2023 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT

ALABAMA POWER COMPANY
PLANT GORGAS
ASH POND

January 31, 2024

Prepared for

Alabama Power Company
Birmingham, Alabama

By

Southern Company Services
Earth Science and Environmental Engineering

CERTIFICATION STATEMENT

This *2023 Annual Groundwater Monitoring and Corrective Action Report, Alabama Power Company - Plant Gorgas Ash Pond* has been prepared in accordance with the United States Environmental Protection Agency's coal combustion residual rule (40 CFR Part 257, Subpart D), ADEM Administrative Order (AO) No. 18-096-GW, and ADEM Admin. Code Ch. 335-13-15 under the supervision of a licensed professional engineer in the State of Alabama. As such, I certify that the information contained herein is true and accurate to the best of my knowledge.

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EXECUTIVE SUMMARY

In accordance with the United States Environmental Protection Agency (EPA) coal combustion residual (CCR) rule (40 CFR Part 257, Subpart D), the State of Alabama Department of Environmental Management (ADEM) Admin. Code Ch. 335-13-15, and ADEM Administrative Order (AO) No. 18-096-GW, this 2023 Annual Groundwater Monitoring and Corrective Action Report has been prepared to document the 2023 semi-annual groundwater monitoring activities at the Plant Gorgas Ash Pond (Ash Pond) and to satisfy the requirements of 40 CFR § 257.90I, ADEM Admin. Code r. 335-13-15-.06(1)(e), and Part E of AO No. 18-096-GW. Semi-annual monitoring and associated reporting for Plant Gorgas Ash Pond is performed in accordance with the monitoring requirements in 40 CFR § 257.90 through § 257.98 and ADEM Admin. Code r. 335-13-15-.06(1) through r. 335-13-15-.06(9).

The CCR unit began the monitoring period in corrective action pursuant to 40 CFR § 257.98, ADEM Admin. Code r. 335-13-15-.06(9), and AO No. 18-096-GW. Statistically significant increases (SSI) of Appendix III constituents over background were identified in the results of the first detection monitoring event, and assessment monitoring was initiated in January 2018. Statistically significant levels (SSL) of Appendix IV parameters above groundwater protection standards (GWPS) were identified while in assessment monitoring. Consequently, an assessment of corrective measures (ACM) was initiated on January 13, 2019, and completed on June 12, 2019, according to the requirements of 40 CFR § 257.96, ADEM Admin. Code r. 335-13-15-.06(7), and AO No. 18-096-GW. The ACM was subsequently submitted to ADEM and posted to the Ash Pond (Site) CCR compliance website. A public meeting to discuss the ACM was held on July 1, 2020.

Since the submittal of the ACM, extensive Site investigations have been performed to select effective corrective measures to address SSL above GWPS. A Groundwater Remedy Selection Report was prepared to meet the requirements of 40 CFR § 257.97, ADEM Admin. Code r. 335-13-15-.06(8), and Part C of AO No.18-096-GW and submitted December 17, 2021. Subsequently, within 90 days of remedy selection, a Corrective Action Groundwater Monitoring Program describing implementation and monitoring of selected remedies at the Site was submitted on March 15, 2022.

SSL of Appendix IV parameters arsenic, lithium, and molybdenum were identified from statistical analysis during the first and second semi-annual monitoring events of 2023. The following summarizes results and activities conducted in 2023:

- Submitted 2022 Annual Groundwater Monitoring and Corrective Action Report on January 31, 2023.
- Completed the first 2023 semi-annual groundwater monitoring event between March 6, 2023, and March 28, 2023, and submitted the first 2023 Semi-annual Groundwater Monitoring and Corrective Action Report on July 31, 2023.
- Research for the in-situ groundwater treatment of Site constituents of interest (COI) as part of a Pre-Design Investigation (PDI) for a Permeation Grouting and/or Geochemical Injection Pilot Program. Geochemical manipulation was originally not selected as corrective measure, however, because it may be a viable remedial technology it has been included as part of the PDI. This research included:
    - Completed all screening batch tests and optimization batch tests for laboratory treatability studies. The findings are summarized in the Laboratory Treatability Study Results for the Plant Gorgas Ash Pond report (Appendix E).
    - Selected locations for pilot tests based on stratigraphy, COI in groundwater, bedrock characterization data, and accessibility.
    - Performed preliminary study of the hydraulics of reagent injections, including sustainable injection rates and distances of treatment solution delivery within the fractured bedrock.
- Completed the second semi-annual monitoring event between August 30, 2023, and September 19, 2023.

The CCR unit concluded the monitoring period in corrective action. APC has begun implementing the selected groundwater remedies identified in the Groundwater Remedy Selection Report submitted to ADEM in December 2021 and detailed in the Corrective Action Groundwater Monitoring Program document. The following monitoring-related activities are planned for the CCR unit:

- Conduct the PDI field work to remediate groundwater at two potential remediation areas (PRA) of the Site, to provide data for predictive groundwater modeling and to inform the design of pilot tests beginning in February 2024. The scope of work developed for the PDI includes the following:
    - Update the current Site hydrogeologic conceptual site model (HCSM).
    - Perform surface geophysical survey consisting of Electrical Resistivity Imaging (ERI) and Electrical Self-Potential (SP) methods for identifying the most advantageous location for borings.

  - Advance two exploratory borings and collect detailed subsurface data to include lithologic descriptions; soil, groundwater, and rock core sample collection; packer testing; downhole geophysical logging; and lugeon hydraulic conductivity testing.
  - Monitor groundwater elevations.
  - Determine and implement disposition of each borehole – for example, monitoring well, tracer injection/extraction well, or temporary securement of open borehole at ground surface – to allow for future decisions on permanent borehole disposition.
  - Evaluate the need for permeation grout test borings and implement as warranted.
- Continue with implementation, evaluation, and reporting of the PDI efforts as part of the Permeation Grouting Pilot Program for the remediation of arsenic, lithium, and molybdenum. Following complete evaluation of Site data, a report summarizing the findings and recommended future remedial techniques for the Site will be prepared.
- Conduct the first semi-annual monitoring event of 2024 and submit the Semi-Annual Groundwater Monitoring and Corrective Action Report summarizing the findings to ADEM by July 31, 2024.

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

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

Assessment Monitoring Initiated: January 15, 2018
Monitoring Period: January 1 - December 31, 2023
Beginning Status: Corrective Action
Ending Status: Corrective Action

Statistical Analysis Results *

Appendix III SSIs

Parameter	Wells
Boron	GS-AP-MW-6S, GS-AP-MW-6D, GS-AP-MW-7, GS-AP-MW-21, and GS-AP-MW-21V.
Calcium	GS-AP-MW-6S, GS-AP-MW-6D, GS-AP-MW-9V, and GS-AP-MW-19.
Chloride	GS-AP-MW-2, GS-AP-MW-6S, GS-AP-MW-6D, GS-AP-MW-7, GS-AP-MW-9V, GS-AP-MW-12V, GS-AP-MW-15, GS-AP-MW-15V, GS-AP-MW-17, GS-AP-MW-19, GS-AP-MW-21, and GS-AP-MW-21V.
Fluoride	GS-AP-MW-2, GS-AP-MW-15, and GS-AP-MW-21V
pH	GS-AP-MW-2, GS-AP-MW-12, GS-AP-MW-12V, GS-AP-MW-15, GS-AP-MW-17, and GS-AP-MW-21
Sulfate	GS-AP-MW-6S, GS-AP-MW-6D, GS-AP-MW-7, GS-AP-MW-9V, GS-AP-MW-15V, GS-AP-MW-21, GS-AP-MW-21V.
TDS	GS-AP-MW-2, GS-AP-MW-9V, GS-AP-MW-15, GS-AP-MW-15V, GS-AP-MW-17, and GS-AP-MW-21, GS-AP-MW-21V.

Appendix IV SSLs

Parameter	Wells
Arsenic	GS-AP-MW-6D, GS-AP-MW-7, GS-AP-MW-13R, and GS-AP-MW-46.
Lithium	GS-AP-MW-6D, GS-AP-MW-7, and GS-AP-MW-15.
Molybdenum	GS-AP-MW-7.

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

Assessment of Corrective Measures & Groundwater Remedy

Assessment of Corrective Measures

Date Initiated: January 13, 2019
Date Complete: June 12, 2019
Public Meeting Date: July 1, 2020

Groundwater Remedy

Remedy Selection Date: December 17, 2021
Initiated During Period: Yes
Ongoing During Period: Yes

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ABBREVATIONS

ACM	Assessment of Corrective Measures
ADEM	Alabama Department of Environmental Management
AL	Alabama
APC	Alabama Power Company
APCEL	APC Environmental Laboratory
ASD	Alternate Source Demonstration
ASTM	American Society for Testing and Materials
BGS	below ground surface
CCR	Coal Combustion Residual
CFR	Code of Federal Regulations
COC	chain of custody
COI	constituents of interest
DO	dissolved oxygen
EPA	United States Environmental Protection Agency
ft	feet
GW	groundwater
GWPS	Groundwater Protection Standard(s)
LCL	Lower Confidence Limit(s)
m	meter
mg/L	milligram per liter
MSL	mean sea level
MW-	denotes “Monitoring Well”
NAVD	North American Vertical Datum (1988 Reference)
NELAP	National Environmental Laboratory Accreditation Program
NTU	nephelometric turbidity unit
NCRDS	National Coal Resources Data System
ORP	oxidation reduction potential
pCi/L	picocuries per liter
PE	Professional Engineer
PG	Professional Geologist
PL	prediction limits
PQL	practical quantitation limit
PRA	potential remediation area
PVC	polymerizing vinyl chloride
QA/QC	quality assurance/quality control
RL	reporting limit
RPD	relative percent difference
SM	Standard Method(s)
SSI	statistically significant increases
SSL	statistically significant levels

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

1.0 INTRODUCTION

In accordance with the United States Environmental Protection Agency (EPA) coal combustion residual (CCR) rule (40 CFR Part 257, Subpart D), the State of Alabama Department of Environmental Management (ADEM) Admin. Code Ch. 335-13-15, and ADEM Administrative Order (AO) No. 18-096-GW, this 2023 Annual Groundwater Monitoring and Corrective Action Report has been prepared to document semi-annual groundwater monitoring activities at the Plant Gorgas Ash Pond (Ash Pond) and to satisfy the requirements of 40 CFR § 257.90(e), ADEM Admin. Code r. 335-13-15-.06(1)(e), and Part E of AO No. 18-096-GW. Semi-annual monitoring and associated reporting for the Ash Pond (Site) is performed in accordance with the monitoring requirements in 40 CFR § 257.90 through § 257.98 and ADEM Admin. Code r. 335-13-15-.06(1) through r. 335-13-15-.06(9).

Semi-Annual Groundwater Monitoring and Corrective Action Reports include an update on groundwater delineation activities completed since the submittal of the Facility Plan for Groundwater Investigation (November 13, 2018) and corrective action activities completed since the submittal of the Corrective Action Groundwater Monitoring Program (March 15, 2022).

2.0 MONITORING PROGRAM STATUS

The Site is currently in corrective action and APC will continue implementation of the selected groundwater remedies identified in the Groundwater Remedy Selection Report and the Corrective Action Groundwater Monitoring Program. In accordance with 40 CFR § 257.94(e) and ADEM Admin. Code r. 335-13-15-.06(5)(e), APC implemented assessment monitoring in January 2018. SSL of Appendix IV parameters were identified at the Gorgas Ash Pond during assessment sampling events. Pursuant to 40 CFR § 257.95(g)(3)(i) and ADEM Admin. Code r. 335-13-15-.06(6)(g)4.(i), APC completed an ACM in accordance with 40 CFR § 257.96, ADEM Admin. Code r. 335-13-15-.06(7), and AO No. 18-096-GW. The ACM was completed June 12, 2019, and a public meeting was held to discuss the ACM on July 1, 2020.

In accordance with 40 CFR § 257.97(a), ADEM Admin. Code r. 335-13-15-.06(8)(a), and Part C of Administrative Order No. 18-096-GW, Semi-Annual Remedy Selection and Design Progress Reports were submitted beginning in December 2019. The semi-annual progress reports were prepared to describe the progress made in selecting and designing a remedy for the Site. A Groundwater Remedy Selection Report was prepared and submitted on December 17, 2021, to meet the requirements of 40 CFR § 257.97, ADEM Admin. Code r. 335-13-15-.06(8), and Part C of AO No. 18-096-GW. Subsequently, within 90 days of remedy selection, a Corrective Action Groundwater Monitoring Program was developed and submitted on March 15, 2022.

In accordance with 40 CFR § 257.98 and ADEM Admin. Code r. 335-13-15-.06(9), APC will continue semi-annual groundwater monitoring, including all monitoring wells in the certified groundwater monitoring system and any well installed to characterize the horizontal and vertical extent of SSL. APC will continue with implementation of the groundwater remedies described in the Groundwater Remedy Selection Report and Corrective Action Groundwater Monitoring Program document.

3.0 SITE LOCATION AND DESCRIPTION

The Alabama Power Company (APC) William Crawford Gorgas Electric Generating Plant (Plant Gorgas) is in southeastern Walker County, Alabama, approximately 15 miles south of Jasper, at 460 Gorgas Road, Parrish, AL 35580. Based on visual inspection of USGS topographic quadrangle maps and GIS plant boundary files provided by SCS, the plant occupies portions of Sections 7, 8, 9, 16, 17, 18, 19, 20, 21, 28 and 29, Township 16 South, Range 6 West and Section 12, 13 and 24, Township 16 South, Range 7 West (USGS, 1975; USGS, 1983). The Ash Pond is located southeast of the main plant on the opposite side of the Black Warrior River. **Figure 1**, **Site Location Map**, depicts the location of the Plant and Ash Pond with respect to the surrounding area.

3.1 PHYSICAL SETTING

Plant Gorgas is in the Black Warrior River basin, an area typified by moderate relief, with river and stream valleys having dendritic drainage patterns. Elevations at the site range from approximately 260 feet above mean sea level (MSL) near the Mulberry Fork to over 600 feet MSL east of the Ash Pond. The Ash Pond occupies a localized, narrow valley where ground elevations are higher to the west, north, and east of the Ash Pond. Ground elevations typically range between 400 and 600 feet MSL and can have steep slopes down to the Ash Pond, which historically resides around elevation 380 ft MSL. **Figure 2**, **Site Topographic Map**, provides the topography of the Site.

3.2 SITE GEOLOGY AND HYDROGEOLOGY

Plant Gorgas lies in the Warrior Basin physiographic region (Sapp and Emplaincourt, 1975), a late Paleozoic basin formed as a result of flexure and sediment loading associated with Appalachian and Ouachita orogenies. The bedrock geology is dominated by clastic sedimentary rocks of the Upper Pottsville Formation as shown on **Figure 3**, **Site Geologic Map** (GSA, 2010b). The Upper Pottsville formation directly underlies Plant Gorgas and extends down to a depth of approximately 2,100 feet below ground surface. This formation is characterized by cyclic sequences (cyclothems) of marginal marine shale/claystone, siltstone, sandstone, conglomerates, and individual coal beds. These depositional cyclothems reflect the sediment balance controlled b^{y} 4th o^{r} 5th order glacial eustasy, continued basin evolution, and variations in sedimentation rates (Pashin and Raymond, 2004). Deeper stratigraphy is marked by carbonates, shales, chert, and sandstones of Mississippian to Cambrian age (Raymond et al., 1988).

The Plant Gorgas Ash Pond is directly underlain by rocks belonging to the Pratt Coal Group (Ward II et al., 1989) of the Lower Pottsville Formation. In general, the Pratt Coal Group consists of mudstone, shale, fine-grained sandstone, and interbedded coal in fining-upward sequences. Stratigraphically, at the Site, the Pratt Coal Group can generally be characterized as (1) a lower coal measures interval, (2) a predominantly mudstone or shale interval, and (3) an upper sandstone interval. As indicated on geologic cross-sections provided in this report, only the lower coal measures interval and mudstone/shale interval intersect or underlie the Ash Pond, as the upper sandstone interval (as well as Cobb Group strata) typically forms the caprock for ridges on either side of the Ash Pond.

The Pratt Coal Group generally contains three named coal seams, each separated by 25 to 50 feet of intra-burden. In descending order, they are the Pratt, Nickel Plate, and American coal seams. Locally, Pratt Coal Group strata gently dip to the south and south-southwest. As noted in the Supplemental Site Hydrogeological Characterization Report submitted in March 2021 (SCS, 2021) local variations in dip direction and magnitude are observed at the site and may be attributable to localized fault displacement, elevations at the time of deposition, and potential presence of a synclinal structural feature. The top of the Pratt Coal Group occurs at depths between 70 and 225 feet below ground surface or at elevations between 350 and 240 feet MSL. Pratt coals generally fit the following patterns:

- Beneath the site, the Pratt coal is generally 3 to 4 feet thick and overlies the Nickel Plate Seam, separated by a 10- to 12-feet sequence of claystone grading downward to sandstone.
- Locally, the Nickel Plate seam is not very prominent and is generally under 1.5 feet in thickness.
- The American seam generally resides 15 to 25 feet beneath the Nickel Plate Seam and is separated primarily by a sandstone bed. The American seam generally thickens towards the south where it was underground mined (Maxine Mine).

Figures 4A-4H, Geologic Cross-Sections, provide illustrations of the Pottsville strata underlying the site.

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

The Pottsville aquifer system is composed primarily of Pennsylvanian-aged sandstones, shales, conglomerates, and coal. Groundwater flow primarily occurs through coal seams or rock fabric discontinuities such as bedding planes and fractures. Groundwater in the Pottsville aquifer system is commonly regarded as confined due to large permeability contrasts within the aquifer (Stricklin, 1989). Recharge to the Pottsville formation is largely through infiltration of precipitation and to a lesser extent, downward seepage of river water at hydraulically favored locations.

Regionally, recharge is accommodated largely by fracture-enhanced permeability. Major recharge zones to the Pottsville Formation are related to major geologic structures such as large fault zones or along systematic fold axes (Pashin, 2007). Although the Pottsville aquifer system is the primary aquifer in Walker County, groundwater use is relatively limited. According to O'Rear et al., 1972, groundwater use accounted for approximately 15% of total water use in Walker County in 1966. By 2005, groundwater use had declined to less than 1% of total water use in Walker County, or 1.14 million gallons per day (MGD) of groundwater out of a total water use of 969.5 MGD (USGS, 2005).

3.2.1 Pottsville Formation – Rock Chemistry

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

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

- Boron – 6.3 to 83.6 ppm (average of 35 ppm).
- Cobalt – 1.6 to 19.8 ppm (average of 8 ppm).
- Molybdenum – 0.8 to 22.2 ppm (average of 5 ppm).
- Lithium – 1.4 to 128 ppm (average of 28 ppm).

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

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

- Boron – 20.8 to 114 ppm (average of 49 ppm).
- Cobalt – 4.2 to 18.2 ppm (average of 14 ppm).
- Molybdenum – 1.0 to 4.4 ppm (average of 2 ppm).

During the first part of 2022, a robust study of the composition of Pottsville Formation (Pratt, Gillespy, and Mine Spoil derivatives) at the nearby Plant Gorgas Gypsum Pond found the following concentrations in rock and mine spoil materials:

- Lithium – 30 to 367 ppm (average of 128 ppm).
- Arsenic – 7 to 79 ppm (average of 32 ppm).
- Molybdenum – 0.67 to 9.8 ppm (average of 3 ppm).

Trace metal enrichment and pyrite origins have been linked to post-depositional (post-coalification) deformation and trace metal laden hydrothermal fluids upwelling during Alleghanian tectonism. Diehl et al., (2004) and Goldhaber et al., (2002) describe “high-pyrite” coals as a source of elevated arsenic and other trace metals. In these publications, pyrite occurrence is observed within coal banding, woody cellular fill structures, mineral overgrowths, and structural fills such as veins and microfaults. The geogenic lithium study at the Plant Gorgas Gypsum Pond (July 2022), observed strong correlations between mica and clay mineral abundance and lithium concentrations, as well as secondary lithium associated primarily with sorption on iron oxides.

In areas where strip mining occurred (north of ash pond dam, west of the ash pond), the process of strip mining and backfilling these materials can increase the availability of trace metals to groundwater. These mining processes and practices lead to the physical weakening and enhanced weathering of rock which, along with changed hydrodynamics, can lead to elevated and highly variable concentrations across a historic mine site. Increased acidity in groundwater, when present, can also help to mobilize constituents – especially in mine spoil materials.

3.2.2 Uppermost Aquifer

The Pottsville aquifer system is the uppermost aquifer beneath the Site for groundwater monitoring purposes. Groundwater occurs in the Pratt Coal Group of the Upper Pottsville Formation at the Site. The primary occurrences of groundwater in the uppermost aquifer are: (1) coal seams and (2) rock fabric discontinuities such as bedding planes and joints. Fractured intervals are sparse across the Site as defined by caliper logging, and tend to occur with greater density in the upper 100 feet of rock. Decreases in fracture density at depth can limit flow and form a base to the aquifer system.

Groundwater yield at the Site is considered low and typical of the Pottsville aquifer system in areas without major geologic structures. Monitoring wells were generally screened in the Pratt coal seam or across groundwater yielding fractures. Depths to groundwater-producing zones were highly variable at the site and typically ranged from 30 to 240 feet BGS. Groundwater yielding zones were identified using caliper, natural gamma, normal resistivity, fluid temperature, fluid resistivity logs, and heat pulse flowmeter logs. Packer testing was used in select borings to further enhance characterization.

Based on published data, groundwater quality produced from the Pottsville Formation can be characterized by high concentrations of sulfate, iron, and other trace metals (Jennings and Cook, 2010). Trace metals in Pottsville Formation groundwater are associated with sulfide minerals contained in organic-rich strata (e.g., mudstones and coal seams) and siliceous/carbonate healed fractures and joints. Trace element enrichment is the result of migrating hydrothermal fluids generated during the late Paleozoic Allegheny orogeny (Diehl et al., 2004). Arsenic, antimony, molybdenum, selenium, copper, thallium, and mercury are elevated in Warrior Basin coal strata (Goldhaber et al., 2002).

3.2.3 Flow Interpretation

Groundwater flow occurs primarily by means of fracture flow, where groundwater flows along more conductive secondary discontinuities in the rock mass such as joints or cleat fabric in coal seams. Groundwater flow in rock aquifer systems is influenced by the structural strike and dip of bedding planes to varying degrees depending on dip magnitude, relative resistance to flow in bed-parallel and cross-bed directions, and orientations with respect to hydraulic gradient. In some cases, groundwater does not flow exactly perpendicular to the head gradients illustrated by potentiometric surface contours in a process called flow distortion. Fracture flow in complex geologic media such as the heterogeneous Pottsville Formation can be complex. Groundwater in the Pottsville aquifer is most commonly regarded as confined due to large permeability contrasts within the aquifer (Stricklin, 1989). The Pottsville at the Site is probably better described as a series of discrete, confined to semi-confined, groundwater yielding zones where groundwater elevations can vary significantly laterally and vertically, depending on the heterogeneity of the lithology and degree of fracture network interconnectivity.

At the Site, the groundwater flow regime is grouped into three general flow systems: (1) shallow water table flow system, (2) Pratt Coal flow system, and (3) American Coal flow system. North of the dam, groundwater occurrence and monitoring also occurs in discrete intervals of the Gillespy Coal Group. These intervals are absent or are low yielding across other areas of the Site. Each flow system displays unique hydraulic head conditions, indicating that confined or semi-confined conditions exist among flow systems.

At higher stratigraphic intervals (water table flow system), groundwater flows towards the Ash Pond or other surface water bodies. This flow system is driven by gravity and mimics the topography of the site. Within deeper rock strata such as coals of the Pratt Group (Pratt Coal Group or deep bedrock flow system), groundwater flows radially away from the site.

Based on structural elevations and dip, the American coal seam would intercept the base of the pond between the ash pond and splitter dike, and the Pratt coal seam would intercept the base of the pond near its geographic center near wells GS-AP-MW-12 and GS-

AP-MW-1. The more permeable coal measures underlie the northern half of the ash pond before dipping below its base towards the south. The southern half of the ash pond is underlain by mudstone/shale interval. Radial flow is interpreted to emanate from this intersection.

Conceptually, there is likely to be little hydraulic communication with strata deeper than the sandstone unit immediately underlying the American Coal Seam (American Coal Flow System), except for the far northern portion of the Ash Pond. Below this interval, a low permeability mudstone to interbedded mudstone-sandstone unit likely forms a barrier to vertical migration of groundwater. Hydraulic conductivity values in the 10^{-7} centimeter per second (cm/s) range are reported for shales at the site as derived from packer testing. This interval reflects the transition to the Gillespy Coal Group.

To the north and underlying the Ash Pond dam, strong hydraulic gradients likely force groundwater along vertical fractures and bedding planes through the upper part of the Gillespy Coal Group. Geophysical and hydrophysical logs for well locations north of the dam suggest there are three to four discrete bedding planes occurring between 30 and 90 ft BGS that transmit groundwater. The most prominent, typically occurring at a depth of 49 to 56 ft BGS, is likely a Gillespy equivalent approximately 100 feet below American Coal Seam. These discrete zones occur in the upper part of the Gillespy Coal Group and appear to dip approximately 2.1° southwest. Geophysical signatures of flow diminish greatly between and below these intervals. Due to groundwater not being encountered during the attempted installation of deeper well locations coupled with site geophysical logs suggest that there is little or no groundwater flow at elevations below 160 feet MSL. Strong upward vertical gradients are observed in paired well locations (see groundwater elevations in MW-6S/6D and MW-41HS/HD pairs) installed north of the ash pond dam. Potentiometric data suggests upward vertical flows along with northerly lateral flow.

Forty-three packer tests were conducted, resulting in a range of hydraulic conductivity (k) values from an estimated low of 7×10^{-7} cm/sec to a high of 4×10^{-3} cm/sec, with most tests (31) in the moderate range (10^{-5} cm/sec to 10^{-4} cm/sec), 2 test results in the more permeable range (10^{-3} to 10^{-2} cm/sec), and 10 test results in the less permeable range (10^{-6} cm/sec). There is a general trend of decreasing estimated hydraulic conductivity with depth. Packer test results vary over four orders of magnitude. Test intervals at the high end of the data range are associated with weathered discontinuities (fractures and joints). Moderate values are associated with minor fractures or bedding planes. The lowest values are associated with more shale intervals without substantial fractures. Test intervals with coal seams are in the moderate to high end of the data range.

3.3 GROUNDWATER MONITORING SYSTEM

Pursuant to 40 CFR § 257.91 and ADEM Admin. Code r. 335-13-15-.06(2), Plant Gorgas has installed a groundwater monitoring network to monitor groundwater flow within the uppermost aquifer. The certified groundwater monitoring network for the Plant Gorgas Ash Pond is designed to monitor groundwater passing the waste boundary of the CCR unit. Wells were sited to serve as upgradient and downgradient monitoring locations based on groundwater flow direction as determined by the potentiometric surface elevation contour maps. All groundwater monitoring wells were designed and constructed using “Design and Installation of Groundwater Monitoring Wells in Aquifers,” ASTM Subcommittee D18.21, as a guideline.

3.3.1 Monitoring Wells

Well locations at the site are designated as upgradient, downgradient, piezometer (water-level only), vertical delineation, and horizontal delineation. The following subsections provide a summary of well designations and if applicable, changes or modifications to the well network or designations. As noted in the site Groundwater Monitoring Plan, modifications to the well network or designation must first be approved by ADEM. The location and designation of Site wells are presented in **Figure 5, Monitoring Well Location Map.**

3.3.1.1 Upgradient Wells

To evaluate upgradient well locations at the Site, groundwater elevations and CCR indicator parameters were reviewed. As described in **Section 3.2.3**, there are multiple groundwater flow regimes within the Pottsville Formation at the Site: (1) an upper groundwater flow system found at higher elevations (water table flow system) and (2) a deeper groundwater flow system composed of Pratt Coal Group strata that also represents the uppermost aquifer beneath the Ash Pond.

There are three upgradient compliance well locations (GS-AP-MW-8, GS-AP-MW-13, and GS-AP-17V) that are currently being used for statistical comparison of groundwater quality. Compliance wells GS-AP-MW-8 and GS-AP-MW-13 are spatially situated near downgradient compliance wells but are screened across fractures that occur at higher elevations and are not hydraulically connected to downgradient flow. Compliance well GS-AP-MW-17V was intended to be utilized as a vertical delineation well. However, the underlying Maxine Mine was encountered during installation and the well was subsequently screened at a higher elevation. GS-AP-MW-17V was redesignated as an upgradient compliance well in the Fall of 2021. In addition, replacement monitoring well GS-AP-MW-18R was installed across a shallow water-bearing fracture and was subsequently designated as an upgradient monitoring well in the Fall of 2021. **Table 1a**, **Compliance Monitoring Well Network Details** summarizes compliance well construction characteristics and the lithology (flow system) surrounding the screened interval.

3.3.1.2 Downgradient Wells

Borehole geophysics, hydrophysical logging, and packer testing were used to determine well screen intervals. These logging techniques identify groundwater flow zones in open boreholes and are optimally suited for use in low-yielding, fractured rock media. Heat-pulse flowmeter logging or packer testing were used to assess or further evaluate potential flow zones indicated by hydrophysical logging tools. If multiple flow zones were identified, then paired wells were installed to screen both zones.

Preferential groundwater flow away from the site, if existing, occurs within zones of enhanced permeability, such as cleated coals or zones of intersecting rock discontinuities, spatially located lateral to or beneath the base of the Ash Pond. Strata of the Pratt Coal Group are the uppermost aquifer lateral to or beneath the base of the Ash Pond, as indicated by borehole logging and geophysics. Downgradient monitoring wells are installed in the Pratt Coal Group, and generally across the Pratt or American Coal Seam.

To the north and beneath the Ash Pond dam, Pratt Coal Group strata exist above the ground surface or are mined out. In these areas, downgradient monitoring well locations were installed across the uppermost groundwater yielding fractures identified by borehole geophysics and hydrophysical logging and generally correspond to the transition from Pratt to Gillespy Coal Groups.

There are currently 27 downgradient compliance wells at the Gorgas Ash Pond that are being used for statistical comparison of groundwater quality. During the Fall of 2021, several delineation wells including GS-AP-MW-9V, GS-AP-MW-12V, GS-AP-MW-15V, and GS-AP-MW-21V were redesignated as downgradient compliance wells to satisfy compliance monitoring needs in the American Flow System. **Table 1a** summarizes compliance well construction characteristics and the lithology (flow system) surrounding the screened interval.

3.3.1.3 Delineation Wells

Pursuant to 40 CFR § 257.95(g)(1), ADEM Admin. Code r. 335-13-15-.06(6)(g)2., and AO 18-096-GW, additional monitoring wells have been installed to characterize the horizontal and vertical extent of GWPS exceedances identified during assessment monitoring. Three phases of field investigation have occurred since late 2018 to explore potential impacts to groundwater. In total, there are 7 vertical delineation wells and 22 horizontal delineation wells. Former piezometers GS-AP-PZ-16, GS-AP-PZ-18, and GS-AP-PZ-22 were redesignated as vertical delineation wells in 2020. Due to its location relative to ongoing closure activities, GS-AP-PZ-18 was abandoned in 2021 and promptly replaced with GS-AP-PZ-18R. Each of the on-site delineation wells is sampled for Appendix III and Appendix IV constituents on a semi-annual basis. However, the analytical dataset compiled for each of the on-site delineation wells is not utilized for statistical analysis. **Table 1b, Delineation Well Network Details**, summarizes delineation well construction characteristics and the lithology (flow system) surrounding the screened interval.

3.3.1.4 Piezometers

There are currently nine piezometers at the site including GS-AP-MW-4, GSP-AP-MW-7V, GS-AP-MW-7VR, GS-AP-MW-16S, GS-AP-MW-20, GS-AP-MW-15H, GS-AP-MW-30H, GS-A-MW-30HS, and GS-AP-MW-39H. Historically, water-level only piezometers were well locations that (1) did not yield sufficient groundwater recharge for sampling or (2) encountered underground mine workings not suitable for compliance sampling.

As noted in the facility's Groundwater Monitoring Plan dated March 2021, monitoring well location GS-AP-MW-16S was proposed for inclusion in the facility's groundwater monitoring network as an upgradient monitoring well. The well's upgradient location relative to the regulated unit, coupled with the historically low concentrations of Appendix III indicator parameters, suggested the groundwater in well GS-AP-MW-16S would be representative of background conditions. However, the historical analytical data compiled for GS-AP-MW-16S suggest that it is geochemically similar to downgradient compliance wells GS-AP-MW-15, GS-AP-MW-15V, and GS-AP-MW-21. As noted in the facility's ASD dated July 2021, the elevated pH and lithium concentrations observed in downgradient compliance wells GS-AP-MW-15, GS-AP-MW15V, and GS-AP-MW-21 are likely attributed to the natural release of lithium from underlying coal seams. Additional assessment of the area immediately surrounding piezometer GS-AP-MW-16S is planned to verify if the elevated pH and lithium concentrations are representative of background conditions. **Table 1c**, **Piezometer Well Network Details** summarizes piezometer installation data, including piezometer construction details and the lithology (flow system) within the screened interval. The locations of each of the on-site piezometers is presented on **Figure 5**.

3.3.1.5 Monitoring Well Replacement and Abandonment

Due to their location in proximity to ash pond closure activities, compliance wells GS-AP-MW-9, GS-AP-MW-11, GS-AP-MW-13, and GS-AP-MW-14 and piezometers GS-AP-MW-5 and GS-AP-MW-10 were abandoned in July 2019, in accordance with ADEM guidelines. In addition, compliance well GS-AP-MW-18, piezometers GS-AP-MW-1, GS-AP-MW-27H, and GS-AP-MW-37H, and vertical delineation wells GS-AP-PZ-18 and GS-AP-MW-18V, were abandoned in September of 2021 due to insufficient water production. Information related to well construction details and screened lithology for each of the former on-site monitoring wells are tabulated in **Table 1d, Abandoned Well Network Details.**

In the Fall of 2021, 12 replacement compliance wells including GS-AP-MW-1R, GS-AP-MW-5R, GS-AP-MW-9R, GS-AP-MW-10R, GS-AP-MW-11R, GS-AP-MW-13R, GS-AP-MW-14R, GS-AP-MW-18R (upgradient), GS-AP-MW-18VR, GS-AP-MW-3V, GS-AP-MW-46, and GS-AP-MW-47 were installed, surveyed, and developed in accordance with ADEM Admin. Code r. 335-13-15-.06(2)(e). In addition, delineation wells GS-AP-MW-23V, GS-AP-MW-27HR, GS-AP-MW-37HR, and GS-AP-MW-PZ-18R were installed in the Fall of 2021. Information related to well construction details and screened lithology for each of the onsite compliance and delineation wells is tabulated in **Table 1a** and **Table 1b**.

3.4 GROUNDWATER MONITORING HISTORY

In accordance with 40 CFR § 257.94(b), eight independent samples were collected from each background and downgradient well and analyzed for the constituents listed in Appendix III and IV prior to October 17, 2017. Background sampling was performed from August 2016 to June 2017. Groundwater sampling for the first detection monitoring event after the background period was performed in August 2017. Based on results of the 2017 Annual Groundwater and Corrective Action Monitoring Report, Alabama Power initiated an assessment monitoring program on January 15, 2018. Pursuant to 40 CFR §257.95(a) and ADEM Admin. Code r. 335-13-15-.06(6)(a), monitoring wells were sampled for all Appendix IV parameters in February 2018, within 90 days of initiating the assessment monitoring program.

Statistical evaluations of 2018 assessment monitoring data identified SSL of Appendix IV constituents above the GWPS, and the Site entered Assessment of Corrective Measures. Pursuant to 40 CFR §257.95(g)(1), ADEM Admin. Code r. 335-13-15-.06(6)(g)2., and AO No. 18-096-GW, additional monitoring wells (**Table 1b, Figure 5**) were installed to characterize the horizontal and vertical extent of GWPS exceedances identified during assessment monitoring in three phases of groundwater investigations between January 2019 and September 2020. These wells, along with the compliance monitoring well network, are sampled semi-annually. Occasionally, additional data collection has occurred independent of routine compliance sampling events to support continuing assessment activities at the Site.

3.4.1 Available Monitoring Data

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

3.4.2 Historical Groundwater Flow

Historical groundwater elevations and potentiometric surface maps show groundwater flow patterns are consistent across monitoring events, as described in **Section 3.2.3**. As ash pond closure activities progress over the years and upon completion of closure, groundwater elevations will likely display variability representative of changing site hydrodynamics and eventually, a new set of equilibrium conditions. As this timeline progresses, groundwater elevations and trends will be qualitatively reviewed against this historical data set. Tables summarizing groundwater elevations from all groundwater monitoring events conducted at the Site are included in **Appendix B, Historical Groundwater Elevations Summary**.

3.4.3 Monitoring Variances

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

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

3.5 GROUNDWATER SAMPLING AND ANALYSIS

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

During routine semi-annual monitoring events, all compliance and delineation network wells are sampled and analyzed for Appendix III and Appendix IV constituents. The following subsections summarize the sequential steps and process for the sampling, handling, transport, and analysis of compliance-related groundwater samples at the Site.

3.5.1 Groundwater Sample Collection

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

Groundwater samples were collected from monitoring wells using low-flow sampling procedures in accordance with 40 CFR § 257.93(a) and ADEM Admin. Code r. 335-13-15-.06(4)(a). All monitoring wells in the compliance well network are equipped with dedicated pumps. Monitoring wells were purged and sampled using low-flow sampling procedures. In this procedure, field water quality parameters (pH, turbidity, conductivity, and dissolved oxygen) are measured to determine stabilization and groundwater samples are collected when the following stabilization criteria are met:

- 0.2 standard units for pH.
- 5% for specific conductance.
- 0.2 mg/L or 10% for DO > 0.5 mg/l (whichever is greater).
- Turbidity measurements less than 10 NTU.
- Temperature and ORP – record only, no stabilization criteria.

During purging and sampling, an in situ Aqua Troll instrument was used to monitor and record field parameters. All downhole groundwater monitoring equipment was calibrated prior to sample collection per the manufacturer's specifications outlined in the Alabama Power Environmental Affairs (EA) Water and Field Group (WFG) Technical Standard Operating Procedure, dated December 14, 2021. Once stabilization was achieved, samples were collected and submitted to the laboratory following standard chain-of-custody (COC) protocol. Field data recorded in support of groundwater sampling activities are included in **Appendix C, Laboratory and Field Records.**

3.5.2 Sample Preservation and Handling

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

3.5.3 Chain of Custody

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

3.5.4 Laboratory Analysis

Laboratory analyses were performed by the APC Environmental Laboratory (APCEL) in Calera, Alabama and Pace Analytical Services, LLC (Pace) in Greensburg, Pennsylvania. Both APCEL and Pace are accredited by National Environmental Laboratory Accreditation Program (NELAP) and maintain a NELAP certification for all parameters analyzed**. Table 2, Parameters and Reporting Limits**, lists assessment monitoring constituents analyzed from site groundwater samples. Groundwater data and chain of custody records for the monitoring period are presented in **Appendix C.**

3.5.5 Monitoring Period Sampling Events

As required by 40 CFR § 257.90(e) and ADEM Admin. Code r. 335-13-15-.06(1)(e), the following describes monitoring-related activities performed during the 2023 annual monitoring period. The first 2023 semi-annual monitoring was conducted between March 6 and 28, 2023 and the second semi-annual event was conducted between August 30, 2023, and September 19, 2023.

Groundwater samples were analyzed for the full list of Appendix III and Appendix IV parameters during each monitoring event. During the first and second 2023 semi-annual sampling events, additional general chemistry and monitored natural attenuation (MNA) parameters were sampled and analyzed. These analytes have been incorporated for continued evaluations of geochemical facies and their evolution over time. These analytes will also support geochemical modeling and evaluations associated with monitored natural attenuation. These parameters include:

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

All groundwater sampling activities were conducted by APC Field and Water Services. Pace Analytical Services (Greensburg) performed the laboratory analyses of Radium-226 and Radium-228 (reported combined) as well as the MNA parameter sulfide (Pace – New Orleans). APCEL performed the remaining

Appendix III and Appendix IV analyses. Analytical data from the groundwater monitoring events is included as **Appendix C** in accordance with the requirements of 40 CFR § 257.90(e)(3) and ADEM Admin. Code r. 335-13-15-.06(1)(f)3.

4.0 GROUNDWATER ELEVATIONS AND FLOW

During the first 2023 semi-annual sampling event, groundwater elevations ranged from 139.30 to 535.11 feet North American Vertical Datum of 1988 (NAVD88). **Figure 6A, Potentiometric Surface Contour Map – (Upper) Water Table Aquifer (March 6, 2023)**, **Figure 6B, Potentiometric Surface Contour Map – Pratt Aquifer (March 6, 2023)**, and **Figure 6C, Potentiometric Surface Contour Map – American Aquifer (March 6, 2023)**, depict groundwater elevations and inferred groundwater flow directions during the first semi-annual sampling event of 2023.

During the second semi-annual sampling event, groundwater elevations ranged from 122.46 to 534.64 ft feet NAVD88. **Figure 7A, Potentiometric Surface Contour Map – (Upper) Water Table (August 29, 2023)**, **Figure 7B, Potentiometric Surface Contour Map – Pratt Aquifer (August 29, 2023)**, and **Figure 7C, Potentiometric Surface Contour Map – American Aquifer (August 29, 2023)** depict groundwater elevations and inferred groundwater flow direction during the second semi-annual sampling event of 2023. **Figures 6A** and **7A** show groundwater flow towards the Ash Pond in wells screened in the upper flow system and towards Mulberry Fork in the middle to lower portions of the flow system. **Figures 6B** and **7B** show radial groundwater flow away from the Ash Pond in the Pratt Coal flow system. **Figures 6C** and **7C** show groundwater flow away from the Ash Pond in the deeper American Coal seam flow system. Recent groundwater elevation data have been tabulated and included in **Table 3, Groundwater Elevations Summary**. All historical available groundwater elevation data recorded since 2016 have been tabulated and included in **Appendix B**.

4.1 GROUNDWATER ELEVATION CHANGES

Ash Pond dewatering activities have been intermittently occurring at the Site since it was first initiated in the Spring of 2023. With an average pumping rate of 12,000 gallons per minute (GPM), the pond elevation has decreased from 382 feet to 359 feet. Consequently, groundwater elevations collected during the second semi-annual sampling event revealed an average decrease of 5.42 feet in the Upper Pratt strata. Groundwater elevation changes associated with closure-related activities will continue to be evaluated and documented.

4.2 GROUNDWATER FLOW VELOCITY CALCULATIONS

Because the geology at the Ash Pond is not homogeneous or isotropic with respect to groundwater flow, groundwater velocity calculations using derivations of Darcy's Law are not applicable to groundwater at the site. The hydrogeologic characteristics of fractured rock typically produce preferential groundwater flow paths, so groundwater velocity is much more variable than in uniform porous media such as sand. During monitoring well installation, multiple techniques were used to successfully intercept groundwater flow paths with the monitoring wells located around the Ash Pond. These flow paths correspond to coal cleats and fractures, zones of fracture concentration, bedding planes, and other discontinuities in the rock. Therefore, groundwater flow velocity at the site cannot be accurately quantified using existing site data.

Slug testing provided horizontal hydraulic conductivities for the uppermost aquifer between 1.19 x 10^{-3} cm/sec and 1.22 x 10^{-5} cm/sec with an average of 4.52 x 10^{-4} cm/sec. A total of 43 packer tests resulted in a range of hydraulic conductivity (k) values from an estimated low of 7 x 10^{-7} cm/sec to a high of 4 x 10^{-3} cm/sec, with most tests (31) in the moderate range (10^{-5} cm/sec to 10^{-4} cm/sec), 2 test results in the more permeable range (10^{-3} to 10^{-2} cm/sec), and 10 test results in the less permeable range (10^{-6} cm/sec).

5.0 EVALUATION OF GROUNDWATER QUALITY DATA

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

5.1 DATA VALIDATION – QUALITY ASSURANCE/QUALITY CONTROL

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

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

Where:

RPD = Relative Percent Difference (%)

Conc1 = Higher concentration of the sample or field duplicate

Conc2 = Lower concentration of the sample or field duplicate

Where the RPD is below 20%, the difference is considered acceptable, and no further action is needed. Where an RPD is greater than 20%, further evaluation is required to attempt to determine the cause of the difference and potentially result in qualified data. **Table 4a, Relative Percent Difference (RPD) Calculations** provides the RPDs for sample and sample duplicates during the monitoring period. Seven RPD criteria failures were observed during the first 2023 semi-annual sampling event in parent duplicate pairs: (1) GS-AP-MW-17/GS-AP-MW-17 DUP for sulfate; (2-6) GS-AP-MW-34HO/GS-AP-34HO DUP for arsenic, barium, cobalt, lead, and molybdenum; and (7) GS-AP-MW-44HO/GS-AP-MW-44HO DUP for fluoride. In all instances of RPD criteria failure, the results reviewed were less than 5 times the RL. In these instances, a validation flag of (+) J, (ND)can be applied to the original samples.

Analytical data showed low-level or trace detections in field or equipment blanks during the monitoring period. All RPDs were below 20% for the second semi-annual sampling event.

Table 4b, Field QC: Blank Detections provides a summary of low-level detections observed during the first and second 2023 semi-annual monitoring events. With the exception of fluoride in sample FB-6 (March 2023 event), each of these detections was an estimated concentration, above the MDL but below the RL, and qualified in the laboratory analytical reports with "J flags." If concentrations are detected above the MDL in field QC samples, original results (1) on the date of a blank detection and (2) with a value less than 5 times the field QC detection are flagged with a (+) U* and the MDL/RL values are modified based upon the blank concentration. Validated flags do not have an impact on possible statistical analyses due to (1) low-level concentrations flagged during validation or (2) constituents flagged are not Site COI. The extent of trace chromium detections in blanks can be explained by a low MDL value of 0.000203 mg/L. During the first 2023 sampling event, four chromium detections and one fluoride detection were identified at low-level concentrations in five total field and equipment blanks from March 6, 2023 to March 28, 2023. During the second semi-annual sampling event, one chromium detection was identified at low level concentrations in one equipment blank collected on August 31, 2023.

5.2 STATISTICAL METHODOLOGY AND TESTS

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

5.2.1 Appendix III Evaluation

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

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

The following adjustments are also applicable to the statistical analysis per the Unified Guidance:

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

5.2.2 Appendix IV Evaluation

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

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

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

(1) The maximum contaminant level (MCL) established under 40 CFR §§ 141.62 and 141.66.
(2) Where an MCL has not been established:

(i) Cobalt 0.006 mg/L.
(ii) Lead 0.015 mg/L.
(iii) Lithium 0.040 mg/L.
(iv) Molybdenum 0.100 mg/L.

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

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

5.3 STATISTICAL EXCEEDANCES

Analytical data from the monitoring period were statistically analyzed in accordance with the Professional Engineer (PE)-certified Statistical Analysis Plan (October 2017) and updated in the August 2020 data screening evaluation performed by Groundwater Stats Consulting. Appendix III statistical analysis was performed to determine if constituents have returned to background levels. Appendix IV monitoring parameters were evaluated to determine if concentrations statistically exceeded the established groundwater protection standard.

5.3.1 Appendix III Constituents

Based on review of the Appendix III statistical analysis presented in **Appendix D, Statistical Analyses**, Appendix III constituents have not returned to background levels. A summary of Appendix III SSI is provided in the **Executive Summary Table** previously referenced.

5.3.2 Appendix IV Constituents

Table 5, Summary of Background Levels and Groundwater Protection Standards, summarizes the background limit established at each monitoring well and the GWPS. A summary table of the statistical limits accompanies the prediction limits in **Appendix D.** Site GWPS were updated after the Fall 2023 sampling event. The following subsections describe statistical exceedances during the first semi-annual monitoring event of 2023.

5.3.2.1 First Semi-Annual Groundwater Monitoring Event

During the first 2023 semi-annual monitoring event, statistical analysis of Appendix IV data incorporating limits defined in the 2019 ADEM Variance (section **3.4.3**) identified the following SSL over GWPS in the listed downgradient wells.

- GS-AP-MW-6D: Arsenic, Lithium.
- GS-AP-MW-7: Arsenic, Lithium, Molybdenum.
- GS-AP-MW-15: Lithium.
- GS-AP-MW-21: Lithium.

Due to insufficient background data, recently installed or converted downgradient wells were not included as part of the facility's statistical analysis during the first semi-annual event. Five recently converted downgradient wells demonstrating concentrations over the GWPS that were not statistically evaluated include the following:

- GS-AP-MW-3V: Lithium.
- GS-AP-MW-13R: Arsenic.
- GS-AP-MW-46: Arsenic.
- GS-AP-MW-15V: Lithium.
- GS-AP-MW-21V: Lithium.

As noted in the facility's Groundwater Monitoring Plan, a minimum of eight sampling events and a minimum of four sampling events must be completed prior to statistical analysis of Appendix III and Appendix IV constituents, respectively. **Table 6, First Semi-Annual Monitoring Event Analytical Results Summary**, provides a summary of all detected constituents for the first semi-annual sampling event. Statistical reporting output is included in **Appendix D**.

5.3.2.2 Delineation Wells – First Semi-Annual Groundwater Monitoring Event

Statistical analyses are not conducted on Site delineation wells. However, laboratory analytical data for the first semi-annual event identified concentrations above GWPS in the following delineation well locations:

- GS-AP-MW-6V: Fluoride, Lithium.
- GS-AP-MW-23H: Arsenic.
- GS-AP-MW-26H: Lithium.

- GS-AP-MW-27HR: Lithium.
- GS-AP-MW-34HO: Lithium.
- GS-AP-MW-41HD: Lithium.
- GS-AP-MW-42H: Arsenic.
- GS-AP-PZ-22: Lithium.

Table 6 provides a summary of all detected constituents for the first semi-annual sampling event. Statistical reporting output is included in **Appendix D.**

5.3.2.3 Second Semi-Annual Groundwater Monitoring Event

During the second 2023 semi-annual monitoring event, statistical analysis of Appendix IV data, incorporating limits defined in the 2019 ADEM Variance (section **3.4.3**), identified the following SSL over GWPS in the listed downgradient wells.

- GS-AP-MW-6D: Arsenic, Lithium.
- GS-AP-MW-7: Arsenic, Lithium, Molybdenum.
- GS-AP-MW-13R: Arsenic
- GS-AP-MW-15: Lithium.
- GS-AP-MW-46: Arsenic

Statistical analysis of Appendix IV concentrations over GWPS from monitoring wells GS-AP-MW-13R and GS-AP-MW-46 identified arsenic as an SSL for the first time during the second 2023 semi-annual sampling event. **Table 7, Second Semi-Annual Monitoring Event Analytical Results Summary**, provides a summary of all detected constituents for the second semi-annual sampling event. Statistical reporting output is included in **Appendix D.**

Due to insufficient background data, recently installed or converted downgradient wells were not included as part of the facility's statistical analysis during the second semi-annual event. Two recently converted downgradient wells demonstrating concentrations over the GWPS that were not statistically evaluated include the following:

- GS-AP-MW-3V: Lithium.
- GS-AP-MW-45V: Lithium

As noted in the facility's Groundwater Monitoring Plan, a minimum of eight sampling events and a minimum of four sampling events must be completed prior to statistical analysis of Appendix III and Appendix IV constituents, respectively.

5.3.2.4 Delineation Wells – Second Semi-Annual Groundwater Monitoring Event

Statistical analyses are not conducted on Site delineation wells. However, laboratory analytical data for the second semi-annual event identified concentrations above GWPS in the following delineation well locations:

- GS-AP-MW-6V: Fluoride, Lithium.
- GS-AP-PZ-22: Lithium.
- GS-AP-MW-23H: Arsenic.
- GS-AP-MW-26H: Lithium.
- GS-AP-MW-27HR: Lithium.
- GS-AP-MW-34HO: Lithium.
- GS-AP-MW-41HD: Lithium.
- GS-AP-MW-42H: Arsenic.

Fluoride, detected at concentrations above the GWPS in vertical delineation well GS-AP-MW-6V, is not being considered an impact from the Ash Pond and is not being evaluated for delineation based on the following lines of evidence:

(1) Absence of fluoride in pore-water samples (Ash Pond source water). Laboratory analytical results of the November 2023 sampling event revealed low-level detectable concentrations of fluoride (0.104 J mg/L). This low-level concentration of fluoride detected in the collected pore-water sample indicates that the ash pond is not a source for the high concentrations of fluoride detected in vertical delineation well GS-AP-MW-6V.

(2) No other compliance or delineation wells sampled contained elevated fluoride concentrations. Fluoride concentrations in other wells ranged from non-detect to 2.20 mg/L and average 0.265 mg/L.

(3) Fluoride concentrations in paired wells GS-AP-MW-6S and GS-AP-MW-6D were 0.122 and 0.153 mg/L respectively during the first 2023 semi-annual monitoring event.

(4) GS-AP-MW-6V is a relatively new and deeper screened well, which can introduce geochemical variability due to (1) localized variability or isolated source in the geologic formation or (2) a temporary disequilibrium caused by the installation of a new well.

Table 7 provides a summary of all detected constituents for the second semi-annual sampling event. Statistical reporting output is included as **Appendix D.**

6.0 ALTERNATE SOURCE DEMONSTRATION

An alternate source demonstration (ASD) was submitted in July 2021 and attached to the 2021 Annual Groundwater Monitoring and Corrective Action Report in January 2022. The alternate source demonstration focuses primarily on (1) the contribution of elevated pH to arsenic and lithium concentrations in wells GS-AP-MW-15/15V and GS-AP-MW-21 and (2) a comparison of Gorgas AP pore-water geochemistry to the geochemistry of downgradient wells. This ASD study and previous data documenting elevated trace metals in Warrior Basin (Pottsville) coal measures strata support a determination that many historical exceedances at the site are related to elevated pH or elevated trace metals in these coal measures.

The following summarizes key lines of evidence documented in the ASD and supporting alternative sources:

- Wells analyzed provided a ratio of lithium to boron different than pore-water samples (source).
- Wells analyzed provided a different geochemical fingerprint (geochemical facies) from pore-water samples.
- Substantial differences in the relative abundance of boron in comparison to chloride and lithium (i.e., conservative ions) in GS-AP-MW-15, GS-AP-MW-15V, and GS-AP-MW-21 compared to Ash Pond porewater indicate an alternate source for lithium.
- High sodium concentrations (+200 mg/L) and alkaline pH (> 10) of groundwater at GS-AP-MW-15, GS-AP-MW-15V, and GSAP-MW-21 relative to upgradient water and Ash Pond porewater indicate potential sodium-bentonite and grout contamination. Sodium-bentonite may allow for cation exchange with lithium.
- Lithium is naturally occurring and environmentally available in the bedrock at Plant Gorgas, as identified by chemical analysis and sequential extraction of rock samples.

As described in numerous previous reports, most notably the *September 2020 Progress and Groundwater Delineation Report*, detailed analyses of geochemistry data indicate that impacts to groundwater are concentrated north of the ash pond dam. Rock chemistry data as well as published technical reports provide sufficient documentation on sources of trace metals. Historical disturbances created by mining in and around Gorgas can also contribute to an increase in some constituents.

Historically, Plant Gorgas used coals from the Appalachian Basin (Warrior Basin included). Data included in Ruhl et al. (2014) indicate that ash derived from Appalachian Basin coals displays a $\delta^{11}B$ range of -2.7 to -17.6 ‰. In terms of natural occurring sources of boron, (1) groundwater typically displays a $\delta^{11}B$ range between 2 and 18 ‰ (2) precipitation a range between 7 and 23 ‰, and (3) soil and rocks between 0 and -5 %. Select wells were not analyzed due to historically low boron concentrations or absence of concentrations over the GWPS. A geogenic study investigating natural sources of COI at the Site has been initiated to follow up on the previously submitted ASD and subsequent geochemical evaluations that have highlighted a likely natural source.

7.0 GROUNDWATER ASSESSMENT AND CORRECTIVE ACTION

As required by Part E of the Order (AO 18-096-GW) and correspondence from the ADEM (March 2021), this report provides an update on groundwater delineation activities completed since the submittal of the Facility Plan for Groundwater Investigation (November 13, 2018). The primary purpose of this plan and subsequent phases of work was to identify the horizontal and vertical extent of groundwater impacts defined by EPA Appendix IV groundwater protection standards.

A comprehensive groundwater delineation report summarizing findings was submitted to ADEM in September 2020. The conclusions and results indicate groundwater delineation has been completed to a sufficient degree to define spatial extent of groundwater impacts and to inform a groundwater remedy selection plan.

7.1 CHRONOLOGY OF DELINEATION ACTIVITIES

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

7.1.1 Delineation Wells

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

Phase I – Groundwater Investigation (January 2019 – August 2019)

Phase I was conducted between January 2, 2019, and August 15, 2019. **Table 1b** and **Figure 5** present details and locations of delineation wells. The following summarizes all activities completed during Phase I of groundwater delineation at the Site:

- Installed nine horizontal delineation wells (GS-AP-MW-23H, GS-AP-MW-24H, GS-AP-MW-25H, GS-AP-MW-26H, GS-AP-MW-27H, GS-AP-MW-28H, GS-AP-MW-29H, GS-AP-MW-

30H, and GS-AP-MW-30HS) and four vertical delineation (GS-AP-MW-7V, GS-AP-MW-12V, GS-AP-MW-17V, and GS-AP-MW-18V) wells between January 2, 2019 and February 26, 2019.

- Developed the delineation wells between January 11, 2019, and March 12, 2019. Horizontal delineation wells MW-25H, MW-27H, MW-30H, and MW-30HS and vertical delineation well MW-7V did not yield sufficient water to be developed or sampled and are used as water level only piezometers.
- Sampled the eight successfully developed delineation wells and three pre-existing Ash Pond piezometers between February 20, 2019, and March 19, 2019.
- Submitted a Semi-Annual Progress Report documenting groundwater investigation activities on March 30, 2019.
- Submitted a Groundwater Investigation Report to ADEM on May 13, 2019. This report recommended a second phase of groundwater investigation to complete delineation of groundwater impacts as required by Part B of the Order.
- Submitted an Assessment of Corrective Measures to ADEM on July 11, 2019, as required by Part C of the Order.
- Submitted a Phase II – Groundwater Delineation Plan to ADEM on August 15, 2019. This plan documented planned activities associated with proposed Phase II delineation efforts.

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

Following a review of data gathered from the Phase I Investigation, additional groundwater investigation to further delineate the extent of groundwater impacts was proposed to ADEM in a Phase II Delineation Plan submitted August 15, 2019. Phase II was conducted between September 24, 2019, and March 27, 2020. **Table 1b** and **Figure 5** present details and locations of delineation wells and piezometers. The following summarizes all activities completed during Phase II of groundwater delineation at the Site:

- Completed semi-annual assessment sampling event in September 2019.
- Installed fifteen horizontal delineation wells (GS-AP-MW-25HA, GS-AP-MW-30HA, GS-AP-MW-31H, GS-AP-MW-32H, GS-AP-MW-33HO, GS-AP-MW-34HO, GS-AP-MW-35HO, GS-AP-MW-36H, GS-AP-MW-37H, GS-AP-MW-38H, GS-AP-MW-39H, GS-AP-MW-41HS, GS-AP-MW-41HD, GS-AP-MW-42H, and GS-AP-MW-43H), three vertical delineation wells (GS-AP-MW-9V, GS-AP-MW-15V, and GS-AP-MW-21V), and converted three existing deep piezometers (GS-AP-PZ-16, GS-AP-PZ-18, and GS-AP-PZ-22) to vertical delineation wells between September 24, 2019 and January 31, 2020.

- Submitted a Semi-Annual Progress Report documenting groundwater investigation activities on September 30, 2019.
- Developed the delineation wells between November 5, 2019, and January 30, 2020. Horizontal delineation wells GS-AP-MW-41HS, GS-AP-MW-37H, and GS-AP-MW-39H did not produce sufficient water to be developed or sampled and are used as water level only piezometers.
- Sampled the 15 successfully developed delineation wells and converted piezometers between March 16, 2020, and March 27, 2020.
- On December 30, 2019, provided ADEM with a response to comments received from ADEM on November 14, 2019.
- Surveyed developed wells in January 2020.
- Submitted a Semi-Annual Progress Report documenting groundwater investigation activities on March 30, 2020.

Phase III – Groundwater Investigation (April 2020 – September 2020)

Following a review of data gathered from the Phase I and II Investigations, additional groundwater investigation was conducted to address data gaps. **Table 1b** and **Figure 5** present details and locations of delineation wells. The following summarizes all activities completed during Phase III of groundwater delineation at the Site:

- Installed two vertical delineation wells north of the Ash Pond (GS-AP-MW-6V and GS-AP-MW-7VR), one horizontal delineation well west of the Ash Pond (GS-AP-MW-40H), and one off-site delineation well (GS-AP-MW-44H0) to the east of the Ash Pond. Onsite well installation activities took place between April 15, 2020, and May 1, 2020, and off-site installation between August 11, 2020 and August 16, 2020.
- Developed the delineation wells between May 27, 2020, and August 27, 2020. Vertical delineation well GS-AP-MW-7VR did not produce sufficient groundwater for well development.
- Sampled delineation wells in September 2020 along with all other delineation and compliance wells as part of the second semi-annual assessment monitoring event of 2020. Laboratory data was included in the 2020 Annual Groundwater Monitoring and Corrective Action Report.
- Conducted a study and re-analysis of low-yielding piezometers (GS-AP-MW-1, GS-AP-MW-3, GS-AP-MW-4, GS-AP-MW-7V, GS-AP-MW-16S, GS-AP-MW-20, GS-AP-MW-27H, GS-AP-MW-30H, GS-AP-MW-30HS, GS-AP-MW-37H, GS-AP-MW-39H, and GS-AP-MW-41HS) to assess potential for sampling and inclusion into monitoring well network. A summary memo and report were included in the 2020 Annual Groundwater Monitoring and Corrective Action Report.

- Submitted a Semi-Annual Progress and Groundwater Delineation Report documenting groundwater investigation activities on September 30, 2020.
- Responded to the February 3, 2021, ADEM Semi-Annual Progress and Groundwater Delineation Reports comments letter on March 5, 2021.
- Responded to the January 20, 2021, ADEM Groundwater Monitoring Plan comments letter and included a Supplemental Site Hydrogeologic Characterization Report on March 8, 2021.
- Submitted the second revised Groundwater Monitoring Plan to the ADEM on March 15, 2021.

Phase IV – Groundwater Investigation (June 2021 – July 2022)

Phase IV of delineation was focused on (1) addressing potential data gaps in lithium delineation and (2) evaluating alternative sources (naturally occurring or mine-related) of elevated lithium in wells where geologic and geochemical data already indicated the strong potential for an alternate source. Phase IV included the following scope:

- Re-attempting delineation wells GS-AP-MW-27H and GS-AP-MW-37H.
- Vertical delineation adjacent to well GS-AP-MW-23H.
- Vertical delineation adjacent to well GS-AP-MW-3 (converted to compliance location) and horizontal delineation east of well GS-AP-MW-3.
- Addressing general data gaps in the American coal flow system.
- Boron isotope sampling and analyses at selected well locations.
- Further geochemical study and evaluation of the occurrence of elevated lithium and arsenic.

During Phase IV 19 replacement, additional compliance, and delineation wells were installed and developed. Each of these will provide valuable information relevant to assessment. Replacement wells installed, surveyed, and developed include compliance replacement locations: GS-AP-MW-1R, GS-AP-MW-5R, GS-AP-MW-9R, GS-AP-MW-10R, GS-AP-MW-11R, GS-AP-MW-13R, GS-AP-MW-14R, GS-AP-MW-18R, and GS-AP-MW-18VR. Additional compliance wells were installed: GS-AP-MW-3V, GS-AP-MW-46, and GS-AP-MW-47. Information related to well construction details and screened lithology can be found in **Table 1a**. Additional or replacement delineation wells were installed during the Fall: GS-AP-MW-23V, GS-AP-MW-27HR, GS-AP-MW-37HR, and GS-AP-MW-PZ-18R. Information related to well construction details and screened lithology can be found in **Table 1b**. These wells were sampled for the first time during the February-March 2022 sampling event.

7.2 NATURE AND QUANTITY OF RELEASE

Part B of the Order required collecting data on the nature and estimated quantity of material released. To collect data regarding the nature of the source and estimated quantity of material released, sampling of ash pore-water at three locations was conducted. Ash pore-water was sampled for all EPA Appendix III and IV constituents. Groundwater quality data is compared to source water and leachate composition to provide a basis for evaluating the degree to which the source area has contributed constituents to groundwater.

7.3 DISCUSSION OF DELINEATION RESULTS

Analytical results identified concentrations above GWPS of EPA Appendix IV constituents arsenic, lithium, and molybdenum during the first and second semi-annual monitoring events of 2023. Isoconcentration maps for arsenic, lithium, and molybdenum are presented in **Figures 8A** through **13**. As shown on these figures, concentrations exceeding GWPS have been observed in three distinct flow systems: (1) Pratt Flow System, (2) American Flow System, and (3) Gillespy Flow System (north of dam).

The displayed isoconcentration lines are data-driven contours derived from the spatial distribution of constituent concentrations in the well network. When spatially distributed objects are spatially correlated (objects close to together have similar characteristics), interpolation analysis can be used to predict "unknowns" between objects. ArcGIS and Geostatistical Analyst are used to interpolate chemical concentrations between well locations. This process involves the transformation of chemical concentration data to log-normal distribution prior to interpolation. In cases where concentrations decrease below the GWPS between well pairs, the extent of groundwater impacts is interpreted from the interpolated (predicted) data set. This method considers the spatial pattern of decreasing concentrations observed in nearby wells. Additionally, when applicable, isoconcentration maps have been subdivided by major flow system (Pratt or American).

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

1. Determine if impacts to groundwater could extend off-site in the direction of groundwater flow away from the facility.
2. Evaluate potential for vertical migration adjacent to compliance wells with SSL and within the context of site hydrogeology.
3. Address key data gaps between phases, working in from property line or off-site depending on gaps.
4. Ability to safely access locations with drill rig and supporting equipment.

5. Occurrence of groundwater and sufficient groundwater yield and recharge at locations.
6. Delineate extent of impacts and capture additional hydrogeologic data necessary to evaluate the feasibility of groundwater remediation technologies.

Table 1b provides a complete list of delineation wells.

Arsenic Delineation

Figures 8A and **8B**, and **11A** and **11B,** show the extent of arsenic concentrations over the 0.01 mg/L GWPS observed during the first and second 2023 semi-annual events, respectively. During the first and second semi-annual sampling events, arsenic exceedances were limited to the Pratt Flow System and Gillespy Flow System. As shown on **Figures 8B** and **11B**, arsenic concentrations in the American Flow System were below the GWPS.

Monitoring locations GS-AP-MW-15, GS-AP-MW-15V, and GS-AP-MW-21V have exhibited downward trends since the 2020 sampling events, and each of these locations exhibited concentrations below the GWPS for arsenic during the first and second 2023 semi-annual sampling events. In addition, compliance monitoring well GS-AP-MW-6S has been below the GWPS for arsenic six out of the previous eight sampling events beginning in 2020. Prior to 2020, arsenic had exceeded the GWPS 9 out of 13 sampling events.

Two recently installed downgradient wells, GS-AP-MW-13R and GS-AP-MW-46, demonstrated arsenic concentrations above the GWPS (**Figures 8A** and **11A).** These are the fourth sampling results from the two well locations and concentrations (1) may reflect temporary disequilibrium caused by the well installation process and (2) have not been delineated due to the preliminary nature of sampling results. It is recommended that an additional three or four sampling events be conducted prior to discussing these specific arsenic concentrations as exceedances attributable to the ash pond and in the context of delineation.

In the northern area of the Site, arsenic was detected at concentrations that exceed its respective GWPS in wells GS-AP-MW-6D, GS-AP-MW-7, GS-AP-MW-23H, and GS-AP-MW-42H during the first and second semi-annual sampling events. In addition, elevated concentrations of arsenic that exceed its GWPS were observed in wells GS-AP-MW-13R and GS-AP-MW-6S during the first and second semi-annual sampling events, respectively. Compliance wells GS-AP-MW-6D and GS-AP-MW-7 are screened across or next to the Gillespy coal or equivalent horizon (when absent) and arsenic is horizontally delineated in the same horizon by delineation wells GS-AP-MW-25HA and GS-AP-MW-41HD.

Vertically, arsenic is delineated by well locations GS-AP-MW-6S, GS-AP-MW-6V, GS-AP-MW-23V and the absence of groundwater flow beneath the GS-AP-MW-7 screened interval (no yield zones encountered in delineation wells attempted at GS-AP-MW-7V and GS-AP-MW-7VR). Arsenic in well GS-AP-MW-6S has been below the GWPS during six of the last eight sampling events. Unless a significant trend reversal occurs, this location is suitable for the uppermost vertical delineation of arsenic. The stratigraphy in this area is detailed in **Figure 4F**.

Additional assessment is required to determine the source of arsenic in horizontal delineation well GS-AP-MW-23H. The following lines of evidence suggest the possibility of a source other than the ash pond:

(1) Screened interval is located above the base of CCR material and approximately 50 feet higher than Gillespy or equivalent monitored by GS-AP-MW-6D, GS-AP-MW-7, and GS-AP-MW-41HS/HD.
(2) Physical location of well appears separated from preferential flow (upslope of valley) and groundwater elevations appearing separate from other wells upgradient of GS-AP-MW-23H.
(3) Low boron concentrations and poor correlation coefficient with boron concentrations.
(4) Low lithium concentrations.
(5) $\delta^{11}B$ value of 3.2 to 4.2 ‰, which indicates strongest potential for a natural or meteoric source of boron.
(6) Iron concentrations between 46 and 54 mg/L, which are 5 times higher than the next highest well (GS-AP-MW-26H) and much greater than the site average that otherwise ranges from 0.84 to 1.82 mg/L from 2019 to 2023.
(7) Low pH range, generally between 5.8 and 6.3, which is much lower than the site average of 7.68 to 8.06 SU observed from 2019 to 2023.

In summary, arsenic exceedances to the north have been successfully delineated within the Gillespy Flow system. Analytical data from future sampling events will be reviewed to determine the need for additional delineation or an alternate source demonstration study to address arsenic at locations GS-AP-MW-13R and GS-AP-MW-46.

Lithium Delineation

Lithium exceedances were observed in the American Flow System, Pratt Flow System, and Gillespy Flow System during the first and second 2023 semi-annual monitoring event.

Lithium Delineation - Gillespy Flow System

Figures 9A and **12A** show the extent of potential lithium impacts within the Pratt and Gillespy flow systems (**Figures 9B** and **12B** show Gillespy/Pratt Transition - north of dam only) during the first and second 2023 semi-annual groundwater monitoring events. North of the dam and in the Gillespy Flow System, lithium concentrations over the GWPS are noted in wells GS-AP-MW-6D, GS-AP-MW-6V, GS-AP-MW-7, and GS-AP-MW-41HD (March event only). North of the dam, lithium concentrations are delineated to below GWPS concentrations in the direction of groundwater flow by wells GS-AP-MW-23H, GS-AP-MW-23V, GS-AP-MW-24H, and GS-AP-MW-42H (**Figure 9B and 12B**).

As described in the *September 2020 Progress and Groundwater Delineation Report*, no deeper flow zones were observed beneath the screened intervals of GS-AP-MW-7, GS-AP-MW-41HD, and GS-AP-MW-6V. Boring, geophysical, hydrophysical, and "dry" piezometer data indicate that flow to the north is accommodated by two or three discrete fracture/bedding planes in the Gillespy Coal Group and Pratt-Gillespy Coal transition zone, thus indicating that there is little to no groundwater yield beneath the discrete planes. Concentrations lower than GWPS in groundwater yielding zones above these discrete zones also correlate with preferential flow conditions.

Additional delineation locations are not feasible or are severely limited due to topography, saturated conditions, ash pond closure activities, and utilities. Sufficient delineation and site hydrogeologic data have been studied to understand suitable remedial technologies in these areas. A permeation grouting pilot program is being evaluated for application across the discrete flow zones.

As shown on **Figures 9A**, **9B**, **12A**, and **12B,** the highest concentrations of lithium correlate to areas previously mined (dashed lines showing Pratt Strip Mines), thus contributing to the elevated lithium concentrations north of the dam**.**

As boron and lithium behave similarly in groundwater (largely unreactive), boron isotopic results can provide an indication of the source of lithium. Boron isotopes have been studied and implemented as tracers for CCR impacts to groundwater (Davidson and Bassett, 1993; Ruhl et al., 2014). These studies have shown that coal or CCR sources are definitively identified by a distinctive negative $\delta^{11}B$ signature, while other geologic and anthropogenic sources display positive ratios. Historically, Plant Gorgas has used coal from the Appalachian Basin (Warrior Basin included). Data included in Ruhl et al. (2014) indicate that ash derived from Appalachian Basin coals display a $\delta^{11}B$ range of -2.7 to -17.6 ‰. In terms of natural occurring sources of boron, (1) groundwater typically displays a $\delta^{11}B$ range between 2 and 18 ‰, (2) precipitation between 7 and 23 ‰, and (3) soil and rocks between 0 and -5 ‰.

In wells GS-AP-MW-6S and GS-AP-MW-7, boron isotopic results indicate lithium concentrations are sourced from coal or CCR. Conversely, corroboration of potential mine or natural sources of lithium is indicated by boron isotope data from wells GS-AP-MW-6V and GS-AP-MW-41HS, which show $\delta^{11}B$ values of 13.3 ‰ and 3.6-5.0 ‰, respectively. These values strongly indicate a source other than the ash pond. Boron isotope data are summarized below.

Well	$\delta^{11}B$ (‰)	Boron Source
GS-AP-MW-6S	-6.2	Coal or CCR
GS-AP-MW-6D	-1.7	Mudstone/Shale
GS-AP-MW-6V	13.3	Meteoric
GS-AP-MW-7	-12.8	Coal or CCR
GS-AP-MW-23H	4.2	Meteoric
GS-AP-MW-41HS	3.6-5.0	Meteoric

In summary, boron isotopic analyses strongly suggest that pond-derived impacts are restricted to wells GS-AP-MW-6S, GS-AP-MW-7, and potentially well GS-AP-MW-6D. Additional study on the potential geogenic origins of lithium associated with the Site was initiated in the spring of 2023 to assess the extent of lithium impacts.

Lithium Delineation - Pratt Flow System

Figures 9A and **12A** illustrate lithium exceedances observed in the Pratt Flow System where wells GS-AP-MW-15 and GS-AP-MW-21 show concentrations above the GWPS during the first and second 2023 sampling events. The ASD described in **Section 6.0** addresses exceedances in wells GS-AP-MW-15 and GS-AP-MW-21 as unrelated to the ash pond. In addition to the analyses described in **Section 6.0** and the ASD submitted in July 2021, boron isotope analyses were attempted at these two well locations. The results were below the quantifiable limit.

In the areas with potential lithium impacts, horizontal delineation to below GWPS concentration can largely be derived from nearby wells: GS-AP-MW-46, GS-AP-MW-31H, GS-AP-MW-18VR, GS-AP-MW-33HO, GS-AP-MW-17, GS-AP-MW-28H, and GS-AP-MW-36H. Southeast of GS-AP-MW-21, piezometers GS-AP-MW-30H and GS-AP-MW-20 show insufficient groundwater yield in Pratt intervals. However, the deeper American Flow System was productive and can be used in the assessment of lithium concentrations.

In terms of vertical delineation, during first 2023 semi-annual monitoring event, lithium was below the GWPS in well GS-AP-MW-15V (installed in deeper American Flow System), and above the GWPS during the second semi-annual event. Lithium concentrations in well GS-AP-MW-15V have decreased from a concentration of 0.208 mg/L when first sampled in March 2020 to 0.0849 mg/L during the most recent sampling event in September 2023. Additionally, lithium concentrations have been below GWPS in two of the four most recent sampling events in February 2022 and March 2023 respectively. Decreasing lithium concentrations in well GS-AP-MW-15V correspond to decreasing pH concentrations of 10.89 when first sampled in March 2020 to 7.89 during the most recent sampling event in September 2023.

In addition, elevated concentrations of lithium were detected in compliance well GS-AP-MW-21V, also installed in the deeper American Flow System (**Figures 9C** and **12C**) during the first and second semi-annual events. Both GS-AP-MW-15V and GS-AP-MW-21V have exhibited a decreasing trend and significantly reduced concentrations from initial sampling events.

Lithium Delineation - American Flow System

Figures 9C and **12C** depict the spatial extent of potential lithium impacts within the American coal flow system during the first and second 2023 semi-annual groundwater monitoring events. Concentrations observed over the GWPS are noted for wells GS-AP-MW-26H, GS-AP-MW-21V, GS-AP-PZ-22, GS-AP-MW-3V, and GS-AP-MW-34HO.

Western Areas

The elevated concentration of lithium detected in delineation well GS-AP-MW-26H appears to be (1) elevated naturally occurring lithium or (2) elevated lithium due to an alternate source. Supporting evidence includes:

1) Absence of lithium exceedances at waste boundary compliance wells upgradient of GS-AP-MW-29H (in both Pratt and American coal screened wells).
2) Increasing lithium concentration trend with distance away from the ash pond.
3) Lack of other CCR indicator parameters:
    a. Boron – 87.5% non-detect, highest concentration is a low-level, estimated (j-flagged) concentration (0.0334 mg/L (J)).
    b. Molybdenum – 87.5% non-detect or low-level, estimated concentrations.
    c. Arsenic – 87.5% non-detect or low-level, estimated concentrations.
4) Well location adjacent to Jacobs Mine permit boundary.
5) Concentration below highest concentration of proposed upgradient well GS-AP-MW-16S indicating lithium in normal concentration range for site.

For these reasons, no further delineation activities are planned near GS-AP-MW-26H for purposes of further delineating lithium. Furthermore, horizontal delineation would technically be achieved in this area by the below-GWPS concentrations observed in GS-AP-MW-40H to the west and GS-AP-MW-38H to the south.

Southern Areas/Maxine Mine

Figures 9C and **12 C** show, to the south, lithium exceedances observed in American coal or Maxine mine screened locations GS-AP-MW-21V, GS-AP-PZ-22, and GS-AP-MW-34HO during the first and second 2023 semi-annual groundwater monitoring events.

As presented on these figures, the southern area of the site (south of line from GS-AP-MW-15V to GS-AP-MW-21V) was previously disturbed by the underground Maxine American Seam Mine. The relatively large size and location of this mine prevents the installation of groundwater wells that are truly representative of the American coal flow system.

As previously described, lithium concentrations in well GS-AP-MW-15V are influenced by pH conditions that have ranged between 7.64 and 10.89 standard units (SU). Data also show that pH conditions have been steadily decreasing since the initial sampling event in March 2020, with values at their lowest during the most recent sampling event (7.64 SU). Lithium concentrations have similarly decreased, most notably since the initial three sampling events. Data evaluation suggests the groundwater geochemistry was likely impacted by the well installation and construction process. Geochemical data suggest that since installation and the initial sampling event, geochemical equilibrium is slowly being restored to more normal conditions. Furthermore, low-level and stable concentrations of boron suggest a source other than CCR leachate.

For well GS-AP-MW-15V, analytical data sets are beginning to show concentrations and values similar to historical averages for the American flow system beneath the Site. When pH conditions are confirmed to have stabilized, it will be most appropriate to evaluate lithium concentrations as representative and for potential groundwater impacts. At a minimum, data collected prior to 2022 appears unrepresentative of Site groundwater quality.

To the southwest, well locations GS-AP-MW-36V, GS-AP-PZ-16, and GS-AP-PZ-22 can be used to effectively demonstrate horizontal delineation in the American coal and Maxine Mine. Maxine Mine location GS-AP-PZ-16 was below the lithium GWPS during the first and second semi-annual sampling events.

However, due south, horizontal delineation well GS-AP-MW-34HO exceeds the GWPS for lithium but appears to present a case as a potential outlier. As shown on **Figure 9C** and **12C**, the lithium concentration observed is two or more times higher than that observed in wells closer to the waste boundary. The evidence supporting the presence of an alternate source includes the following:

1) Increasing lithium concentration trend with distance away from the ash pond.
2) Low concentrations of other CCR indicator parameters:
    a. Boron – 0.0827 (J) to 0.109 [mg/L]
    b. Molybdenum – 0.00386 (J) to 0.0143 (J) [mg/L]
    c. Arsenic – 0.00308 (J) to 0.00668 [mg/L]
3) Chloride concentrations significantly greater than CCR pore-water.
4) Geochemical facies representative of ancient groundwater (sodium-chloride) and different than CCR pore-water (calcium-chloride).
5) Boron isotopic fractionation not representative of CCR signature, where a $\delta^{11}B$ value of 13.8 to 15.7 ‰ suggests a meteoric signature of boron, and thus, lithium.
6) Well location surrounded by the large-scale, underground Maxine Mine.

For these reasons, no further delineation activities for lithium constituents are planned near well GS-AP-MW-34HO.

Lithium concentrations in well GS-AP-MW-21V have decreased from a concentration of 0.146 mg/L when first sampled in March 2020 to below GWPS (0.0789 mg/L) in August 2022. However, lithium concentrations increased to above GWPS during the 2023 sampling events (0.11 mg/L March 2023 and 0.0928 mg/L September 2023). Additional delineation efforts in the area surrounding downgradient well MW-21V may be warranted, pending ADEM's review of the July 2021 ASD. Lithium concentrations detected in downgradient well MW-21V will continue to be closely monitored.

Northern Areas

As shown in **Figures 9C** and **12C**, lithium concentrations were generally below the GWPS during the first and second 2023 semi-annual groundwater monitoring events, with the exception of well GS-AP-MW-3V located to the northeast. Downgradient compliance wells GS-AP-MW-5R and GS-AP-MW-3V were recently installed in the Fall of 2021 and have since been sampled a total of four times. Preliminary laboratory analytical data indicate an upwards trend of detected lithium concentrations in compliance wells GS-AP-MW-5R and GS-AP-MW-3V. In accordance with the facility's Groundwater Monitoring Plan, detected concentrations of Appendix IV constituents in downgradient wells GS-AP-MW-5R and GS-AP-

MW-3V were incorporated into the facility's statistical analysis. However, until sufficient background has been established, Appendix III constituents detected in compliance wells GS-AP-MW-5R and GS-AP-MW-3V will not be incorporated into the facility's statistical analysis. Additional sampling and laboratory analysis is required to ensure that the detected lithium concentrations are representative of the Site's groundwater quality. Once sufficient background has been established, the need for additional assessment in the area surrounding GS-AP-MW-5R and GS-AP-MW-3V will be evaluated.

Molybdenum Delineation

Figures 10 and **13** show the extent of potential molybdenum impacts to groundwater observed during the first and second 2023 semi-annual sampling events. The molybdenum concentrations detected in downgradient compliance well GS-AP-MW-7, located north of the ash pond dam, exceeded its respective GWPS during the first and second 2023 semi-annual events. Historical molybdenum concentrations detected in delineation wells GS-AP-MW-23H, GS-AP-MW-24H, GS-AP-MW-41HD, and GS-AP-MW-42H indicate that the extent of molybdenum has been horizontally delineated. To assess for the vertical extent of molybdenum impact in the areas surrounding GS-AP-MW-7, two vertical delineation wells identified as GS-AP-MW-7V and GS-AP-MW-7VR were installed in 2019 and 2020, respectively. However, these two delineation wells did not produce sufficient groundwater for well development or low-flow sampling methods and were subsequently redesignated as piezometers.

Borehole geophysical logs for piezometers MW-7V and MW-7VR and compliance well GS-AP-MW-7 (chiefly fluid resistivity and fluid temperature logs) did not provide robust evidence of groundwater flow zones deeper than 88 feet BGS where GS-AP-MW-7 already monitors. The fracture encountered at GS-AP-MW-7 and noted in geophysical logs for MW-7V and MW-7VR appears to be the basal and most prominent flow feature in the area. Therefore, no additional vertical delineation is proposed within the vicinity of GS-AP-MW-7.

7.4 STATUS OF DELINEATION

As described in **Section 7.1.1**, a fourth phase of work and study was conducted. Nineteen wells were installed to address potential data gaps. All additionally installed and existing wells were sampled for the first time during the spring of 2022. A review of recent data identified the potential data gaps, listed below. Because gaps are primarily associated with the most recently installed wells, or wells where significant signatures of natural or alternate sources are present in the data, the recommended plan of action is to:

(1) Evaluate the occurrence, distribution, and mobility of naturally occurring lithium in subsurface geologic materials (generally using recent Gorgas Gypsum Pond study as template).
(2) Allow for the collection of four to six additional groundwater samples in recently installed wells prior to evaluation.
(3) After review of the above tasks and result, evaluate the need for potential additional delineation and assessment. Potential needs are outlined below.

Lithium Delineation

- Pratt Flow System
  - **Horizontal delineation (or new compliance well), re-attempt: east and/or southeast of GS-AP-MW-21.***
  - **Horizontal delineation southwest/west of GS-AP-MW-15 and GS-AP-MW-27HR.***
- American Flow System
  - Horizontal delineation or new compliance well to the southeast (between GS-MW-30HA and GS-AP-MW-34HO).

Arsenic Delineation

- Pratt Flow System
  - Potential Future Action: (1) Horizontal delineation west-southwest of GS-AP-MW-13R and offset vertical delineation, (2) Horizontal delineation east of GS-AP-MW-46 and offset vertical delineation, and (3) Horizontal delineation west of GS-AP-MW-7. These are labeled potential future actions pending the recommendation to re-evaluate data and trends after six to eight sampling events. Rationale for this recommendation is provided in the Arsenic Delineation portion of **Section 7.3**.

* The bolded text in the list above indicates an ASD has been presented to address these exceedances and selected data gaps. A review of the data revealed no data gaps associated with molybdenum impacts due to the confined exceedances that are limited to only one well location.

7.5 GROUNDWATER REMEDY AND CORRECTIVE ACTION

An Assessment of Corrective Measures (ACM) for groundwater impacts was conducted and formally submitted to ADEM in June 2019. Additional data analyses and investigations conducted since the ACM culminated with a detailed Groundwater Remedy Selection Report, submitted in December 2021, and a Corrective Action Groundwater Monitoring Program submitted in March 2022.

Submittal	Submittal Date	Purpose
Assessment of Corrective Measures	06/2019	Initial evaluation of the feasibility, performance, and implementation of known and emerging groundwater remediation technologies against site conditions and factors.
Groundwater Remedy Selection Report	12/2021	Formal selection and detailed description of groundwater remedies selected for implementation at the site.
Corrective Action Groundwater Monitoring Program	03/2022	Plan document to describe process and program for implementation and monitoring of groundwater remedies selected at the site.

7.5.1 Groundwater Remedy Selection

As described in **Section 5** and **Section 7.3**, geochemical data gathered and analyzed indicate that groundwater impacts may be constrained in a small area north of the dam and between wells GS-AP-MW-6S, GS-AP-MW-7, and GS-AP-MW-41HD. A small footprint of impacted groundwater flowing through well-defined, discrete bedding provides an opportunity for a targeted groundwater remediation program. The Groundwater Remedy Selection Report described the selected remedies for groundwater corrective actions at the site:

- Source control to include dewatering, consolidation, and capping of the CCR unit.
- Permeation grouting in areas of higher concentrations of constituents of interest (COI) or preferential groundwater flow pathways to prevent COI movement.
- Monitored natural attenuation (MNA) over the entire site.

Additionally, it was determined that geochemical manipulation should be included as an alternate or companion remedy selection with permeation grouting. Geochemical manipulation using injection removes COI from groundwater and immobilizes them in situ through the creation of solid precipitates formed from injection of treatment solutions. A Laboratory Treatability Study Results report for the Plant Gorgas Ash Pond is included as **Appendix E**.

Closure of the CCR Unit, including dewatering, consolidation, and capping, will greatly reduce or eliminate source contributions to groundwater. Permeation grouting was selected because, as a corollary to barrier walls, it impedes groundwater flow and helps prevent the migration of COI away from the source area. Geochemical manipulation was selected as an additional potential corrective measure because of its effectiveness, ease of implementation, versatility (ability to treat more than one COI), ability to implement in areas with limited working space, and because it produces no byproducts that would require further treatment or disposal. Permeation grouting can be viewed as a complementary method to MNA, where either the sealing of groundwater flow or the slowing of the flow path away from the source area provides longer residence time for MNA processes or geochemically enhanced MNA processes to reduce COI concentrations. MNA was selected based on the evidence gathered during initial investigations, which highlighted that these processes are already occurring.

7.5.2 Corrective Action – Groundwater Monitoring Program

The Corrective Action Groundwater Monitoring Program describes early plans for implementation and monitoring of groundwater remedies described above. This plan divided the program into two stages.

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

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

Stage 1

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

Selected Remedy	Implementation Task(s)
Monitored Natural Attenuation	1. Implementation of expanded MNA sampling parameters. 2. Further assessment of MNA monitoring network.
Permeation Grouting/Geochemical Injection Program	1. Plan, Work Scope development and field program for the detailed characterization of fracture flow characteristics and data needs. supporting a permeation grouting pilot. 2. Implementation of Permeation Grouting and/or Geochemical Injection Pilot Program using data collected from detailed characterization.
Source Control/Closure Activities	1. Evaluation of geochemical changes in groundwater with respect to transient closure activities such as excavation and de-watering. 2. Implementation of field data collection instruments/telemetry within key monitoring wells to further understand the nature of geochemical changes over time and with respect to closure activities and MNA/geochemical modelling.

Implementation of Monitored Natural Attenuation

MNA sampling parameters were added to the sampling plans and analyzed in the laboratory during the February-March 2022 sampling event and have continued through the most recent 2023 semi-annual events (**Table 6** and **7**). These parameters, in addition to field parameters, Appendix III parameters, and Appendix IV parameters, are used to study the processes that govern or facilitate MNA as well as changes in geochemical conditions. Parameters will be included in the site geochemical model.

Source Control and Closure Activities

The primary tasks and objectives at the start of Stage 1 include: (1) monitoring and reviewing for changes in geochemical conditions that would invoke an adaptive trigger, (2) studying transient changes in groundwater quality that could be the result of physical closure activities, and (3) determining primary mechanisms and geochemical relationships related to changing geochemical conditions. The understanding of mechanisms and relationships leading to geochemical changes in groundwater provides opportunity to further understand natural MNA processes at the site and document the benefits and impacts of source control as closure progresses.

As a part of the Semi-Annual Monitoring Reporting process, groundwater quality is being evaluated with respect to:

1) Concentration Trends:
    a) By analyte.
    b) By locations.
    c) In aggregate.
2) Geochemical correlations.
    Concentration trends and geochemical correlations cross-referenced by recent or active ash pond closure activities.

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

Permeation Grouting and/or Geochemical Injection Program

An Implementation and Data Requirements Pre-Design Investigation (PDI) Plan for a permeation grouting and/or geochemical injection pilot study program is being drafted to outline the means and methods for the complete geologic and hydrogeologic characterization of areas of the Site selected for a pilot study. The program includes a pre-design investigation work plan for the detailed characterization of fracture flow through the Pottsville Formation, including standards for core logging, downhole geophysical methods, hydrogeophysical methods, and aquifer performance testing. This work plan will be executed in the field and the data analyzed to complete the initial study (foundation phase) of the Permeation Grouting Pilot Program.

7.5.3 Pre-Design Investigation

The objective of the PDI is to provide data specific to the potential remediation areas (PRA) to enable predictive groundwater modeling and to inform the design of a permeation grouting/geochemical injection pilot test. The specific PRA of interest for the PDI is still undetermined but will likely include the locations of either GS-AP-MW-15, GS-AP-MW-21, or GS-AP-MW-6D/GN-AP-MW-7. The determination of the PRA of interest will be based in part on results of a surface geophysics survey (electrical resistivity imaging (ERI) and the self-potential (SP) method) that is scheduled to be performed in February 2024. Additionally, the investigation will further define the understanding of certain subsurface lithologic/hydrogeologic data to include:

- Bedrock fracture data
  - Fracture orientations
  - Fracture apertures and spacings
- Hydraulic data
  - Bulk hydraulic conductivity
  - Hydraulic responses between wells
- Groundwater transport continuity between wells
  - Proof of flow path continuity between and among wells
- Aquifer characteristics
  - Mineralogy and geochemical properties of fracture surfaces
  - Mineralogy and geochemical and physical properties of unfractured rock matrix
- Groundwater characteristics
  - Constituent of interest (COI) concentrations
  - Groundwater geochemical properties

The overall scope of work (SOW) developed for this PDI proposed the following tasks:

- Update the hydrogeologic conceptual site model (HCSM).

- Perform a surface geophysical survey consisting of ERI and SP methods for identifying the most appropriate location for advancing borings.
- Monitor groundwater elevations.
- Advance an estimated two exploratory boreholes (with additional borings to be performed, if appropriate).
- Collect detailed borehole data, including the following:
  - Core descriptions and sample collection.
  - Packer testing (hydraulic testing and groundwater sampling via extraction of groundwater from packer-isolated bedrock intervals).
  - Downhole geophysical logging, to include conventional tools and potentially, an optical/acoustic borehole televiewer, a heat pulse flowmeter (HPFM), cross-borehole resistivity, and nuclear magnetic resonance (NMR; only in existing monitoring wells).
  - Lugeon hydraulic conductivity testing.
- Determine and implement disposition of each borehole – for example, monitoring well, tracer injection/extraction well, or temporary securement of open borehole at ground surface to allow for future decisions on permanent borehole disposition.
- Evaluate the need for tracer testing and implement as warranted.
- Evaluate the need for permeation grout test borings and implement as warranted.
- Evaluate the need for geochemical injection/manipulation test borings and implement as warranted.

8.0 SUMMARY AND CONCLUSIONS

Semi-annual groundwater monitoring events were conducted in March 2023 and August and September 2023. Statistical evaluations of the monitoring data identified SSL of Appendix IV constituents above the GWPS. To address previously identified SSL, a Groundwater Remedy Selection Report was prepared and submitted to ADEM on December 17, 2021. Subsequently, within 90 days of remedy selection, a Corrective Action Groundwater Monitoring Program was developed and submitted to ADEM on March 15, 2022.

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

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

- Continue with implementation and evaluation of the PDI work plan as part of the Permeation Grouting Pilot Program for the remediation of arsenic, lithium, and molybdenum related to corrective action measures at the Site.
- Continue ongoing research to evaluate the applicability of the in situ groundwater treatment and to assess technical and implementation feasibility of geochemical manipulation and enhanced MNA technologies.
- Following complete evaluation of Site data collected during the PDI, a report summarizing the findings and recommended future remedial techniques for the Site will be prepared.
- Conduct the first semi-annual monitoring event in the spring of 2024 and submit the Semi-Annual Groundwater Monitoring and Corrective Action Report summarizing the findings to ADEM by July 31, 2024.

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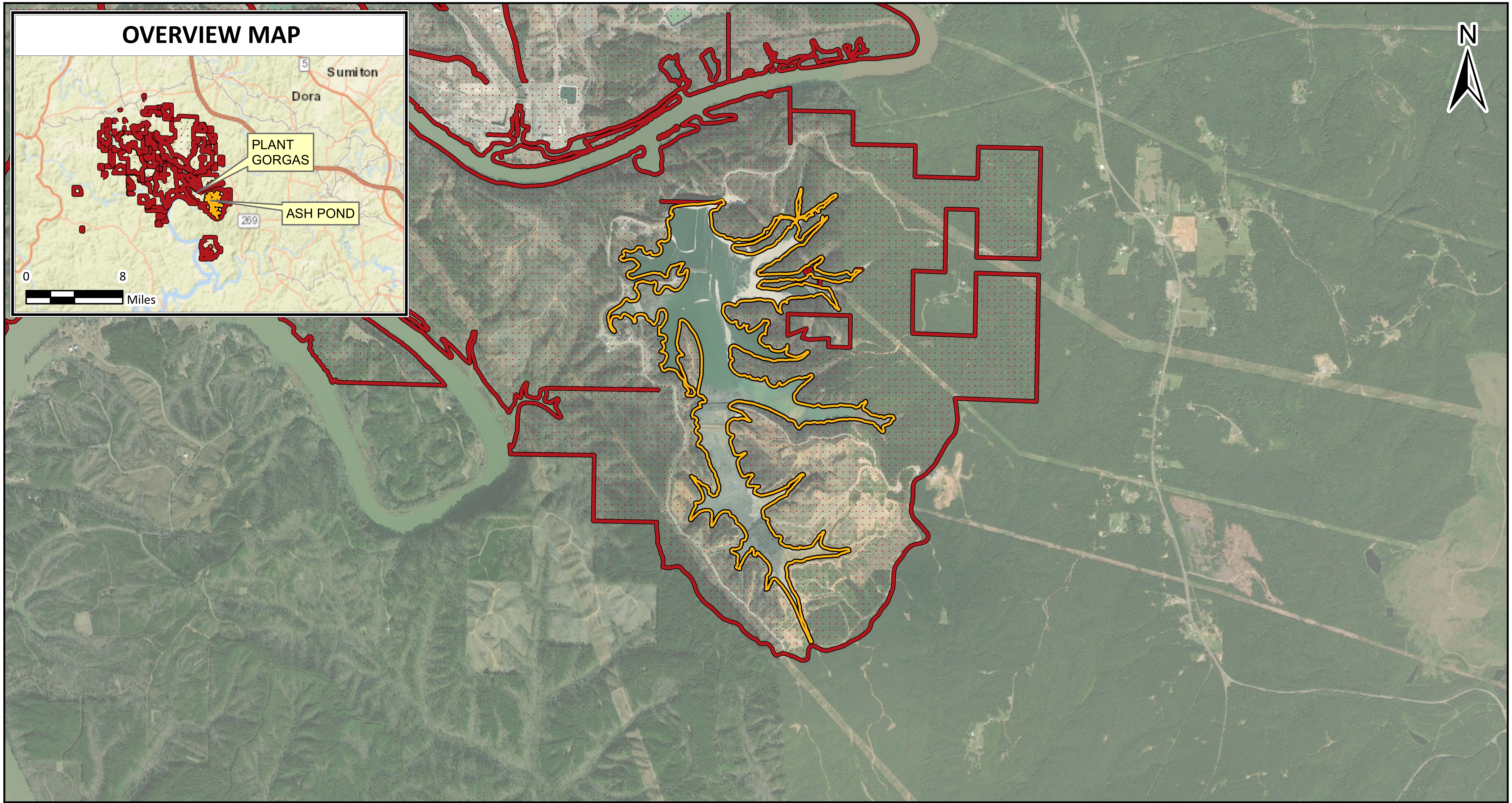
Figures



LEGEND

🟨 Ash Pond Boundary

🟥 Property Boundary (Approximate)

0 2,000
Feet

Projection: NAD 1983 State Plane Alabama West FIPS 0102 Feet
Base Map:Maxar Vivid Standard, 1/07/2023 (west);
Maxar Vivid Standard, 11/14/2020 (east)

SCALE 1:24,000

DATE 10/18/2023

DRAWN BY KWR

CHECKED BY AWH

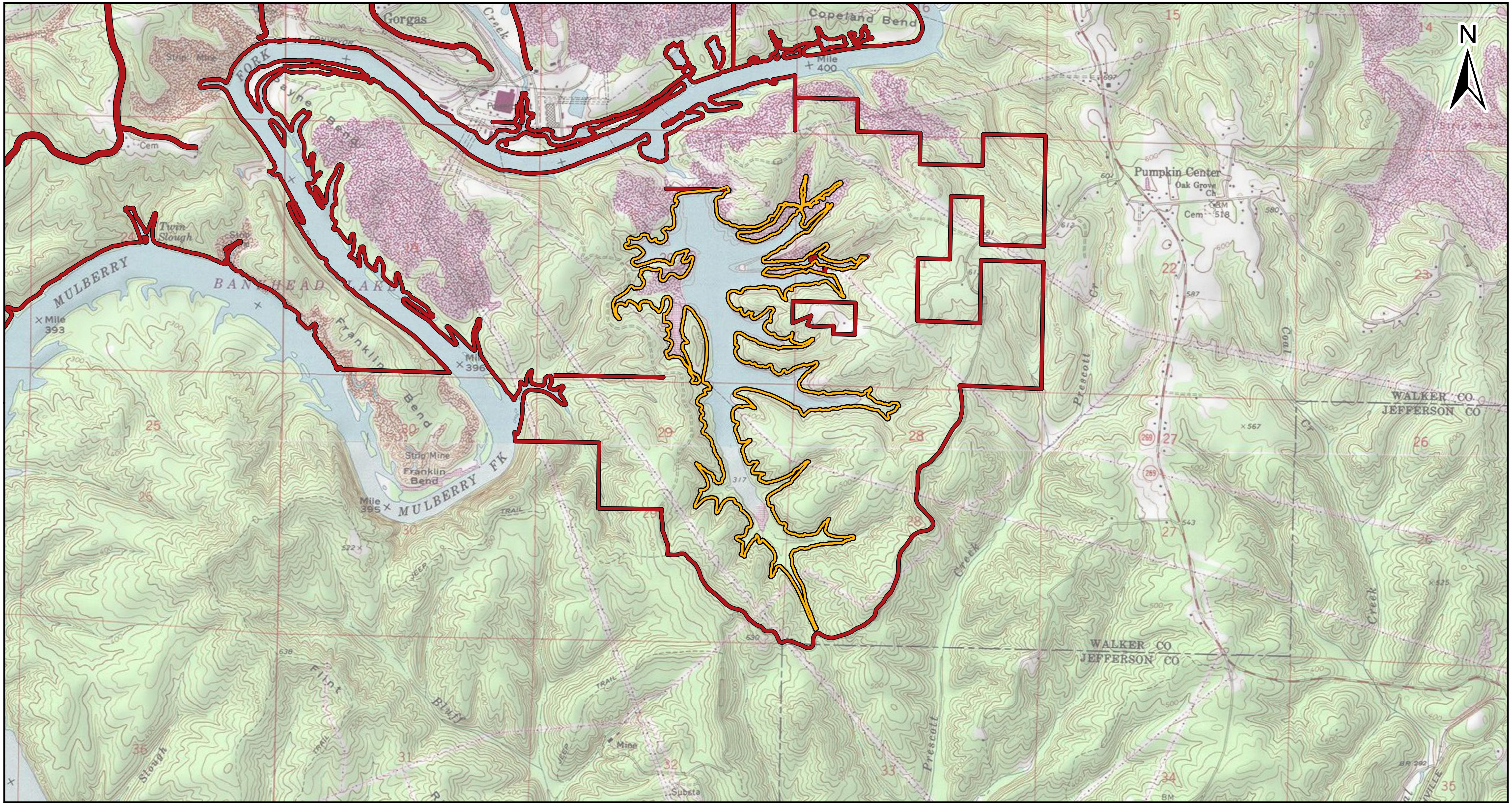
DRAWING TITLE:

SITE LOCATION MAP
PLANT GORGAS ASH POND

FIGURE NO.

FIGURE 1

Southern Company



LEGEND

🟧 Ash Pond Boundary

🟥 Property Boundary (Approximate)

0 2,000
Feet

Projection: NAD 1983 State Plane Alabama West FIPS 0102 Feet
Base Map:Goodsprings, Alabama 1971 (Photorevised 1983) US
Geoloigical Survey 7.5' Topographic Quadrangle.

SCALE 1:24,000

DATE 10/18/2023

DRAWN BY KWR

CHECKED BY AWH

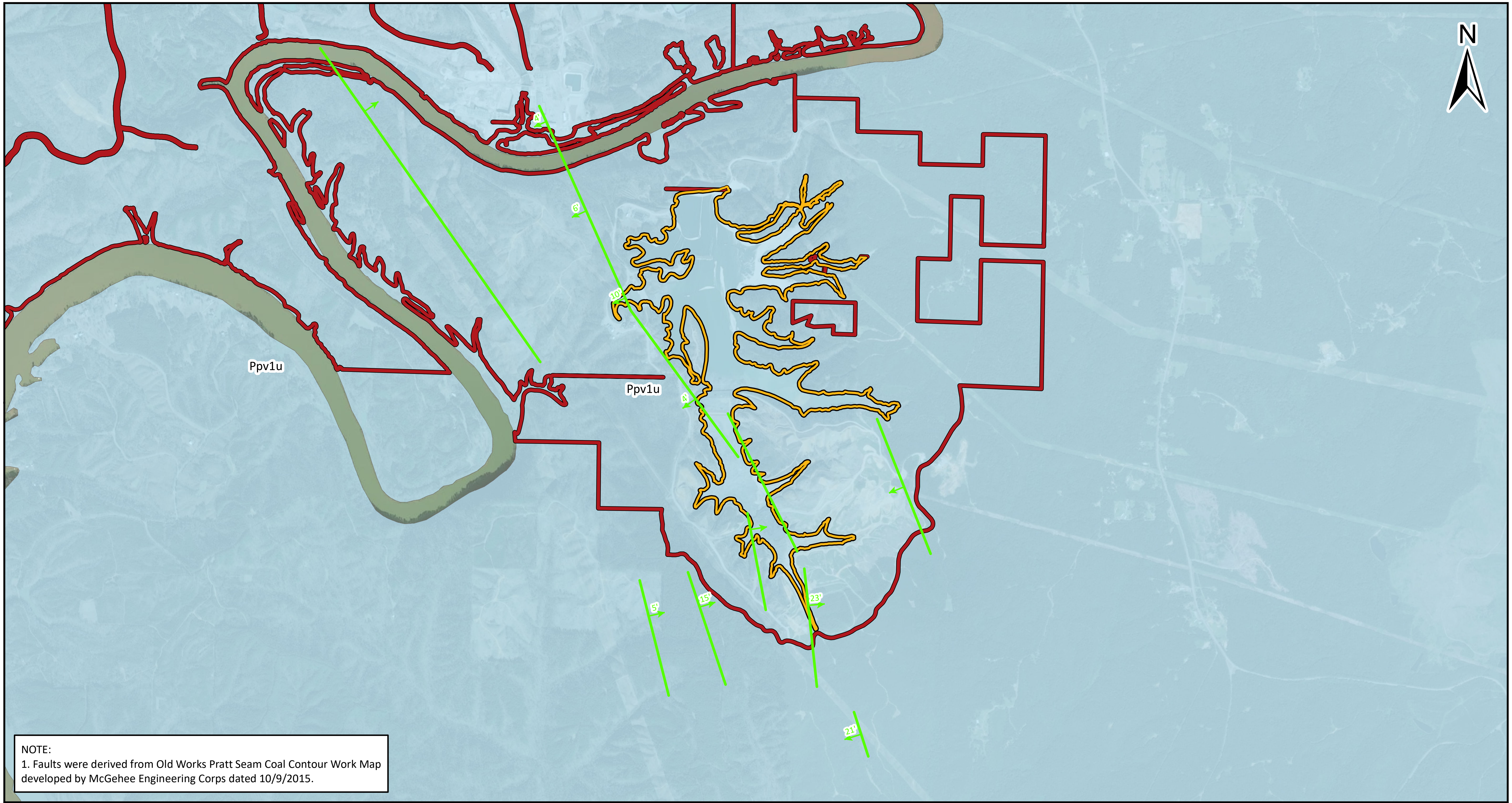
DRAWING TITLE:

SITE TOPOGRAPHIC MAP
PLANT GORGAS ASH POND

FIGURE NO.

FIGURE 2

Southern Company



NOTE:
1. Faults were derived from Old Works Pratt Seam Coal Contour Work Map developed by McGehee Engineering Corps dated 10/9/2015.

🟨 Ash Pond Boundary
🟥 Property Boundary (Approximate)

Geologic Units

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

╱ Fault

↘ Dip Direction of Fault with Offset (ft)

0 2,000
Feet

Projection: NAD 1983 State Plane Alabama West FIPS 0102 Feet

Base Map:Maxar Vivid Standard, 1/07/2023 (west),
Maxar Vivid Standard, 11/14/2020 (east).

SCALE 1:24,000

DATE 11/09/2023

DRAWN BY KWR

CHECKED BY AWH

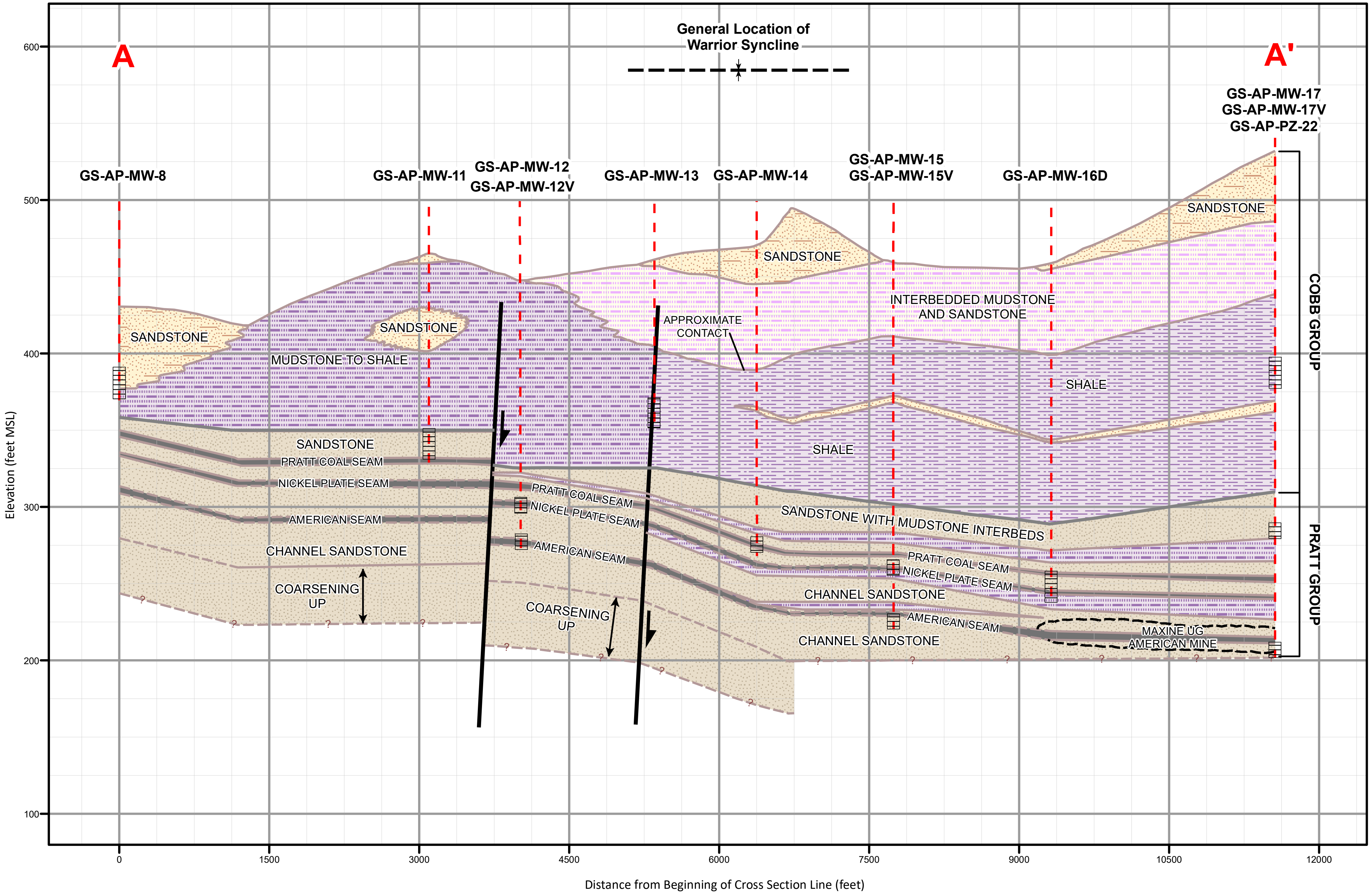
DRAWING TITLE:

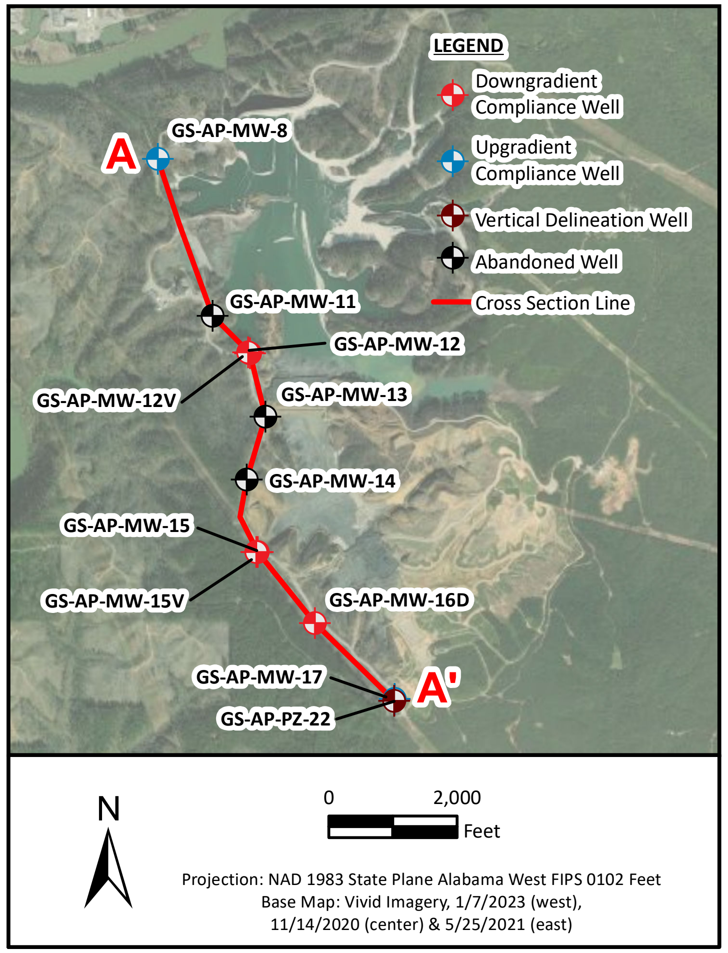
SITE GEOLOGIC MAP
PLANT GORGAS ASH POND

FIGURE NO.

FIGURE 3

Southern Company





Projection: NAD 1983 State Plane Alabama West FIPS 0102 Feet
Base Map: Vivid Imagery, 1/7/2023 (west),
11/14/2020 (center) & 5/25/2021 (east)

Notes:
1. Stratigraphic layers were correlated using a combination of boring data and gamma logs.
2. Elevation data are reported using feet above Mean Sea Level (MSL).
3. Monitoring wells GS-AP-MW-8, GS-AP-MW-13, and GS-AP-MW-17V display groundwater elevations that are higher than the ash pond elevation (382.5 ft MSL).
4. Vertical exaggeration = 15x.

LEGEND

- ☰ Screen Interval
- - - Monitoring Well Location
- ― Group Boundary
- ― Strata Boundary
- - - Inferred Strata Boundary
- ― Fault
- - - Mine
- ―✢― Syncline

Geologic Units

- ▤ Shale
- ▤ Mudstone to Shale
- ▨ Interbedded Mudstone and Sandstone
- ▨ Sandstone
- ▨ Channel Sandstone
- ■ Coal

SCALE
As Shown

DATE
1/24/2024

DRAWN BY
KWR

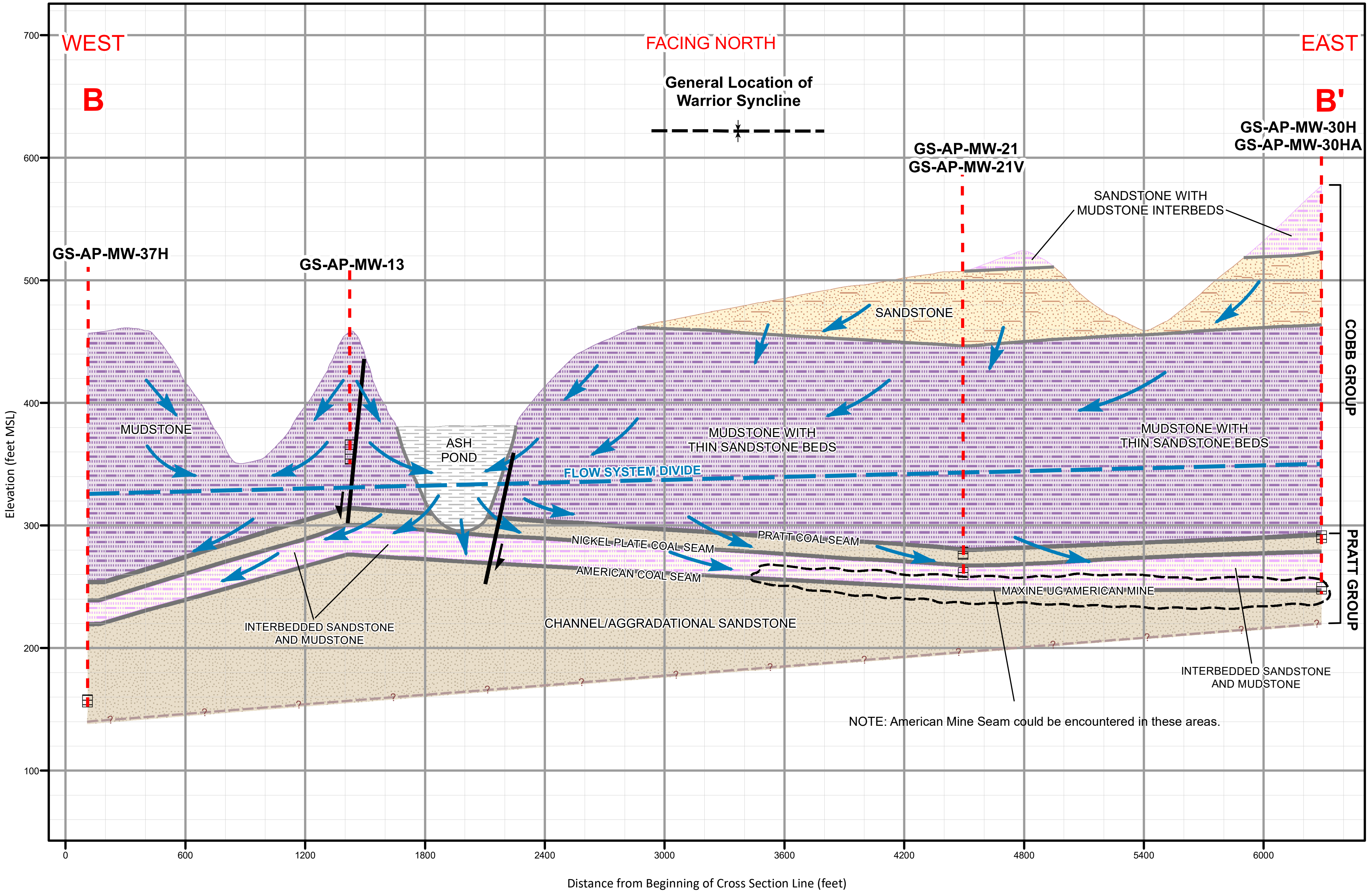
CHECKED BY
GBD

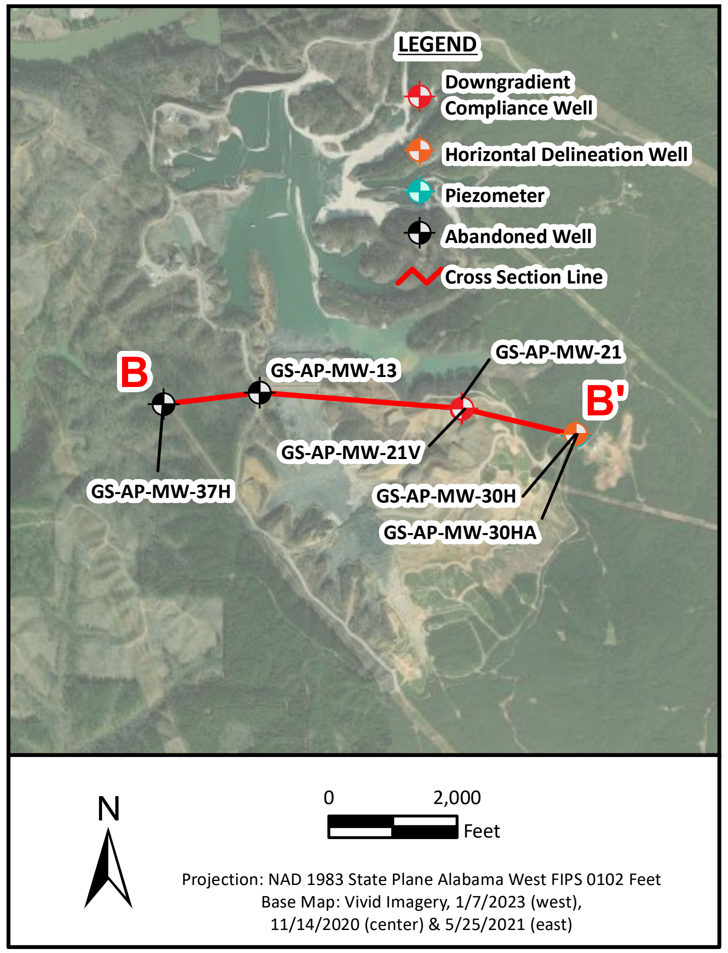
DRAWING TITLE

GEOLOGIC CROSS SECTION A - A'
PLANT GORGAS ASH POND

FIGURE NO.
FIGURE 4A

Southern Company





Projection: NAD 1983 State Plane Alabama West FIPS 0102 Feet
Base Map: Vivid Imagery, 1/7/2023 (west), 11/14/2020 (center) & 5/25/2021 (east)

Notes:
1. Stratigraphic layers were correlated using a combination of boring data and gamma logs.
2. Dashed blue line represents approximate boundary between water-table flow system and deeper Pratt flow system.
3. Elevation data are reported using feet above Mean Sea Level (MSL).
4. Vertical exaggeration = 6x.

LEGEND

- Cross Section Line
- Monitoring Well Location
- Screen Interval
- Groundwater Flow Direction
- Flow System Divide
- Group Boundary
- Strata Boundary
- Fault
- Mine
- Inferred Boundary
- Syncline

Geologic Units

- Ash Pond (Fill)
- Mudstone with Thin Sandstone Interbeds
- Sandstone with Mudstone Interbeds
- Sandstone
- Channel/Aggradational Sandstone
- Coal

SCALE
As Shown

DATE
1/24/2024

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KAR

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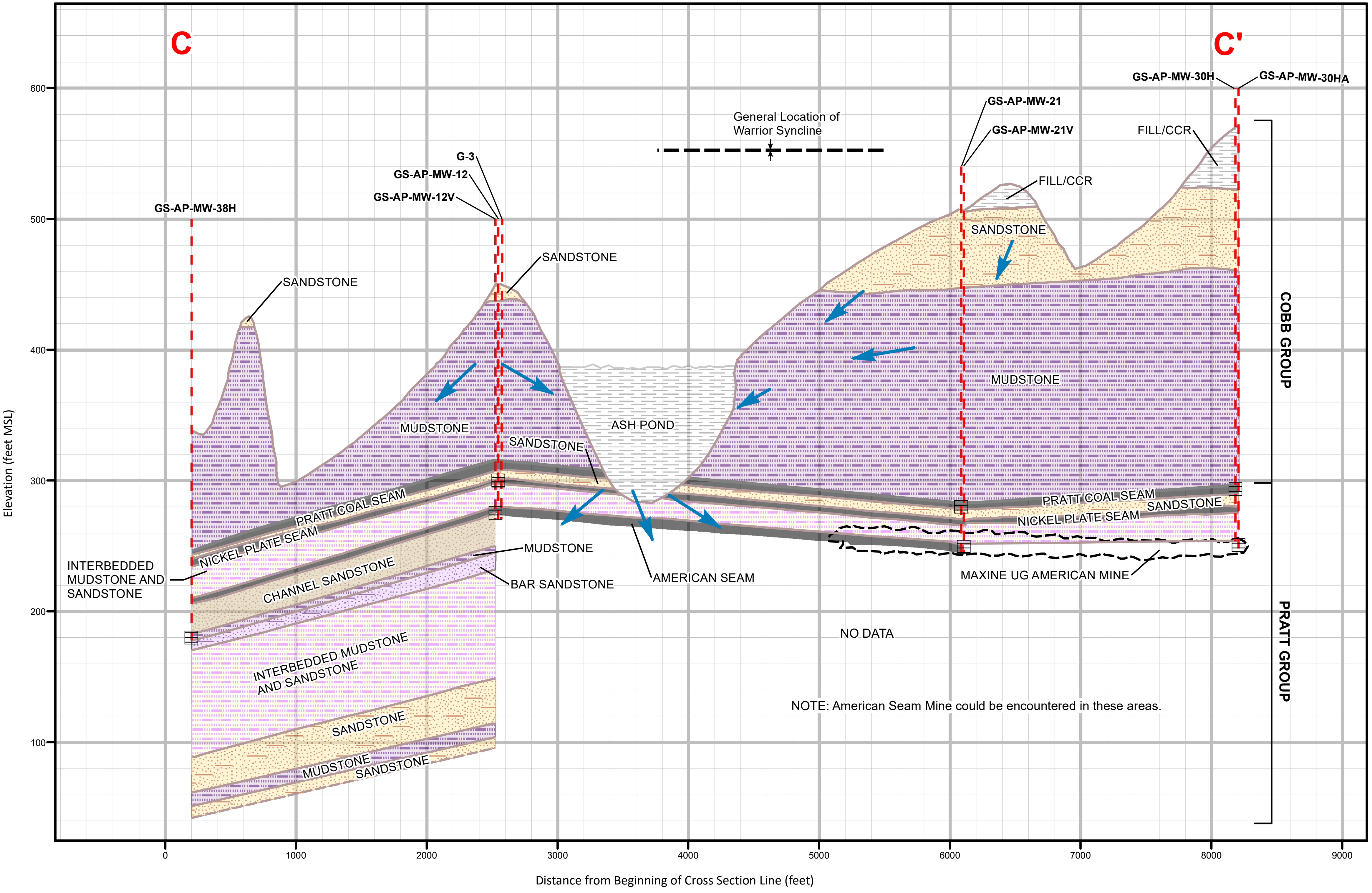
GBD

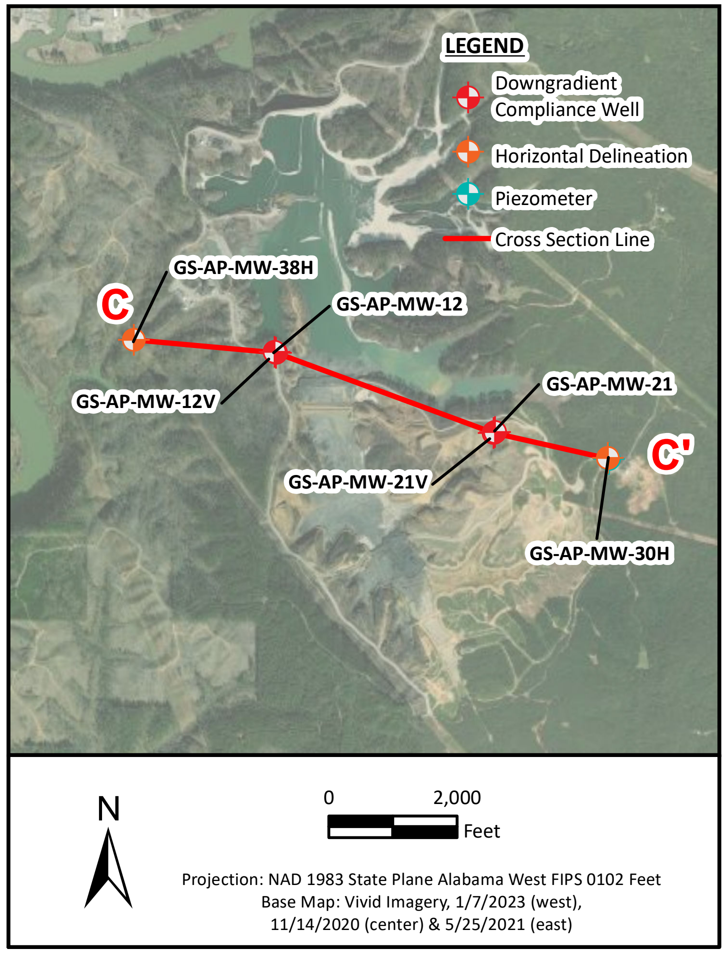
DRAWING TITLE

GEOLOGIC CROSS SECTION B - B'
PLANT GORGAS ASH POND

FIGURE NO.
FIGURE 4B

Southern Company





Projection: NAD 1983 State Plane Alabama West FIPS 0102 Feet
Base Map: Vivid Imagery, 1/7/2023 (west),
11/14/2020 (center) & 5/25/2021 (east)

Notes:

1. Stratigraphic layers were correlated using a combination of boring data and gamma logs.
2. Elevation data are reported using feet above Mean Sea Level (MSL).
3. Maxine Mine was not encountered at well GW-AP-MW-21V.
4. Vertical exaggeration = 10x

LEGEND

▤ Screen Interval
- - Monitoring Well Location
➔ Groundwater Flow Direction
— Group Boundary
— Strata Boundary
- - Inferred Strata Boundary
- - Mine
✛ Syncline

Geologic Units

▤ Fill/CCR
▨ Bar Sandstone
▤ Mudstone
▤ Interbedded Mudstone and Sandstone
▨ Sandstone
▨ Channel Sandstone
■ Coal

SCALE
As Shown

DATE
1/24/2024

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MDM/KWR

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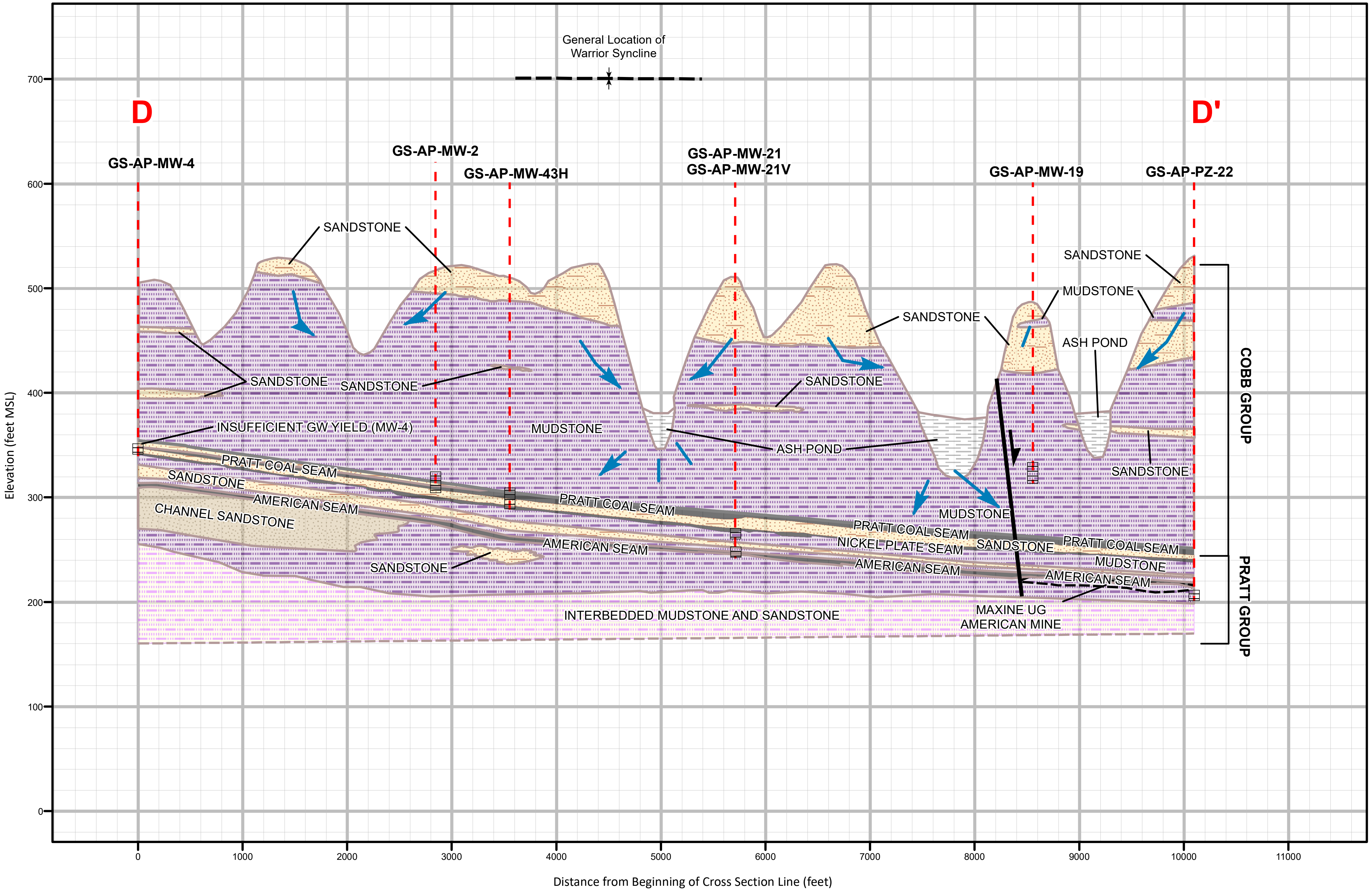
GBD

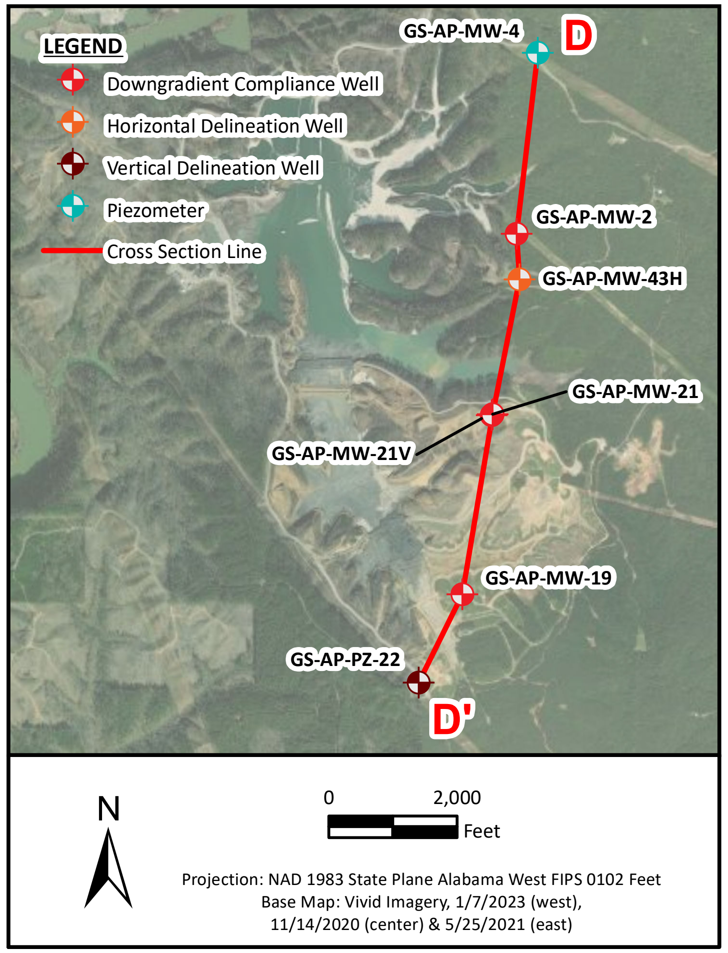
DRAWING TITLE

GEOLOGIC CROSS SECTION C - C'
PLANT GORGAS ASH POND

FIGURE NO.
FIGURE 4C

Southern Company





Notes:
1. Stratagraphic layers were correlated using a combination of boring data and gamma logs.
2. Elevation data are reported using feet above Mean Sea Level (MSL).
3. Vertical exaggeration = 10x.

LEGEND

- Monitoring Well Location
- Screen Interval
- Groundwater Flow Direction
- Group Boundary
- Strata Boundary
- Inferred Strata Boundary
- Mine
- Fault
- Syncline

Geologic Units

- Fill/CCR
- Mudstone
- Interbedded Mudstone and Sandstone
- Sandstone
- Channel Sandstone
- Coal

SCALE
As Shown

DATE
1/24/2024

DRAWN BY
JEM/KWR

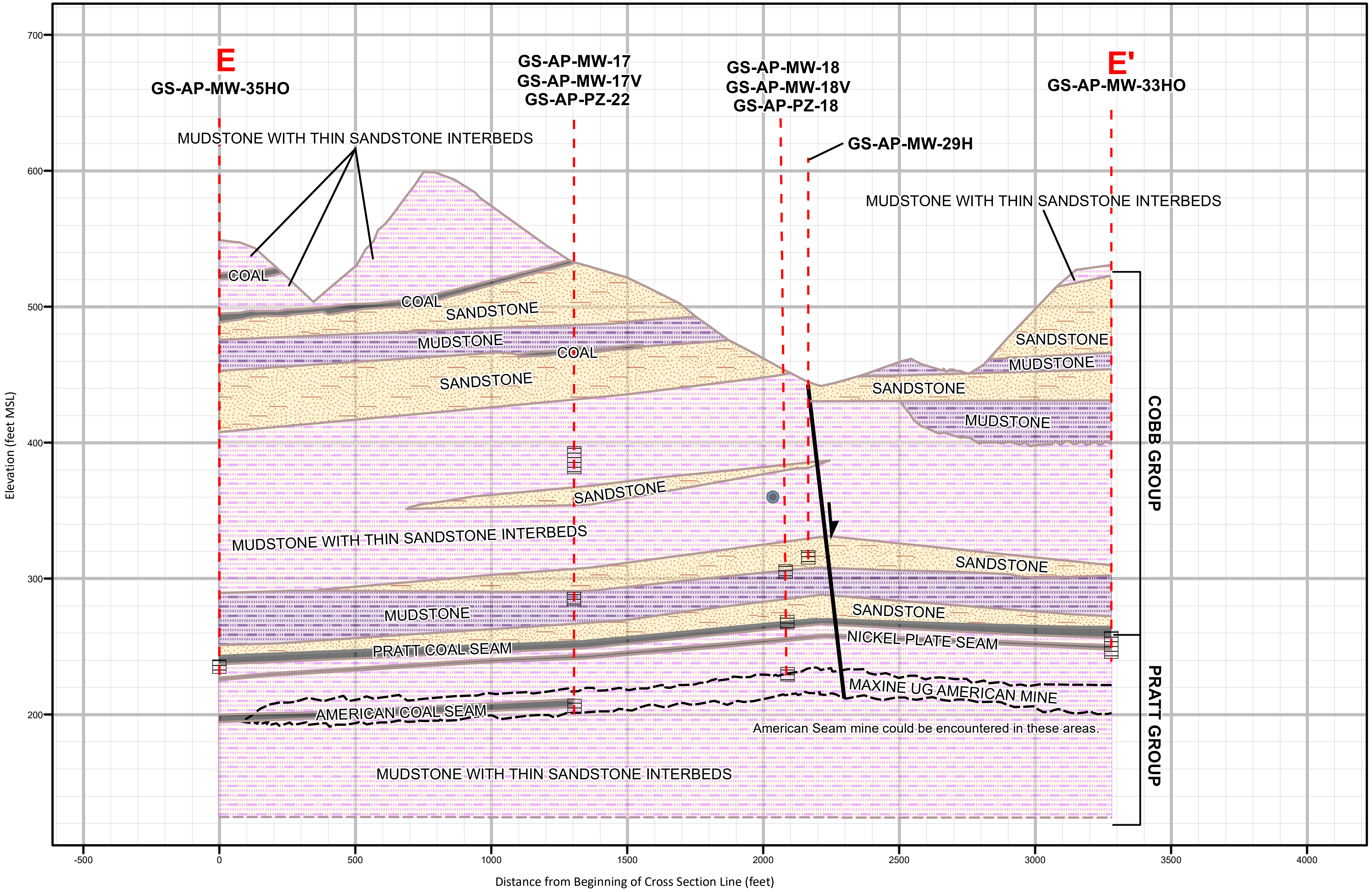
CHECKED BY
GBD

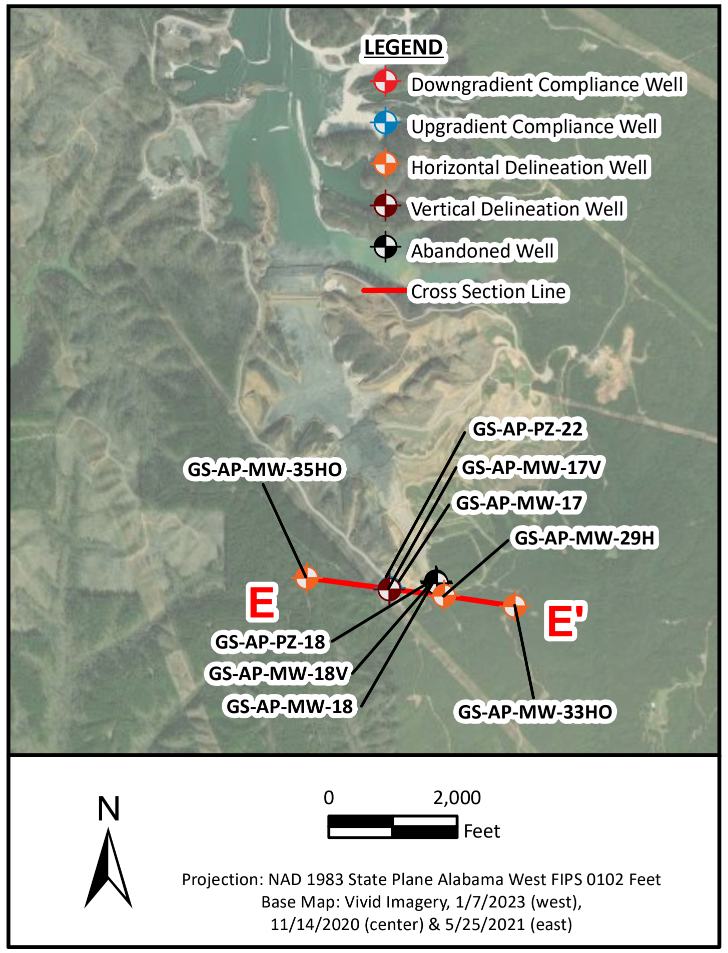
DRAWING TITLE

GEOLOGIC CROSS SECTION D - D'
PLANT GORGAS ASH POND

FIGURE NO.
FIGURE 4D

Southern Company





Projection: NAD 1983 State Plane Alabama West FIPS 0102 Feet
Base Map: Vivid Imagery, 1/7/2023 (west),
11/14/2020 (center) & 5/25/2021 (east)

Notes:
1. Stratagraphic layers were correlated using a combination of boring data and gamma logs.
2. Elevation data are reported using feet above Mean Sea Level (MSL).
3. Vertical exaggeration = 5x.
4. Prescott Creek Outfall Tunnel (~355 ft MSL; 9' diameter) Plugged: 2007 Grouted: Spring-Early Summer 2019

LEGEND

Symbol	Description
- -	Monitoring Well Location
☰	Screen Interval
●	Prescott Creek Outfall Tunnel
╱	Group Boundary
╱	Strata Boundary
╱	Inferred Strata Boundary
╱	Mine
╱	Fault

Geologic Units

Symbol	Unit
▨	Mudstone
▨	Mudstone with Thin Sandstone Interbeds
▨	Sandstone
▨	Coarse Sandstone
■	Coal

SCALE
As Shown

DATE
1/24/2024

DRAWN BY
JEM/KWR

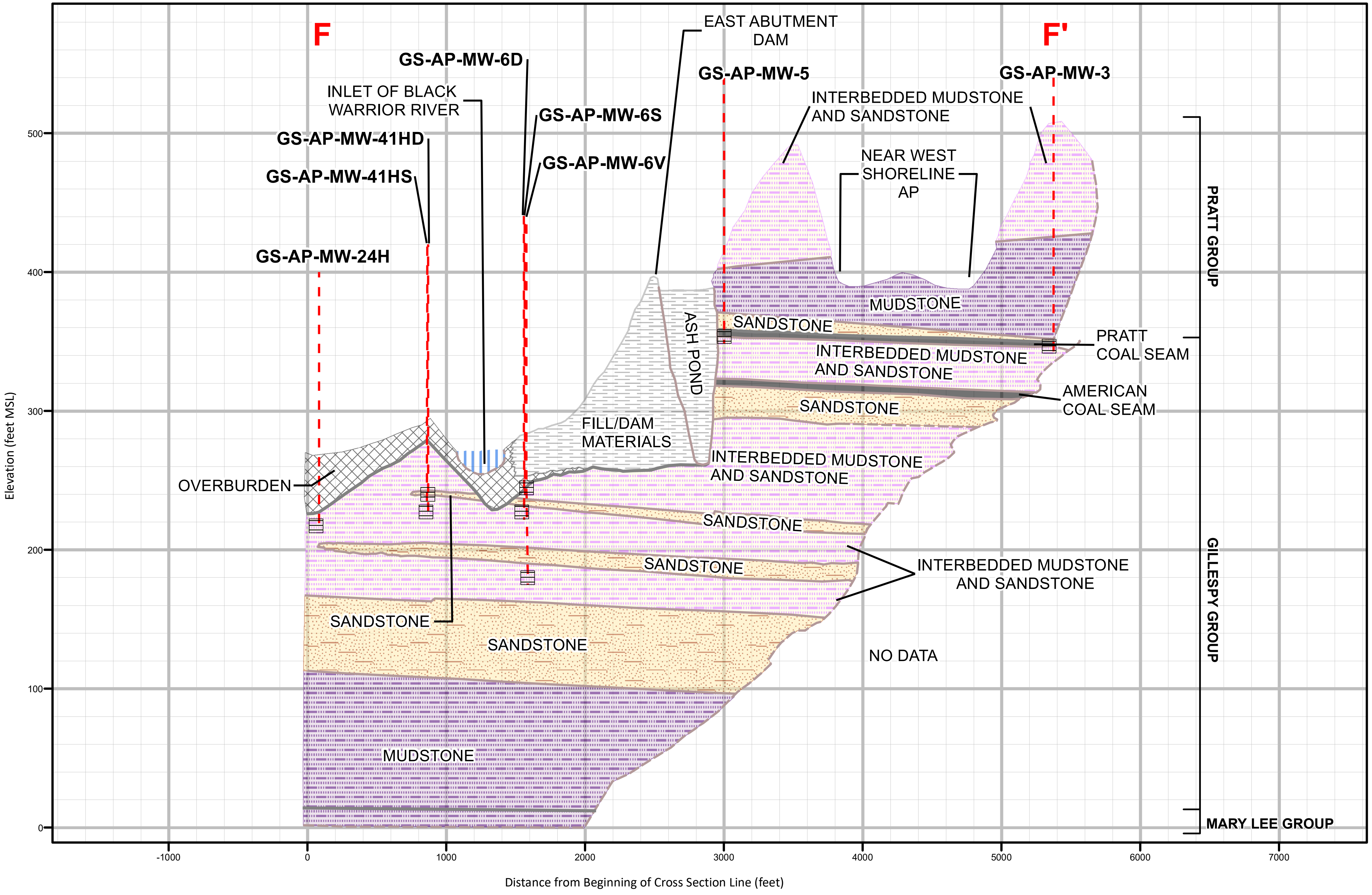
CHECKED BY
GBD

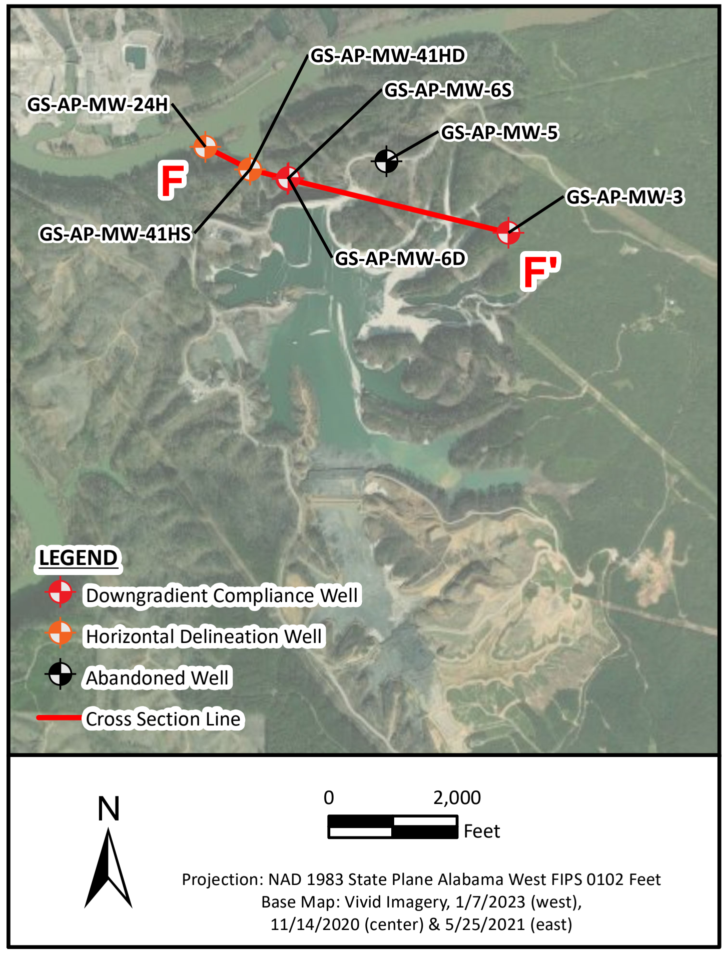
DRAWING TITLE

GEOLOGIC CROSS SECTION E - E'
PLANT GORGAS ASH POND

FIGURE NO.
FIGURE 4E

Southern Company





Projection: NAD 1983 State Plane Alabama West FIPS 0102 Feet
Base Map: Vivid Imagery, 1/7/2023 (west), 11/14/2020 (center) & 5/25/2021 (east)

Notes:

1. Stratigraphic layers were correlated using a combination of boring data and gamma logs.
2. Elevation data are reported using feet above Mean Sea Level (MSL).
3. Vertical exaggeration = 10x

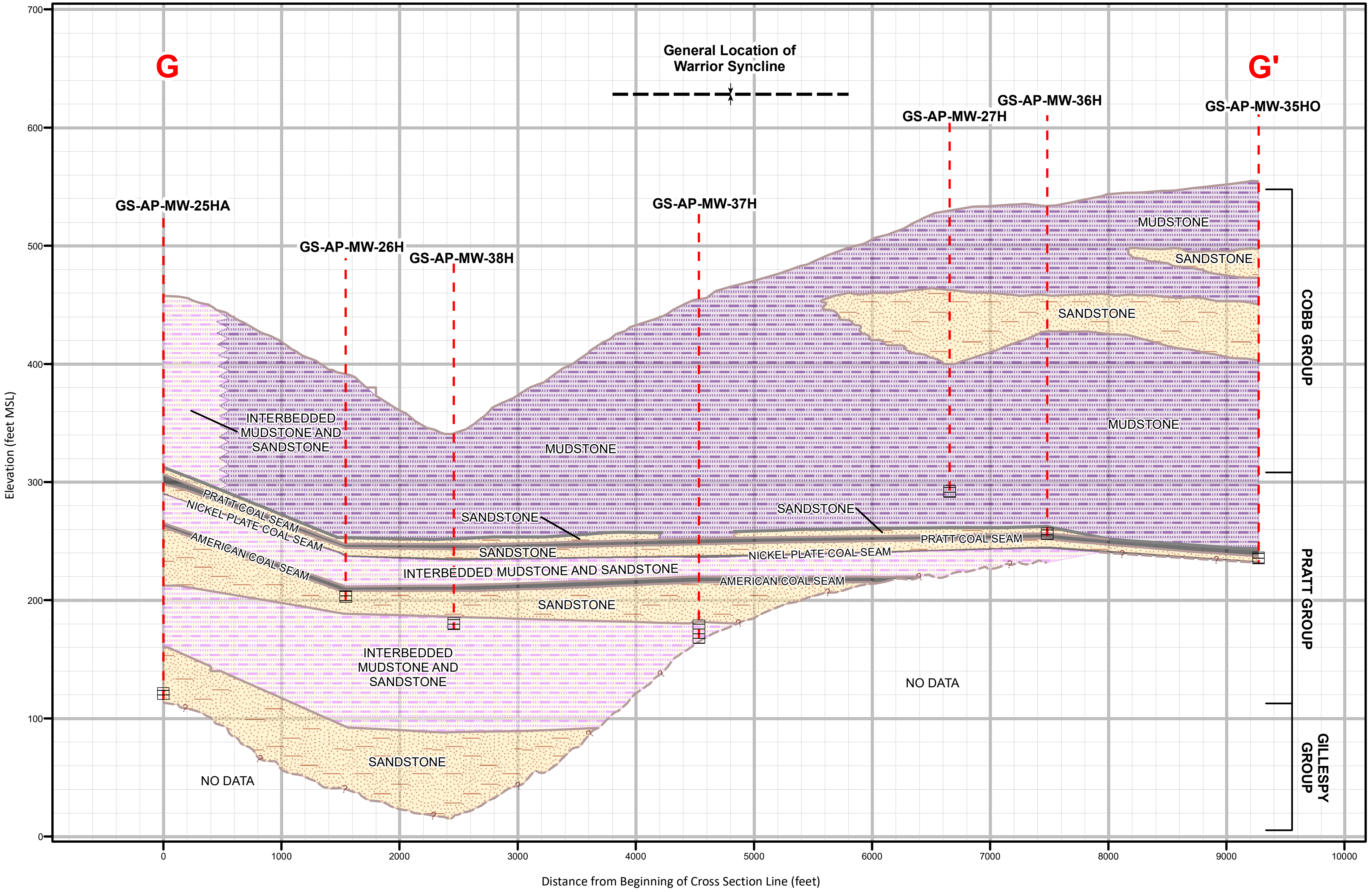
LEGEND

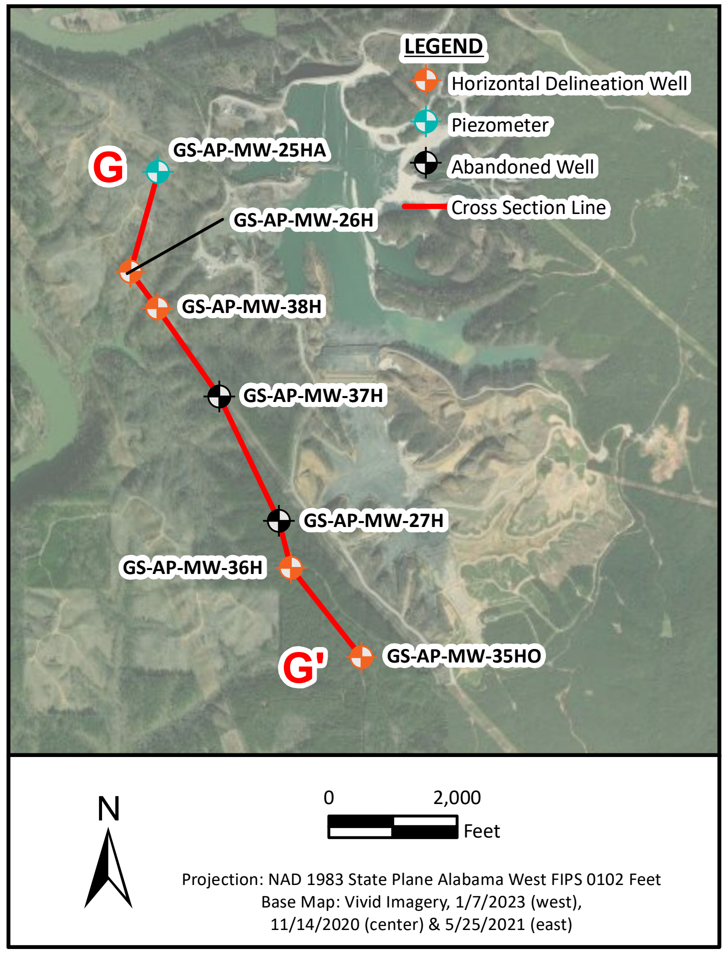
- ▤ Screen Interval
- ‐ ‐ Monitoring Well Location
- ╱ Group Boundary
- ╱ Strata Boundary
- ╱ Inferred Strata Boundary

Geologic Units

- ■ Coal
- ▤ Fill/CCR
- ▨ Interbedded Mudstone and Shale
- ▤ Mudstone
- ▩ Overburden
- ▦ Sandstone
- ||| Water

SCALE As Shown	DRAWING TITLE GEOLOGIC CROSS SECTION F - F' PLANT GORGAS ASH POND
DATE 1/24/2024	
DRAWN BY MDM/KWR	FIGURE NO. FIGURE 4F
CHECKED BY GBD	Southern Company





Projection: NAD 1983 State Plane Alabama West FIPS 0102 Feet
Base Map: Vivid Imagery, 1/7/2023 (west),
11/14/2020 (center) & 5/25/2021 (east)

Notes:
1. Stratigraphic layers were correlated using a combination of boring data and gamma logs.
2. Elevation data are reported using feet above Mean Sea Level (MSL).
3. Vertical exaggeration = 10x.

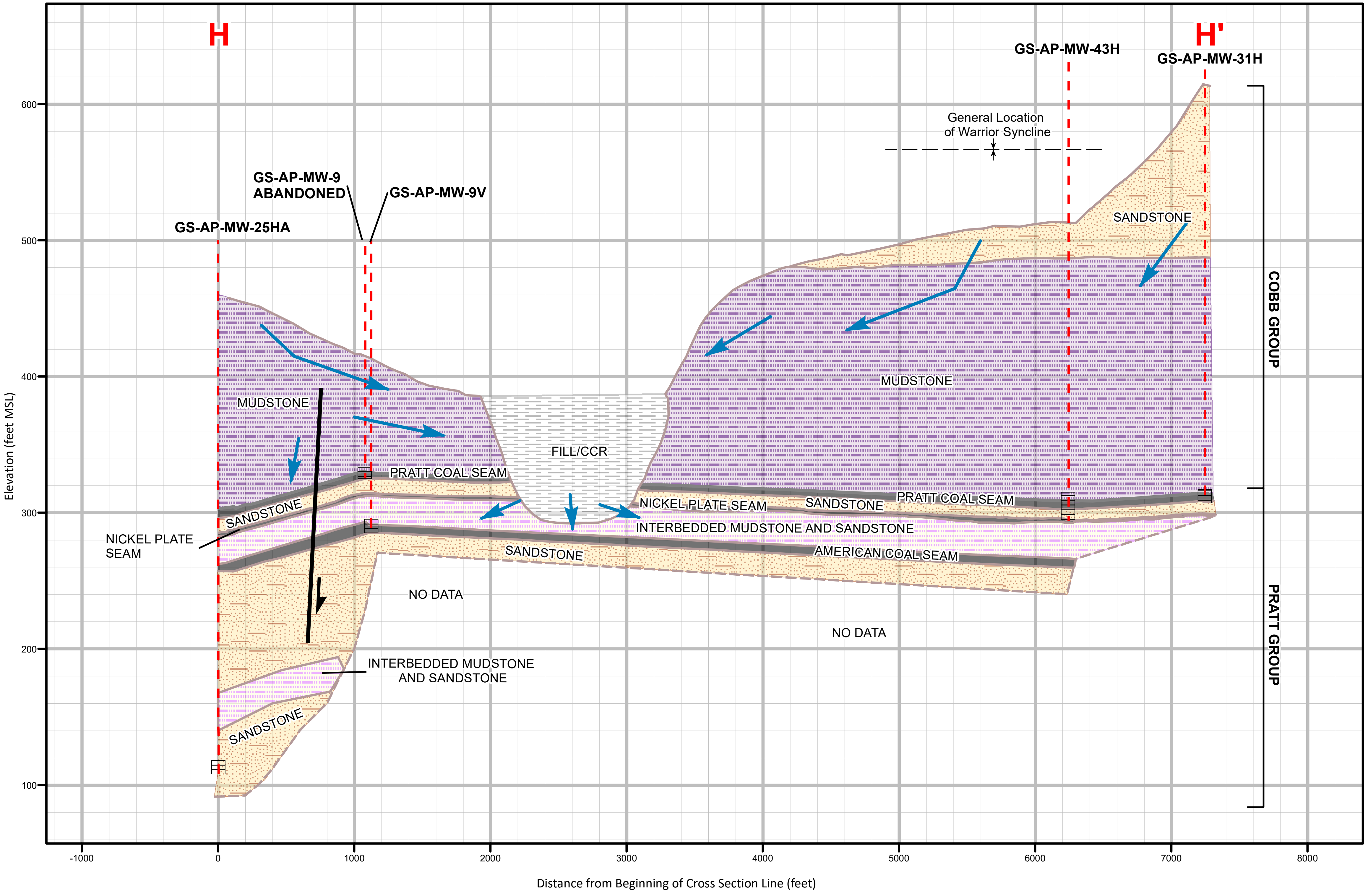
LEGEND

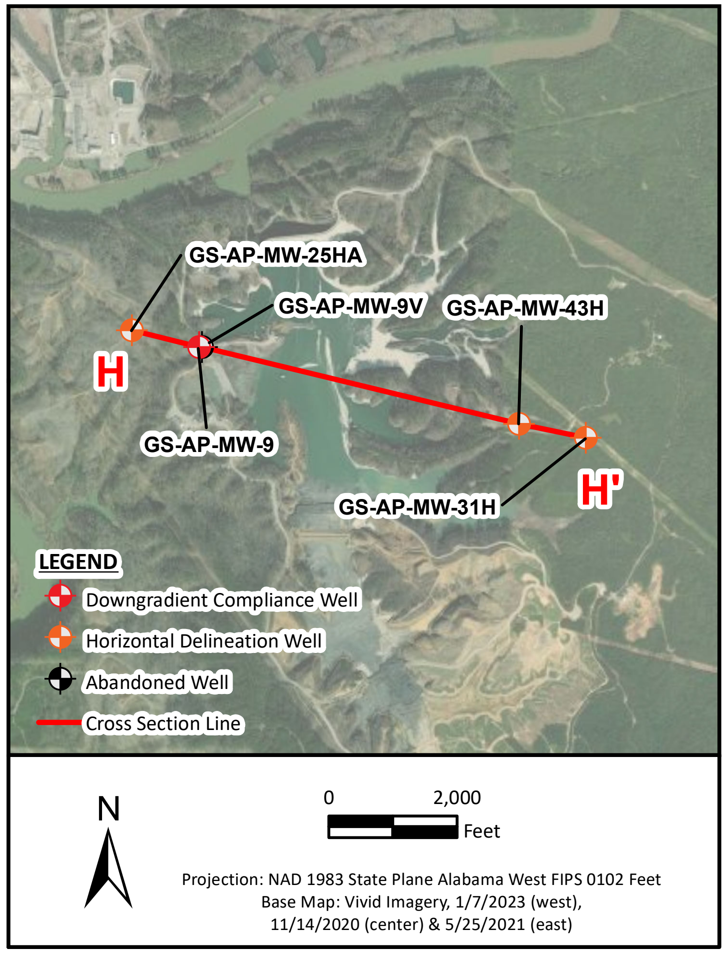
- ☰ Screen Interval
- ╌ Monitoring Well Location
- ╱ Group Boundary
- ╱ Strata Boundary
- ╱? Inferred Strata Boundary
- ╋ Syncline

Geologic Units

- ▨ Mudstone
- ▨ Interbedded Mudstone and Sandstone
- ▨ Sandstone
- ▨ Channel Sandstone
- ■ Coal

SCALE As Shown	DRAWING TITLE **GEOLOGIC CROSS SECTION G - G' PLANT GORGAS ASH POND**
DATE 1/24/2024	
DRAWN BY KWR	FIGURE NO. FIGURE 4G
CHECKED BY GBD	Southern Company





Projection: NAD 1983 State Plane Alabama West FIPS 0102 Feet
Base Map: Vivid Imagery, 1/7/2023 (west),
11/14/2020 (center) & 5/25/2021 (east)

Notes: 1. Stratigraphic layers were correlated using a combination of boring data and gamma logs.
2. Elevation data are reported using feet above Mean Sea Level (MSL).

LEGEND

▤ Screen Interval
Monitoring Well Location
Groundwater Flow Direction
Group Boundary
Strata Boundary
Inferred Strata Boundary
Fault
Syncline

Geologic Units

■ Coal
▤ Fill/CCR
▨ Interbedded Mudstone and Sandstone
▨ Mudstone
▨ Sandstone

SCALE
As Shown

DATE
1/24/2024

DRAWN BY
KWR

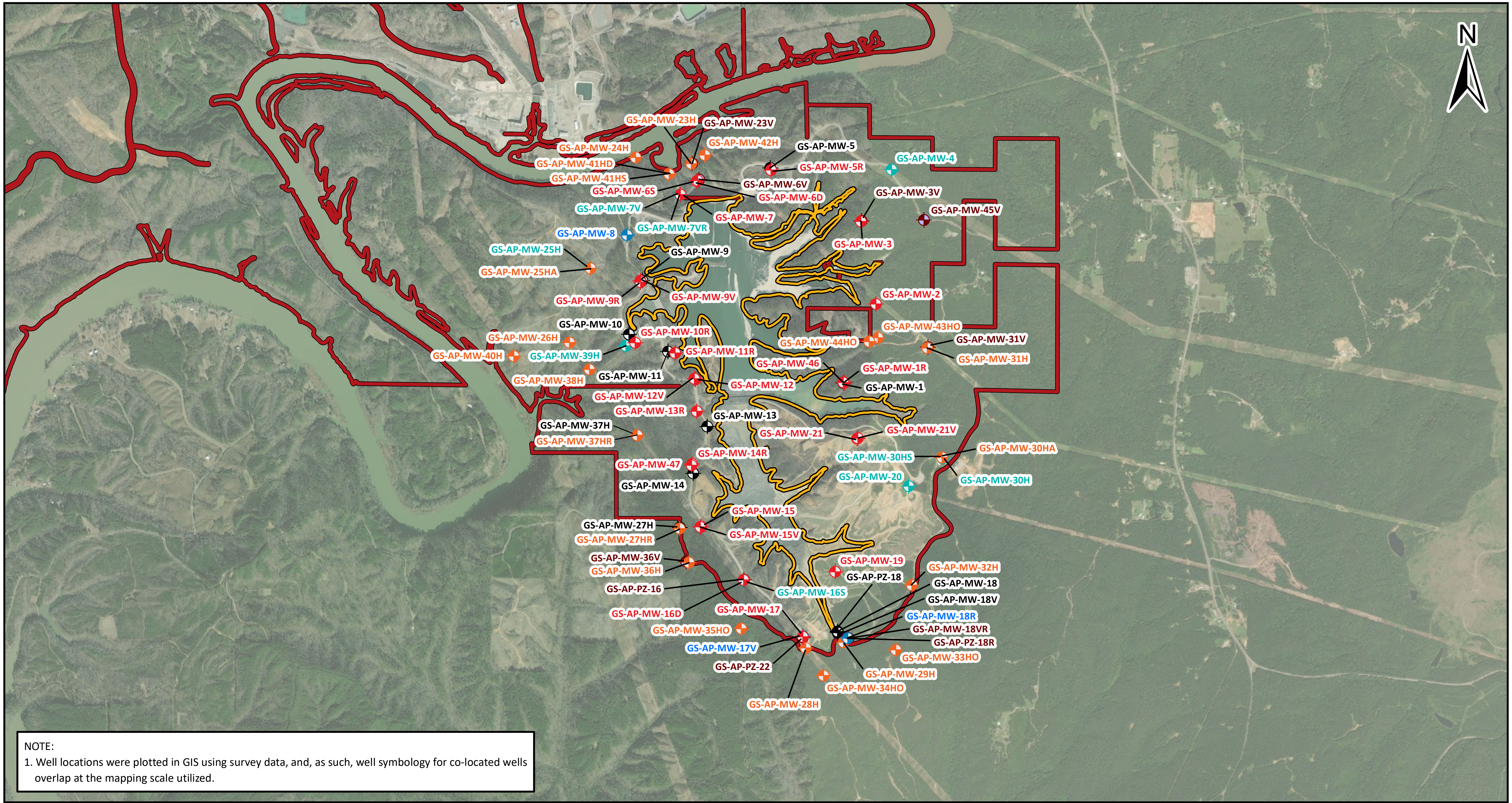
CHECKED BY
GBD

DRAWING TITLE

GEOLOGIC CROSS SECTION H - H'
PLANT GORGAS ASH POND

FIGURE NO.
FIGURE 4H

Southern Company



NOTE:
1. Well locations were plotted in GIS using survey data, and, as such, well symbology for co-located wells overlap at the mapping scale utilized.

LEGEND

- ⌖ Downgradient Monitoring Well
- ⌖ Upgradient Monitoring Well
- ⌖ Horizontal Delineation Well
- ⌖ Vertical Delineation Well
- ⌖ Piezometer
- ⌖ Abandoned Well
- ▭ Ash Pond Boundary
- ▭ Property Boundary (Approximate)

GS-AP-MW-2	Downgradient Monitoring Well ID
GS-AP-MW-8	Upgradient Monitoring Well ID
GS-AP-MW-23H	Horizontal Delineation Well ID
GS-AP-MW-6V	Vertical Delineation Well ID
GS-AP-MW-4	Piezometer ID
GS-AP-MW-9	Abandoned Well ID

0 2,000
Feet

Projection: NAD 1983 State Plane Alabama West FIPS 0102 Feet
Base Map: Vivid Imagery, 1/7/2023 (west), 11/14/2020 (center) & 5/25/2021 (east)

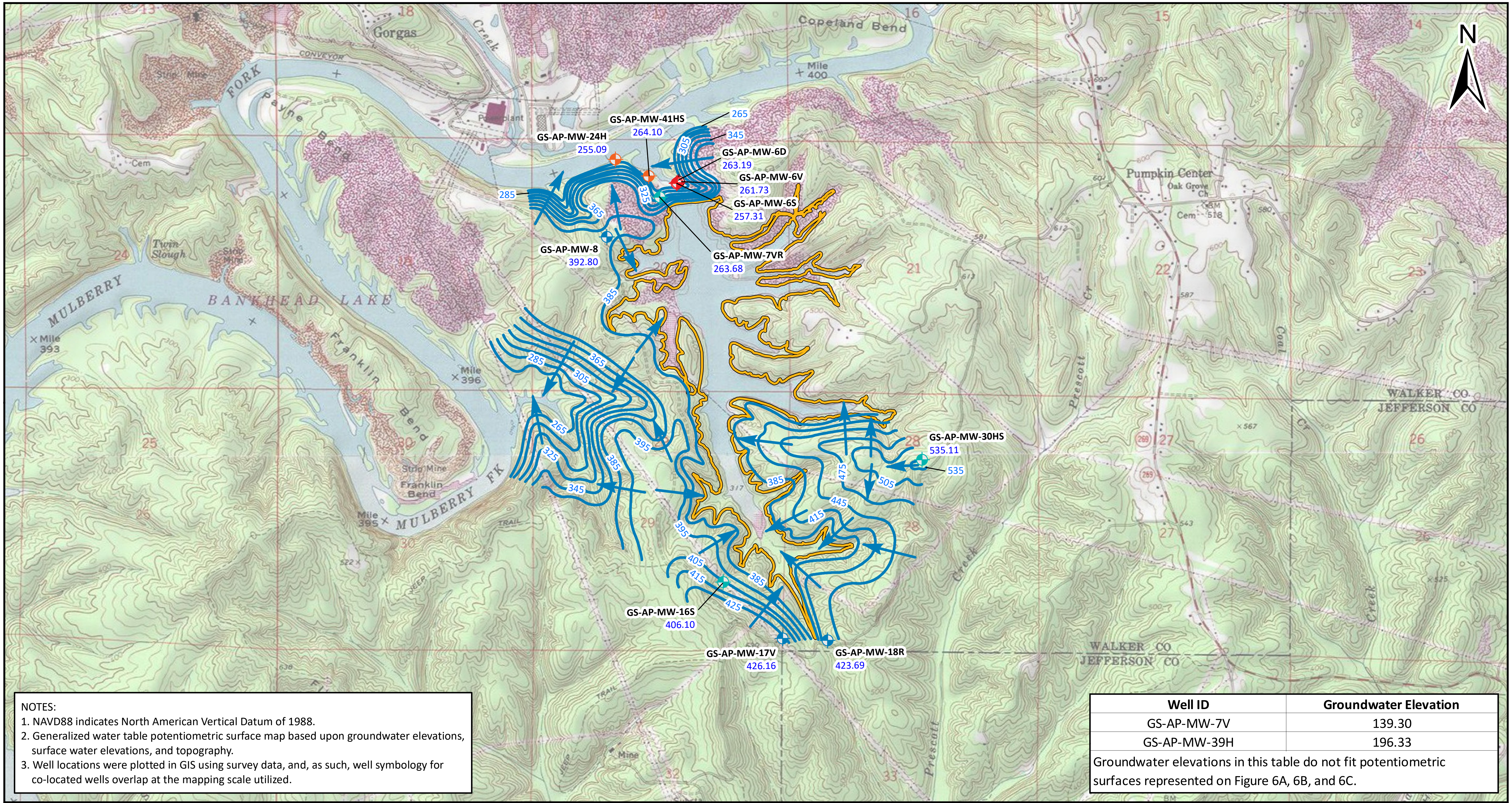
SCALE	1:24000
DATE	1/25/2024
DRAWN BY	KWR
CHECKED BY	AWH

DRAWING TITLE:

MONITORING WELL LOCATION MAP
PLANT GORGAS ASH POND

FIGURE NO.
FIGURE 5

Southern Company



NOTES:

1. NAVD88 indicates North American Vertical Datum of 1988.
2. Generalized water table potentiometric surface map based upon groundwater elevations, surface water elevations, and topography.
3. Well locations were plotted in GIS using survey data, and, as such, well symbology for co-located wells overlap at the mapping scale utilized.

Well ID	Groundwater Elevation
GS-AP-MW-7V	139.30
GS-AP-MW-39H	196.33

Groundwater elevations in this table do not fit potentiometric surfaces represented on Figure 6A, 6B, and 6C.

LEGEND

- ⊕ Downgradient Compliance Well
- ⊕ Upgradient Compliance Well
- ⊕ Horizontal Delineation Well
- ⊕ Vertical Delineation Well
- ⊕ Piezometer
- Potentiometric Surface Contour (ft NAVD88)
- Approximate Groundwater Flow Direction
- ▭ Ash Pond Boundary

GS-AP-MW-8 Well ID
392.80 Groundwater Elevation

0 2,000
Feet

Projection: NAD 1983 State Plane Alabama West FIPS 0102 Feet
Base Map: Goodsprings, Alabama 1971 (Photorevised 1983) and Gilmore, Alabama 1917 (Photorevised 1975) US Geological Survey 7.5' Topographic Quadrangle.

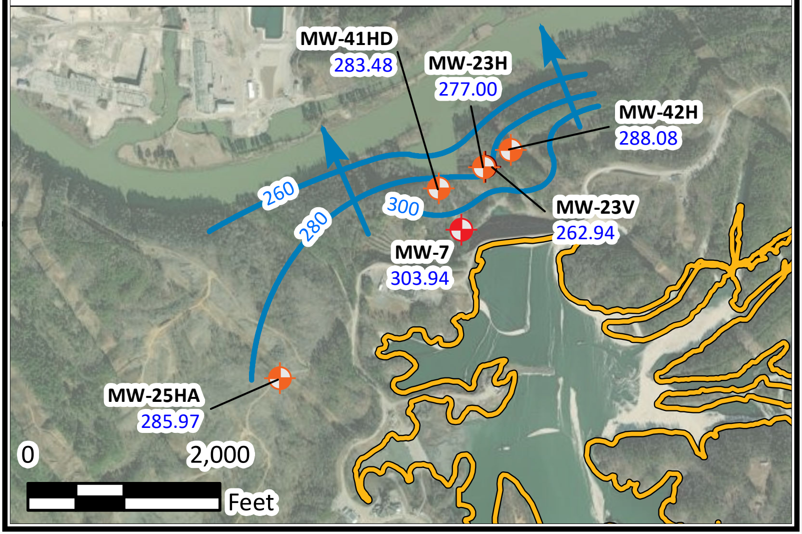
SCALE	1:24000
DATE	1/25/2024
DRAWN BY	KWR
CHECKED BY	AWH

DRAWING TITLE: POTENTIOMETRIC SURFACE CONTOUR MAP
(UPPER) WATER TABLE AQUIFER
MARCH 6, 2023
PLANT GORGAS ASH POND

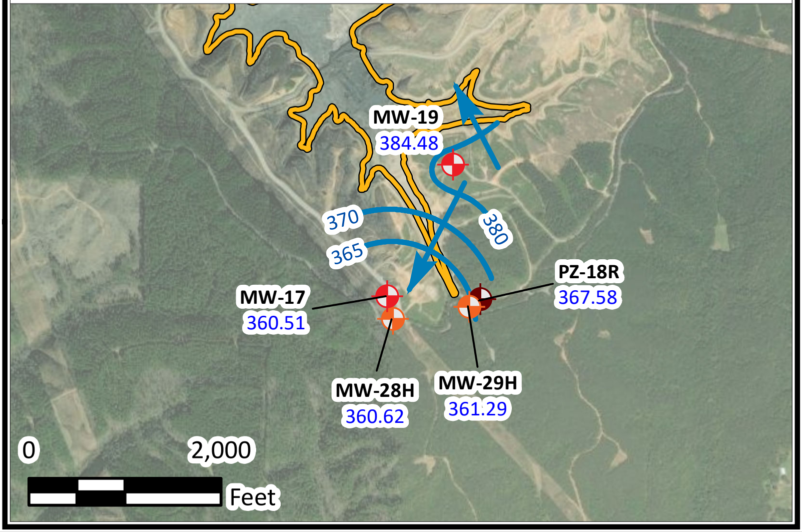
FIGURE NO.
FIGURE 6A

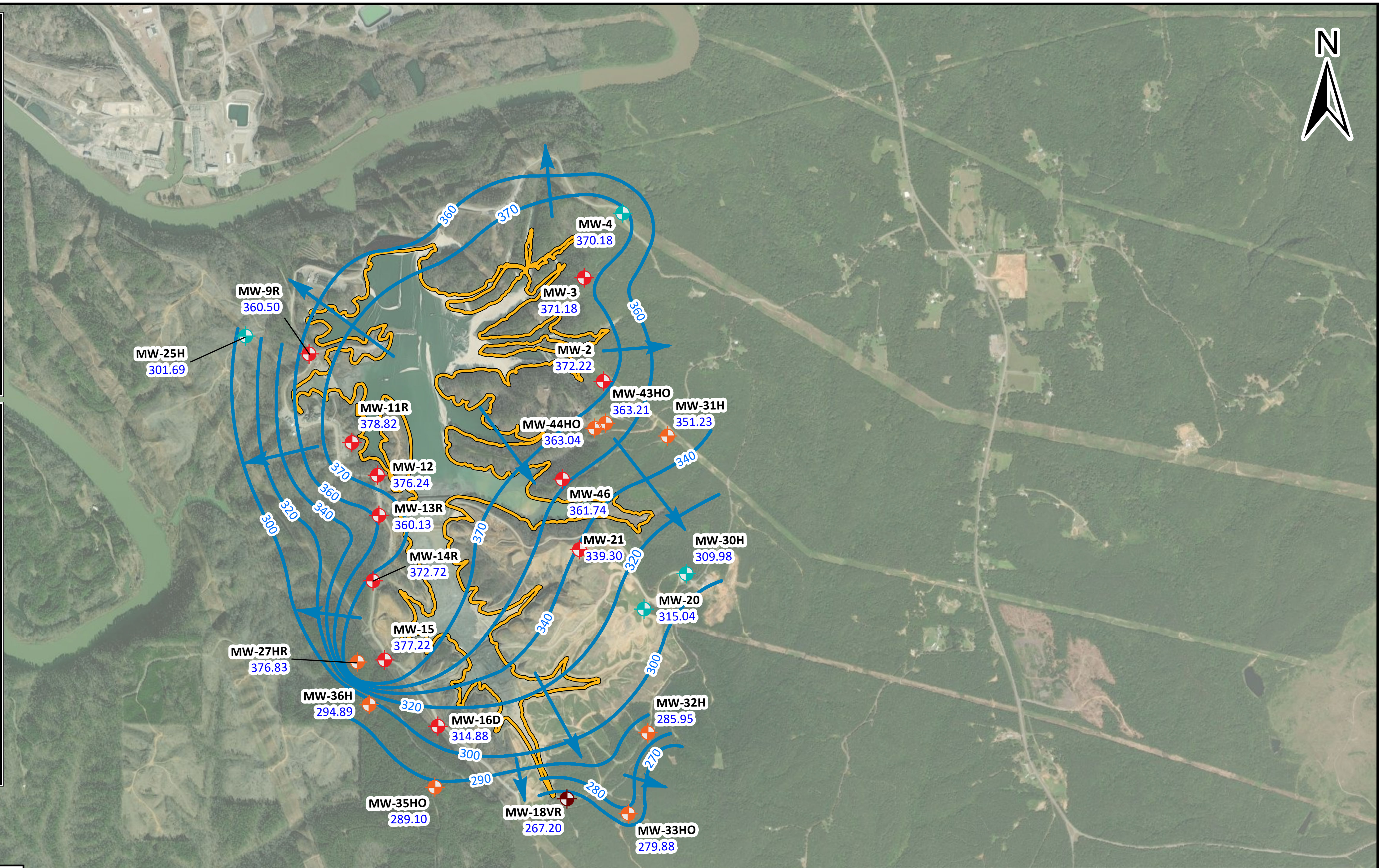
Southern Company

GENERALIZED POTENTIOMETRIC SURFACE CONTOUR MAP - BASE OF PRATT TO GILLESPY TRANSITION (NORTH OF DAM)



GENERALIZED POTENTIOMETRIC SURFACE CONTOUR MAP - UPPER PRATT TO COBB COAL GROUP





NOTES:
1. NAVD88 indicates North American Vertical Datum of 1988.
2. Abbreviated well and piezometer designations are shown for readability. Formal well designations are preceded by "GS-AP-" as shown on the Monitoring Well Location Map.
3. Potentiometric contour lines were generalized for depiction and ease of reader.

Well ID	Groundwater Elevation
GS-AP-MW-7V	139.30
GS-AP-MW-39H	196.33

Groundwater elevations in this table do not fit potentiometric surfaces represented on Figure 6A, 6B, and 6C.

LEGEND
- Downgradient Compliance Well
- Upgradient Compliance Well
- Horizontal Delineation Well
- Vertical Delineation Well
- Piezometer
- Potentiometric Surface Contour (ft NAVD88)
- Approximate Groundwater Flow Direction
- Ash Pond Boundary
- MW-2 Well ID
- 372.22 Groundwater Elevation

0 2,000
Feet

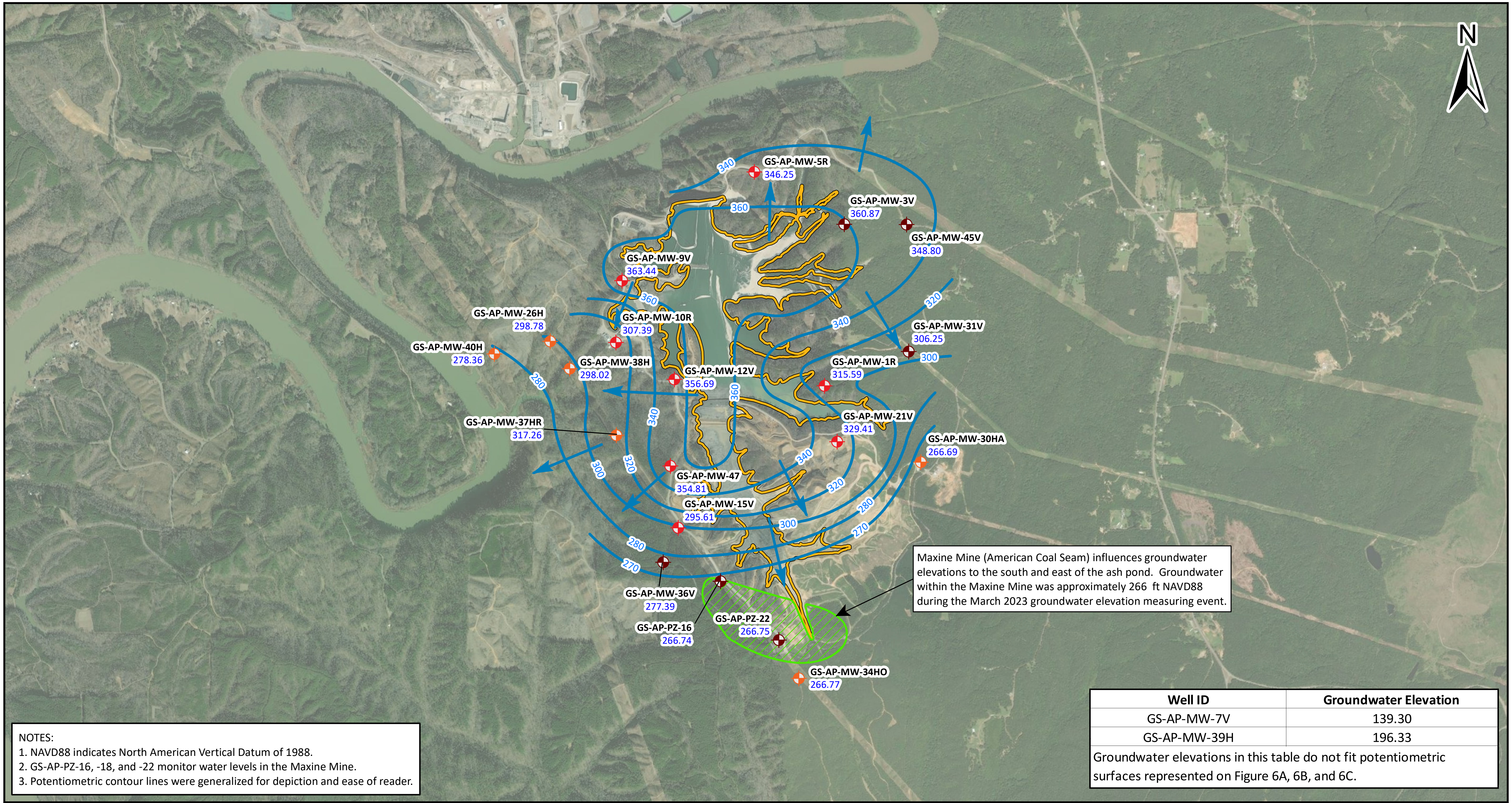
Projection: NAD 1983 State Plane Alabama West FIPS 0102 Feet
Base Map: Vivid Imagery, 1/7/2023 (west), 11/14/2020 (center) & 5/25/2021 (east)

SCALE	1:24000
DATE	1/25/2024
DRAWN BY	KWR
CHECKED BY	AWH

DRAWING TITLE: **POTENTIOMETRIC SURFACE CONTOUR MAP**
PRATT AQUIFER
MARCH 6, 2023
PLANT GORGAS ASH POND

FIGURE NO.
FIGURE 6B

Southern Company



Maxine Mine (American Coal Seam) influences groundwater elevations to the south and east of the ash pond. Groundwater within the Maxine Mine was approximately 266 ft NAVD88 during the March 2023 groundwater elevation measuring event.

NOTES:
1. NAVD88 indicates North American Vertical Datum of 1988.
2. GS-AP-PZ-16, -18, and -22 monitor water levels in the Maxine Mine.
3. Potentiometric contour lines were generalized for depiction and ease of reader.

Well ID	Groundwater Elevation
GS-AP-MW-7V	139.30
GS-AP-MW-39H	196.33

Groundwater elevations in this table do not fit potentiometric surfaces represented on Figure 6A, 6B, and 6C.

LEGEND

- ⊕ Downgradient Compliance Well
- ⊕ Horizontal Delineation Well
- ⊕ Vertical Delineation Well
- ⌒ Potentiometric Surface Contour (ft NAVD88)
- ➚ Approximate Groundwater Flow Direction
- ☐ Ash Pond Boundary
- ▨ Maxine Mine
- **GS-AP-MW-9V** Well ID
- 363.44 Groundwater Elevation

0 2,000
Feet

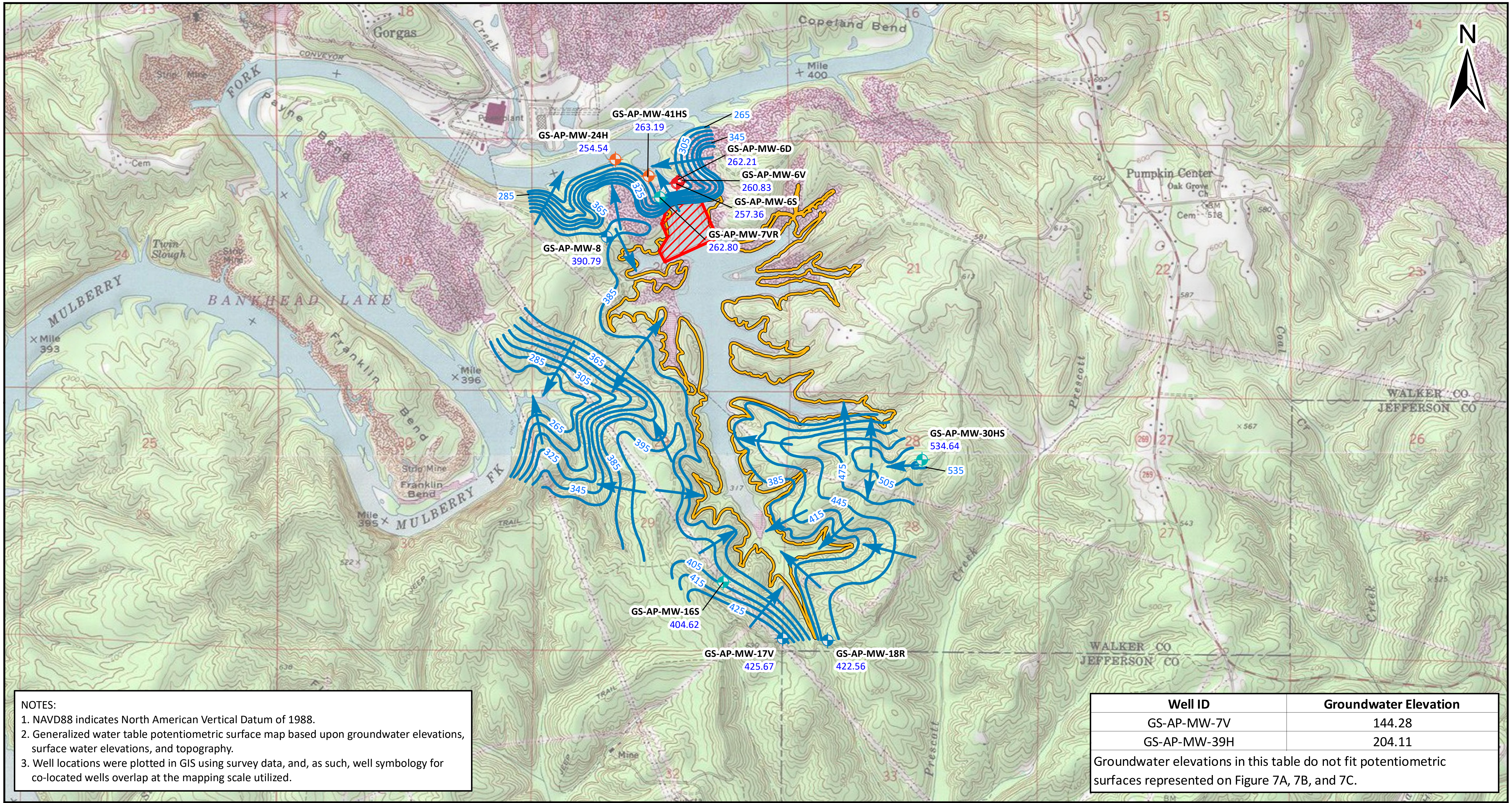
Projection: NAD 1983 State Plane Alabama West FIPS 0102 Feet
Base Map: Vivid Imagery, 1/7/2023 (west), 11/14/2020 (center) & 5/25/2021 (east)

SCALE 1:24000
DATE 1/25/2024
DRAWN BY KWR
CHECKED BY AWH

DRAWING TITLE: **POTENTIOMETRIC SURFACE CONTOUR MAP**
AMERICAN AQUIFER
MARCH 6, 2023
PLANT GORGAS ASH POND

FIGURE NO.
FIGURE 6C

Southern Company



NOTES:
1. NAVD88 indicates North American Vertical Datum of 1988.
2. Generalized water table potentiometric surface map based upon groundwater elevations, surface water elevations, and topography.
3. Well locations were plotted in GIS using survey data, and, as such, well symbology for co-located wells overlap at the mapping scale utilized.

Well ID	Groundwater Elevation
GS-AP-MW-7V	144.28
GS-AP-MW-39H	204.11

Groundwater elevations in this table do not fit potentiometric surfaces represented on Figure 7A, 7B, and 7C.

LEGEND

- ⊕ Downgradient Compliance Well
- ⊕ Upgradient Compliance Well
- ⊕ Horizontal Delineation Well
- ⊕ Vertical Delineation Well
- ⊕ Piezometer
- Potentiometric Surface Contour (ft NAVD88)
- Approximate Groundwater Flow Direction
- ▨ EVOQUA Pumping Location
- ☐ Ash Pond Boundary
- **GS-AP-MW-8** Well ID
- 390.79 Groundwater Elevation

0 2,000 Feet

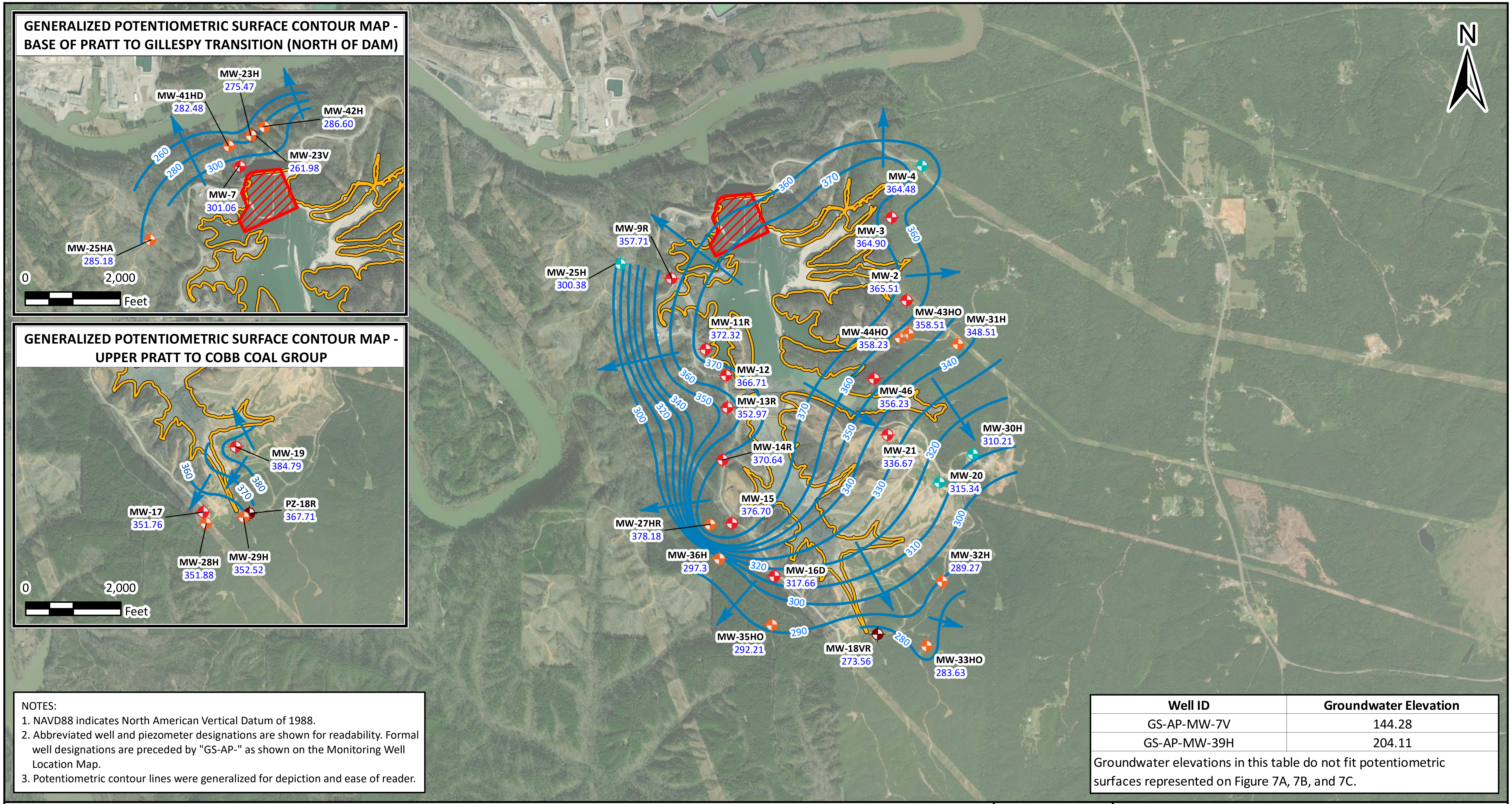
Projection: NAD 1983 State Plane Alabama West FIPS 0102 Feet
Base Map: Goodsprings, Alabama 1971 (Photorevised 1983) and Gilmore, Alabama 1917 (Photorevised 1975) US Geological Survey 7.5' Topographic Quadrangle.

SCALE	1:24000
DATE	1/25/2024
DRAWN BY	KWR
CHECKED BY	AWH

DRAWING TITLE:
POTENTIOMETRIC SURFACE CONTOUR MAP
(UPPER) WATER TABLE AQUIFER
AUGUST 29, 2023
PLANT GORGAS ASH POND

FIGURE NO.
FIGURE 7A

Southern Company



NOTES:
1. NAVD88 indicates North American Vertical Datum of 1988.
2. Abbreviated well and piezometer designations are shown for readability. Formal well designations are preceded by "GS-AP-" as shown on the Monitoring Well Location Map.
3. Potentiometric contour lines were generalized for depiction and ease of reader.

Well ID	Groundwater Elevation
GS-AP-MW-7V	144.28
GS-AP-MW-39H	204.11
Groundwater elevations in this table do not fit potentiometric surfaces represented on Figure 7A, 7B, and 7C.	

LEGEND

- Downgradient Compliance Well
- Upgradient Compliance Well
- Horizontal Delineation Well
- Vertical Delineation Well
- Piezometer
- Potentiometric Surface Contour (ft NAVD88)
- Approximate Groundwater Flow Direction
- ☐ Ash Pond Boundary
- ▨ EVOQUA Pumping Location

MW-2 Well ID
364.90 Groundwater Elevation

0 2,000
Feet

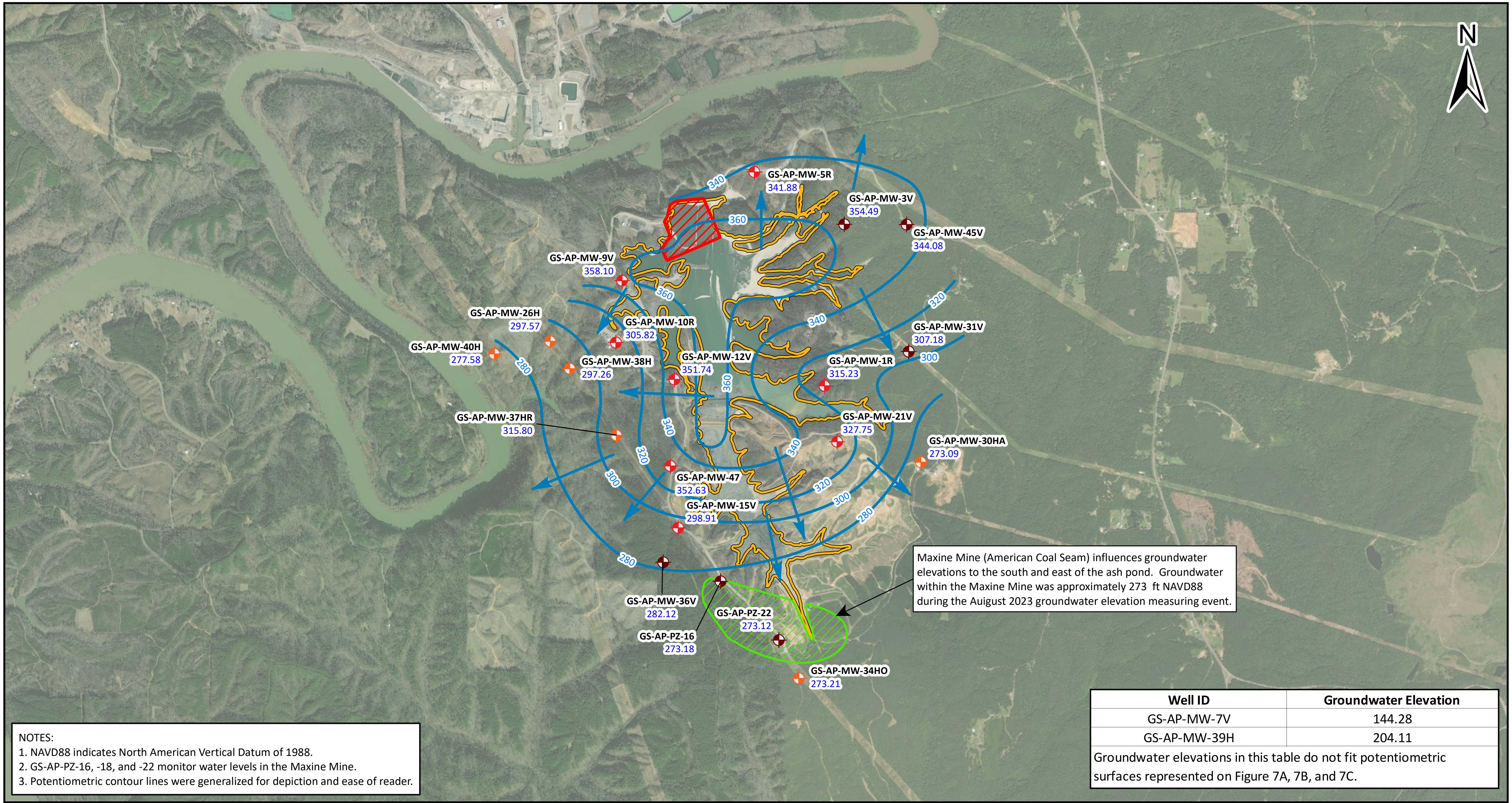
Projection: NAD 1983 State Plane Alabama West FIPS 0102 Feet
Base Map: Vivid Imagery, 1/7/2023 (west), 11/14/2020 (center) & 5/25/2021 (east)

SCALE	1:24000
DATE	1/25/2024
DRAWN BY	KWR
CHECKED BY	AWH

DRAWING TITLE: POTENTIOMETRIC SURFACE CONTOUR MAP
PRATT AQUIFER
AUGUST 29, 2023
PLANT GORGAS ASH POND

FIGURE NO.
FIGURE 7B

Southern Company



Maxine Mine (American Coal Seam) influences groundwater elevations to the south and east of the ash pond. Groundwater within the Maxine Mine was approximately 273 ft NAVD88 during the Auigust 2023 groundwater elevation measuring event.

NOTES:
1. NAVD88 indicates North American Vertical Datum of 1988.
2. GS-AP-PZ-16, -18, and -22 monitor water levels in the Maxine Mine.
3. Potentiometric contour lines were generalized for depiction and ease of reader.

Well ID	Groundwater Elevation
GS-AP-MW-7V	144.28
GS-AP-MW-39H	204.11

Groundwater elevations in this table do not fit potentiometric surfaces represented on Figure 7A, 7B, and 7C.

LEGEND

- ⊕ Downgradient Compliance Well
- ⊕ Horizontal Delineation Well
- ⊕ Vertical Delineation Well
- **GS-AP-MW-9V** Well ID
- 358.10 Groundwater Elevation
- ⌒ Potentiometric Surface Contour (ft NAVD88)
- ➚ Approximate Groundwater Flow Direction
- ☐ Ash Pond Boundary
- 🟥 EVOQUA Pumping Location
- 🟩 Maxine Mine

0 2,000 Feet

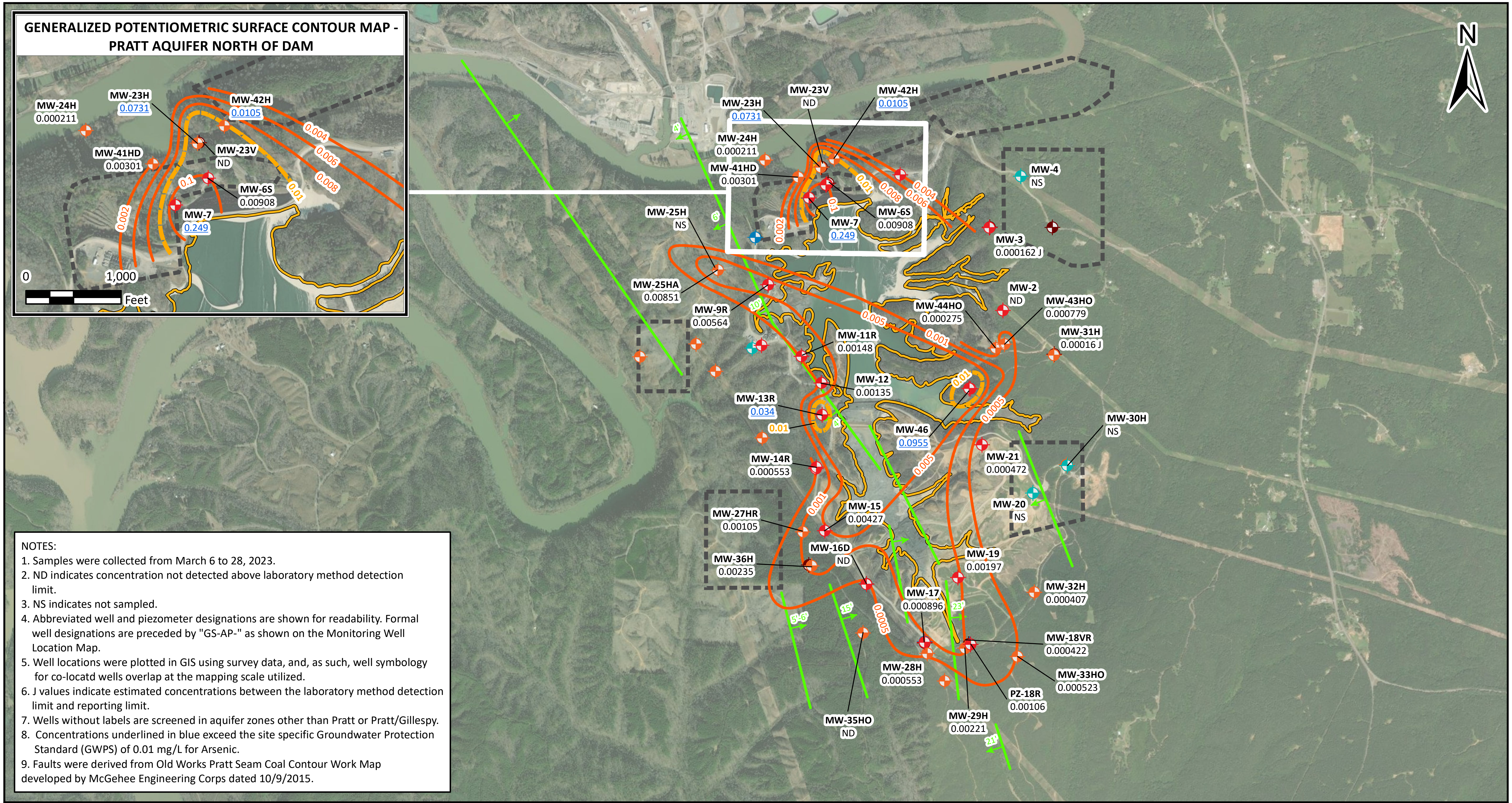
Projection: NAD 1983 State Plane Alabama West FIPS 0102 Feet
Base Map: Vivid Imagery, 1/7/2023 (west), 11/14/2020 (center) & 5/25/2021 (east)

SCALE 1:24000
DATE 1/25/2024
DRAWN BY KWR
CHECKED BY AWH

DRAWING TITLE: **POTENTIOMETRIC SURFACE CONTOUR MAP**
AMERICAN AQUIFER
AUGUST 29, 2023
PLANT GORGAS ASH POND

FIGURE NO.
FIGURE 7C

Southern Company



NOTES:
1. Samples were collected from March 6 to 28, 2023.
2. ND indicates concentration not detected above laboratory method detection limit.
3. NS indicates not sampled.
4. Abbreviated well and piezometer designations are shown for readability. Formal well designations are preceded by "GS-AP-" as shown on the Monitoring Well Location Map.
5. Well locations were plotted in GIS using survey data, and, as such, well symbology for co-locatd wells overlap at the mapping scale utilized.
6. J values indicate estimated concentrations between the laboratory method detection limit and reporting limit.
7. Wells without labels are screened in aquifer zones other than Pratt or Pratt/Gillespy.
8. Concentrations underlined in blue exceed the site specific Groundwater Protection Standard (GWPS) of 0.01 mg/L for Arsenic.
9. Faults were derived from Old Works Pratt Seam Coal Contour Work Map developed by McGehee Engineering Corps dated 10/9/2015.

LEGEND

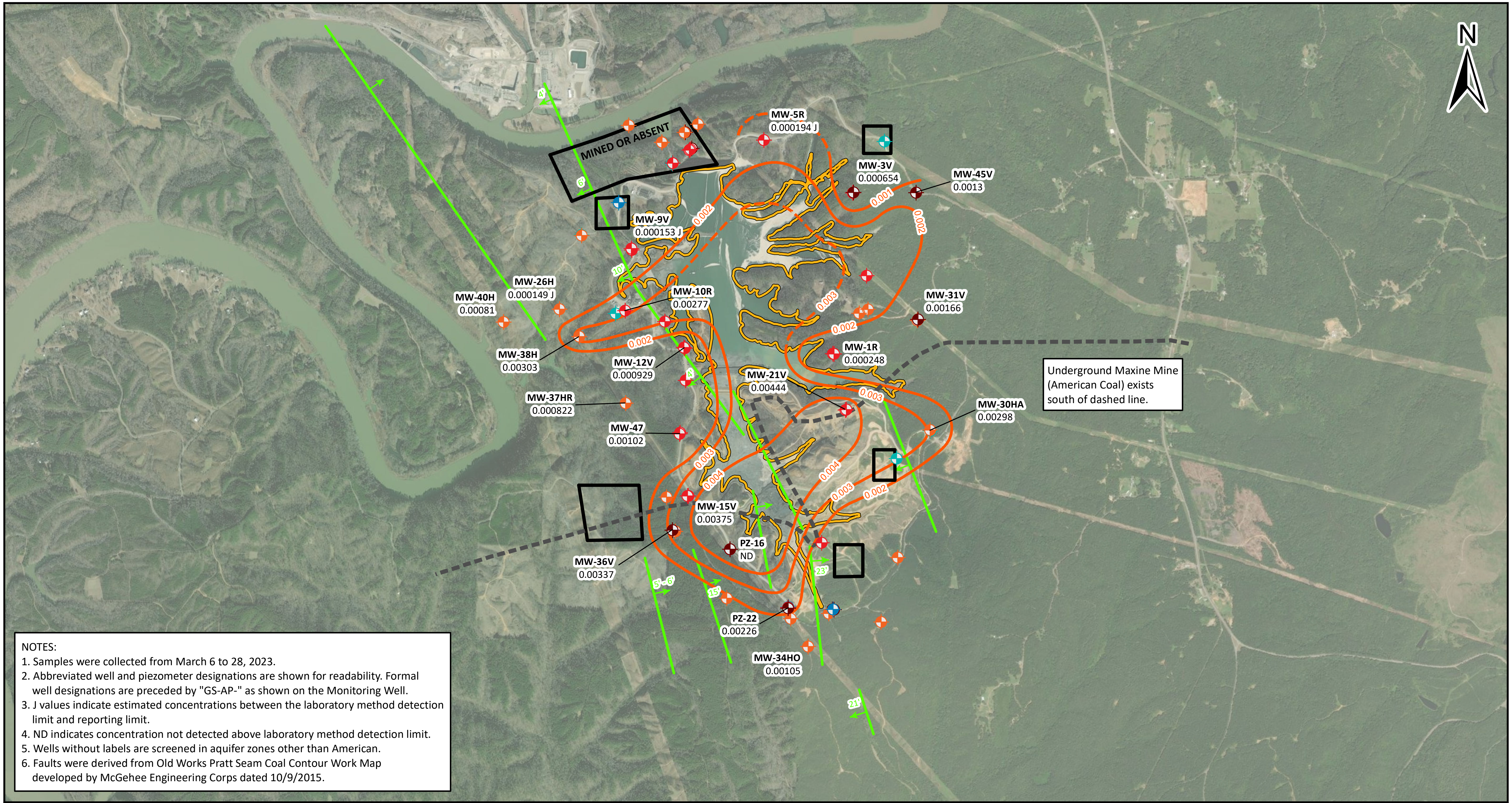
- ⊕ Downgradient Compliance Well
- ⊕ Upgradient Compliance Well
- ⊕ Horizontal Delineation Well
- ⊕ Vertical Delineation Well
- ⊕ Piezometer
- Arsenic GWPS Contour (0.01 mg/L)
- Arsenic Isoconcentration Contour (mg/L)
- Fault
- Dip Direction of Fault with Offset (ft)
- Pratt Mines
- Ash Pond Boundary

MW-36H	Well ID
0.00235	Arsenic Concentration (mg/L)

0 2,000 Feet

Projection: NAD 1983 State Plane Alabama West FIPS 0102 Feet
Base Map: Vivid Imagery, 1/7/2023 (west), 11/14/2020 (center) & 5/25/2021 (east)

SCALE	1:24000	DRAWING TITLE:	**ARSENIC ISOCONCENTRATION MAP PRATT AQUIFER MARCH 2023 PLANT GORGAS ASH POND**
DATE	1/25/2024		
DRAWN BY	KWR	FIGURE NO.	FIGURE 8A
CHECKED BY	AWH		Southern Company



Underground Maxine Mine (American Coal) exists south of dashed line.

NOTES:

1. Samples were collected from March 6 to 28, 2023.
2. Abbreviated well and piezometer designations are shown for readability. Formal well designations are preceded by "GS-AP-" as shown on the Monitoring Well.
3. J values indicate estimated concentrations between the laboratory method detection limit and reporting limit.
4. ND indicates concentration not detected above laboratory method detection limit.
5. Wells without labels are screened in aquifer zones other than American.
6. Faults were derived from Old Works Pratt Seam Coal Contour Work Map developed by McGehee Engineering Corps dated 10/9/2015.

LEGEND

- Downgradient Monitoring Well
- Upgradient Monitoring Well
- Horizontal Delineation Well
- Vertical Delineation Well
- Piezometer
- Arsenic Isoconcentration Contour (mg/L)
- Inferred Arsenic Isoconcentration Contour (mg/L)
- Fault
- Dip Direction of Fault with Offset (ft)
- Approximate Underground Maxine Mine Boundary
- American Coal Seam (Mined or Absent)
- Ash Pond Boundary

MW-12V Well ID
0.000929 Arsenic Concentration (mg/L)

0 2,000
Feet

Projection: NAD 1983 State Plane Alabama West FIPS 0102 Feet
Base Map: Vivid Imagery, 1/7/2023 (west), 11/14/2020 (center) & 5/25/2021 (east)

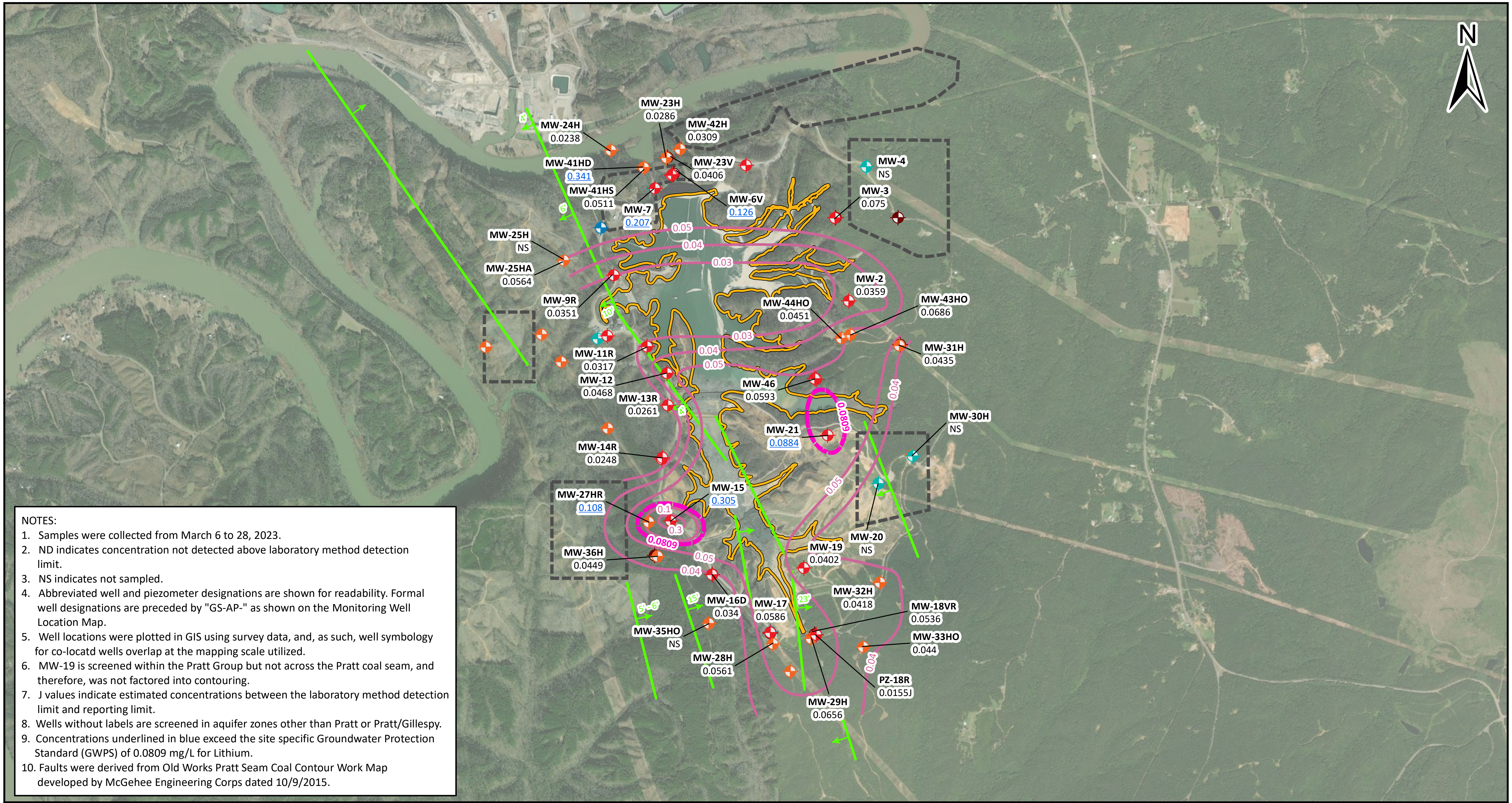
SCALE	1:24000
DATE	1/26/2024
DRAWN BY	KWR
CHECKED BY	AWH

DRAWING TITLE:

ARSENIC ISOCONCENTRATION MAP
AMERICAN AQUIFER
MARCH 2023
PLANT GORGAS ASH POND

FIGURE NO.
FIGURE 8B

Southern Company



NOTES:

1. Samples were collected from March 6 to 28, 2023.
2. ND indicates concentration not detected above laboratory method detection limit.
3. NS indicates not sampled.
4. Abbreviated well and piezometer designations are shown for readability. Formal well designations are preceded by "GS-AP-" as shown on the Monitoring Well Location Map.
5. Well locations were plotted in GIS using survey data, and, as such, well symbology for co-locatd wells overlap at the mapping scale utilized.
6. MW-19 is screened within the Pratt Group but not across the Pratt coal seam, and therefore, was not factored into contouring.
7. J values indicate estimated concentrations between the laboratory method detection limit and reporting limit.
8. Wells without labels are screened in aquifer zones other than Pratt or Pratt/Gillespy.
9. Concentrations underlined in blue exceed the site specific Groundwater Protection Standard (GWPS) of 0.0809 mg/L for Lithium.
10. Faults were derived from Old Works Pratt Seam Coal Contour Work Map developed by McGehee Engineering Corps dated 10/9/2015.

LEGEND

⊕ Downgradient Compliance Well
⊕ Upgradient Compliance Well
⊕ Horizontal Delineation Well
⊕ Vertical Delineation Well
⊕ Piezometer

Lithium GWPS Background Contour (0.0809 mg/L)
Lithium Isoconcentration Contour (mg/L)
Fault
Dip Direction of Fault with Offset (ft)

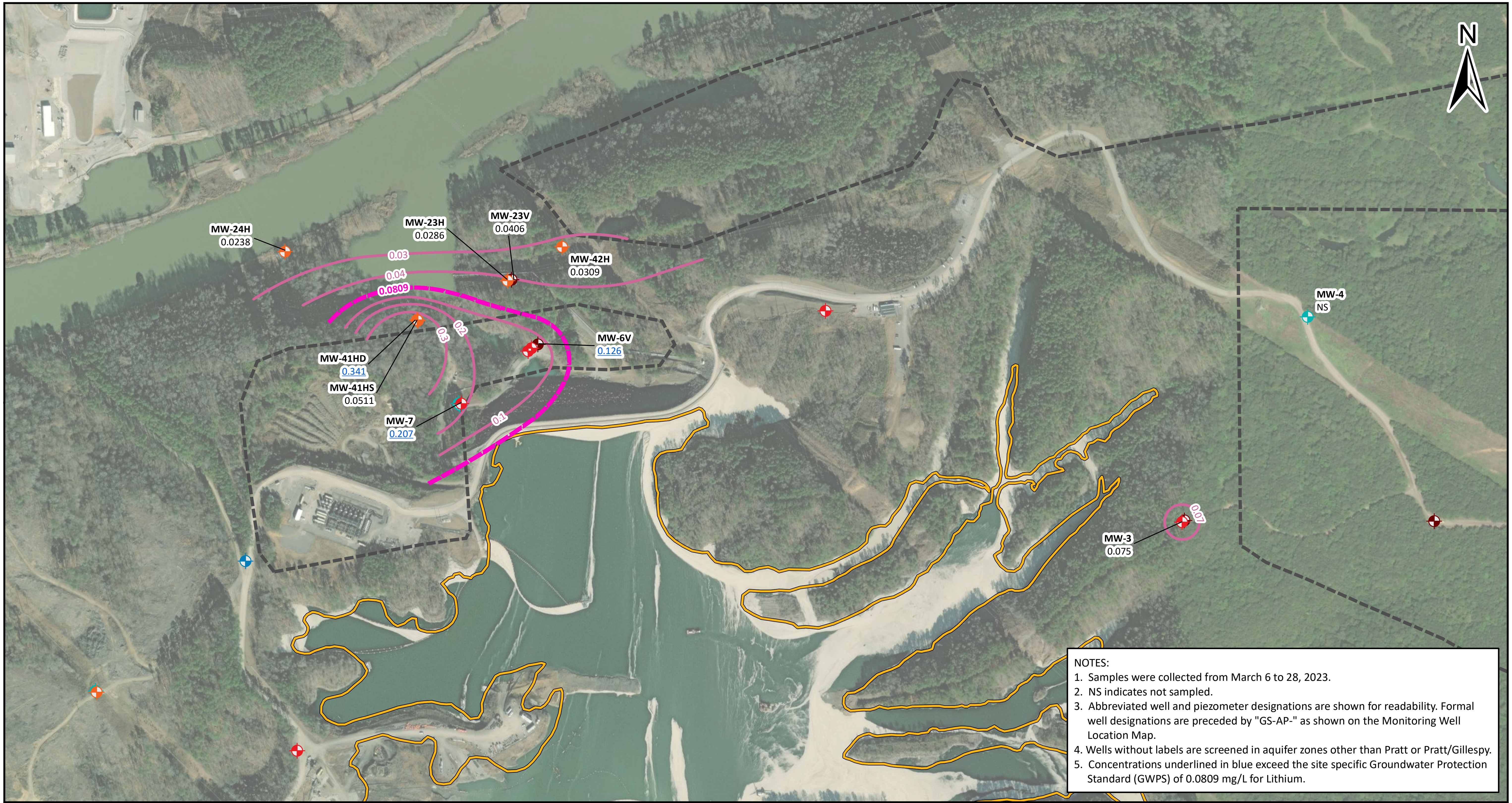
MW-17	Well ID
0.0586	Lithium Concentration (mg/L)

Pratt Mines
Ash Pond Boundary

0 2,000
Feet

Projection: NAD 1983 State Plane Alabama West FIPS 0102 Feet
Base Map: Vivid Imagery, 1/7/2023 (west), 11/14/2020 (center) & 5/25/2021 (east)

SCALE	1:24000	DRAWING TITLE:	LITHIUM ISOCONCENTRATION MAP PRATT AQUIFER (SOUTH OF DAM) MARCH 2023 PLANT GORGAS ASH POND
DATE	1/26/2024		
DRAWN BY	KWR	FIGURE NO.	FIGURE 9A
CHECKED BY	AWH		Southern Company



NOTES:
1. Samples were collected from March 6 to 28, 2023.
2. NS indicates not sampled.
3. Abbreviated well and piezometer designations are shown for readability. Formal well designations are preceded by "GS-AP-" as shown on the Monitoring Well Location Map.
4. Wells without labels are screened in aquifer zones other than Pratt or Pratt/Gillespy.
5. Concentrations underlined in blue exceed the site specific Groundwater Protection Standard (GWPS) of 0.0809 mg/L for Lithium.

LEGEND

- 🔴 Downgradient Monitoring Well
- 🔵 Upgradient Monitoring Well
- 🟠 Horizontal Delineation Well
- 🟤 Vertical Delineation Well
- 🔷 Piezometer
- Lithium GWPS Background Contour (0.0809 mg/L)
- Lithium Isoconcentration Contour (mg/L)
- Inferred Lithium Isoconcentration Contour (mg/L)
- Pratt Mines
- Ash Pond Boundary

MW-23H Well ID
0.0286 Lithium Concentration (mg/L)

0 500
Feet

Projection: NAD 1983 State Plane Alabama West FIPS 0102 Feet
Base Map: Vivid Imagery, 1/7/2023 (west), 11/14/2020 (center) & 5/25/2021 (east)

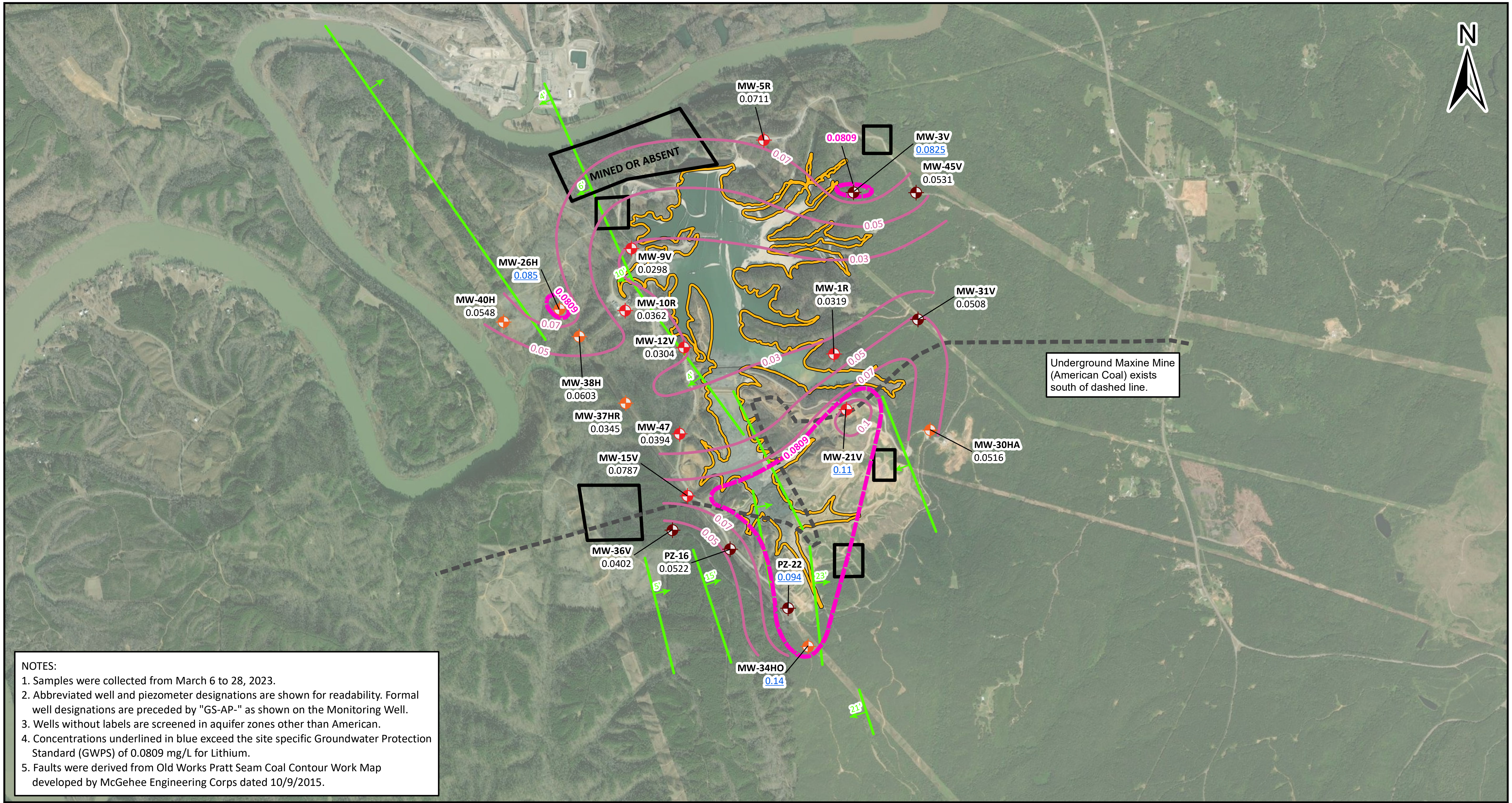
SCALE 1:6000
DATE 1/25/2024
DRAWN BY KWR
CHECKED BY AWH

DRAWING TITLE:

LITHIUM ISOCONCENTRATION MAP
PRATT AQUIFER (NORTH OF DAM)
MARCH 2023
PLANT GORGAS ASH POND

FIGURE NO.
FIGURE 9B

Southern Company



NOTES:
1. Samples were collected from March 6 to 28, 2023.
2. Abbreviated well and piezometer designations are shown for readability. Formal well designations are preceded by "GS-AP-" as shown on the Monitoring Well.
3. Wells without labels are screened in aquifer zones other than American.
4. Concentrations underlined in blue exceed the site specific Groundwater Protection Standard (GWPS) of 0.0809 mg/L for Lithium.
5. Faults were derived from Old Works Pratt Seam Coal Contour Work Map developed by McGehee Engineering Corps dated 10/9/2015.

LEGEND

⊕ Downgradient Monitoring Well
⊕ Horizontal Delineation Well
⊕ Vertical Delineation Well
MW-15V Well ID
0.0787 Lithium Concentration (mg/L)
Lithium GWPS Contour (0.0809 mg/L)
Lithium Isoconcentration Contour (mg/L)
Approximate Underground Maxine Mine Boundary
☐ American Coal Seam (Mined or Absent)
Fault
Dip Direction of Fault with Offset (ft)
☐ Ash Pond Boundary

0 2,000
Feet

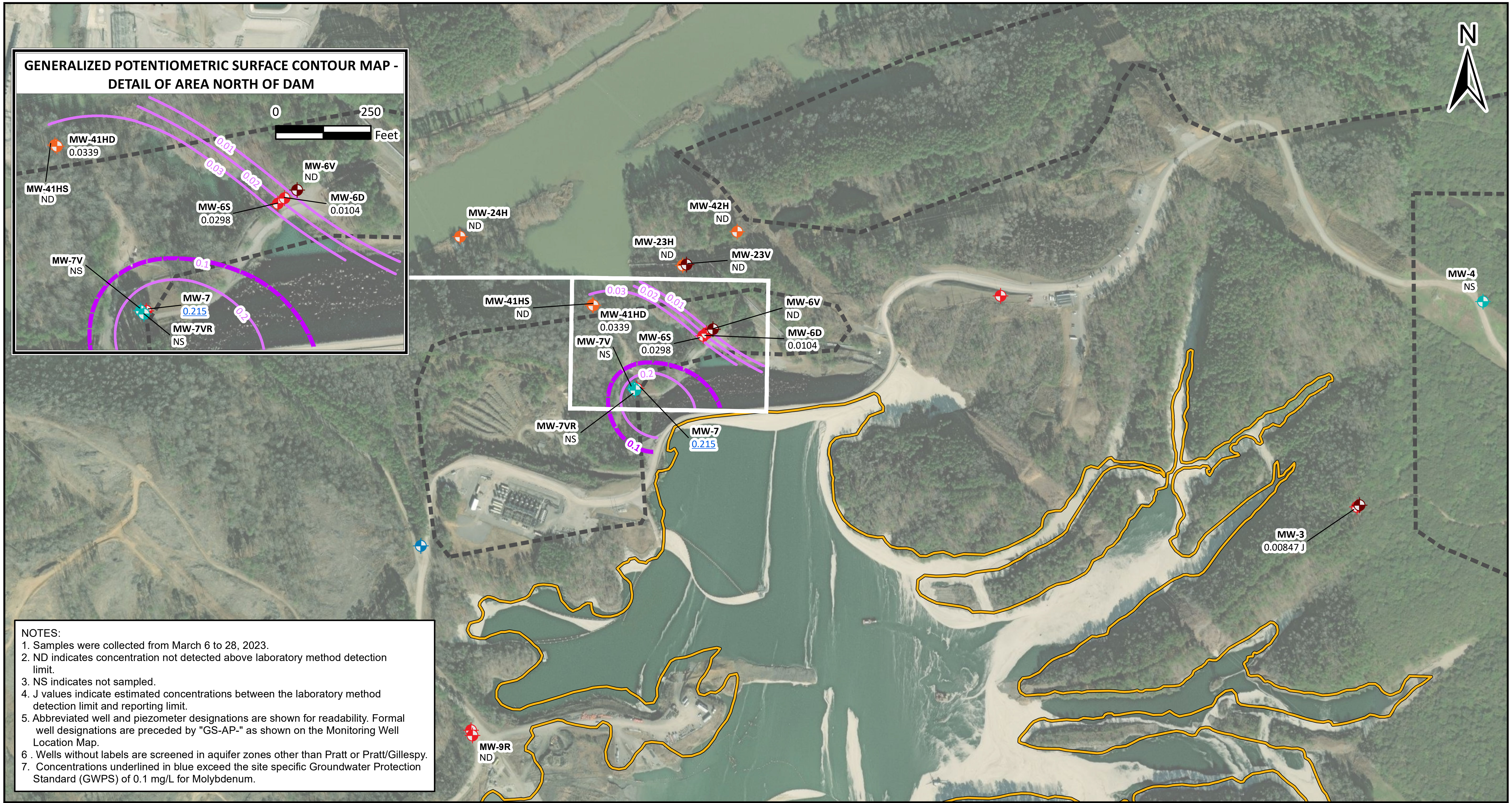
Projection: NAD 1983 State Plane Alabama West FIPS 0102 Feet
Base Map: Vivid Imagery, 1/7/2023 (west), 11/14/2020 (center) & 5/25/2021 (east)

SCALE 1:24000
DATE 1/26/2024
DRAWN BY KWR
CHECKED BY AWH

DRAWING TITLE:
LITHIUM ISOCONCENTRATION MAP
AMERICAN AQUIFER
MARCH 2023
PLANT GORGAS ASH POND

FIGURE NO.
FIGURE 9C

Southern Company



NOTES:
1. Samples were collected from March 6 to 28, 2023.
2. ND indicates concentration not detected above laboratory method detection limit.
3. NS indicates not sampled.
4. J values indicate estimated concentrations between the laboratory method detection limit and reporting limit.
5. Abbreviated well and piezometer designations are shown for readability. Formal well designations are preceded by "GS-AP-" as shown on the Monitoring Well Location Map.
6. Wells without labels are screened in aquifer zones other than Pratt or Pratt/Gillespy.
7. Concentrations underlined in blue exceed the site specific Groundwater Protection Standard (GWPS) of 0.1 mg/L for Molybdenum.

LEGEND

- ⊕ Downgradient Compliance Well
- ⊕ Upgradient Compliance Well
- ⊕ Horizontal Delineation Well
- ⊕ Vertical Delineation Well
- ⊕ Piezometer
- Molybdenum GWPS Contour (0.1 mg/L)
- Molybdenum Isoconcentration Contour (mg/L)
- ▭ Pratt Mines
- ▭ Ash Pond Boundary

MW-41HD	Well ID
0.0339	Molybdenum Concentration (mg/L)

0 500 Feet

Projection: NAD 1983 State Plane Alabama West FIPS 0102 Feet
Base Map: Vivid Imagery, 1/7/2023 (west), 11/14/2020 (center) & 5/25/2021 (east)

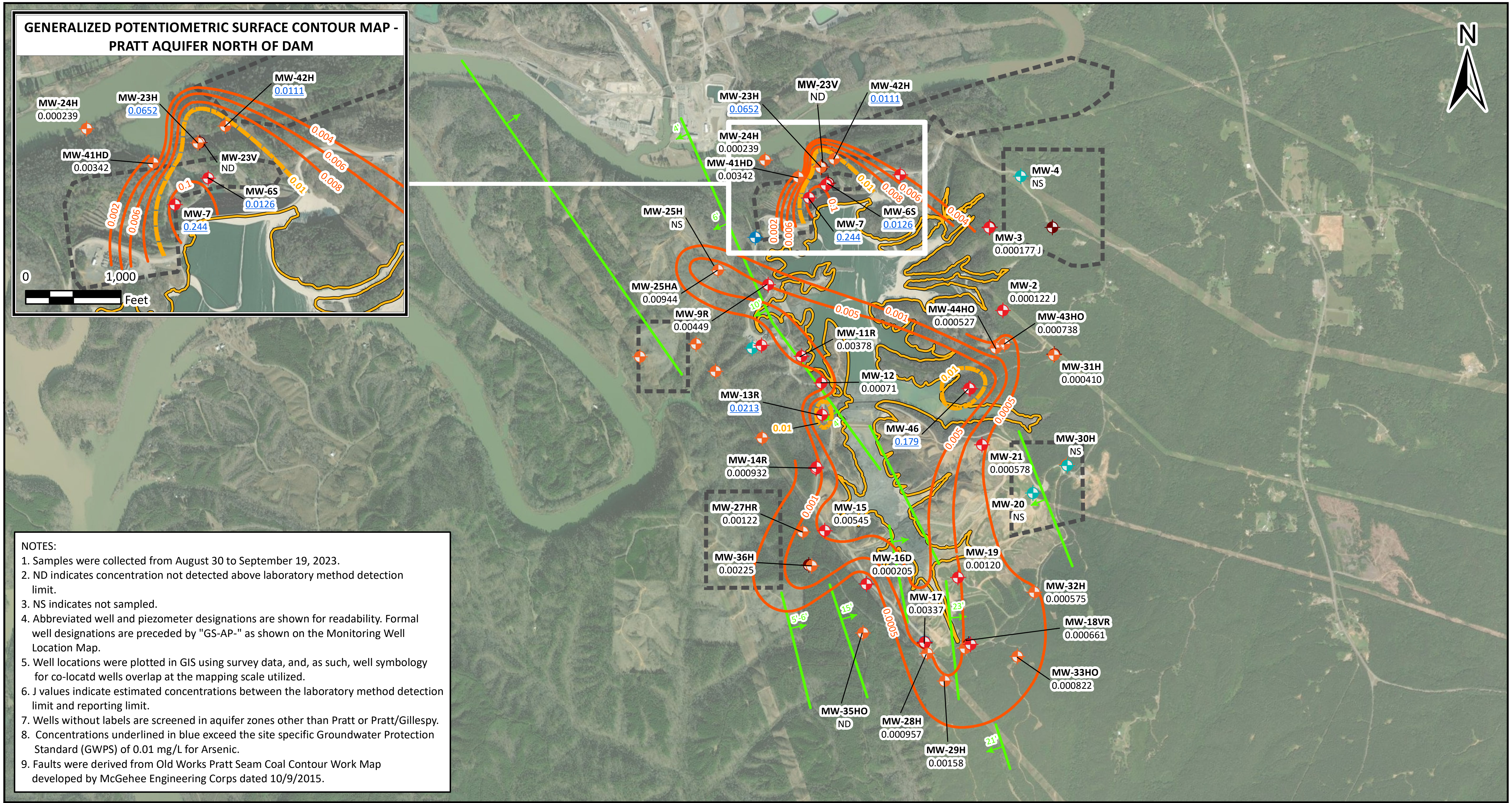
SCALE	1:6000
DATE	1/26/2024
DRAWN BY	KWR
CHECKED BY	AWH

DRAWING TITLE:

MOLYBDENUM ISOCONCENTRATION MAP
PRATT AQUIFER
MARCH 2023
PLANT GORGAS ASH POND

FIGURE NO.
FIGURE 10

Southern Company



NOTES:
1. Samples were collected from August 30 to September 19, 2023.
2. ND indicates concentration not detected above laboratory method detection limit.
3. NS indicates not sampled.
4. Abbreviated well and piezometer designations are shown for readability. Formal well designations are preceded by "GS-AP-" as shown on the Monitoring Well Location Map.
5. Well locations were plotted in GIS using survey data, and, as such, well symbology for co-locatd wells overlap at the mapping scale utilized.
6. J values indicate estimated concentrations between the laboratory method detection limit and reporting limit.
7. Wells without labels are screened in aquifer zones other than Pratt or Pratt/Gillespy.
8. Concentrations underlined in blue exceed the site specific Groundwater Protection Standard (GWPS) of 0.01 mg/L for Arsenic.
9. Faults were derived from Old Works Pratt Seam Coal Contour Work Map developed by McGehee Engineering Corps dated 10/9/2015.

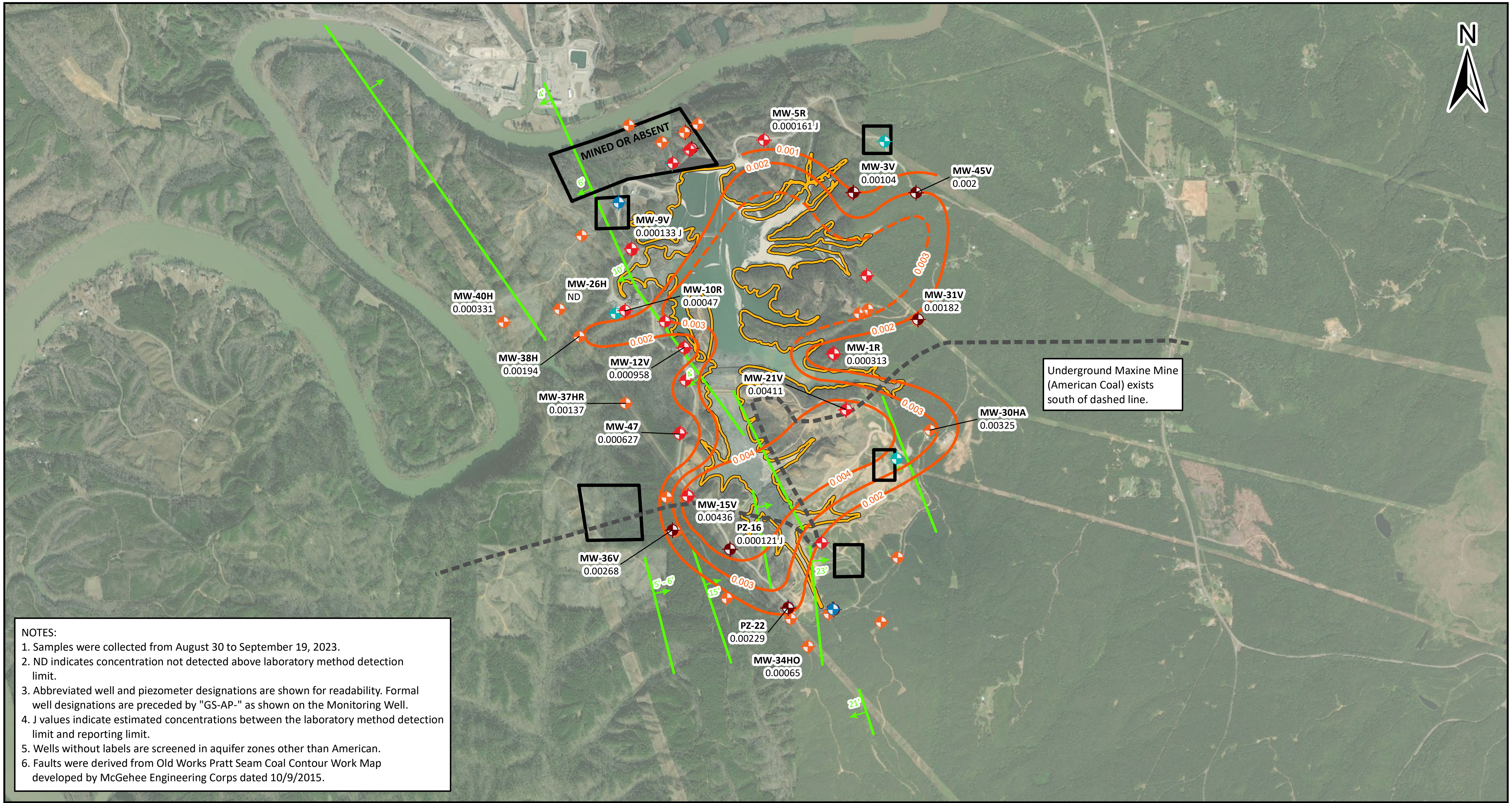
LEGEND

⊕	Downgradient Compliance Well	▬	Arsenic GWPS Contour (0.01 mg/L)	▭	Pratt Mines
⊕	Upgradient Compliance Well	▬	Arsenic Isoconcentration Contour (mg/L)	▭	Ash Pond Boundary
⊕	Horizontal Delineation Well	╱	Fault	MW-36H	Well ID
⊕	Vertical Delineation Well	↘	Dip Direction of Fault with Offset (ft)	0.00225	Arsenic Concentration (mg/L)
⊕	Piezometer				

0 2,000 Feet

Projection: NAD 1983 State Plane Alabama West FIPS 0102 Feet
Base Map: Vivid Imagery, 1/7/2023 (west), 11/14/2020 (center) & 5/25/2021 (east)

SCALE	1:24000	DRAWING TITLE:	ARSENIC ISOCONCENTRATION MAP PRATT AQUIFER AUGUST TO SEPTEMBER 2023 PLANT GORGAS ASH POND
DATE	1/26/2024		
DRAWN BY	KWR	FIGURE NO.	FIGURE 11A
CHECKED BY	AWH		Southern Company



Underground Maxine Mine (American Coal) exists south of dashed line.

NOTES:
1. Samples were collected from August 30 to September 19, 2023.
2. ND indicates concentration not detected above laboratory method detection limit.
3. Abbreviated well and piezometer designations are shown for readability. Formal well designations are preceded by "GS-AP-" as shown on the Monitoring Well.
4. J values indicate estimated concentrations between the laboratory method detection limit and reporting limit.
5. Wells without labels are screened in aquifer zones other than American.
6. Faults were derived from Old Works Pratt Seam Coal Contour Work Map developed by McGehee Engineering Corps dated 10/9/2015.

LEGEND

- ⊕ Downgradient Monitoring Well
- ⊕ Upgradient Monitoring Well
- ⊕ Horizontal Delineation Well
- ⊕ Vertical Delineation Well
- ⊕ Piezometer
- Arsenic Isoconcentration Contour (mg/L)
- Inferred Arsenic Isoconcentration Contour (mg/L)
- Fault
- Dip Direction of Fault with Offset (ft)
- Approximate Underground Maxine Mine Boundary
- ☐ American Coal Seam (Mined or Absent)
- ☐ Ash Pond Boundary

MW-12V Well ID
0.000958 Arsenic Concentration (mg/L)

0 2,000
Feet

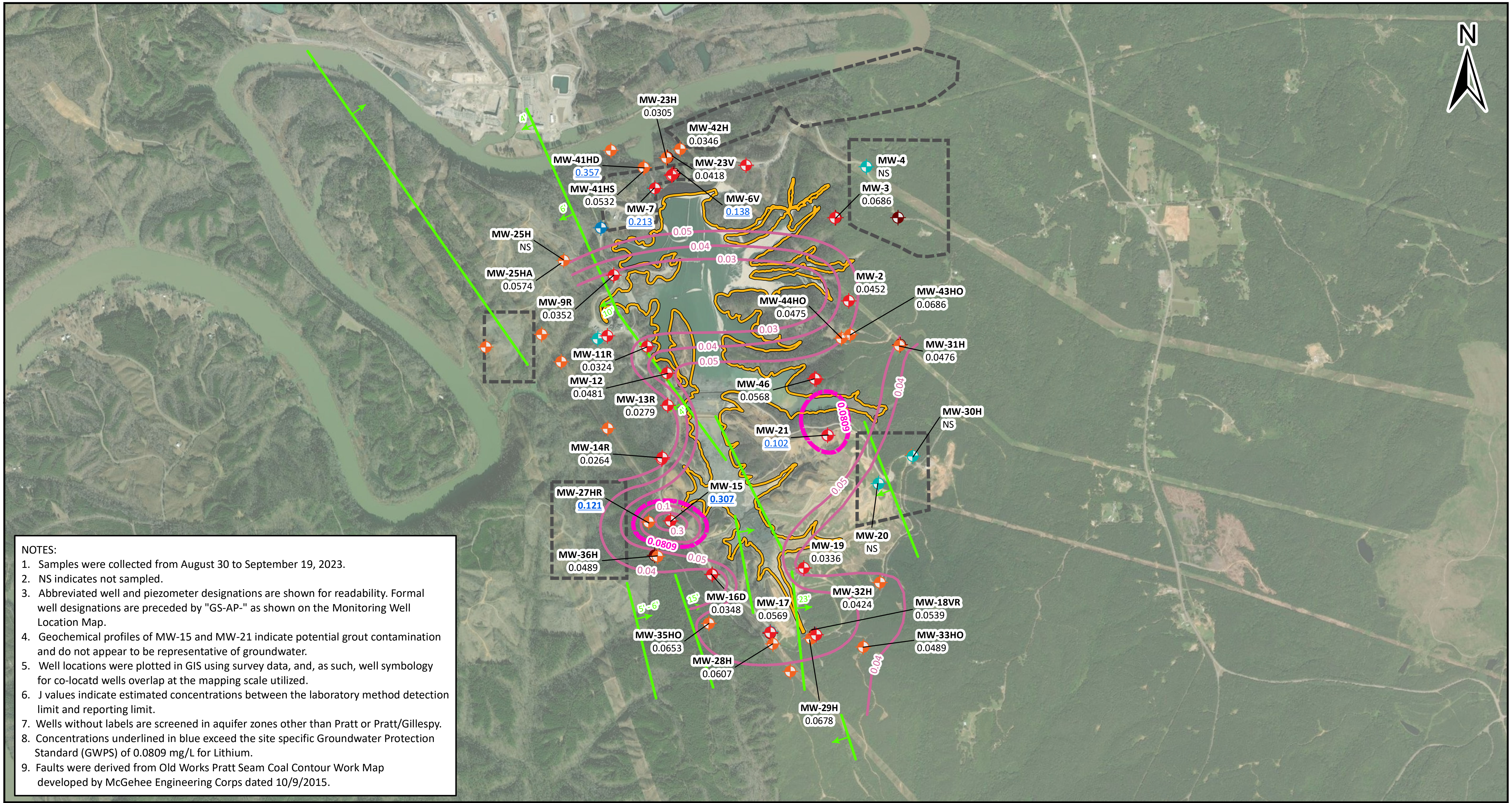
Projection: NAD 1983 State Plane Alabama West FIPS 0102 Feet
Base Map: Vivid Imagery, 1/7/2023 (west), 11/14/2020 (center) & 5/25/2021 (east)

SCALE	1:24000
DATE	1/26/2024
DRAWN BY	KWR
CHECKED BY	AWH

DRAWING TITLE:
ARSENIC ISOCONCENTRATION MAP
AMERICAN AQUIFER
AUGUST TO SEPTEMBER 2023
PLANT GORGAS ASH POND

FIGURE NO.
FIGURE 11B

Southern Company



NOTES:
1. Samples were collected from August 30 to September 19, 2023.
2. NS indicates not sampled.
3. Abbreviated well and piezometer designations are shown for readability. Formal well designations are preceded by "GS-AP-" as shown on the Monitoring Well Location Map.
4. Geochemical profiles of MW-15 and MW-21 indicate potential grout contamination and do not appear to be representative of groundwater.
5. Well locations were plotted in GIS using survey data, and, as such, well symbology for co-locatd wells overlap at the mapping scale utilized.
6. J values indicate estimated concentrations between the laboratory method detection limit and reporting limit.
7. Wells without labels are screened in aquifer zones other than Pratt or Pratt/Gillespy.
8. Concentrations underlined in blue exceed the site specific Groundwater Protection Standard (GWPS) of 0.0809 mg/L for Lithium.
9. Faults were derived from Old Works Pratt Seam Coal Contour Work Map developed by McGehee Engineering Corps dated 10/9/2015.

LEGEND

- ⊕ Downgradient Compliance Well
- ⊕ Upgradient Compliance Well
- ⊕ Horizontal Delineation Well
- ⊕ Vertical Delineation Well
- ⊕ Piezometer
- Lithium GWPS Contour (0.0809 mg/L)
- Lithium Isoconcentration Contour (mg/L)
- Fault
- Dip Direction of Fault with Offset (ft)
- MW-17 Well ID
- 0.0569 Lithium Concentration (mg/L)
- ⬚ Pratt Mines
- ▭ Ash Pond Boundary

0 2,000
Feet

Projection: NAD 1983 State Plane Alabama West FIPS 0102 Feet
Base Map: Vivid Imagery, 1/7/2023 (west), 11/14/2020 (center) & 5/25/2021 (east)

SCALE	1:24000
DATE	1/26/2024
DRAWN BY	KWR
CHECKED BY	AWH

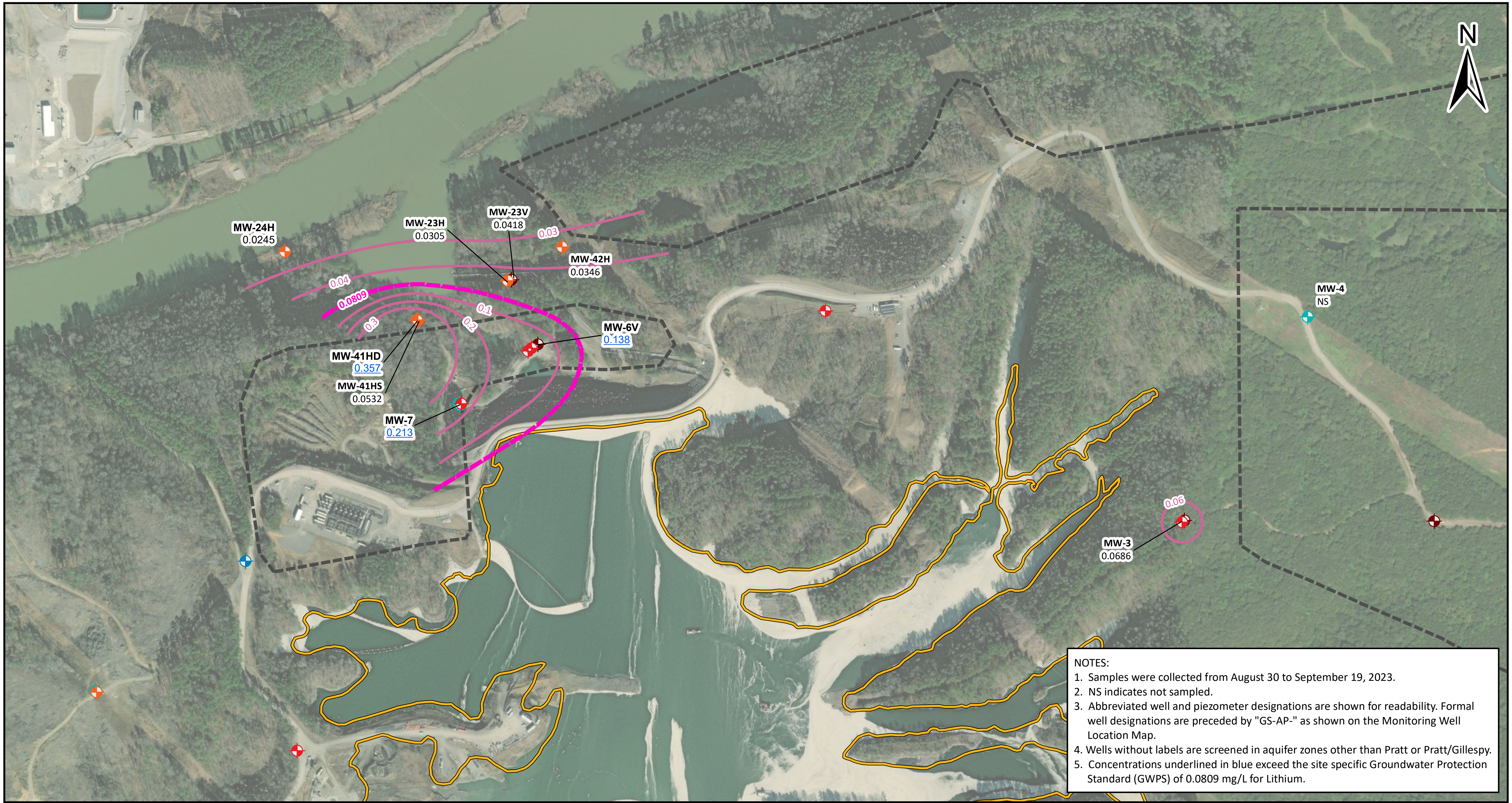
DRAWING TITLE:

LITHIUM ISOCONCENTRATION MAP
PRATT AQUIFER (SOUTH OF DAM)
AUGUST TO SEPTEMBER 2023
PLANT GORGAS ASH POND

FIGURE NO.

FIGURE 12A

Southern Company



NOTES:
1. Samples were collected from August 30 to September 19, 2023.
2. NS indicates not sampled.
3. Abbreviated well and piezometer designations are shown for readability. Formal well designations are preceded by "GS-AP-" as shown on the Monitoring Well Location Map.
4. Wells without labels are screened in aquifer zones other than Pratt or Pratt/Gillespy.
5. Concentrations underlined in blue exceed the site specific Groundwater Protection Standard (GWPS) of 0.0809 mg/L for Lithium.

LEGEND

- ⊕ Downgradient Monitoring Well
- ⊕ Upgradient Monitoring Well
- ⊕ Horizontal Delineation Well
- ⊕ Vertical Delineation Well
- ⊕ Piezometer
- ━ Lithium GWPS Contour (0.0809 mg/L)
- ━ Lithium Isoconcentration Contour (mg/L)
- ╌ Inferred Lithium Isoconcentration Contour (mg/L)
- ▭ Pratt Mines
- ▭ Ash Pond Boundary

MW-23H Well ID
0.0305 Lithium Concentration (mg/L)

0 500
Feet

Projection: NAD 1983 State Plane Alabama West FIPS 0102 Feet
Base Map: Vivid Imagery, 1/7/2023 (west), 11/14/2020 (center) & 5/25/2021 (east)

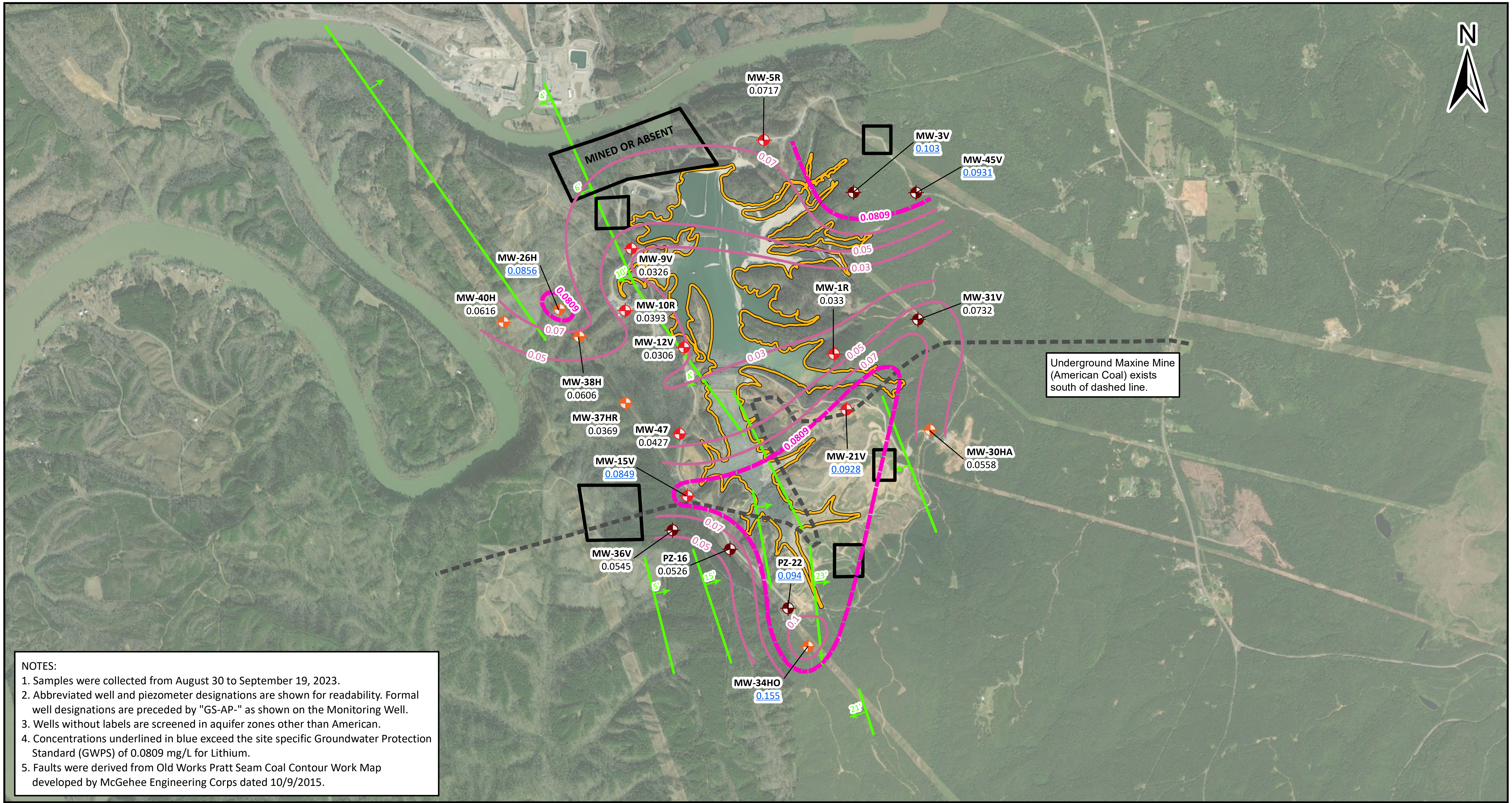
SCALE	1:6000
DATE	1/26/2024
DRAWN BY	KWR
CHECKED BY	AWH

DRAWING TITLE:

LITHIUM ISOCONCENTRATION MAP
PRATT AQUIFER (NORTH OF DAM)
AUGUST TO SEPTEMBER 2023
PLANT GORGAS ASH POND

FIGURE NO.
FIGURE 12B

Southern Company



Underground Maxine Mine (American Coal) exists south of dashed line.

NOTES:
1. Samples were collected from August 30 to September 19, 2023.
2. Abbreviated well and piezometer designations are shown for readability. Formal well designations are preceded by "GS-AP-" as shown on the Monitoring Well.
3. Wells without labels are screened in aquifer zones other than American.
4. Concentrations underlined in blue exceed the site specific Groundwater Protection Standard (GWPS) of 0.0809 mg/L for Lithium.
5. Faults were derived from Old Works Pratt Seam Coal Contour Work Map developed by McGehee Engineering Corps dated 10/9/2015.

LEGEND

- Downgradient Monitoring Well
- Horizontal Delineation Well
- Vertical Delineation Well
- **MW-36V** Well ID
- 0.0545 Lithium Concentration (mg/L)
- Lithium GWPS Contour (0.0809 mg/L)
- Lithium Isoconcentration Contour (mg/L)
- Approximate Underground Maxine Mine Boundary
- American Coal Seam (Mined or Absent)
- Fault
- Dip Direction of Fault with Offset (ft)
- Ash Pond Boundary

0 2,000
Feet

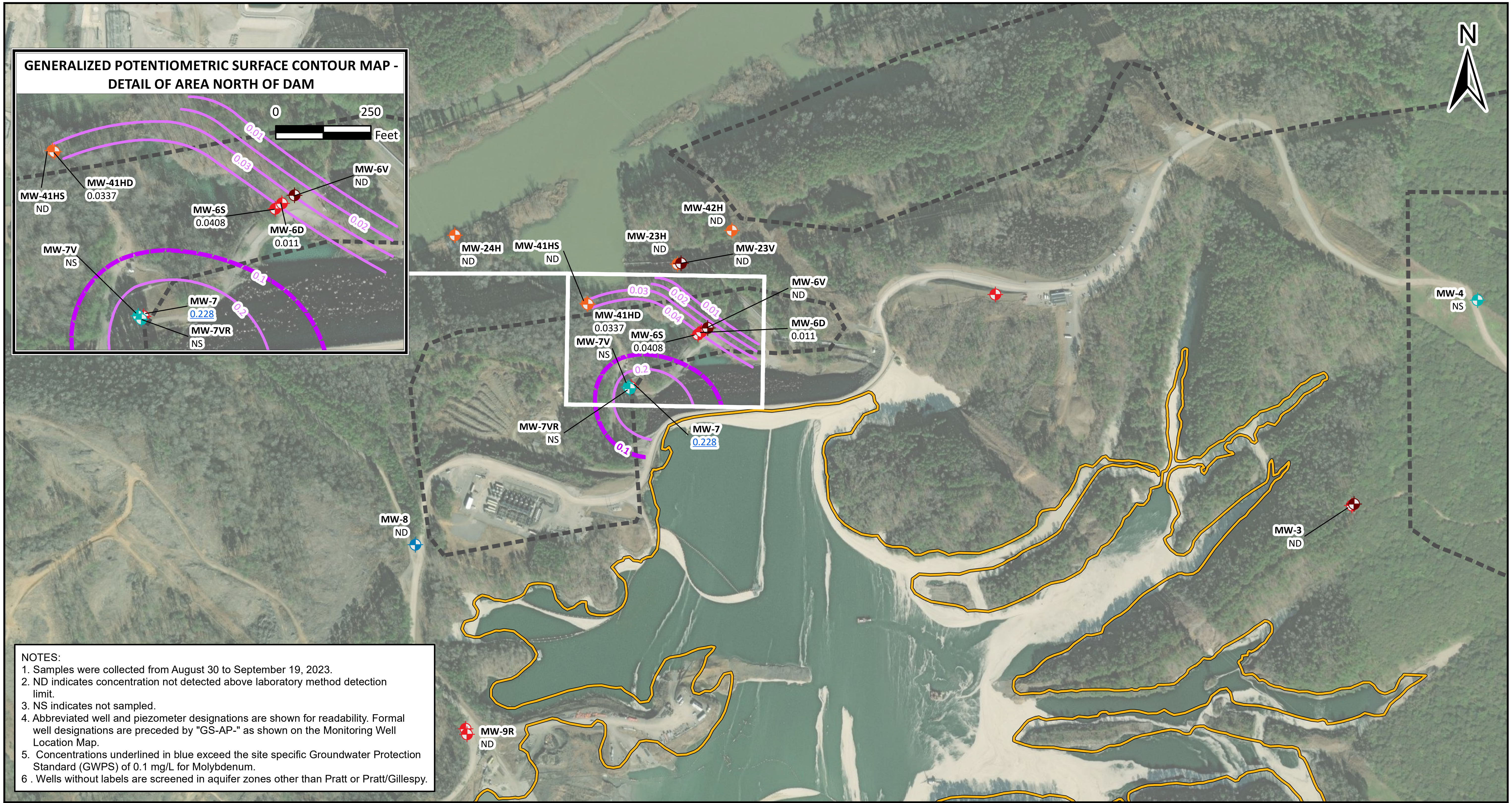
Projection: NAD 1983 State Plane Alabama West FIPS 0102 Feet
Base Map: Vivid Imagery, 1/7/2023 (west), 11/14/2020 (center) & 5/25/2021 (east)

SCALE 1:24000
DATE 1/26/2024
DRAWN BY KWR
CHECKED BY AWH

DRAWING TITLE:
LITHIUM ISOCONCENTRATION MAP
AMERICAN AQUIFER
AUGUST TO SEPTEMBER 2023
PLANT GORGAS ASH POND

FIGURE NO.
FIGURE 12C

Southern Company



NOTES:

1. Samples were collected from August 30 to September 19, 2023.
2. ND indicates concentration not detected above laboratory method detection limit.
3. NS indicates not sampled.
4. Abbreviated well and piezometer designations are shown for readability. Formal well designations are preceded by "GS-AP-" as shown on the Monitoring Well Location Map.
5. Concentrations underlined in blue exceed the site specific Groundwater Protection Standard (GWPS) of 0.1 mg/L for Molybdenum.
6. Wells without labels are screened in aquifer zones other than Pratt or Pratt/Gillespy.

LEGEND

- ⊕ Downgradient Compliance Well
- ⊕ Upgradient Compliance Well
- ⊕ Horizontal Delineation Well
- ⊕ Vertical Delineation Well
- ⊕ Piezometer
- Molybdenum GWPS Contour (0.1 mg/L)
- Molybdenum Isoconcentration Contour (mg/L)
- ▭ Pratt Mines
- ▭ Ash Pond Boundary

MW-3V Well ID
0.0449 Molybdenum Concentration (mg/L)

0 500
Feet

Projection: NAD 1983 State Plane Alabama West FIPS 0102 Feet
Base Map: Vivid Imagery, 1/7/2023 (west), 11/14/2020 (center) & 5/25/2021 (east)

SCALE 1:6000
DATE 1/26/2024
DRAWN BY KWR
CHECKED BY AWH

DRAWING TITLE:
MOLYBDENUM ISOCONCENTRATION MAP
PRATT AQUIFER
AUGUST TO SEPTEMBER 2023
PLANT GORGAS ASH POND

FIGURE NO.
FIGURE 13

Southern Company

Tables

Southern Company

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

Well ID	Hydraulic Location	Geologic Unit	Latitude	Longitude	Ground Surface Elevation (ft NAVD)	Top Of Casing Elevation (ft NAVD)	Well Depth (ft BTOC)	Top Of Screen Elevation (ft NAVD)	Bottom Of Screen Elevation (ft NAVD)	Screen Length (ft)	Date Of Installation
WELL NETWORK											
GS-AP-MW-18R	Upgradient	Pottsville Fm - Shallow Water Table	33.61434	-87.17632	459.80	463.07	56.1	417.42	407.42	10	11/3/2021
GS-AP-MW-8	Upgradient	Pottsville Fm - Shallow Water Table	33.63767	-87.19149	431.63	434.61	64.6	390.42	370.42	20	2/26/2016
GS-AP-MW-17V	Upgradient	Pottsville Fm - Shallow Water Table	33.61445	-87.17943	528.75	531.45	151.4	400.45	380.45	20	1/20/2019
GS-AP-MW-10R	Downgradient	Pottsville Fm - American Strata	33.63144	-87.19096	449.88	452.79	210.6	252.64	242.64	10	8/8/2021
GS-AP-MW-11R	Downgradient	Pottsville Fm - Pratt Strata	33.63084	-87.18819	452.90	455.60	147.3	318.74	308.74	10	7/25/2021
GS-AP-MW-13R	Downgradient	Pottsville Fm - Pratt Strata	33.62746	-87.18671	457.82	460.66	167.9	303.18	293.18	10	7/25/2021
GS-AP-MW-14R	Downgradient	Pottsville Fm - Pratt Strata	33.62444	-87.18705	471.62	474.32	201.3	283.42	273.42	10	8/11/2021
GS-AP-MW-18VR	Downgradient	Pottsville Fm - Pratt Strata	33.61435	-87.17638	459.55	462.80	220.2	253.00	243.00	10	11/3/2021
GS-AP-MW-1R	Downgradient	Pottsville Fm - American Strata	33.6291	-87.1765	488.24	491.37	244.6	257.17	247.17	10	11/3/2021
GS-AP-MW-3V	Downgradient	Pottsville Fm - American Strata	33.63844	-87.17529	510.28	513.40	217.5	306.33	296.33	10	9/26/2021
GS-AP-MW-45V	Downgradient	Pottsville Fm - American Strata	33.63847	-87.17098	547.76	550.59	259.1	301.91	291.91	10	10/7/2021
GS-AP-MW-46	Downgradient	Pottsville Fm - Pratt Strata	33.62911	-87.17658	488.01	491.25	217.6	294.10	274.10	20	11/3/2021
GS-AP-MW-47	Downgradient	Pottsville Fm - American Strata	33.62436	-87.18708	471.88	475.09	242.6	242.85	232.85	10	11/6/2021
GS-AP-MW-5R	Downgradient	Pottsville Fm - American Strata	33.6414	-87.18153	485.98	488.59	177.3	321.71	311.71	10	7/28/2021
GS-AP-MW-9R	Downgradient	Pottsville Fm - Pratt Strata	33.63494	-87.19056	418.47	421.20	98.6	332.99	322.99	10	7/28/2021
GS-AP-MW-2	Downgradient	Pottsville Fm - Pratt Strata	33.63363	-87.17432	518.77	522.03	214.2	328.21	308.21	20	3/10/2016
GS-AP-MW-3	Downgradient	Pottsville Fm - Pratt Strata	33.63841	-87.17534	508.77	512.29	180.5	342.17	332.17	10	3/4/2016

Notes:

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

(1) Coordinates have been transformed into WGS 84 from NAD 27/83

GS-AP-MW-6S	Downgradient	Pottsville Fm - Shallow Water Table	33.64076	-87.18666	271.57	274.67	46.6	238.52	228.52	10	1/19/2016
GS-AP-MW-6D	Downgradient	Pottsville Fm - Shallow Water Table	33.6408	-87.18661	271.39	274.50	64.5	220.42	210.42	10	1/18/2016
GS-AP-MW-7	Downgradient	Pottsville Fm - Gillespy Transition	33.63999	-87.1878	310.05	313.45	100.5	223.36	213.36	10	1/26/2016
GS-AP-MW-12	Downgradient	Pottsville Fm - Pratt Strata	33.62932	-87.18679	447.48	450.67	154.0	307.09	297.09	10	4/20/2016
GS-AP-MW-15	Downgradient	Pottsville Fm - Pratt Strata	33.62079	-87.18642	452.21	454.89	200.1	265.21	255.21	10	2/8/2016
GS-AP-MW-16D	Downgradient	Pottsville Fm - Nickel Plate Strata	33.61772	-87.18351	459.09	462.27	224.2	258.44	238.44	20	4/20/2016
GS-AP-MW-17	Downgradient	Pottsville Fm - Pratt Strata	33.61442	-87.17944	528.78	531.88	248.9	293.43	283.43	10	2/11/2016
GS-AP-MW-19	Downgradient	Pottsville Fm - Pratt Strata	33.61818	-87.17718	492.60	495.58	179.2	283.43	273.43	20	4/29/2016
GS-AP-MW-21	Downgradient	Pottsville Fm - Pratt Strata	33.62586	-87.17565	506.51	509.48	236.5	283.03	273.03	10	1/18/2019
GS-AP-MW-9V	Downgradient	Pottsville Fm - American Strata	33.63502	-87.19058	418.25	420.86	138.1	292.81	282.81	10	11/6/2019
GS-AP-MW-12V	Downgradient	Pottsville Fm - American Strata	33.62936	-87.18687	446.54	449.74	179.1	312.22	302.22	10	1/9/2019
GS-AP-MW-15V	Downgradient	Pottsville Fm - American Strata	33.62079	-87.18649	452.91	455.89	235.4	230.51	220.51	10	10/28/2019
GS-AP-MW-21V	Downgradient	Pottsville Fm - American Strata	33.62589	-87.17559	507.59	509.84	249.0	270.89	260.89	10	9/26/2019

Notes:

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

(1) Coordinates have been transformed into WGS 84 from NAD 27/83

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

Well ID	Hydraulic Location	Geologic Unit	Latitude	Longitude	Ground Surface Elevation (ft NAVD)	Top Of Casing Elevation (ft NAVD)	Well Depth (ft BTOC)	Top Of Screen Elevation (ft NAVD)	Bottom Of Screen Elevation (ft NAVD)	Screen Length (ft)	Date Of Installation
WELL NETWORK											
GS-AP-MW-23V	Vertical Delineation	Pottsville Fm - Gillespy Transition	33.64178	-87.18697	303.34	306.40	87.4	229.42	219.42	10	10/7/2021
GS-AP-MW-31V	Vertical Delineation	Pottsville Fm - American Strata	33.63115	-87.17073	585.88	588.49	328.3	270.56	260.56	10	11/5/2021
GS-AP-MW-36V	Vertical Delineation	Pottsville Fm - American Strata	33.61879	-87.18748	533.82	537.05	319.4	228.10	218.10	10	10/7/2021
GS-AP-PZ-18R	Vertical Delineation	Pottsville Fm - Nickel Plate Strata	33.61433	-87.17626	459.81	463.13	116.0	357.50	347.50	10	11/3/2021
GS-AP-MW-6V	Vertical Delineation	Pottsville Fm - Shallow Water Table	33.64085	-87.18649	272.84	275.44	98.5	184.34	174.34	10	6/23/2020
GS-AP-PZ-16	Vertical Delineation	Pottsville Fm - American Strata	33.61773	-87.1835	458.83	462.29	252.7	219.63	209.63	10	3/16/2016
GS-AP-PZ-22	Vertical Delineation	Pottsville Fm - American Strata	33.61438	-87.17944	529.31	532.38	328.1	214.31	204.31	10	4/11/2016
GS-AP-MW-27HR	Horizontal Delineation	Pottsville Fm - Pratt Strata	33.6207	-87.18793	531.32	535.26	279.8	265.86	255.86	10	7/9/2021
GS-AP-MW-37HR	Horizontal Delineation	Pottsville Fm - American Strata	33.62609	-87.19083	457.27	460.05	243.1	227.35	217.35	10	10/7/2021
GS-AP-MW-23H	Horizontal Delineation	Pottsville Fm - Gillespy Transition	33.64177	-87.18703	301.90	304.98	42.5	272.48	262.48	10	1/4/2019
GS-AP-MW-24H	Horizontal Delineation	Pottsville Fm - Shallow Water Table	33.64215	-87.19088	258.38	261.35	62.8	208.55	198.55	10	1/3/2019
GS-AP-MW-26H	Horizontal Delineation	Pottsville Fm - American Strata	33.63147	-87.19548	391.68	394.68	193.6	211.08	201.08	10	1/22/2019
GS-AP-MW-28H	Horizontal Delineation	Pottsville Fm - Pratt Strata	33.61378	-87.17924	513.84	513.82	229.7	294.12	284.12	10	2/26/2019
GS-AP-MW-29H	Horizontal Delineation	Pottsville Fm - Pratt Strata	33.61411	-87.17663	440.71	440.95	130.6	320.31	310.31	10	2/5/2019
GS-AP-MW-25HA	Horizontal Delineation	Pottsville Fm - Gillespy Transition	33.63575	-87.19403	458.98	462.27	342.9	129.37	119.37	10	11/7/2019
GS-AP-MW-30HA	Horizontal Delineation	Pottsville Fm - American Strata	33.62477	-87.16979	579.99	582.40	338.0	254.45	244.45	10	10/23/2019
GS-AP-MW-31H	Horizontal Delineation	Pottsville Fm - Pratt Strata	33.63109	-87.17078	584.48	587.39	287.6	309.81	299.81	10	10/11/2019

Notes:

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

(1) Coordinates have been transformed into WGS 84 from NAD 27/83

GS-AP-MW-32H	Horizontal Delineation	Pottsville Fm - Pratt Strata	33.61739	-87.17191	547.43	550.03	304.1	265.98	245.98	20	10/12/2019
GS-AP-MW-33HO	Horizontal Delineation	Pottsville Fm - Pratt Strata	33.61366	-87.17301	524.08	526.79	282.9	263.88	243.88	20	11/7/2019
GS-AP-MW-34HO	Horizontal Delineation	Pottsville Fm - American Strata	33.61219	-87.17802	521.18	523.82	327.6	206.22	196.22	10	11/9/2019
GS-AP-MW-35HO	Horizontal Delineation	Pottsville Fm - Pratt Strata	33.6149	-87.18368	550.60	553.35	320.5	242.87	232.87	10	11/20/2019
GS-AP-MW-36H	Horizontal Delineation	Pottsville Fm - Pratt Strata	33.61873	-87.18729	533.67	536.61	283.1	263.51	253.51	10	10/28/2019
GS-AP-MW-40H	Horizontal Delineation	Pottsville Fm - American Strata	33.63069	-87.19933	355.07	357.91	90.3	274.77	264.77	10	5/1/2020
GS-AP-MW-41HS	Horizontal Delineation	Pottsville Fm - Shallow Water Table	33.64119	-87.18858	281.75	284.65	37.7	257.00	247.00	10	10/28/2019
GS-AP-MW-38H	Horizontal Delineation	Pottsville Fm - American Strata	33.6299	-87.19411	343.41	345.74	168.2	187.54	177.54	10	11/22/2019
GS-AP-MW-41HD	Horizontal Delineation	Pottsville Fm - Gillespy Transition	33.64118	-87.18857	282.32	284.54	58.3	236.24	226.24	10	10/27/2019
GS-AP-MW-42H	Horizontal Delineation	Pottsville Fm - Gillespy Transition	33.64227	-87.1861	338.61	340.62	87.5	263.11	253.11	10	10/29/2019
GS-AP-MW-43HO	Horizontal Delineation	Pottsville Fm - Pratt Strata	33.63169	-87.17419	511.87	514.62	222.8	311.87	291.87	20	11/11/2019
GS-AP-MW-44HO	Horizontal Delineation	Pottsville Fm - Pratt Strata	33.63147	-87.17478	503.33	506.21	205.6	308.23	298.23	10	8/16/2020

Notes:

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

(1) Coordinates have been transformed into WGS 84 from NAD 27/83

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

Well ID	Hydraulic Location	Geologic Unit	Latitude	Longitude	Ground Surface Elevation (ft NAVD)	Top Of Casing Elevation (ft NAVD)	Well Depth (ft BTOC)	Top Of Screen Elevation (ft NAVD)	Bottom Of Screen Elevation (ft NAVD)	Screen Length (ft)	Date Of Installation
WELL NETWORK											
GS-AP-MW-4	Piezometer	Pottsville Fm - Pratt Strata	33.6414	-87.17321	504.61	507.90	163.3	354.61	344.61	10	3/7/2016
GS-AP-MW-16S	Piezometer	Pottsville Fm - Shallow Water Table	33.61771	-87.18353	459.04	462.42	133.4	349.04	329.04	20	4/18/2016
GS-AP-MW-20	Piezometer	Pottsville Fm - Pratt Strata	33.6231	-87.17209	525.18	528.15	250.0	288.18	278.18	10	2/1/2019
GS-AP-MW-7VR	Piezometer	Pottsville Fm - Shallow Water Table	33.63997	-87.18782	311.04	313.89	150.3	171.74	161.74	10	4/18/2020
GS-AP-MW-7V	Piezometer	Pottsville Fm - Gillespy Transition	33.63999	-87.18785	309.46	312.14	202.7	119.46	109.46	10	1/18/2019
GS-AP-MW-25H	Piezometer	Pottsville Fm - Pratt Strata	33.63577	-87.19405	458.66	461.79	168.1	303.66	293.66	10	1/2/2019
GS-AP-MW-30H	Piezometer	Pottsville Fm - Pratt Strata	33.62473	-87.16975	579.62	582.49	295.9	296.62	286.62	10	1/8/2019
GS-AP-MW-30HS	Piezometer	Pottsville Fm - Shallow Water Table	33.62474	-87.16977	579.84	582.53	47.2	545.34	535.34	10	1/10/2019
GS-AP-MW-39H	Piezometer	Pottsville Fm - Unassigned	33.63126	-87.1916	448.47	451.13	348.5	122.63	102.63	20	10/29/2019

Notes:

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

(1) Coordinates have been transformed into WGS 84 from NAD 27/83

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

Well ID	Hydraulic Location	Geologic Unit	Latitude	Longitude	Ground Surface Elevation (ft NAVD)	Top Of Casing Elevation (ft NAVD)	Well Depth (ft BTOC)	Top Of Screen Elevation (ft NAVD)	Bottom Of Screen Elevation (ft NAVD)	Screen Length (ft)	Date Of Installation
WELL NETWORK											
GS-AP-MW-1	Abandoned	Pottsville Fm - Pratt Strata	33.62908	-87.17658	487.30	490.68	148.4	362.30	342.30	20	2/24/2016
GS-AP-MW-5	Abandoned	Pottsville Fm - Pratt Strata	33.64151	-87.18158	483.80	487.17	149.4	347.80	337.80	10	4/2/2016
GS-AP-MW-9	Abandoned	Pottsville Fm - Pratt Strata	33.63504	-87.19044	417.06	420.04	111.4	307.09	297.09	20	4/22/2016
GS-AP-MW-10	Abandoned	Pottsville Fm - Unassigned	33.63192	-87.19137	464.94	468.41	144.9	265.21	255.21	20	1/21/2016
GS-AP-MW-11	Abandoned	Pottsville Fm - Pratt Strata	33.63092	-87.18869	465.34	468.34	139.9	348.44	328.44	20	2/4/2016
GS-AP-MW-13	Abandoned	Pottsville Fm - Pratt Strata	33.62659	-87.186	461.03	464.20	113.6	265.21	255.21	20	2/4/2016
GS-AP-MW-14	Abandoned	Pottsville Fm - Pratt Strata	33.62389	-87.18697	469.60	472.40	203.2	279.20	269.20	10	1/30/2016
GS-AP-MW-18	Abandoned	Pottsville Fm - Pratt Strata	33.61468	-87.17703	400.17	403.39	98.7	336.79	316.79	20	3/29/2016
GS-AP-PZ-18	Abandoned	Pottsville Fm - American Strata	33.61473	-87.17704	399.77	402.38	183.8	228.59	218.59	10	2/25/2016
GS-AP-MW-18V	Abandoned	Pottsville Fm - American Strata	33.61466	-87.177	401.81	404.61	137.7	276.90	266.90	10	1/30/2019
GS-AP-MW-27H	Abandoned	Pottsville Fm - American Strata	33.62075	-87.1879	532.08	535.03	245.0	300.08	290.08	10	2/12/2019
GS-AP-MW-37H	Abandoned	Pottsville Fm - Pratt Strata	33.62611	-87.19093	456.12	459.28	293.5	185.83	165.83	20	10/23/2019

Notes:

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

(1) Coordinates have been transformed into WGS 84 from NAD 27/83

Table 2. Parameters And Reporting Limits

Plant Gorgas Ash Pond
03/06/2023 - 09/19/2023

Appendix III Parameters			
Parameters	**Analytical Methods**	**Reporting Limits**	**Units of Measure**
Boron	EPA 200.7	0.1015	mg/L
Calcium	EPA 200.7	0.406-40.599998	mg/L
Chloride	SM4500Cl E	1-100	mg/L
Fluoride	SM4500F G 2017	0.125	mg/L
pH_Field	Field Sampling	NA	SU
Sulfate	SM4500SO4 E 2011	2-100	mg/L
TDS	NA	NA	mg/L

Appendix IV Parameters			
Parameters	**Analytical Methods**	**Reporting Limits**	**Units of Measure**
Antimony	EPA 200.8	0.001015	mg/L
Arsenic	EPA 200.8	0.000203	mg/L
Barium	EPA 200.8	0.001015	mg/L
Beryllium	EPA 200.8	0.001015	mg/L
Cadmium	EPA 200.8	0.000203	mg/L
Chromium	EPA 200.8	0.001015	mg/L
Cobalt	EPA 200.8	0.000203	mg/L
Lead	EPA 200.8	0.000203	mg/L
Lithium	EPA 200.7	0.02	mg/L
Mercury	EPA 245.1	0.0005	mg/L
Molybdenum	EPA 200.7	0.01015	mg/L
	EPA 200.8	0.000203	mg/L
Selenium	EPA 200.8	0.001015	mg/L
Thallium	EPA 200.8	0.000203	mg/L
Combined Radium 226 + 228	Total Radium Calculation	0.796-2.94	pCi/L

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

Southern Company

Table 3. Groundwater Elevations Summary

Plant Gorgas Ash Pond
03/06/2023 - 08/29/2023

Measurement Date		03/06/2023		08/29/2023	
Well	**TOC Elevation (ft. NAVD)**	**Depth To Water (ft. BTOC)**	**Groundwater Elevation (ft. NAVD)**	**Depth To Water (ft. BTOC)**	**Groundwater Elevation (ft. NAVD)**
GS-AP-MW-10R	452.79	145.40	307.39	146.97	305.82
GS-AP-MW-11R	455.60	76.78	378.82	83.28	372.32
GS-AP-MW-12	450.67	74.43	376.24	83.96	366.71
GS-AP-MW-12V	449.74	93.05	356.69	98.00	351.74
GS-AP-MW-13R	460.66	100.53	360.13	107.69	352.97
GS-AP-MW-14R	474.32	101.60	372.72	103.68	370.64
GS-AP-MW-15	454.89	77.67	377.22	78.19	376.70
GS-AP-MW-15V	455.89	160.28	295.61	156.98	298.91
GS-AP-MW-16D	462.27	147.39	314.88	144.61	317.66
GS-AP-MW-16S	462.42	56.32	406.10	57.80	404.62
GS-AP-MW-17	531.88	171.37	360.51	180.12	351.76
GS-AP-MW-17V	531.45	105.29	426.16	105.78	425.67
GS-AP-MW-18R	463.07	39.38	423.69	40.51	422.56
GS-AP-MW-18VR	462.80	195.60	267.20	189.24	273.56
GS-AP-MW-19	495.58	111.10	384.48	110.79	384.79
GS-AP-MW-1R	491.37	175.78	315.59	176.14	315.23
GS-AP-MW-2	522.03	149.81	372.22	156.52	365.51
GS-AP-MW-20	528.15	213.11	315.04	212.81	315.34
GS-AP-MW-21	509.48	170.18	339.30	172.81	336.67
GS-AP-MW-21V	509.84	180.43	329.41	182.09	327.75
GS-AP-MW-23H	304.98	27.98	277.00	29.51	275.47
GS-AP-MW-23V	306.40	43.46	262.94	44.42	261.98
GS-AP-MW-24H	261.35	6.26	255.09	6.81	254.54
GS-AP-MW-25H	461.79	160.10	301.69	161.41	300.38
GS-AP-MW-25HA	462.27	176.30	285.97	177.09	285.18
GS-AP-MW-26H	394.68	95.90	298.78	97.11	297.57
GS-AP-MW-27HR	535.26	158.43	376.83	157.08	378.18
GS-AP-MW-28H	513.82	153.20	360.62	161.94	351.88
GS-AP-MW-29H	440.95	79.66	361.29	88.43	352.52
GS-AP-MW-3	512.29	141.11	371.18	147.39	364.90
GS-AP-MW-30H	582.49	272.51	309.98	272.28	310.21
GS-AP-MW-30HA	582.40	315.71	266.69	309.31	273.09
GS-AP-MW-30HS	582.53	47.42	535.11	47.89	534.64

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

Table 3. Groundwater Elevations Summary

Plant Gorgas Ash Pond
03/06/2023 - 08/29/2023

Measurement Date		03/06/2023		08/29/2023	
Well	TOC Elevation (ft. NAVD)	Depth To Water (ft. BTOC)	Groundwater Elevation (ft. NAVD)	Depth To Water (ft. BTOC)	Groundwater Elevation (ft. NAVD)
GS-AP-MW-31H	587.39	236.16	351.23	238.88	348.51
GS-AP-MW-31V	588.49	282.24	306.25	281.31	307.18
GS-AP-MW-32H	550.03	264.08	285.95	260.76	289.27
GS-AP-MW-33HO	526.79	246.91	279.88	243.16	283.63
GS-AP-MW-34HO	523.82	257.05	266.77	250.61	273.21
GS-AP-MW-35HO	553.35	264.25	289.10	261.14	292.21
GS-AP-MW-36H	536.61	241.72	294.89	239.31	297.30
GS-AP-MW-36V	537.05	259.66	277.39	254.93	282.12
GS-AP-MW-37HR	460.05	142.79	317.26	144.25	315.80
GS-AP-MW-38H	345.74	47.72	298.02	48.48	297.26
GS-AP-MW-39H	451.13	254.80	196.33	247.02	204.11
GS-AP-MW-3V	513.40	152.53	360.87	158.91	354.49
GS-AP-MW-4	507.90	137.72	370.18	143.42	364.48
GS-AP-MW-40H	357.91	79.55	278.36	80.33	277.58
GS-AP-MW-41HD	284.54	1.06	283.48	2.06	282.48
GS-AP-MW-41HS	284.65	20.55	264.10	21.46	263.19
GS-AP-MW-42H	340.62	52.54	288.08	54.02	286.60
GS-AP-MW-43HO	514.62	151.41	363.21	156.11	358.51
GS-AP-MW-44HO	506.21	143.17	363.04	147.98	358.23
GS-AP-MW-45V	550.59	201.79	348.80	206.51	344.08
GS-AP-MW-46	491.25	129.51	361.74	135.02	356.23
GS-AP-MW-47	475.09	120.28	354.81	122.46	352.63
GS-AP-MW-5R	488.59	142.34	346.25	146.71	341.88
GS-AP-MW-6D	274.50	11.31	263.19	12.29	262.21
GS-AP-MW-6S	274.67	17.36	257.31	17.31	257.36
GS-AP-MW-6V	275.44	13.71	261.73	14.61	260.83
GS-AP-MW-7	313.45	9.51	303.94	12.39	301.06
GS-AP-MW-7V	312.14	172.84	139.30	167.86	144.28
GS-AP-MW-7VR	313.89	50.21	263.68	51.09	262.80
GS-AP-MW-8	434.61	41.81	392.80	43.82	390.79
GS-AP-MW-9R	421.20	60.70	360.50	63.49	357.71
GS-AP-MW-9V	420.86	57.42	363.44	62.76	358.10
GS-AP-PZ-16	462.29	195.55	266.74	189.11	273.18

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

Table 3. Groundwater Elevations Summary

Plant Gorgas Ash Pond
03/06/2023 - 08/29/2023

Measurement Date		03/06/2023		08/29/2023	
Well	**TOC Elevation (ft. NAVD)**	**Depth To Water (ft. BTOC)**	**Groundwater Elevation (ft. NAVD)**	**Depth To Water (ft. BTOC)**	**Groundwater Elevation (ft. NAVD)**
GS-AP-PZ-18R	463.13	95.55	367.58	95.42	367.71
GS-AP-PZ-22	532.38	265.63	266.75	259.26	273.12

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

Table 4a. Relative Percent Difference (RPD) Calculations

Plant Gorgas Ash Pond
03/06/2023 - 09/18/2023

GS-AP-MW-29H				
Sample Date = 9/13/2023				
Analyte	**Units**	**Original Result**	**Duplicate Result**	**RPD (%)**
Boron	mg/L	0.292	0.293	0.34%
Calcium	mg/L	11.6	11.7	0.86%
Chloride	mg/L	5.63	5.7	1.24%
Fluoride	mg/L	0.371	0.376	1.34%
Sulfate	mg/L	28.5	28.1	1.41%
Arsenic	mg/L	0.00158	0.00156	1.27%
Barium	mg/L	0.242	0.254	4.84%
Lithium	mg/L	0.0678	0.0677	0.15%
Molybdenum	mg/L	0.0658	0.066	0.30%
GS-AP-MW-9R				
Sample Date = 9/13/2023				
Analyte	**Units**	**Original Result**	**Duplicate Result**	**RPD (%)**
Boron	mg/L	0.193	0.192	0.52%
Calcium	mg/L	38.9	38.9	0.00%
Chloride	mg/L	13.7	13.7	0.00%
Fluoride	mg/L	0.158	0.186	16.28%
Sulfate	mg/L	57.5	57.3	0.35%
Arsenic	mg/L	0.00449	0.0045	0.22%
Barium	mg/L	0.0315	0.0318	0.95%
Lithium	mg/L	0.0352	0.0355	0.85%
GS-AP-PZ-22				
Sample Date = 9/11/2023				
Analyte	**Units**	**Original Result**	**Duplicate Result**	**RPD (%)**
Calcium	mg/L	9.05	9.75	7.45%
Chloride	mg/L	2.96	2.9	2.05%
Fluoride	mg/L	0.472	0.468	0.85%
Sulfate	mg/L	64.2	66.8	3.97%
Arsenic	mg/L	0.00229	0.00207	10.09%
Barium	mg/L	0.0543	0.062	13.24%
Lithium	mg/L	0.094	0.0885	6.03%
GS-AP-MW-35HO				
Sample Date = 8/31/2023				
Analyte	**Units**	**Original Result**	**Duplicate Result**	**RPD (%)**
Calcium	mg/L	1.38	1.36	1.46%

Table 4a. Relative Percent Difference (RPD) Calculations

Plant Gorgas Ash Pond
03/06/2023 - 09/18/2023

<table>
<tr><th colspan="5">GS-AP-MW-35HO</th></tr>
<tr><th colspan="5">Sample Date = 8/31/2023</th></tr>
<tr><th>Analyte</th><th>Units</th><th>Original Result</th><th>Duplicate Result</th><th>RPD (%)</th></tr>
<tr><td>Chloride</td><td>mg/L</td><td>8.21</td><td>7.99</td><td>2.72%</td></tr>
<tr><td>Fluoride</td><td>mg/L</td><td>0.153</td><td>0.143</td><td>6.76%</td></tr>
<tr><td>Sulfate</td><td>mg/L</td><td>14.5</td><td>14.4</td><td>0.69%</td></tr>
<tr><td>Barium</td><td>mg/L</td><td>0.0494</td><td>0.0498</td><td>0.81%</td></tr>
<tr><td>Lithium</td><td>mg/L</td><td>0.0653</td><td>0.0648</td><td>0.77%</td></tr>
<tr><th colspan="5">GS-AP-MW-41HD</th></tr>
<tr><th colspan="5">Sample Date = 8/30/2023</th></tr>
<tr><th>Analyte</th><th>Units</th><th>Original Result</th><th>Duplicate Result</th><th>RPD (%)</th></tr>
<tr><td>Boron</td><td>mg/L</td><td>1.6</td><td>1.59</td><td>0.63%</td></tr>
<tr><td>Calcium</td><td>mg/L</td><td>58.9</td><td>56</td><td>5.05%</td></tr>
<tr><td>Chloride</td><td>mg/L</td><td>7.91</td><td>7.96</td><td>0.63%</td></tr>
<tr><td>Fluoride</td><td>mg/L</td><td>0.161</td><td>0.137</td><td>16.11%</td></tr>
<tr><td>Sulfate</td><td>mg/L</td><td>113</td><td>110</td><td>2.69%</td></tr>
<tr><td>Arsenic</td><td>mg/L</td><td>0.00342</td><td>0.00344</td><td>0.58%</td></tr>
<tr><td>Barium</td><td>mg/L</td><td>0.0519</td><td>0.0504</td><td>2.93%</td></tr>
<tr><td>Cobalt</td><td>mg/L</td><td>0.00097</td><td>0.00096</td><td>0.52%</td></tr>
<tr><td>Lithium</td><td>mg/L</td><td>0.357</td><td>0.348</td><td>2.55%</td></tr>
<tr><td>Molybdenum</td><td>mg/L</td><td>0.0337</td><td>0.0339</td><td>0.59%</td></tr>
<tr><th colspan="5">GS-AP-MW-18R</th></tr>
<tr><th colspan="5">Sample Date = 3/28/2023</th></tr>
<tr><th>Analyte</th><th>Units</th><th>Original Result</th><th>Duplicate Result</th><th>RPD (%)</th></tr>
<tr><td>Calcium</td><td>mg/L</td><td>25.8</td><td>26.1</td><td>1.16%</td></tr>
<tr><td>Chloride</td><td>mg/L</td><td>3</td><td>3.13</td><td>4.24%</td></tr>
<tr><td>Sulfate</td><td>mg/L</td><td>26.3</td><td>26.2</td><td>0.38%</td></tr>
<tr><td>Arsenic</td><td>mg/L</td><td>0.00043</td><td>0.00049</td><td>12.35%</td></tr>
<tr><td>Barium</td><td>mg/L</td><td>0.0803</td><td>0.0809</td><td>0.74%</td></tr>
<tr><td>Cobalt</td><td>mg/L</td><td>0.00069</td><td>0.00072</td><td>4.13%</td></tr>
<tr><th colspan="5">GS-AP-PZ-18R</th></tr>
<tr><th colspan="5">Sample Date = 3/28/2023</th></tr>
<tr><th>Analyte</th><th>Units</th><th>Original Result</th><th>Duplicate Result</th><th>RPD (%)</th></tr>
<tr><td>Calcium</td><td>mg/L</td><td>61.8</td><td>67.6</td><td>8.96%</td></tr>
<tr><td>Chloride</td><td>mg/L</td><td>4</td><td>4.05</td><td>1.24%</td></tr>
<tr><td>Fluoride</td><td>mg/L</td><td>0.175</td><td>0.178</td><td>1.70%</td></tr>
<tr><td>Sulfate</td><td>mg/L</td><td>44.9</td><td>45.1</td><td>0.44%</td></tr>
</table>

Table 4a. Relative Percent Difference (RPD) Calculations

Plant Gorgas Ash Pond
03/06/2023 - 09/18/2023

GS-AP-PZ-18R

Sample Date = 3/28/2023

Analyte	Units	Original Result	Duplicate Result	RPD (%)
Arsenic	mg/L	0.00106	0.00113	6.39%
Barium	mg/L	0.0701	0.0711	1.42%

GS-AP-MW-46

Sample Date = 3/27/2023

Analyte	Units	Original Result	Duplicate Result	RPD (%)
Boron	mg/L	0.886	0.881	0.57%
Calcium	mg/L	0.975	0.957	1.86%
Chloride	mg/L	30.2	30.4	0.66%
Fluoride	mg/L	0.271	0.267	1.49%
Sulfate	mg/L	168	177	5.22%
Arsenic	mg/L	0.0955	0.092	3.73%
Barium	mg/L	0.0655	0.0639	2.47%
Lithium	mg/L	0.0593	0.0593	0.00%
Molybdenum	mg/L	0.0114	0.0114	0.00%

Sample Date = 9/18/2023

Analyte	Units	Original Result	Duplicate Result	RPD (%)
Boron	mg/L	0.919	0.913	0.66%
Calcium	mg/L	0.866	0.873	0.81%
Chloride	mg/L	31.1	30.8	0.97%
Fluoride	mg/L	0.334	0.293	13.08%
Sulfate	mg/L	130	130	0.00%
Arsenic	mg/L	0.179	0.158	12.46%
Barium	mg/L	0.0535	0.0535	0.00%
Lithium	mg/L	0.0568	0.0583	2.61%
Molybdenum	mg/L	0.0168	0.0161	4.26%

GS-AP-MW-17

Sample Date = 3/22/2023

Analyte	Units	Original Result	Duplicate Result	RPD (%)
Calcium	mg/L	2.07	2.1	1.44%
Chloride	mg/L	5.96	5.87	1.52%
Fluoride	mg/L	0.183	0.174	5.04%
Sulfate	mg/L	7	4.78	37.69%
Arsenic	mg/L	0.0009	0.00097	8.45%
Barium	mg/L	0.0835	0.0891	6.49%

Table 4a. Relative Percent Difference (RPD) Calculations

Plant Gorgas Ash Pond
03/06/2023 - 09/18/2023

GS-AP-MW-17

Sample Date = 3/22/2023

Analyte	Units	Original Result	Duplicate Result	RPD (%)
Lithium	mg/L	0.0586	0.0594	1.36%

GS-AP-MW-24H

Sample Date = 3/15/2023

Analyte	Units	Original Result	Duplicate Result	RPD (%)
Calcium	mg/L	41.2	40.8	0.98%
Chloride	mg/L	2.88	2.94	2.06%
Fluoride	mg/L	0.172	0.186	7.82%
Sulfate	mg/L	7.51	7.2	4.22%
Arsenic	mg/L	0.00021	0.00023	6.87%
Barium	mg/L	1.08	1.08	0.00%
Cobalt	mg/L	0.00029	0.00025	11.46%
Lithium	mg/L	0.0238	0.0233	2.12%

GS-AP-MW-6S

Sample Date = 3/14/2023

Analyte	Units	Original Result	Duplicate Result	RPD (%)
Boron	mg/L	0.935	0.933	0.21%
Calcium	mg/L	50.9	50.4	0.99%
Chloride	mg/L	18.5	18.6	0.54%
Fluoride	mg/L	0.153	0.149	2.65%
Sulfate	mg/L	96.1	94.9	1.26%
Arsenic	mg/L	0.00908	0.00904	0.44%
Barium	mg/L	0.108	0.105	2.82%
Cobalt	mg/L	0.00075	0.0007	6.08%
Lithium	mg/L	0.0468	0.0449	4.14%
Molybdenum	mg/L	0.0298	0.029	2.72%

Sample Date = 9/5/2023

Analyte	Units	Original Result	Duplicate Result	RPD (%)
Boron	mg/L	1.16	1.15	0.87%
Calcium	mg/L	55.7	56.9	2.13%
Chloride	mg/L	19.2	19.1	0.52%
Fluoride	mg/L	0.152	0.153	0.66%
Sulfate	mg/L	107	111	3.67%
Arsenic	mg/L	0.0126	0.0135	6.90%
Barium	mg/L	0.102	0.108	5.71%

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Table 4a. Relative Percent Difference (RPD) Calculations

Plant Gorgas Ash Pond
03/06/2023 - 09/18/2023

GS-AP-MW-6S

Sample Date = 9/5/2023

Analyte	Units	Original Result	Duplicate Result	RPD (%)
Cobalt	mg/L	0.00064	0.00067	4.44%
Lithium	mg/L	0.0806	0.0773	4.18%
Molybdenum	mg/L	0.0408	0.0395	3.24%

GS-AP-MW-34HO

Sample Date = 3/8/2023

Analyte	Units	Original Result	Duplicate Result	RPD (%)
Calcium	mg/L	64.5	70.3	8.61%
Chloride	mg/L	354	356	0.56%
Fluoride	mg/L	0.315	0.309	1.92%
Sulfate	mg/L	1200	1230	2.47%
Arsenic	mg/L	0.00105	0.00144	31.33%
Barium	mg/L	0.0695	0.1	35.99%
Cobalt	mg/L	0.00059	0.0008	30.70%
Lead	mg/L	0.00103	0.00281	92.71%
Lithium	mg/L	0.14	0.149	6.23%
Molybdenum	mg/L	0.0104	0.016	42.42%

GS-AP-MW-44HO

Sample Date = 3/6/2023

Analyte	Units	Original Result	Duplicate Result	RPD (%)
Calcium	mg/L	1.09	1.11	1.82%
Chloride	mg/L	33.8	32	5.47%
Fluoride	mg/L	0.227	0.125	57.96%
Sulfate	mg/L	23.1	22.5	2.63%
Arsenic	mg/L	0.00027	0.00025	11.13%
Barium	mg/L	0.0835	0.0831	0.48%
Lithium	mg/L	0.0451	0.0463	2.63%
Molybdenum	mg/L	0.00325	0.00355	8.82%

Sample Date = 9/5/2023

Analyte	Units	Original Result	Duplicate Result	RPD (%)
Calcium	mg/L	2	2.02	1.00%
Chloride	mg/L	33.8	31.5	7.04%
Fluoride	mg/L	0.158	0.153	3.22%
Sulfate	mg/L	24.4	25.5	4.41%
Arsenic	mg/L	0.00053	0.00052	2.30%

Table 4a. Relative Percent Difference (RPD) Calculations

Plant Gorgas Ash Pond
03/06/2023 - 09/18/2023

GS-AP-MW-44HO				
Sample Date = 9/5/2023				
Analyte	**Units**	**Original Result**	**Duplicate Result**	**RPD (%)**
Barium	mg/L	0.0867	0.0838	3.40%
Lithium	mg/L	0.0475	0.0474	0.21%

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

Table 4b. - Field QC: Blank Detections

Plant Gorgas Ash Pond
03/06/2023 - 09/13/2023

Parameters Detected Above MDL					
Sample Date	**QC Location**	**Parameter**	**Blank Concentration**	**Units**	**MDL**
03/28/2023	FB-6	Fluoride	0.242 v	mg/L	0.06
08/31/2023	EB-1	Chromium	0.00021 J	mg/L	0.0002
03/28/2023	FB-6	Chromium	0.00021 J	mg/L	0.0002
03/27/2023	EB-1	Chromium	0.00025 J	mg/L	0.0002
03/09/2023	EB-1	Chromium	0.0003 J	mg/L	0.0002
03/06/2023	FB-1	Chromium	0.00026 J	mg/L	0.0002

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

Table 5. Summary of Background Levels and Groundwater Protection Standards

Plant Gorgas Ash Pond

Appendix IV Analytes			
Analyte	**Units**	**Background**	**GWPS**
Antimony	mg/L	0.00115	0.006
Arsenic	mg/L	0.005	0.01
Barium	mg/L	0.353	2
Beryllium	mg/L	0.001015	0.004
Cadmium	mg/L	0.000203	0.005
Chromium	mg/L	0.00405	0.1
Cobalt	mg/L	0.00362	0.006
Fluoride	mg/L	0.278	4
Lead	mg/L	0.000189	0.015
Lithium	mg/L	0.0809	0.0809
Mercury	mg/L	0.0005	0.002
Molybdenum	mg/L	0.01015	0.1
Selenium	mg/L	0.001015	0.05
Thallium	mg/L	0.000203	0.002
Combined Radium 226 + 228	pCi/L	1.25	5

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

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Table 6. First Semi-Annual Monitoring Event

Analytical Results Summary
Plant Gorgas Ash Pond
03/06/2023 - 03/28/2023

Field Parameters

Hydraulic Location	Well	Sample Date	DO mg/L	ORP mv	Turbidity NTU	Field Temperature C	pH_Field SU	Conductivity uS/cm
Upgradient	GS-AP-MW-17V	03/22/2023	0.07	-157.18	1.95	18.59	7.61	545.07
Upgradient	GS-AP-MW-18R	03/28/2023	0.21	-17.38	1.74	17.16	6.48	220.04
Upgradient	GS-AP-MW-8	03/27/2023	1.63	189.13	1.1	22.43	5.82	130.02
Downgradient	GS-AP-MW-10R	03/27/2023	0.34	-126.86	3.52	19.48	6.68	459.61
Downgradient	GS-AP-MW-11R	03/22/2023	0.24	-29.27	9.9	17.52	6.69	431.37
Downgradient	GS-AP-MW-12	03/22/2023	0.44	-158.03	0.73	18.59	8.15	339.15
Downgradient	GS-AP-MW-12V	03/22/2023	0.63	-141.69	8.44	17.61	9	253.08
Downgradient	GS-AP-MW-13R	03/27/2023	0.8	-75.07	7.66	20.13	6.47	311.29
Downgradient	GS-AP-MW-14R	03/15/2023	0.72	-39.96	1.82	17.11	6.63	386.48
Downgradient	GS-AP-MW-15	03/20/2023	0.24	-292.43	1.84	16.74	11.26	906.63
Downgradient	GS-AP-MW-15V	03/20/2023	0.45	-140.13	2.88	16.07	7.96	1291.78
Downgradient	GS-AP-MW-16D	03/21/2023	0.44	-66.44	2.98	16.16	7.51	356.64
Downgradient	GS-AP-MW-17	03/22/2023	0.09	-206.67	2.44	16.9	8.56	590.08
Downgradient	GS-AP-MW-18VR	03/27/2023	0.3	-160.78	2.25	18.03	8.03	408.93
Downgradient	GS-AP-MW-19	03/21/2023	0.08	-189.29	1.4	16.91	7.85	516.74
Downgradient	GS-AP-MW-1R	03/27/2023	0.06	-245.17	7.14	19.2	8.84	510.66
Downgradient	GS-AP-MW-2	03/22/2023	0.07	-213.6	2.16	17.48	9.27	469.8
Downgradient	GS-AP-MW-21	03/21/2023	0.32	-257.5	2.76	17.1	9.56	993.99
Downgradient	GS-AP-MW-21V	03/21/2023	0.43	-234.51	2.33	18.85	7.67	3641.79
Downgradient	GS-AP-MW-3	03/21/2023	0.88	-151.88	1.02	16.43	8.19	468.36
Downgradient	GS-AP-MW-3V	03/21/2023	1.45	-80.03	1.26	17.53	7.71	1483.23
Downgradient	GS-AP-MW-45V	03/28/2023	0.45	-137.23	1.21	16.77	7.47	2649.8
Downgradient	GS-AP-MW-46	03/27/2023	0.05	-323.09	1.4	17.93	8.81	862.06
Downgradient	GS-AP-MW-47	03/15/2023	0.4	-100.08	2.18	17.53	7.44	394.2
Downgradient	GS-AP-MW-5R	03/20/2023	0.72	-81.16	3.32	17.26	6.8	1273.03
Downgradient	GS-AP-MW-6D	03/14/2023	0.16	-173.21	0.38	16.87	7.33	487.96

Notes:
1. \"J\" indicates the result was detected above the MDL but below the PQL
2. \"<\" indicates the result was not detected above the MDL and is considered a non-detect.
3. U - Radium data is a combination of radium iso

Table 6. First Semi-Annual Monitoring Event

Analytical Results Summary
Plant Gorgas Ash Pond
03/06/2023 - 03/28/2023

Field Parameters								
Downgradient	GS-AP-MW-6S	03/14/2023	0.38	-94.12	9.24	16.26	7.04	491.61
Downgradient	GS-AP-MW-7	03/14/2023	0.54	-147.43	9.93	15.56	7.67	538.18
Downgradient	GS-AP-MW-9R	03/27/2023	0.22	-55.2	3.52	18.27	6.01	442.64
Downgradient	GS-AP-MW-9V	03/27/2023	1.22	-137.39	0.72	18.86	7	540.47
Vert. Delineation	GS-AP-MW-23V	03/14/2023	0.2	-125.2	3.1	16.85	7.37	674.91
Vert. Delineation	GS-AP-MW-31V	03/27/2023	0.12	-185.43	3.45	19.2	7.8	2054.74
Vert. Delineation	GS-AP-MW-36V	03/14/2023	0.61	-125.69	8.27	16.94	7.27	3138.49
Vert. Delineation	GS-AP-MW-6V	03/08/2023	0.57	-140.29	15.8	18.49	8.7	1359.41
Vert. Delineation	GS-AP-PZ-16	03/21/2023	0.21	-205.85	4.36	15.98	8.44	581.99
Vert. Delineation	GS-AP-PZ-18R	03/28/2023	0.3	-78.62	0.75	16.79	7.22	450.65
Vert. Delineation	GS-AP-PZ-22	03/21/2023	0.06	-270.47	3.09	17.74	9.53	669.22
Horiz. Delineation	GS-AP-MW-23H	03/14/2023	0.29	-7.19	1.88	16.74	5.93	781.52
Horiz. Delineation	GS-AP-MW-24H	03/15/2023	0.33	-80.09	1.86	17.2	6.93	405.33
Horiz. Delineation	GS-AP-MW-25HA	03/22/2023	0.12	-258.58	5.1	16.71	8.78	1397.98
Horiz. Delineation	GS-AP-MW-26H	03/22/2023	0.18	-163.94	0.12	17.99	7.23	404.65
Horiz. Delineation	GS-AP-MW-27HR	03/14/2023	0.72	-142.76	2.27	15.54	7.28	5249.37
Horiz. Delineation	GS-AP-MW-28H	03/14/2023	0.31	-186.98	1.98	17.39	8.31	725.54
Horiz. Delineation	GS-AP-MW-29H	03/28/2023	0.05	-159.04	1.99	16.94	7.82	610
Horiz. Delineation	GS-AP-MW-30HA	03/13/2023	0.64	-120.83	7.03	18.09	7.22	1013.84
Horiz. Delineation	GS-AP-MW-31H	03/27/2023	0.03	-308.74	2.13	19.58	8.86	641.31
Horiz. Delineation	GS-AP-MW-32H	03/21/2023	0.36	-82.72	3.04	16.16	8.3	567.87
Horiz. Delineation	GS-AP-MW-33HO	03/14/2023	0.15	-184.76	8.41	17.36	7.71	453.03
Horiz. Delineation	GS-AP-MW-34HO	03/08/2023	1.81	-106.29	9.58	19.39	7.26	4065.94
Horiz. Delineation	GS-AP-MW-35HO	03/08/2023	0.33	-157.86	1.44	17.66	8.42	454.15
Horiz. Delineation	GS-AP-MW-36H	03/15/2023	0.42	57.5	7.48	16.3	8.06	858.23
Horiz. Delineation	GS-AP-MW-37HR	03/15/2023	0.78	-130.57	1.9	17.13	7.81	625.16
Horiz. Delineation	GS-AP-MW-38H	03/28/2023	0.57	-170.4	2.29	19.28	7.85	588.55
Horiz. Delineation	GS-AP-MW-40H	03/22/2023	0.55	-82.81	4.55	19.43	6.6	1626.76

Notes:

1. \"J\" indicates the result was detected above the MDL but below the PQL
2. \"<\" indicates the result was not detected above the MDL and is considered a non-detect.
3. U - Radium data is a combination of radium iso

Table 6. First Semi-Annual Monitoring Event

Analytical Results Summary
Plant Gorgas Ash Pond
03/06/2023 - 03/28/2023

Field Parameters								
Horiz. Delineation	GS-AP-MW-41HS	03/13/2023	1.71	8.2	0.79	15.54	6.49	428.31
Horiz. Delineation	GS-AP-MW-42H	03/15/2023	0.19	-26.83	9.37	17.77	6.63	1015.21
Horiz. Delineation	GS-AP-MW-43HO	03/28/2023	0.98	-218.07	5.98	17.27	7.92	2166.36
Horiz. Delineation	GS-AP-MW-44HO	03/06/2023	0.26	-321	3.94	20.86	9.06	858
Piezometer	GS-AP-MW-16S	03/21/2023	0.69	-168.29	3.82	16.91	12.2	3001.38

Notes:
1. \"J\" indicates the result was detected above the MDL but below the PQL
2. \"<\" indicates the result was not detected above the MDL and is considered a non-detect.
3. U - Radium data is a combination of radium iso

Table 6. First Semi-Annual Monitoring Event

Analytical Results Summary
Plant Gorgas Ash Pond
03/06/2023 - 03/28/2023

EPA Appendix III Set

Hydraulic Location	Well	Sample Date	Boron mg/L	Calcium mg/L	Chloride mg/L	Fluoride mg/L	pH_Field SU	Sulfate mg/L	TDS mg/L
Upgradient	GS-AP-MW-17V	03/22/2023	0.0379 J	29.6	2.8	0.198	7.61	10.6	344
Upgradient	GS-AP-MW-18R	03/28/2023	<0.03	25.8	3	0.115 J	6.48	26.3	154
Upgradient	GS-AP-MW-8	03/27/2023	<0.03	4.77	4.17	0.112 J	5.82	4.41	100
Downgradient	GS-AP-MW-10R	03/27/2023	<0.03	45.3	19.3	0.283	6.68	17.5	266
Downgradient	GS-AP-MW-11R	03/22/2023	0.13	52	4.39	0.0999 J	6.69	45.6	277
Downgradient	GS-AP-MW-12	03/22/2023	<0.03	36.4	2.73	0.0941 J	8.15	18.3	203
Downgradient	GS-AP-MW-12V	03/22/2023	<0.03	38	3.77	0.138	9	1.52 J	182
Downgradient	GS-AP-MW-13R	03/27/2023	<0.03	32.1	11.4	0.18	6.47	33.1	200
Downgradient	GS-AP-MW-14R	03/15/2023	<0.03	32.8	11	0.141	6.63	20.9	229
Downgradient	GS-AP-MW-15	03/20/2023	0.0308 J	6.6	5.41	0.333	11.26	6.57	444
Downgradient	GS-AP-MW-15V	03/20/2023	0.0536 J	18.2	93.5	0.183	7.96	176	694
Downgradient	GS-AP-MW-16D	03/21/2023	<0.03	32	3.72	0.0849 J	7.51	14.7	221
Downgradient	GS-AP-MW-17	03/22/2023	0.0727 J	2.07	5.96	0.183	8.56	7	441
Downgradient	GS-AP-MW-18VR	03/27/2023	0.0477 J	2.12	3.45	0.182	8.03	1.61 J	256
Downgradient	GS-AP-MW-19	03/21/2023	0.0334 J	46.9	5.22	0.24	7.85	16.4	320
Downgradient	GS-AP-MW-1R	03/27/2023	0.0603 J	0.838	7.49	0.234	8.84	5.43	314
Downgradient	GS-AP-MW-2	03/22/2023	0.0989 J	0.4 J	4.23	0.72	9.27	8.17	297
Downgradient	GS-AP-MW-21	03/21/2023	0.13	2.74	38.5	0.194	9.56	238	606
Downgradient	GS-AP-MW-21V	03/21/2023	0.106	46.6	564	0.381	7.67	595	1950
Downgradient	GS-AP-MW-3	03/21/2023	0.341	19.4	16	0.0689 J	8.19	83.1	295
Downgradient	GS-AP-MW-3V	03/21/2023	0.0528 J	9.04	212	0.161	7.71	330	942
Downgradient	GS-AP-MW-45V	03/28/2023	0.0582 J	19	209	0.249	7.47	489	1310
Downgradient	GS-AP-MW-46	03/27/2023	0.886	0.975	30.2	0.271	8.81	168	554
Downgradient	GS-AP-MW-47	03/15/2023	<0.03	30.2	19.8	0.107 J	7.44	24.3	234
Downgradient	GS-AP-MW-5R	03/20/2023	0.038 J	94.8	54.6	0.117 J	6.8	290	767
Downgradient	GS-AP-MW-6D	03/14/2023	1.32	52.4	9.66	0.122 J	7.33	57.5	300
Downgradient	GS-AP-MW-6S	03/14/2023	0.935	50.9	18.5	0.153	7.04	96.1	298

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Table 6. First Semi-Annual Monitoring Event

Analytical Results Summary
Plant Gorgas Ash Pond
03/06/2023 - 03/28/2023

EPA Appendix III Set

Hydraulic Location	Well	Sample Date	Boron mg/L	Calcium mg/L	Chloride mg/L	Fluoride mg/L	pH_Field SU	Sulfate mg/L	TDS mg/L
Downgradient	GS-AP-MW-7	03/14/2023	1.64	11	7.98	0.177	7.67	130	340
Downgradient	GS-AP-MW-9R	03/27/2023	0.152	43	19.1	0.207	6.01	80.6	281
Downgradient	GS-AP-MW-9V	03/27/2023	0.0359 J	49	23.2	0.164	7	47.9	335
Vert. Delineation	GS-AP-MW-23V	03/14/2023	0.409	73.6	5.79	0.189	7.37	113	418
Vert. Delineation	GS-AP-MW-31V	03/27/2023	0.048 J	16.4	196	0.309	7.8	214	1010
Vert. Delineation	GS-AP-MW-36V	03/14/2023	0.0771 J	43	428	0.344	7.27	346	1540
Vert. Delineation	GS-AP-MW-6V	03/08/2023	0.101 J	1.46	49.3	4.58	8.7	7.27	861
Vert. Delineation	GS-AP-PZ-16	03/21/2023	0.0798 J	12.4	5.96	0.171	8.44	8.8	372
Vert. Delineation	GS-AP-PZ-18R	03/28/2023	0.0871 J	61.8	4	0.175	7.22	44.9	297
Vert. Delineation	GS-AP-PZ-22	03/21/2023	0.0442 J	7.61	2.8	0.393	9.53	62.9	421
Horiz. Delineation	GS-AP-MW-23H	03/14/2023	0.0377 J	59.5	9.24	0.165	5.93	292	587
Horiz. Delineation	GS-AP-MW-24H	03/15/2023	0.0674 J	41.2	2.88	0.172	6.93	7.51	255
Horiz. Delineation	GS-AP-MW-25HA	03/22/2023	0.151	1.84	28.5	2.03	8.78	62.1	873
Horiz. Delineation	GS-AP-MW-26H	03/22/2023	<0.03	25.7	2.33	0.123 J	7.23	4.65	280
Horiz. Delineation	GS-AP-MW-27HR	03/14/2023	0.107	95.3	781	0.335	7.28	864	2840
Horiz. Delineation	GS-AP-MW-28H	03/14/2023	0.0699 J	1.99	8.63	0.187	8.31	5.24	445
Horiz. Delineation	GS-AP-MW-29H	03/28/2023	0.36	12.2	5.09	0.388	7.82	27.3	373
Horiz. Delineation	GS-AP-MW-30HA	03/13/2023	0.0605 J	56	4.77	1.61	7.22	228	680
Horiz. Delineation	GS-AP-MW-31H	03/27/2023	<0.03	3.9	18.4	0.155	8.86	8.13	373
Horiz. Delineation	GS-AP-MW-32H	03/21/2023	0.0455 J	2.42	32.6	0.144	8.3	38.5	359
Horiz. Delineation	GS-AP-MW-33HO	03/14/2023	0.0312 J	18.2	15.3	0.248	7.71	15.9	267
Horiz. Delineation	GS-AP-MW-34HO	03/08/2023	0.0911 J	64.5	354	0.315	7.26	1200	2740
Horiz. Delineation	GS-AP-MW-35HO	03/08/2023	<0.03	1.49	8.75	0.171	8.42	15	287
Horiz. Delineation	GS-AP-MW-36H	03/15/2023	0.0446 J	5.26	66.6	0.212	8.06	77	452
Horiz. Delineation	GS-AP-MW-37HR	03/15/2023	<0.03	3.16	44.4	0.116 J	7.81	40.9	367
Horiz. Delineation	GS-AP-MW-38H	03/28/2023	0.0503 J	13.4	45.8	0.254	7.85	39.5	403
Horiz. Delineation	GS-AP-MW-40H	03/22/2023	0.0379 J	196	15.5	0.1 J	6.6	683	1300

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Table 6. First Semi-Annual Monitoring Event

Analytical Results Summary

Plant Gorgas Ash Pond

03/06/2023 - 03/28/2023

EPA Appendix III Set

Hydraulic Location	Well	Sample Date	Boron mg/L	Calcium mg/L	Chloride mg/L	Fluoride mg/L	pH_Field SU	Sulfate mg/L	TDS mg/L
Horiz. Delineation	GS-AP-MW-41HD	03/15/2023	1.52	58.9	7.05	0.18	--	103	317
Horiz. Delineation	GS-AP-MW-41HS	03/13/2023	0.848	33.3	6.83	0.104 J	6.49	88.6	267
Horiz. Delineation	GS-AP-MW-42H	03/15/2023	0.055 J	128	9.31	0.128	6.63	329	744
Horiz. Delineation	GS-AP-MW-43HO	03/28/2023	0.157	17.4	228	0.239	7.92	322	1280
Horiz. Delineation	GS-AP-MW-44HO	03/06/2023	0.0433 J	1.09	33.8	0.227	9.06	23.1	490
Piezometer	GS-AP-MW-16S	03/21/2023	<0.03	59.2	3.99	0.123 J	12.2	7.08	707

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Table 6. First Semi-Annual Monitoring Event

Analytical Results Summary
Plant Gorgas Ash Pond
03/06/2023 - 03/28/2023

EPA Appendix IV Set

Hydraulic Location	Well	Sample Date	Antimony mg/L	Arsenic mg/L	Barium mg/L	Beryllium mg/L	Cadmium mg/L	Chromium mg/L	Cobalt mg/L
Upgradient	GS-AP-MW-17V	03/22/2023	<0.00071	0.000293	0.289	<0.000406	<6.8e-005	<0.000203	<6.8e-005
Upgradient	GS-AP-MW-18R	03/28/2023	<0.00071	0.000433	0.0803	<0.000406	<6.8e-005	0.000221 J	0.000688
Upgradient	GS-AP-MW-8	03/27/2023	<0.00071	0.000162 J	0.00644	<0.000406	<6.8e-005	0.000761 J	0.000254
Downgradient	GS-AP-MW-10R	03/27/2023	<0.00071	0.00277	0.587	<0.000406	<6.8e-005	0.000235 J	0.000682
Downgradient	GS-AP-MW-11R	03/22/2023	<0.00071	0.00148	0.12	<0.000406	<6.8e-005	<0.000203	<6.8e-005
Downgradient	GS-AP-MW-12	03/22/2023	0.00257	0.00135	0.22	<0.000406	<6.8e-005	<0.000203	<6.8e-005
Downgradient	GS-AP-MW-12V	03/22/2023	<0.00071	0.000929	1.24	<0.000406	<6.8e-005	0.000396 J	<6.8e-005
Downgradient	GS-AP-MW-13R	03/27/2023	<0.00071	0.034	0.0685	<0.000406	<6.8e-005	0.000246 J	<6.8e-005
Downgradient	GS-AP-MW-14R	03/15/2023	<0.00071	0.000553	0.229	<0.000406	<6.8e-005	0.000302 J	<6.8e-005
Downgradient	GS-AP-MW-15	03/20/2023	<0.00071	0.00427	0.276	<0.000406	<6.8e-005	0.000384 J	<6.8e-005
Downgradient	GS-AP-MW-15V	03/20/2023	0.00133	0.00375	0.175	<0.000406	<6.8e-005	<0.000203	<6.8e-005
Downgradient	GS-AP-MW-16D	03/21/2023	<0.00071	<0.000112	0.324	<0.000406	<6.8e-005	<0.000203	<6.8e-005
Downgradient	GS-AP-MW-17	03/22/2023	<0.00071	0.000896	0.0835	<0.000406	<6.8e-005	<0.000203	<6.8e-005
Downgradient	GS-AP-MW-18VR	03/27/2023	<0.00071	0.000422	0.115	<0.000406	<6.8e-005	0.000272 J	<6.8e-005
Downgradient	GS-AP-MW-19	03/21/2023	<0.00071	0.00197	0.304	<0.000406	<6.8e-005	<0.000203	<6.8e-005
Downgradient	GS-AP-MW-1R	03/27/2023	<0.00071	0.000248	0.0647	<0.000406	<6.8e-005	0.000404 J	<6.8e-005
Downgradient	GS-AP-MW-2	03/22/2023	<0.00071	<0.000112	0.0456	<0.000406	<6.8e-005	0.000254 J	<6.8e-005
Downgradient	GS-AP-MW-21	03/21/2023	<0.00071	0.000472	0.127	<0.000406	<6.8e-005	0.000459 J	<6.8e-005
Downgradient	GS-AP-MW-21V	03/21/2023	<0.00071	0.00444	0.059	<0.000406	<6.8e-005	0.000223 J	<6.8e-005
Downgradient	GS-AP-MW-3	03/21/2023	<0.00071	0.000162 J	0.611	<0.000406	<6.8e-005	0.000239 J	<6.8e-005
Downgradient	GS-AP-MW-3V	03/21/2023	<0.00071	0.000654	0.0197	<0.000406	<6.8e-005	<0.000203	<6.8e-005
Downgradient	GS-AP-MW-45V	03/28/2023	<0.00071	0.0013	0.073	<0.000406	<6.8e-005	0.000479 J	<6.8e-005
Downgradient	GS-AP-MW-46	03/27/2023	<0.00071	0.0955	0.0655	<0.000406	<6.8e-005	0.000222 J	<6.8e-005
Downgradient	GS-AP-MW-47	03/15/2023	<0.00071	0.00102	0.638	<0.000406	<6.8e-005	0.000359 J	0.000135 J
Downgradient	GS-AP-MW-5R	03/20/2023	<0.00071	0.000194 J	0.0567	<0.000406	<6.8e-005	0.000222 J	<6.8e-005
Downgradient	GS-AP-MW-6D	03/14/2023	<0.00071	0.108	0.604	<0.000406	<6.8e-005	<0.000203	<6.8e-005
Downgradient	GS-AP-MW-6S	03/14/2023	<0.00071	0.00908	0.108	<0.000406	<6.8e-005	0.000206 J	0.000746

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Southern Company

Table 6. First Semi-Annual Monitoring Event

Analytical Results Summary
Plant Gorgas Ash Pond
03/06/2023 - 03/28/2023

EPA Appendix IV Set

Hydraulic Location	Well	Sample Date	Antimony mg/L	Arsenic mg/L	Barium mg/L	Beryllium mg/L	Cadmium mg/L	Chromium mg/L	Cobalt mg/L
Downgradient	GS-AP-MW-7	03/14/2023	<0.00071	0.249	0.0631	<0.000406	<6.8e-005	0.000482 J	9.22e-005 J
Downgradient	GS-AP-MW-9R	03/27/2023	<0.00071	0.00564	0.0344	<0.000406	<6.8e-005	0.000216 J	<6.8e-005
Downgradient	GS-AP-MW-9V	03/27/2023	<0.00071	0.000153 J	0.184	<0.000406	<6.8e-005	0.000236 J	<6.8e-005
Vert. Delineation	GS-AP-MW-23V	03/14/2023	<0.00071	<0.000112	0.0698	<0.000406	<6.8e-005	<0.000203	<6.8e-005
Vert. Delineation	GS-AP-MW-31V	03/27/2023	<0.00071	0.00166	0.253	<0.000406	<6.8e-005	0.000368 J	6.82e-005 J
Vert. Delineation	GS-AP-MW-36V	03/14/2023	<0.00071	0.00337	0.0858	<0.000406	<6.8e-005	0.000257 J	<6.8e-005
Vert. Delineation	GS-AP-MW-6V	03/08/2023	<0.000508	0.00113	0.183	<0.000406	<6.8e-005	0.00361	0.000224
Vert. Delineation	GS-AP-PZ-16	03/21/2023	<0.00071	<0.000112	0.248	<0.000406	<6.8e-005	<0.000203	<6.8e-005
Vert. Delineation	GS-AP-PZ-18R	03/28/2023	<0.00071	0.00106	0.0701	<0.000406	<6.8e-005	0.000212 J	7.75e-005 J
Vert. Delineation	GS-AP-PZ-22	03/21/2023	<0.00071	0.00226	0.0615	<0.000406	<6.8e-005	<0.000203	<6.8e-005
Horiz. Delineation	GS-AP-MW-23H	03/14/2023	<0.00071	0.0731	0.0155	<0.000406	<6.8e-005	0.000226 J	0.000974
Horiz. Delineation	GS-AP-MW-24H	03/15/2023	<0.00071	0.000211	1.08	<0.000406	<6.8e-005	0.000208 J	0.000286
Horiz. Delineation	GS-AP-MW-25HA	03/22/2023	<0.00071	0.00851	0.196	<0.000406	<6.8e-005	0.00024 J	<6.8e-005
Horiz. Delineation	GS-AP-MW-26H	03/22/2023	<0.00071	0.000149 J	0.725	<0.000406	<6.8e-005	0.000429 J	<6.8e-005
Horiz. Delineation	GS-AP-MW-27HR	03/14/2023	<0.00071	0.00105	0.0327	<0.000406	<6.8e-005	0.000255 J	<6.8e-005
Horiz. Delineation	GS-AP-MW-28H	03/14/2023	<0.00071	0.000553	0.052	<0.000406	<6.8e-005	0.000248 J	<6.8e-005
Horiz. Delineation	GS-AP-MW-29H	03/28/2023	<0.00071	0.00221	0.263	<0.000406	<6.8e-005	0.000258 J	<6.8e-005
Horiz. Delineation	GS-AP-MW-30HA	03/13/2023	<0.00071	0.00298	0.115	<0.000406	<6.8e-005	0.000264 J	0.000168 J
Horiz. Delineation	GS-AP-MW-31H	03/27/2023	<0.00071	0.00016 J	0.123	<0.000406	<6.8e-005	0.000232 J	<6.8e-005
Horiz. Delineation	GS-AP-MW-32H	03/21/2023	<0.00071	0.000407	0.0393	<0.000406	<6.8e-005	<0.000203	<6.8e-005
Horiz. Delineation	GS-AP-MW-33HO	03/14/2023	<0.00071	0.000523	0.443	<0.000406	<6.8e-005	0.000368 J	<6.8e-005
Horiz. Delineation	GS-AP-MW-34HO	03/08/2023	<0.000508	0.00105	0.0695	<0.000406	<6.8e-005	0.000538 J	0.00059
Horiz. Delineation	GS-AP-MW-35HO	03/08/2023	<0.000508	<8.1e-005	0.0521	<0.000406	<6.8e-005	<0.000203	<6.8e-005
Horiz. Delineation	GS-AP-MW-36H	03/15/2023	<0.00071	0.00235	0.142	<0.000406	<6.8e-005	0.00044 J	<6.8e-005
Horiz. Delineation	GS-AP-MW-37HR	03/15/2023	<0.00071	0.000822	0.0314	<0.000406	<6.8e-005	0.00024 J	<6.8e-005
Horiz. Delineation	GS-AP-MW-38H	03/28/2023	<0.00071	0.00303	0.264	<0.000406	<6.8e-005	0.000213 J	<6.8e-005
Horiz. Delineation	GS-AP-MW-40H	03/22/2023	<0.00071	0.00081	0.0302	<0.000406	<6.8e-005	0.000209 J	0.000195 J

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Analytical Results Summary
Plant Gorgas Ash Pond
03/06/2023 - 03/28/2023

EPA Appendix IV Set

Hydraulic Location	Well	Sample Date	Antimony mg/L	Arsenic mg/L	Barium mg/L	Beryllium mg/L	Cadmium mg/L	Chromium mg/L	Cobalt mg/L
Horiz. Delineation	GS-AP-MW-41HD	03/15/2023	<0.00071	0.00301	0.0511	<0.000406	<6.8e-005	<0.000203	0.00097
Horiz. Delineation	GS-AP-MW-41HS	03/13/2023	<0.00071	0.000483	0.0572	<0.000406	<6.8e-005	<0.000203	0.00193
Horiz. Delineation	GS-AP-MW-42H	03/15/2023	<0.00071	0.0105	0.0241	<0.000406	<6.8e-005	0.000226 J	0.000371
Horiz. Delineation	GS-AP-MW-43HO	03/28/2023	<0.00071	0.000779	0.18	<0.000406	<6.8e-005	0.000229 J	<6.8e-005
Horiz. Delineation	GS-AP-MW-44HO	03/06/2023	<0.000508	0.000275	0.0835	<0.000406	<6.8e-005	0.000343 J	<6.8e-005
Piezometer	GS-AP-MW-16S	03/21/2023	<0.00071	0.00171	0.424	<0.000406	<6.8e-005	0.00022 J	0.000183 J
Abandoned	GS-AP-MW-10	03/27/2023	--	--	--	--	--	--	--

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Hydraulic Location	Well	Sample Date	Fluoride mg/L	Lead mg/L	Lithium mg/L	Mercury mg/L	Molybdenum mg/L	Selenium mg/L	Thallium mg/L	Combined Radium 226 + 228 pCi/L
Upgradient	GS-AP-MW-17V	03/22/2023	0.198	<6.8e-005	0.0507	<0.0003	<0.005075	<0.000508	<6.8e-005	0.707 U
Upgradient	GS-AP-MW-18R	03/28/2023	0.115 J	<6.8e-005	<0.007105	<0.0003	<0.005075	<0.000508	<6.8e-005	0.889 U
Upgradient	GS-AP-MW-8	03/27/2023	0.112 J	<6.8e-005	0.00968 J	<0.0003	<0.005075	<0.000508	<6.8e-005	0.142 U
Downgradient	GS-AP-MW-10R	03/27/2023	0.283	<6.8e-005	0.0362	<0.0003	<0.005075	<0.000508	<6.8e-005	--
Downgradient	GS-AP-MW-11R	03/22/2023	0.0999 J	<6.8e-005	0.0317	<0.0003	<0.005075	<0.000508	<6.8e-005	0.691 U
Downgradient	GS-AP-MW-12	03/22/2023	0.0941 J	<6.8e-005	0.0468	<0.0003	0.00512 J	<0.000508	<6.8e-005	1.18
Downgradient	GS-AP-MW-12V	03/22/2023	0.138	8.97e-005 J	0.0304	<0.0003	<0.005075	<0.000508	<6.8e-005	1.17
Downgradient	GS-AP-MW-13R	03/27/2023	0.18	<6.8e-005	0.0261	<0.0003	<0.005075	<0.000508	<6.8e-005	0.347 U
Downgradient	GS-AP-MW-14R	03/15/2023	0.141	<6.8e-005	0.0248	<0.0003	<0.005075	<0.000508	<6.8e-005	0.145 U
Downgradient	GS-AP-MW-15	03/20/2023	0.333	<6.8e-005	0.305	<0.0003	0.0315	<0.000508	<6.8e-005	0.679 U
Downgradient	GS-AP-MW-15V	03/20/2023	0.183	<6.8e-005	0.0787	<0.0003	0.0195	<0.000508	<6.8e-005	0.484 U
Downgradient	GS-AP-MW-16D	03/21/2023	0.0849 J	<6.8e-005	0.034	<0.0003	<0.005075	<0.000508	<6.8e-005	0.861 U
Downgradient	GS-AP-MW-17	03/22/2023	0.183	<6.8e-005	0.0586	<0.0003	<0.005075	<0.000508	<6.8e-005	0.602 U
Downgradient	GS-AP-MW-18VR	03/27/2023	0.182	<6.8e-005	0.0536	<0.0003	0.0495	<0.000508	<6.8e-005	0.708 U
Downgradient	GS-AP-MW-19	03/21/2023	0.24	<6.8e-005	0.0402	<0.0003	<0.005075	<0.000508	<6.8e-005	0.407 U
Downgradient	GS-AP-MW-1R	03/27/2023	0.234	0.000134 J	0.0319	<0.0003	<0.005075	<0.000508	<6.8e-005	0.498 U
Downgradient	GS-AP-MW-2	03/22/2023	0.72	<6.8e-005	0.0359	<0.0003	<0.005075	<0.000508	<6.8e-005	0.0664 U
Downgradient	GS-AP-MW-21	03/21/2023	0.194	<6.8e-005	0.0884	<0.0003	0.0103	<0.000508	<6.8e-005	0.213 U
Downgradient	GS-AP-MW-21V	03/21/2023	0.381	<6.8e-005	0.11	<0.0003	0.0361	<0.000508	<6.8e-005	1.07 U
Downgradient	GS-AP-MW-3	03/21/2023	0.0689 J	<6.8e-005	0.075	<0.0003	0.00847 J	<0.000508	<6.8e-005	1.08
Downgradient	GS-AP-MW-3V	03/21/2023	0.161	<6.8e-005	0.0825	<0.0003	0.02	<0.000508	<6.8e-005	0.189 U
Downgradient	GS-AP-MW-45V	03/28/2023	0.249	<6.8e-005	0.0531	<0.0003	0.0123	<0.000508	<6.8e-005	0.647 U
Downgradient	GS-AP-MW-46	03/27/2023	0.271	<6.8e-005	0.0593	<0.0003	0.0114	<0.000508	<6.8e-005	0.0303 U
Downgradient	GS-AP-MW-47	03/15/2023	0.107 J	<6.8e-005	0.0394	<0.0003	<0.005075	<0.000508	<6.8e-005	0.767 U
Downgradient	GS-AP-MW-5R	03/20/2023	0.117 J	<6.8e-005	0.0711	<0.0003	<0.005075	<0.000508	<6.8e-005	0.742 U
Downgradient	GS-AP-MW-6D	03/14/2023	0.122 J	<6.8e-005	0.308	<0.0003	0.0104	<0.000508	<6.8e-005	0.656 U
Downgradient	GS-AP-MW-6S	03/14/2023	0.153	<6.8e-005	0.0468	<0.0003	0.0298	0.000886 J	<6.8e-005	0.424 U

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Table 6. First Semi-Annual Monitoring Event

Analytical Results Summary
Plant Gorgas Ash Pond
03/06/2023 - 03/28/2023

EPA Appendix IV Set

Hydraulic Location	Well	Sample Date	Fluoride mg/L	Lead mg/L	Lithium mg/L	Mercury mg/L	Molybdenum mg/L	Selenium mg/L	Thallium mg/L	Combined Radium 226 + 228 pCi/L
Downgradient	GS-AP-MW-7	03/14/2023	0.177	0.000188 J	0.207	<0.0003	0.215	<0.000508	<6.8e-005	0.351 U
Downgradient	GS-AP-MW-9R	03/27/2023	0.207	<6.8e-005	0.0351	<0.0003	<0.005075	<0.000508	<6.8e-005	0.263 U
Downgradient	GS-AP-MW-9V	03/27/2023	0.164	<6.8e-005	0.0298	<0.0003	<0.005075	<0.000508	<6.8e-005	0.414 U
Vert. Delineation	GS-AP-MW-23V	03/14/2023	0.189	<6.8e-005	0.0406	<0.0003	<0.005075	<0.000508	<6.8e-005	0.317 U
Vert. Delineation	GS-AP-MW-31V	03/27/2023	0.309	<6.8e-005	0.0508	<0.0003	0.0409	<0.000508	<6.8e-005	0.965 U
Vert. Delineation	GS-AP-MW-36V	03/14/2023	0.344	<6.8e-005	0.0402	<0.0003	0.00789 J	<0.000508	<6.8e-005	0.805 U
Vert. Delineation	GS-AP-MW-6V	03/08/2023	4.58	0.00037	0.126	<0.0003	<0.005075	<0.000508	<6.8e-005	0.356 U
Vert. Delineation	GS-AP-PZ-16	03/21/2023	0.171	0.000192 J	0.0522	<0.0003	<0.005075	<0.000508	<6.8e-005	0.891 U
Vert. Delineation	GS-AP-PZ-18R	03/28/2023	0.175	<6.8e-005	0.0155 J	<0.0003	<0.005075	<0.000508	<6.8e-005	0.526 U
Vert. Delineation	GS-AP-PZ-22	03/21/2023	0.393	<6.8e-005	0.094	<0.0003	0.00545 J	<0.000508	<6.8e-005	1.01 U
Horiz. Delineation	GS-AP-MW-23H	03/14/2023	0.165	<6.8e-005	0.0286	<0.0003	<0.005075	<0.000508	<6.8e-005	0.741 U
Horiz. Delineation	GS-AP-MW-24H	03/15/2023	0.172	<6.8e-005	0.0238	<0.0003	<0.005075	<0.000508	<6.8e-005	1.03 U
Horiz. Delineation	GS-AP-MW-25HA	03/22/2023	2.03	<6.8e-005	0.0564	<0.0003	0.00584 J	<0.000508	<6.8e-005	1.72 U
Horiz. Delineation	GS-AP-MW-26H	03/22/2023	0.123 J	<6.8e-005	0.085	<0.0003	<0.005075	<0.000508	<6.8e-005	0.546 U
Horiz. Delineation	GS-AP-MW-27HR	03/14/2023	0.335	<6.8e-005	0.108	<0.0003	0.0095 J	<0.000508	<6.8e-005	1.29
Horiz. Delineation	GS-AP-MW-28H	03/14/2023	0.187	<6.8e-005	0.0561	<0.0003	<0.005075	<0.000508	<6.8e-005	0.739 U
Horiz. Delineation	GS-AP-MW-29H	03/28/2023	0.388	<6.8e-005	0.0656	<0.0003	0.0333	<0.000508	<6.8e-005	0.397 U
Horiz. Delineation	GS-AP-MW-30HA	03/13/2023	1.61	0.000162 J	0.0516	<0.0003	<0.005075	<0.000508	<6.8e-005	0.963
Horiz. Delineation	GS-AP-MW-31H	03/27/2023	0.155	<6.8e-005	0.0435	<0.0003	<0.005075	<0.000508	<6.8e-005	0.39 U
Horiz. Delineation	GS-AP-MW-32H	03/21/2023	0.144	<6.8e-005	0.0418	<0.0003	0.086	<0.000508	<6.8e-005	0.503 U
Horiz. Delineation	GS-AP-MW-33HO	03/14/2023	0.248	0.000147 J	0.044	<0.0003	<0.005075	<0.000508	<6.8e-005	2.94
Horiz. Delineation	GS-AP-MW-34HO	03/08/2023	0.315	0.00103	0.14	<0.0003	0.0104	<0.000508	<6.8e-005	0.868 U
Horiz. Delineation	GS-AP-MW-35HO	03/08/2023	0.171	<6.8e-005	0.0633	<0.0003	0.0006	<0.000508	<6.8e-005	0.578 U
Horiz. Delineation	GS-AP-MW-36H	03/15/2023	0.212	0.00019 J	0.0449	<0.0003	0.0183	<0.000508	<6.8e-005	0.356 U
Horiz. Delineation	GS-AP-MW-37HR	03/15/2023	0.116 J	<6.8e-005	0.0345	<0.0003	<0.005075	<0.000508	<6.8e-005	0.545 U
Horiz. Delineation	GS-AP-MW-38H	03/28/2023	0.254	<6.8e-005	0.0603	<0.0003	<0.005075	<0.000508	<6.8e-005	0.502 U
Horiz. Delineation	GS-AP-MW-40H	03/22/2023	0.1 J	<6.8e-005	0.0548	<0.0003	<0.005075	<0.000508	<6.8e-005	0.772 U

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Table 6. First Semi-Annual Monitoring Event

Analytical Results Summary

Plant Gorgas Ash Pond

03/06/2023 - 03/28/2023

EPA Appendix IV Set										
Hydraulic Location	**Well**	**Sample Date**	**Fluoride mg/L**	**Lead mg/L**	**Lithium mg/L**	**Mercury mg/L**	**Molybdenum mg/L**	**Selenium mg/L**	**Thallium mg/L**	**Combined Radium 226 + 228 pCi/L**
Horiz. Delineation	GS-AP-MW-41HD	03/15/2023	0.18	<6.8e-005	0.341	<0.0003	0.0339	<0.000508	<6.8e-005	0.534 U
Horiz. Delineation	GS-AP-MW-41HS	03/13/2023	0.104 J	<6.8e-005	0.0511	<0.0003	<0.005075	<0.000508	<6.8e-005	0.305 U
Horiz. Delineation	GS-AP-MW-42H	03/15/2023	0.128	<6.8e-005	0.0309	<0.0003	<0.005075	<0.000508	<6.8e-005	0.641 U
Horiz. Delineation	GS-AP-MW-43HO	03/28/2023	0.239	<6.8e-005	0.0686	<0.0003	0.0074 J	<0.000508	<6.8e-005	0.833 U
Horiz. Delineation	GS-AP-MW-44HO	03/06/2023	0.227	<6.8e-005	0.0451	<0.0003	0.00325	<0.000508	<6.8e-005	1.11
Piezometer	GS-AP-MW-16S	03/21/2023	0.123 J	8.06e-005 J	0.101	<0.0003	0.0409	0.000703 J	<6.8e-005	1.04 U
Abandoned	GS-AP-MW-10	03/27/2023	--	--	--	--	--	--	--	0.422 U

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Table 6. First Semi-Annual Monitoring Event

Analytical Results Summary
Plant Gorgas Ash Pond
03/06/2023 - 03/28/2023

General Chemistry and MNA Parameters

Hydraulic Location	Well	Sample Date	Sulfide mg/L	Iron Total mg/L	Magnesium Total mg/L	Silicon mg/L	Sodium mg/L	Calcium mg/L	Silica mg/L
Upgradient	GS-AP-MW-17V	03/22/2023	0	0.828	12.3	10.8	84.1	29.6	23.1
Upgradient	GS-AP-MW-18R	03/28/2023	0	3.29	6.32	10.9	10.5	25.8	23.3
Upgradient	GS-AP-MW-8	03/27/2023	0	0.251	8.34	17.4	11.2	4.77	37.2
Downgradient	GS-AP-MW-10R	03/27/2023	0	1.64	16	12.2	32.4	45.3	26.1
Downgradient	GS-AP-MW-11R	03/22/2023	0	2.19	17.7	14.8	14.7	52	31.7
Downgradient	GS-AP-MW-12	03/22/2023	0	0.227	10.9	9.31	18.8	36.4	19.9
Downgradient	GS-AP-MW-12V	03/22/2023	0	0.426	9.41	11.5	16.3	38	24.6
Downgradient	GS-AP-MW-13R	03/27/2023	0	3.07	13.2	12.5	14.2	32.1	26.8
Downgradient	GS-AP-MW-14R	03/15/2023	1	0.614	13.3	12.3	27.4	32.8	26.3
Downgradient	GS-AP-MW-15	03/20/2023	1	0.0171 J	1.53	26.8	168	6.6	57.4
Downgradient	GS-AP-MW-15V	03/20/2023	0	<0.00812	4.47	7.76	188	18.2	16.6
Downgradient	GS-AP-MW-16D	03/21/2023	0	0.292	12	10.6	28.8	32	22.7
Downgradient	GS-AP-MW-17	03/22/2023	0	0.0737	0.64	7.51	176	2.07	16.1
Downgradient	GS-AP-MW-18VR	03/27/2023	0	0.083	0.714	5.45	101	2.12	11.7
Downgradient	GS-AP-MW-19	03/21/2023	0	0.38	14.6	9.15	50.9	46.9	19.6
Downgradient	GS-AP-MW-1R	03/27/2023	0	0.138	0.236 J	4.48	129	0.838	9.59
Downgradient	GS-AP-MW-2	03/22/2023	1	0.0311 J	0.111 J	5.25	119	0.4 J	11.2
Downgradient	GS-AP-MW-21	03/21/2023	3	0.011 J	0.421	4.08	208	2.74	8.73
Downgradient	GS-AP-MW-21V	03/21/2023	0	0.122	13	5.55	542	46.6	11.9
Downgradient	GS-AP-MW-3	03/21/2023	0	2.08	8.4	5.48	74.7	19.4	11.7
Downgradient	GS-AP-MW-3V	03/21/2023	0	0.225	3.37	7.07	288	9.04	15.1
Downgradient	GS-AP-MW-45V	03/28/2023	4	0.361	6.37	5.63	404	19	12
Downgradient	GS-AP-MW-46	03/27/2023	3	<0.00812	0.317 J	4.65	213	0.975	9.95
Downgradient	GS-AP-MW-47	03/15/2023	0	0.606	10.3	10.9	32.4	30.2	23.3
Downgradient	GS-AP-MW-5R	03/20/2023	0	1.45	37.6	11.6	94.7	94.8	24.8
Downgradient	GS-AP-MW-6D	03/14/2023	5	0.016 J	15	6.52	25.4	52.4	14
Downgradient	GS-AP-MW-6S	03/14/2023	0	7.66	20.3	5.17	9.84	50.9	11.1
Downgradient	GS-AP-MW-7	03/14/2023	0	0.63	3.79	5.4	98.5	11	11.6
Downgradient	GS-AP-MW-9R	03/27/2023	0	1.64	18.8	13.9	20.9	43	29.7
Downgradient	GS-AP-MW-9V	03/27/2023	2	0.278	15.7	15.4	49.5	49	33
Vert. Delineation	GS-AP-MW-23V	03/14/2023	0	0.211	19	10.6	49.5	73.6	22.7
Vert. Delineation	GS-AP-MW-31V	03/27/2023	0	0.0299 J	5.67	5.59	369	16.4	12

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Southern Company

Table 6. First Semi-Annual Monitoring Event

Analytical Results Summary
Plant Gorgas Ash Pond
03/06/2023 - 03/28/2023

General Chemistry and MNA Parameters

Hydraulic Location	Well	Sample Date	Sulfide mg/L	Iron Total mg/L	Magnesium Total mg/L	Silicon mg/L	Sodium mg/L	Calcium mg/L	Silica mg/L
Vert. Delineation	GS-AP-MW-36V	03/14/2023	2	0.488	13.4	7.08	443	43	15.2
Vert. Delineation	GS-AP-MW-6V	03/08/2023	0	0.321	0.49	4.53	375	1.46	9.69
Vert. Delineation	GS-AP-PZ-16	03/21/2023	1	0.0742	3.14	8.8	132	12.4	18.8
Vert. Delineation	GS-AP-PZ-18R	03/28/2023	0	0.764	18.1	11.3	17.3	61.8	24.2
Vert. Delineation	GS-AP-PZ-22	03/21/2023	0	0.624	3.55	4.85	149	7.61	10.4
Horiz. Delineation	GS-AP-MW-23H	03/14/2023	0	54.1	30.2	12.5	19.6	59.5	26.8
Horiz. Delineation	GS-AP-MW-24H	03/15/2023	0	1.91	13.4	13.2	30.3	41.2	28.2
Horiz. Delineation	GS-AP-MW-25HA	03/22/2023	3	0.0459	0.62	4.91	362	1.84	10.5
Horiz. Delineation	GS-AP-MW-26H	03/22/2023	0	0.785	11.3	10.3	65.6	25.7	22
Horiz. Delineation	GS-AP-MW-27HR	03/14/2023	2	0.166	20.8	7.49	844	95.3	16
Horiz. Delineation	GS-AP-MW-28H	03/14/2023	0	0.0942	0.584	8	186	1.99	17.1
Horiz. Delineation	GS-AP-MW-29H	03/28/2023	0	0.161	4.2	9.23	135	12.2	19.8
Horiz. Delineation	GS-AP-MW-30HA	03/13/2023	0	2.95	7.8	10.4	210	56	22.3
Horiz. Delineation	GS-AP-MW-31H	03/27/2023	2	0.00848 J	1.51	7.36	151	3.9	15.8
Horiz. Delineation	GS-AP-MW-32H	03/21/2023	0	0.0386 J	0.526	5.06	132	2.42	10.8
Horiz. Delineation	GS-AP-MW-33HO	03/14/2023	0	0.26	7.44	8.76	83.6	18.2	18.7
Horiz. Delineation	GS-AP-MW-34HO	03/08/2023	2	1.27	21.5	4.74	694	64.5	10.1
Horiz. Delineation	GS-AP-MW-35HO	03/08/2023	0	0.0205 J	0.356 J	8.79	119	1.49	18.8
Horiz. Delineation	GS-AP-MW-36H	03/15/2023	0	0.148	1.27	6.88	172	5.26	14.7
Horiz. Delineation	GS-AP-MW-37HR	03/15/2023	0	0.0518	1.08	8.63	135	3.16	18.5
Horiz. Delineation	GS-AP-MW-38H	03/28/2023	0	0.0642	4.42	7.37	138	13.4	15.8
Horiz. Delineation	GS-AP-MW-40H	03/22/2023	0	3.14	90.2	11.4	72.9	196	24.4
Horiz. Delineation	GS-AP-MW-41HD	03/15/2023	--	0.0253 J	17.1	7.2	18.6	58.9	15.4
Horiz. Delineation	GS-AP-MW-41HS	03/13/2023	0	1.03	19.3	8.6	22.7	33.3	18.4
Horiz. Delineation	GS-AP-MW-42H	03/15/2023	0	4.44	45	10.6	33.7	128	22.7
Horiz. Delineation	GS-AP-MW-43HO	03/28/2023	9	0.0176 J	5.87	5.64	397	17.4	12.1
Horiz. Delineation	GS-AP-MW-44HO	03/06/2023	5	0.0133 J	0.28 J	5.01	205	1.09	10.7
Piezometer	GS-AP-MW-16S	03/21/2023	0	0.0773	<0.021315	7.31	228	59.2	15.6

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Table 6. First Semi-Annual Monitoring Event

Analytical Results Summary
Plant Gorgas Ash Pond
03/06/2023 - 03/28/2023

General Chemistry and MNA Parameters

Hydraulic Location	Well	Sample Date	Aluminum mg/L	Manganese Total mg/L	Potassium mg/L	Nitrate Nitrite mg/L as N	Alkalinity Total as CaCO3 mg CaCO3/L	Carbonate Alkalinity as CaCO3 mg CaCO3/L	Bicarbonate Alkalinity as CaCO3 mg CaCO3/L	Carbon, Total Organic mg/L	Chloride mg/L	Sulfate mg/L
Upgradient	GS-AP-MW-17V	03/22/2023	<0.009135	0.0237	2.03	<0.2	305	2.21	303	4.17	2.8	10.6
Upgradient	GS-AP-MW-18R	03/28/2023	<0.009135	0.164	0.958	<0.2	90.5	NC	90.4	1.01 J	3	26.3
Upgradient	GS-AP-MW-8	03/27/2023	0.0409 J	0.0617	0.801	0.221 J	60.9	NC	60.9	<1	4.17	4.41
Downgradient	GS-AP-MW-10R	03/27/2023	<0.009135	0.115	5.88	<0.2	197	0.533	196	<1	19.3	17.5
Downgradient	GS-AP-MW-11R	03/22/2023	<0.009135	0.0787	1.29	<0.2	178	NC	178	3.34	4.39	45.6
Downgradient	GS-AP-MW-12	03/22/2023	<0.009135	0.0301	1.73	<0.2	165	2.71	162	2.75	2.73	18.3
Downgradient	GS-AP-MW-12V	03/22/2023	0.0613	0.0195	2.4	<0.2	165	3.25	162	3.87	3.77	1.52 J
Downgradient	GS-AP-MW-13R	03/27/2023	<0.009135	0.0452	1.33	<0.2	117	NC	117	<1	11.4	33.1
Downgradient	GS-AP-MW-14R	03/15/2023	<0.009135	0.041	1.96	<0.2	165	0.706	164	3.03	11	20.9
Downgradient	GS-AP-MW-15	03/20/2023	0.456	0.000353 J	5.39	<0.2	386	282	17.3	11	5.41	6.57
Downgradient	GS-AP-MW-15V	03/20/2023	<0.009135	0.0101	8.43	0.771	232	3.64	228	10.5	93.5	176
Downgradient	GS-AP-MW-16D	03/21/2023	0.0534	0.0113	1.52	<0.2	178	1.51	176	3.27	3.72	14.7
Downgradient	GS-AP-MW-17	03/22/2023	0.0216 J	0.00406	0.789	<0.2	391	13.2	378	4.99	5.96	7
Downgradient	GS-AP-MW-18VR	03/27/2023	0.0115 J	0.00395	0.918	<0.2	223	4.49	218	<1	3.45	1.61 J
Downgradient	GS-AP-MW-19	03/21/2023	0.00928 J	0.0221	2.08	<0.2	274	3.76	270	4.1	5.22	16.4
Downgradient	GS-AP-MW-1R	03/27/2023	0.151	0.00274	0.463 J	<0.2	265	13.9	251	<1	7.49	5.43
Downgradient	GS-AP-MW-2	03/22/2023	0.124	0.00082 J	0.382 J	<0.2	247	47.8	198	3.11	4.23	8.17
Downgradient	GS-AP-MW-21	03/21/2023	0.0464 J	0.000786 J	1.61	<0.2	185	55.8	127	3.38	38.5	238
Downgradient	GS-AP-MW-21V	03/21/2023	0.024 J	0.0355	74.2	<0.2	226	2.1	224	8.65	564	595
Downgradient	GS-AP-MW-3	03/21/2023	0.0196 J	0.119	1.23	<0.2	154	1.25	153	2.49	16	83.1
Downgradient	GS-AP-MW-3V	03/21/2023	0.0107 J	0.0164	16.4	<0.2	200	1.66	198	4.85	212	330
Downgradient	GS-AP-MW-45V	03/28/2023	0.0251 J	0.0511	28.6	<0.2	216	1.36	215	5.97	209	489
Downgradient	GS-AP-MW-46	03/27/2023	<0.009135	0.000846 J	0.569	<0.2	212	3.65	208	1.38 J	30.2	168
Downgradient	GS-AP-MW-47	03/15/2023	<0.009135	0.0326	4.8	<0.2	151	1.37	150	2.92	19.8	24.3
Downgradient	GS-AP-MW-5R	03/20/2023	<0.009135	0.133	7.06	<0.2	246	NC	246	5.93	54.6	290
Downgradient	GS-AP-MW-6D	03/14/2023	<0.009135	0.182	2.3	<0.2	183	1.03	182	3.5	9.66	57.5
Downgradient	GS-AP-MW-6S	03/14/2023	0.0209 J	2.94	3.68	0.285 J	117	NC	117	2.92	18.5	96.1
Downgradient	GS-AP-MW-7	03/14/2023	0.135	0.0442	1.29	<0.2	104	1.01	103	1.97 J	7.98	130
Downgradient	GS-AP-MW-9R	03/27/2023	<0.009135	0.179	3.2	<0.2	127	NC	127	<1	19.1	80.6
Downgradient	GS-AP-MW-9V	03/27/2023	<0.009135	0.036	2.15	<0.2	209	0.527	208	1.76 J	23.2	47.9
Vert. Delineation	GS-AP-MW-23V	03/14/2023	0.0164 J	0.0664	1.96	<0.2	230	1.91	228	3.99	5.79	113
Vert. Delineation	GS-AP-MW-31V	03/27/2023	0.0243 J	0.0337	27.3	<0.2	350	4.69	345	3.17	196	214

Notes:
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3. U - Radium data is a combination of radium iso

Table 6. First Semi-Annual Monitoring Event

Analytical Results Summary

Plant Gorgas Ash Pond

03/06/2023 - 03/28/2023

General Chemistry and MNA Parameters

Hydraulic Location	Well	Sample Date	Aluminum mg/L	Manganese Total mg/L	Potassium mg/L	Nitrate Nitrite mg/L as N	Alkalinity Total as CaCO3 mg CaCO3/L	Carbonate Alkalinity as CaCO3 mg CaCO3/L	Bicarbonate Alkalinity as CaCO3 mg CaCO3/L	Carbon, Total Organic mg/L	Chloride mg/L	Sulfate mg/L
Vert. Delineation	GS-AP-MW-36V	03/14/2023	<0.009135	0.0673	46.3	<0.2	319	1.8	317	13	428	346
Vert. Delineation	GS-AP-MW-6V	03/08/2023	0.416	0.0104	1.28	<0.2	686	21.6	664	9.28	50.4	7.27
Vert. Delineation	GS-AP-PZ-16	03/21/2023	0.112	0.00555	1.03	0.241 J	312	15.3	296	3.62	5.96	8.8
Vert. Delineation	GS-AP-PZ-18R	03/28/2023	<0.009135	0.0603	1.17	<0.2	216	NC	216	<1	4	44.9
Vert. Delineation	GS-AP-PZ-22	03/21/2023	<0.009135	0.0221	4.16	<0.2	295	38.1	256	4.2	2.8	62.9
Horiz. Delineation	GS-AP-MW-23H	03/14/2023	<0.009135	1.53	2.12	0.255 J	43.4	NC	43.4	3.12	9.24	292
Horiz. Delineation	GS-AP-MW-24H	03/15/2023	0.0393 J	0.101	1.44	<0.2	219	0.855	218	3.76	2.88	7.51
Horiz. Delineation	GS-AP-MW-25HA	03/22/2023	0.181	0.00507	1.39	<0.2	643	30.2	613	23.9	28.5	62.1
Horiz. Delineation	GS-AP-MW-26H	03/22/2023	0.00923 J	0.0162	2.6	<0.2	249	0.773	248	4.69	2.33	4.65
Horiz. Delineation	GS-AP-MW-27HR	03/14/2023	0.016 J	0.57	20.1	<0.2	267	1.17	266	18.2	781	864
Horiz. Delineation	GS-AP-MW-28H	03/14/2023	0.0189 J	0.00556	0.988	<0.2	387	12.8	374	4.66	8.63	5.24
Horiz. Delineation	GS-AP-MW-29H	03/28/2023	0.00936 J	0.00773	1.35	<0.2	295	3.01	292	<1	5.09	27.3
Horiz. Delineation	GS-AP-MW-30HA	03/13/2023	0.0562	0.201	4.31	0.225 J	301	0.795	300	5.01	4.77	228
Horiz. Delineation	GS-AP-MW-31H	03/27/2023	0.0219 J	0.00753	1.31	<0.2	302	13.3	288	<1	18.4	8.13
Horiz. Delineation	GS-AP-MW-32H	03/21/2023	0.0324 J	0.00614	2.25	<0.2	225	4.74	220	3.34	32.6	38.5
Horiz. Delineation	GS-AP-MW-33HO	03/14/2023	0.0512	0.024	3.31	<0.2	206	1.63	204	2.82	15.3	15.9
Horiz. Delineation	GS-AP-MW-34HO	03/08/2023	0.85	0.139	36.5	<0.2	242	0.611	241	10.3	354	1200
Horiz. Delineation	GS-AP-MW-35HO	03/08/2023	0.0176 J	0.00429	1.04	<0.2	210	4.04	206	3.66	8.75	15
Horiz. Delineation	GS-AP-MW-36H	03/15/2023	0.0569	0.0105	5.97	<0.2	202	3.63	198	4.48	66.6	77
Horiz. Delineation	GS-AP-MW-37HR	03/15/2023	0.0338 J	0.0138	7.13	<0.2	207	2.84	204	2.95	44.4	40.9
Horiz. Delineation	GS-AP-MW-38H	03/28/2023	0.0196 J	0.0283	6.32	<0.2	243	3.18	240	2.47	45.8	39.5
Horiz. Delineation	GS-AP-MW-40H	03/22/2023	<0.009135	0.266	5.46	<0.2	245	NC	245	7.52	15.5	683
Horiz. Delineation	GS-AP-MW-41HD	03/15/2023	<0.009135	0.598	1.69	<0.2	131	1.11	130	2.53	7.05	103
Horiz. Delineation	GS-AP-MW-41HS	03/13/2023	<0.009135	0.228	1.9	0.344	99.8	NC	99.8	3.33	6.83	88.6
Horiz. Delineation	GS-AP-MW-42H	03/15/2023	<0.009135	0.864	2.12	<0.2	190	NC	190	4.63	9.31	329
Horiz. Delineation	GS-AP-MW-43HO	03/28/2023	0.0286 J	0.051	29.4	<0.2	390	3.47	386	5.11	228	322
Horiz. Delineation	GS-AP-MW-44HO	03/06/2023	0.0244 J	0.00119	0.553	<0.2	369	21.6	347	6.47	33.8	23.1
Piezometer	GS-AP-MW-16S	03/21/2023	3.72	0.000294 J	4.66	<0.2	657	--	--	2.62	3.99	7.08

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3. U - Radium data is a combination of radium iso

Southern Company

Table 7. Second Semi-Annual Monitoring Event

Analytical Results Summary

Plant Gorgas Ash Pond

09/05/2023 - 09/19/2023

General Chemistry and MNA Parameters

Hydraulic Location	Well	Sample Date	Sulfide mg/L	Iron Total mg/L	Magnesium Total mg/L	Silicon mg/L	Sodium mg/L	Calcium mg/L	Silica mg/L
Upgradient	GS-AP-MW-17V	09/11/2023	0	0.82	12.9	11.2	92.9	31.1	24
Upgradient	GS-AP-MW-18R	09/19/2023	0	3.53	8.33	11.9	11.9	33.1	25.5
Upgradient	GS-AP-MW-8	09/18/2023	0	1.18	7.59	17.5	10.8	6.08	37.4
Downgradient	GS-AP-MW-10R	09/19/2023	0	0.43	16.2	12.4	31.3	39.6	26.5
Downgradient	GS-AP-MW-11R	09/19/2023	0	6.67	19	15.9	16.7	56	34
Downgradient	GS-AP-MW-12	09/13/2023	0	0.215	11.5	9.47	19.3	41.8	20.3
Downgradient	GS-AP-MW-12V	09/13/2023	0	0.355	9.55	12	17.2	39.2	25.7
Downgradient	GS-AP-MW-13R	09/19/2023	0	2.07	14.5	12.2	18	34	26.1
Downgradient	GS-AP-MW-14R	09/12/2023	1	1.65	14.3	13.2	25.3	34.5	28.2
Downgradient	GS-AP-MW-15	09/11/2023	1	0.0131 J	0.57	35.7	186	5.21	76.4
Downgradient	GS-AP-MW-15V	09/11/2023	0	0.0153 J	4.74	8.27	223	20.3	17.7
Downgradient	GS-AP-MW-16D	09/12/2023	0	0.37	12.6	11	29.9	33.1	23.5
Downgradient	GS-AP-MW-17	09/11/2023	0	0.0775	0.775	7.49	222	2.93	16
Downgradient	GS-AP-MW-18VR	09/19/2023	0	0.0923	0.88	5.46	106	2.49	11.7
Downgradient	GS-AP-MW-19	09/19/2023	0	0.511	16.6	10.1	44.8	53.5	21.6
Downgradient	GS-AP-MW-1R	09/13/2023	0	0.0589	0.214 J	4.52	137	0.823	9.67
Downgradient	GS-AP-MW-2	09/18/2023	1	0.0239 J	0.183 J	5.25	158	0.668	11.2
Downgradient	GS-AP-MW-21	09/05/2023	2	<0.00812	0.391 J	4.3	216	2	9.2
Downgradient	GS-AP-MW-21V	09/05/2023	0	0.0767	10.5	5.6	430	39.8	12
Downgradient	GS-AP-MW-3	09/12/2023	0	0.511	4.16	5.36	103	9.92	11.5
Downgradient	GS-AP-MW-3V	09/12/2023	0	0.461	7.41	7.13	433	20	15.3
Downgradient	GS-AP-MW-45V	09/18/2023	4	0.722	14.1	6.08	618	43.3	13
Downgradient	GS-AP-MW-46	09/18/2023	6	<0.00812	0.259 J	4.81	188	0.866	10.3

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Southern Company

Table 7. Second Semi-Annual Monitoring Event

Analytical Results Summary
Plant Gorgas Ash Pond
09/05/2023 - 09/19/2023

General Chemistry and MNA Parameters

Hydraulic Location	Well	Sample Date	Sulfide mg/L	Iron Total mg/L	Magnesium Total mg/L	Silicon mg/L	Sodium mg/L	Calcium mg/L	Silica mg/L
Downgradient	GS-AP-MW-47	09/12/2023	0	0.102	12.9	10.5	78.4	37.2	22.5
Downgradient	GS-AP-MW-5R	09/12/2023	0	1.27	38.8	11.9	103	109	25.5
Downgradient	GS-AP-MW-6D	09/05/2023	7	0.0233 J	16.1	6.92	27.1	53.9	14.8
Downgradient	GS-AP-MW-6S	09/05/2023	0	8.48	22.8	6.08	11.1	55.7	13
Downgradient	GS-AP-MW-7	09/11/2023	--	0.731	4.02	5.87	110	11.2	12.6
Downgradient	GS-AP-MW-9R	09/13/2023	0	1.34	17.6	14.8	16.3	38.9	31.7
Downgradient	GS-AP-MW-9V	09/13/2023	2	0.316	17.6	15.9	67.6	56	34
Vert. Delineation	GS-AP-MW-23V	09/06/2023	0	0.196	17.2	10.6	47.9	57.9	22.7
Vert. Delineation	GS-AP-MW-31V	09/13/2023	0	0.00882 J	9.01	5.56	486	24.7	11.9
Vert. Delineation	GS-AP-MW-36V	09/06/2023	3	0.609	19.4	7.08	500	61.5	15.2
Vert. Delineation	GS-AP-MW-6V	09/11/2023	0	0.503	0.492	5.82	379	1.22	12.5
Vert. Delineation	GS-AP-PZ-16	09/12/2023	0	0.091	3.09	9.27	141	10.4	19.8
Vert. Delineation	GS-AP-PZ-18R	09/19/2023	0	0.82	18.7	11.7	18.1	60.5	25
Vert. Delineation	GS-AP-PZ-22	09/11/2023	0	0.649	3.61	4.42	183	9.05	9.46
Horiz. Delineation	GS-AP-MW-23H	09/06/2023	0	49.2	35.3	13.7	19.5	76.3	29.3
Horiz. Delineation	GS-AP-MW-24H	09/06/2023	0	1.99	14.7	13.8	31.8	43.8	29.5
Horiz. Delineation	GS-AP-MW-25HA	09/18/2023	2	0.0657	0.576	5.01	341	2.05	10.7
Horiz. Delineation	GS-AP-MW-26H	09/18/2023	0	0.735	12	10.9	67.2	27.3	23.3
Horiz. Delineation	GS-AP-MW-27HR	09/06/2023	2	0.108	22.6	7.47	769	107	16
Horiz. Delineation	GS-AP-MW-28H	09/11/2023	0	0.0982	0.591	8.3	213	1.84	17.8
Horiz. Delineation	GS-AP-MW-29H	09/13/2023	0	0.123	4.12	9.24	142	11.6	19.8
Horiz. Delineation	GS-AP-MW-30HA	09/05/2023	0	2.78	7.91	10.9	192	45.1	23.3
Horiz. Delineation	GS-AP-MW-31H	09/13/2023	1	0.0111 J	0.967	7.73	186	3.21	16.5
Horiz. Delineation	GS-AP-MW-32H	09/13/2023	0	0.035 J	0.463	5.3	146	2.08	11.3
Horiz. Delineation	GS-AP-MW-36H	09/06/2023	0	0.358	1.55	7.26	177	5.89	15.5

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Table 7. Second Semi-Annual Monitoring Event

Analytical Results Summary
Plant Gorgas Ash Pond
09/05/2023 - 09/19/2023

General Chemistry and MNA Parameters

Hydraulic Location	Well	Sample Date	Sulfide mg/L	Iron Total mg/L	Magnesium Total mg/L	Silicon mg/L	Sodium mg/L	Calcium mg/L	Silica mg/L
Horiz. Delineation	GS-AP-MW-37HR	09/11/2023	0	0.0619	1.94	8.23	214	5.59	17.6
Horiz. Delineation	GS-AP-MW-38H	09/19/2023	0	0.0733	3.65	7.5	133	10.7	16
Horiz. Delineation	GS-AP-MW-40H	09/18/2023	0	2.44	101	12	72.8	219	25.7
Horiz. Delineation	GS-AP-MW-42H	09/19/2023	0	4.72	47.2	11	39.5	131	23.5
Horiz. Delineation	GS-AP-MW-43HO	09/19/2023	7	0.0133 J	2.01	5.83	361	6.7	12.5
Horiz. Delineation	GS-AP-MW-44HO	09/05/2023	5	0.0164 J	0.454	5.1	210	2	10.9
Piezometer	GS-AP-MW-16S	09/12/2023	0	0.0993	<0.021315	8.37	209	56.7	17.9

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Southern Company

Table 7. Second Semi-Annual Monitoring Event

Analytical Results Summary
Plant Gorgas Ash Pond
09/05/2023 - 09/19/2023

General Chemistry and MNA Parameters

Hydraulic Location	Well	Sample Date	Aluminum mg/L	Manganese Total mg/L	Potassium mg/L	Nitrate Nitrite mg/L as N	Alkalinity Total as CaCO3 mg CaCO3/L	Carbonate Alkalinity as CaCO3 mg CaCO3/L	Bicarbonate Alkalinity as CaCO3 mg CaCO3/L
Upgradient	GS-AP-MW-17V	09/11/2023	<0.009135	0.0238	2.03	<0.2	300	2.22	298
Upgradient	GS-AP-MW-18R	09/19/2023	<0.009135	0.176	1.09	<0.2	120	NC	120
Upgradient	GS-AP-MW-8	09/18/2023	0.0362 J	0.554	0.746	<0.2	54.5	NC	54.5
Downgradient	GS-AP-MW-10R	09/19/2023	<0.009135	0.0416	4.75	<0.2	203	NC	203
Downgradient	GS-AP-MW-11R	09/19/2023	<0.009135	0.0777	1.54	<0.2	178	NC	178
Downgradient	GS-AP-MW-12	09/13/2023	<0.009135	0.0285	1.53	<0.2	163	6.42	156
Downgradient	GS-AP-MW-12V	09/13/2023	0.0488 J	0.0181	2.32	<0.2	161	5.08	156
Downgradient	GS-AP-MW-13R	09/19/2023	<0.009135	0.0522	1.32	<0.2	125	NC	125
Downgradient	GS-AP-MW-14R	09/12/2023	<0.009135	0.0407	1.71	<0.2	170	0.936	169
Downgradient	GS-AP-MW-15	09/11/2023	0.441	0.000186 J	5.37	<0.2	477	159	2.68
Downgradient	GS-AP-MW-15V	09/11/2023	0.0122 J	0.0143	8.62	0.208 J	235	5.54	229
Downgradient	GS-AP-MW-16D	09/12/2023	0.0857	0.0118	1.48	<0.2	185	2.65	182
Downgradient	GS-AP-MW-17	09/11/2023	0.0232 J	0.00592	1.09	<0.2	407	14.7	392
Downgradient	GS-AP-MW-18VR	09/19/2023	0.0271 J	0.00359	1.41	<0.2	228	6.88	221
Downgradient	GS-AP-MW-19	09/19/2023	0.0618	0.0243	1.9	<0.2	274	2.28	272
Downgradient	GS-AP-MW-1R	09/13/2023	0.0724	0.00206	0.476 J	<0.2	278	17.7	260
Downgradient	GS-AP-MW-2	09/18/2023	0.0472 J	0.00102	0.458 J	<0.2	321	58.8	261
Downgradient	GS-AP-MW-21	09/05/2023	0.0424 J	0.000508 J	2.01	<0.2	195	73.4	118
Downgradient	GS-AP-MW-21V	09/05/2023	0.0167 J	0.0276	60.1	<0.2	229	1.9	227
Downgradient	GS-AP-MW-3	09/12/2023	0.091	0.0539	1.07	<0.2	185	3.4	181
Downgradient	GS-AP-MW-3V	09/12/2023	<0.009135	0.0277	34.9	<0.2	202	1.01	201
Downgradient	GS-AP-MW-45V	09/18/2023	0.00925 J	0.0779	57.1	<0.2	295	1.74	293
Downgradient	GS-AP-MW-46	09/18/2023	<0.009135	0.000654 J	0.513	<0.2	252	5.81	246

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Table 7. Second Semi-Annual Monitoring Event

Analytical Results Summary
Plant Gorgas Ash Pond
09/05/2023 - 09/19/2023

General Chemistry and MNA Parameters

Hydraulic Location	Well	Sample Date	Aluminum mg/L	Manganese Total mg/L	Potassium mg/L	Nitrate Nitrite mg/L as N	Alkalinity Total as CaCO3 mg CaCO3/L	Carbonate Alkalinity as CaCO3 mg CaCO3/L	Bicarbonate Alkalinity as CaCO3 mg CaCO3/L
Downgradient	GS-AP-MW-47	09/12/2023	<0.009135	0.0418	13	<0.2	157	1.22	156
Downgradient	GS-AP-MW-5R	09/12/2023	<0.009135	0.127	6.72	<0.2	243	NC	243
Downgradient	GS-AP-MW-6D	09/05/2023	<0.009135	0.17	2.26	<0.2	187	2.09	185
Downgradient	GS-AP-MW-6S	09/05/2023	0.0321 J	2.69	4.22	<0.2	133	NC	132
Downgradient	GS-AP-MW-7	09/11/2023	0.204	0.0425	1.32	<0.2	107	1.14	106
Downgradient	GS-AP-MW-9R	09/13/2023	<0.009135	0.15	2.33	<0.2	121	NC	121
Downgradient	GS-AP-MW-9V	09/13/2023	<0.009135	0.0385	2.13	<0.2	212	NC	212
Vert. Delineation	GS-AP-MW-23V	09/06/2023	0.015 J	0.0516	1.85	<0.2	223	2.38	221
Vert. Delineation	GS-AP-MW-31V	09/13/2023	0.0101 J	0.0467	45.6	<0.2	343	3.5	339
Vert. Delineation	GS-AP-MW-36V	09/06/2023	<0.009135	0.0823	66.6	0.245 J	305	1.53	303
Vert. Delineation	GS-AP-MW-6V	09/11/2023	1.22	0.00831	1.29	<0.2	707	52.3	654
Vert. Delineation	GS-AP-PZ-16	09/12/2023	0.124	0.00666	0.998	<0.2	301	11.9	289
Vert. Delineation	GS-AP-PZ-18R	09/19/2023	<0.009135	0.0534	1.19	<0.2	218	0.851	217
Vert. Delineation	GS-AP-PZ-22	09/11/2023	<0.009135	0.0245	3.67	<0.2	305	35	269
Horiz. Delineation	GS-AP-MW-23H	09/06/2023	<0.009135	1.4	1.99	<0.2	84.6	NC	84.6
Horiz. Delineation	GS-AP-MW-24H	09/06/2023	0.0504 J	0.105	1.51	<0.2	222	1.04	221
Horiz. Delineation	GS-AP-MW-25HA	09/18/2023	0.118	0.00451	1.62	<0.2	661	55.6	605
Horiz. Delineation	GS-AP-MW-26H	09/18/2023	<0.009135	0.0149	2.38	<0.2	273	0.907	272
Horiz. Delineation	GS-AP-MW-27HR	09/06/2023	0.0132 J	0.517	47.6	<0.2	249	1.43	248
Horiz. Delineation	GS-AP-MW-28H	09/11/2023	0.0189 J	0.0061	1.03	<0.2	405	16	389
Horiz. Delineation	GS-AP-MW-29H	09/13/2023	<0.009135	0.007	1.28	<0.2	314	4.3	310
Horiz. Delineation	GS-AP-MW-30HA	09/05/2023	0.168	0.139	3.8	<0.2	303	1.56	301
Horiz. Delineation	GS-AP-MW-31H	09/13/2023	0.0203 J	0.00662	1.84	<0.2	304	11.7	292
Horiz. Delineation	GS-AP-MW-32H	09/13/2023	0.0283 J	0.0055	1.89	<0.2	237	4.88	232
Horiz. Delineation	GS-AP-MW-36H	09/06/2023	0.112	0.0168	6.05	0.668	209	4.5	204

Notes:
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2. \"<\" indicates the result was not detected above the MDL and is considered a non-detect.
3. U - Radium data is a combination of radium iso

Table 7. Second Semi-Annual Monitoring Event

Analytical Results Summary
Plant Gorgas Ash Pond
09/05/2023 - 09/19/2023

General Chemistry and MNA Parameters

Hydraulic Location	Well	Sample Date	Aluminum mg/L	Manganese Total mg/L	Potassium mg/L	Nitrate Nitrite mg/L as N	Alkalinity Total as CaCO3 mg CaCO3/L	Carbonate Alkalinity as CaCO3 mg CaCO3/L	Bicarbonate Alkalinity as CaCO3 mg CaCO3/L
Horiz. Delineation	GS-AP-MW-37HR	09/11/2023	0.013 J	0.0108	11.3	<0.2	219	3.14	216
Horiz. Delineation	GS-AP-MW-38H	09/19/2023	0.0285 J	0.0199	4.33	<0.2	243	3.26	240
Horiz. Delineation	GS-AP-MW-40H	09/18/2023	<0.009135	0.242	5.45	<0.2	234	NC	234
Horiz. Delineation	GS-AP-MW-42H	09/19/2023	<0.009135	0.816	2.19	<0.2	192	NC	192
Horiz. Delineation	GS-AP-MW-43HO	09/19/2023	0.0429 J	0.0117	5.65	<0.2	325	3.17	322
Horiz. Delineation	GS-AP-MW-44HO	09/05/2023	0.0372 J	0.00268	1.3	<0.2	370	25.1	344
Piezometer	GS-AP-MW-16S	09/12/2023	3.51	0.000176 J	3.5	<0.2	524	--	--

Notes:
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3. U - Radium data is a combination of radium iso

Southern Company

Table 7. Second Semi-Annual Monitoring Event

Analytical Results Summary
Plant Gorgas Ash Pond
09/05/2023 - 09/19/2023

General Chemistry and MNA Parameters

Hydraulic Location	Well	Sample Date	Carbon, Total Organic mg/L	Chloride mg/L	Sulfate mg/L
Upgradient	GS-AP-MW-17V	09/11/2023	1.52 J	2.83	10.7
Upgradient	GS-AP-MW-18R	09/19/2023	<1	3.44	23.5
Upgradient	GS-AP-MW-8	09/18/2023	<1	3.07	10.1
Downgradient	GS-AP-MW-10R	09/19/2023	<1	18.6	17
Downgradient	GS-AP-MW-11R	09/19/2023	<1	7.64	54
Downgradient	GS-AP-MW-12	09/13/2023	<1	3.19	18.9
Downgradient	GS-AP-MW-12V	09/13/2023	1.86 J	4.38	1.61 J
Downgradient	GS-AP-MW-13R	09/19/2023	<1	16.8	39.9
Downgradient	GS-AP-MW-14R	09/12/2023	<1	13.8	24.6
Downgradient	GS-AP-MW-15	09/11/2023	10.7	5.04	8.43
Downgradient	GS-AP-MW-15V	09/11/2023	5.57	83.9	140
Downgradient	GS-AP-MW-16D	09/12/2023	<1	4.14	15.3
Downgradient	GS-AP-MW-17	09/11/2023	1.84 J	7.59	23.1
Downgradient	GS-AP-MW-18VR	09/19/2023	<1	5.31	2.85
Downgradient	GS-AP-MW-19	09/19/2023	<1	4.82	13.5
Downgradient	GS-AP-MW-1R	09/13/2023	<1	9.36	4.81
Downgradient	GS-AP-MW-2	09/18/2023	<1	6.28	2.96
Downgradient	GS-AP-MW-21	09/05/2023	1.37 J	36.6	214
Downgradient	GS-AP-MW-21V	09/05/2023	3.46	380	430
Downgradient	GS-AP-MW-3	09/12/2023	<1	12.5	47.9
Downgradient	GS-AP-MW-3V	09/12/2023	3.32	294	396
Downgradient	GS-AP-MW-45V	09/18/2023	12.9	425	746
Downgradient	GS-AP-MW-46	09/18/2023	1.3 J	31.1	130

Notes:
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Table 7. Second Semi-Annual Monitoring Event

Analytical Results Summary

Plant Gorgas Ash Pond

09/05/2023 - 09/19/2023

General Chemistry and MNA Parameters

Hydraulic Location	Well	Sample Date	Carbon, Total Organic mg/L	Chloride mg/L	Sulfate mg/L
Downgradient	GS-AP-MW-47	09/12/2023	1.24 J	60	72.9
Downgradient	GS-AP-MW-5R	09/12/2023	1.74 J	57.9	271
Downgradient	GS-AP-MW-6D	09/05/2023	1.12 J	9.14	58.7
Downgradient	GS-AP-MW-6S	09/05/2023	1.2 J	19.2	107
Downgradient	GS-AP-MW-7	09/11/2023	<1	8.17	124
Downgradient	GS-AP-MW-9R	09/13/2023	<1	13.7	57.5
Downgradient	GS-AP-MW-9V	09/13/2023	1.76 J	45.8	85.2
Vert. Delineation	GS-AP-MW-23V	09/06/2023	1.01 J	7.04	77.5
Vert. Delineation	GS-AP-MW-31V	09/13/2023	2.3	360	324
Vert. Delineation	GS-AP-MW-36V	09/06/2023	6.27	489	517
Vert. Delineation	GS-AP-MW-6V	09/11/2023	1.41 J	44.6	6.84
Vert. Delineation	GS-AP-PZ-16	09/12/2023	<1	6.03	8.92
Vert. Delineation	GS-AP-PZ-18R	09/19/2023	<1	3.86	42.7
Vert. Delineation	GS-AP-PZ-22	09/11/2023	1.14 J	2.96	64.2
Horiz. Delineation	GS-AP-MW-23H	09/06/2023	<1	5.93	335
Horiz. Delineation	GS-AP-MW-24H	09/06/2023	<1	3.11	7.72
Horiz. Delineation	GS-AP-MW-25HA	09/18/2023	9.52	27.8	23.6
Horiz. Delineation	GS-AP-MW-26H	09/18/2023	<1	2.22	4.78
Horiz. Delineation	GS-AP-MW-27HR	09/06/2023	10.3	758	858
Horiz. Delineation	GS-AP-MW-28H	09/11/2023	<1	9.86	9.05
Horiz. Delineation	GS-AP-MW-29H	09/13/2023	1.01 J	5.63	28.5
Horiz. Delineation	GS-AP-MW-30HA	09/05/2023	1.48 J	6.67	244
Horiz. Delineation	GS-AP-MW-31H	09/13/2023	<1	32.6	33.8
Horiz. Delineation	GS-AP-MW-32H	09/13/2023	<1	26.5	35.6
Horiz. Delineation	GS-AP-MW-36H	09/06/2023	2.96	99.3	152

Notes:

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3. U - Radium data is a combination of radium iso

Table 7. Second Semi-Annual Monitoring Event

Analytical Results Summary

Plant Gorgas Ash Pond

09/05/2023 - 09/19/2023

General Chemistry and MNA Parameters

Hydraulic Location	Well	Sample Date	Carbon, Total Organic mg/L	Chloride mg/L	Sulfate mg/L
Horiz. Delineation	GS-AP-MW-37HR	09/11/2023	1.41 J	87.4	81.4
Horiz. Delineation	GS-AP-MW-38H	09/19/2023	1.46 J	31.6	29.1
Horiz. Delineation	GS-AP-MW-40H	09/18/2023	1.63 J	9.85	692
Horiz. Delineation	GS-AP-MW-42H	09/19/2023	<1	11	339
Horiz. Delineation	GS-AP-MW-43HO	09/19/2023	4.08	134	237
Horiz. Delineation	GS-AP-MW-44HO	09/05/2023	1.38 J	33.8	24.4
Piezometer	GS-AP-MW-16S	09/12/2023	2.15	4.22	7.94

Notes:

1. \"J\" indicates the result was detected above the MDL but below the PQL
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3. U - Radium data is a combination of radium iso

Appendix A

ANALYTICAL DATA SUMMARY
Ash Pond (08/01/2016 - 09/19/2023)
APC Plant Gorgas
Walker County Alabama

Analyte	Units	GS-AP-MW-10R				GS-AP-MW-11R				GS-AP-MW-13R		
		03/01/2022	08/03/2022	03/27/2023	09/19/2023	03/01/2022	07/19/2022	03/22/2023	09/19/2023	03/01/2022	07/20/2022	03/27/2023
Appendix III												
Boron	mg/L	<0.03	<0.03	<0.03	<0.03	0.0844 J	0.111	0.13	0.222	<0.03	<0.03	<0.03
Calcium	mg/L	39.8	46.6	45.3	39.6	45.3	51.8	52	56	31.6	31.8	32.1
Chloride	mg/L	37.5	33.5	19.3	18.6	5.08	5.38	4.39	7.64	19.2	17.6	11.4
Fluoride	mg/L	0.278	0.265	0.283	0.263	0.143	0.107 J	0.0999 J	0.0949 J	0.122	0.084 J	0.18
pH_Field	pH	6.87	6.7	6.68	6.87	6.68	6.13	6.69	6.49	6.47	6.39	6.47
Sulfate	mg/L	21.6	30.9	17.5	17	39.4	39.4	45.6	54	38	38.9	33.1
TDS	mg/L	--	--	--	--	--	--	--	--	--	--	--
Appendix IV												
Antimony	mg/L	<0.000508	<0.000508	<0.00071	<0.00071	<0.000508	<0.000508	<0.00071	<0.00071	<0.000508	<0.000508	<0.00071
Arsenic	mg/L	0.00209	0.00109	0.00277	0.00047	0.00235	0.00137	0.00148	0.00378	0.011	0.016	0.034
Barium	mg/L	0.701	0.524	0.587	0.608	0.107	0.11	0.12	0.133	0.0617	0.0667	0.0685
Beryllium	mg/L	<0.000406	<0.000406	<0.000406	<0.000406	<0.000406	<0.000406	<0.000406	<0.000406	<0.000406	<0.000406	<0.000406
Cadmium	mg/L	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005
Chromium	mg/L	0.000237 J	0.000414 J	0.000235 J	0.000306 J	0.000257 J	0.000293 J	<0.000203	0.000264 J	0.000229 J	0.000261 J	0.000246 J
Cobalt	mg/L	0.00014 J	8.87e-005 J	0.000682	9.5e-005 J	0.00011 J	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005
Combined Radium 226 + 228	pCi/L	1.05 U	0.552 U	--	0.275 U	0.757 U	0.586 U	0.691 U	1.12 U	0.656 U	0.551 U	0.347 U
Fluoride	mg/L	0.278	0.265	0.283	0.263	0.143	0.107 J	0.0999 J	0.0949 J	0.122	0.084 J	0.18
Lead	mg/L	0.000134 J	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	0.000187 J	0.000128 J	<6.8e-005	<6.8e-005
Lithium	mg/L	0.0349	0.0391	0.0362	0.0393	0.0281	0.0289	0.0317	0.0324	0.0272	0.027	0.0261
Mercury	mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Molybdenum	mg/L	0.00288	0.00163	<0.005075	<0.005075	0.000143 J	<0.000102	<0.005075	<0.005075	0.000611	0.000155 J	<0.005075
Selenium	mg/L	<0.000508	<0.000508	<0.000508	<0.000508	<0.000508	<0.000508	<0.000508	<0.000508	<0.000508	<0.000508	<0.000508
Thallium	mg/L	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005

Notes:

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

ANALYTICAL DATA SUMMARY
Ash Pond (08/01/2016 - 09/19/2023)
APC Plant Gorgas
Walker County Alabama

Analyte	Units	GS-AP-MW-13R	GS-AP-MW-14R				GS-AP-MW-18R				GS-AP-MW-18VR
		09/19/2023	02/28/2022	08/03/2022	03/15/2023	09/12/2023	02/22/2022	08/03/2022	03/28/2023	09/19/2023	02/22/2022
Appendix III											
Boron	mg/L	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	0.0488 J
Calcium	mg/L	34	33.7	35.3	32.8	34.5	20.3	30.8	26.1	33.1	5.8
Chloride	mg/L	16.8	38.1	16.1	11	13.8	3.52	4.34	3	3.44	15.3
Fluoride	mg/L	0.147	0.215	0.145	0.141	0.128	0.118	0.0797 J	0.115 J	0.11 J	0.199
pH_Field	pH	6.17	7.04	6.44	6.63	6.63	6.29	6.46	6.48	6.39	7.88
Sulfate	mg/L	39.9	33.3	24.7	20.9	24.6	27	20.7	26.3	23.5	13
TDS	mg/L	--	--	--	--	--	--	--	--	--	--
Appendix IV											
Antimony	mg/L	<0.00071	<0.000508	<0.000508	<0.00071	<0.00071	<0.000508	<0.000508	<0.00071	<0.00071	<0.000508
Arsenic	mg/L	0.0213	0.00231	0.00142	0.000553	0.000932	0.000367	0.000442	0.000433	0.000488	0.00164
Barium	mg/L	0.0696	0.174	0.221	0.229	0.201	0.0713	0.0895	0.0809	0.0955	0.187
Beryllium	mg/L	<0.000406	<0.000406	<0.000406	<0.000406	<0.000406	<0.000406	<0.000406	<0.000406	<0.000406	<0.000406
Cadmium	mg/L	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005
Chromium	mg/L	0.00035 J	0.000616 J	0.000306 J	0.000302 J	<0.000203	0.000221 J	0.000304 J	0.000237 J	<0.000203	0.000522 J
Cobalt	mg/L	<6.8e-005	0.000147 J	<6.8e-005	<6.8e-005	<6.8e-005	0.000678	0.000582	0.000717	0.000694	9.32e-005 J
Combined Radium 226 + 228	pCi/L	0.711 U	0.801 U	0.55 U	0.145 U	0.345 U	0.961 U	0.507 U	0.889 U	0.478 U	0.187 U
Fluoride	mg/L	0.147	0.215	0.145	0.141	0.128	0.118	0.0797 J	0.115 J	0.11 J	0.199
Lead	mg/L	<6.8e-005	0.000446	<6.8e-005	<6.8e-005	8.37e-005 J	8.09e-005 J	<6.8e-005	<6.8e-005	<6.8e-005	8.95e-005 J
Lithium	mg/L	0.0279	0.0228	0.0265	0.0248	0.0264	<0.007105	0.00862 J	<0.007105	0.00814 J	0.0446
Mercury	mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Molybdenum	mg/L	<0.005075	0.000965	0.000479	<0.005075	<0.005075	0.00025	0.000529	<0.005075	<0.005075	0.0336
Selenium	mg/L	<0.000508	<0.000508	<0.000508	<0.000508	<0.000508	<0.000508	<0.000508	<0.000508	<0.000508	<0.000508
Thallium	mg/L	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005

Notes:

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

ANALYTICAL DATA SUMMARY
Ash Pond (08/01/2016 - 09/19/2023)
APC Plant Gorgas
Walker County Alabama

Analyte	Units	GS-AP-MW-18VR			GS-AP-MW-1R				GS-AP-MW-23V			
		08/09/2022	03/27/2023	09/19/2023	03/01/2022	08/02/2022	03/27/2023	09/13/2023	02/23/2022	07/26/2022	03/14/2023	09/06/2023
Appendix III												
Boron	mg/L	0.0488 J	0.0477 J	0.0488 J	0.0582 J	0.0596 J	0.0603 J	0.0619 J	0.0919 J	0.0772 J	0.409	0.515
Calcium	mg/L	2.49	2.12	2.49	1.14	0.888	0.838	0.823	152	138	73.6	57.9
Chloride	mg/L	3.31	3.45	5.31	5.25	5.38	7.49	9.36	3.21	3.49	5.79	7.04
Fluoride	mg/L	0.133	0.182	0.146	0.248	0.177	0.234	0.229	0.141	0.0773 J	0.189	0.158
pH_Field	pH	7.93	8.03	8.15	8.86	8.35	8.84	8.63	7.38	7.1	7.37	6.12
Sulfate	mg/L	5.54	1.61 J	2.85	5.88	4.28	5.43	4.81	331	286	113	77.5
TDS	mg/L	--	--	--	--	--	--	--	--	--	--	--
Appendix IV												
Antimony	mg/L	<0.000508	<0.00071	<0.00071	<0.000508	<0.000508	<0.00071	<0.00071	<0.000508	<0.000508	<0.00071	<0.00071
Arsenic	mg/L	0.00121	0.000422	0.000661	0.000382	0.000259	0.000248	0.000313	0.000161 J	<8.1e-005	<0.000112	<0.000112
Barium	mg/L	0.126	0.115	0.11	0.072	0.0679	0.0647	0.0559	0.0812	0.0695	0.0698	0.0771
Beryllium	mg/L	<0.000406	<0.000406	<0.000406	<0.000406	<0.000406	<0.000406	<0.000406	<0.000406	<0.000406	<0.000406	<0.000406
Cadmium	mg/L	8.01e-005 J	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005
Chromium	mg/L	0.000584 J	0.000272 J	0.000225 J	0.000443 J	0.00037 J	0.000404 J	0.000236 J	0.000663 J	0.000389 J	<0.000203	<0.000203
Cobalt	mg/L	0.000256	<6.8e-005	<6.8e-005	8.77e-005 J	<6.8e-005	<6.8e-005	<6.8e-005	0.000203	<6.8e-005	<6.8e-005	<6.8e-005
Combined Radium 226 + 228	pCi/L	0.473 U	0.708 U	0.8 U	0.836 U	0.53 U	0.498 U	0.0804 U	0.258 U	0.603 U	0.317 U	0.618 U
Fluoride	mg/L	0.133	0.182	0.146	0.248	0.177	0.234	0.229	0.141	0.0773 J	0.189	0.158
Lead	mg/L	0.000634	<6.8e-005	6.94e-005 J	0.000221	0.000135 J	0.000134 J	<6.8e-005	0.000208	<6.8e-005	<6.8e-005	<6.8e-005
Lithium	mg/L	0.059	0.0536	0.0539	0.0309	0.0385	0.0319	0.033	0.041	0.0419	0.0406	0.0418
Mercury	mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Molybdenum	mg/L	0.0456	0.0495	0.0516	0.00143	0.00102	<0.005075	<0.005075	0.000132 J	<0.000102	<0.005075	<0.005075
Selenium	mg/L	<0.000508	<0.000508	<0.000508	<0.000508	<0.000508	<0.000508	<0.000508	<0.000508	<0.000508	<0.000508	<0.000508
Thallium	mg/L	7.72e-005 J	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005

Notes:

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

ANALYTICAL DATA SUMMARY
Ash Pond (08/01/2016 - 09/19/2023)
APC Plant Gorgas
Walker County Alabama

Analyte	Units	GS-AP-MW-27HR				GS-AP-MW-31V				GS-AP-MW-36V		
		02/22/2022	07/27/2022	03/14/2023	09/06/2023	02/22/2022	08/03/2022	03/27/2023	09/13/2023	02/22/2022	07/27/2022	03/14/2023
Appendix III												
Boron	mg/L	0.0541 J	0.107	0.107	0.109	<0.03	0.0391 J	0.048 J	0.0544 J	0.0402 J	0.0689 J	0.0771 J
Calcium	mg/L	12.3	65.1	95.3	107	7.58	13	16.4	24.7	9.42	33.9	43
Chloride	mg/L	253	635	781	758	32.1	127	196	360	55.9	436	428
Fluoride	mg/L	0.292	0.263	0.335	0.285	0.179	0.237	0.309	0.198	0.259	0.38	0.344
pH_Field	pH	7.83	7.44	7.28	7.35	8	7.88	7.8	7.49	7.35	7.14	7.27
Sulfate	mg/L	268	593	864	858	26.2	111	214	324	53.9	387	346
TDS	mg/L	--	--	--	--	--	--	--	--	--	--	--
Appendix IV												
Antimony	mg/L	0.00053 J	<0.000508	<0.00071	<0.00071	<0.000508	<0.000508	<0.00071	<0.00071	<0.000508	<0.000508	<0.00071
Arsenic	mg/L	0.00102	0.00148	0.00105	0.00122	0.0011	0.0015	0.00166	0.00182	0.00167	0.00447	0.00337
Barium	mg/L	0.0414	0.0599	0.0327	0.0401	0.238	0.342	0.253	0.192	0.092	0.114	0.0858
Beryllium	mg/L	<0.000406	<0.000406	<0.000406	<0.000406	<0.000406	<0.000406	<0.000406	<0.000406	<0.000406	<0.000406	<0.000406
Cadmium	mg/L	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005
Chromium	mg/L	0.000288 J	0.000354 J	0.000255 J	<0.000203	0.000346 J	0.000803 J	0.000368 J	<0.000203	0.000248 J	0.000348 J	0.000257 J
Cobalt	mg/L	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	6.98e-005 J	<6.8e-005	6.82e-005 J	0.000118 J	9.1e-005 J	0.000136 J	<6.8e-005
Combined Radium 226 + 228	pCi/L	0.645 U	1.63	1.29	0.605 U	0.486 U	0.696 U	0.965 U	0.225 U	0.495 U	0.857 U	0.805 U
Fluoride	mg/L	0.292	0.263	0.335	0.285	0.179	0.237	0.309	0.198	0.259	0.38	0.344
Lead	mg/L	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	0.00028	0.000166 J	<6.8e-005	<6.8e-005	0.00016 J	<6.8e-005	<6.8e-005
Lithium	mg/L	0.042	0.0935	0.108	0.121	0.0316	0.0429	0.0508	0.0732	0.0383	0.0378	0.0402
Mercury	mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Molybdenum	mg/L	0.000829	0.0101	0.0095 J	0.0279	0.00536	0.0243	0.0409	0.0649	0.00427	0.0268	0.00789 J
Selenium	mg/L	<0.000508	<0.000508	<0.000508	<0.000508	<0.000508	<0.000508	<0.000508	<0.000508	<0.000508	<0.000508	<0.000508
Thallium	mg/L	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005

Notes:

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

ANALYTICAL DATA SUMMARY
Ash Pond (08/01/2016 - 09/19/2023)
APC Plant Gorgas
Walker County Alabama

Analyte	Units	GS-AP-MW-36V	GS-AP-MW-37HR				GS-AP-MW-3V				GS-AP-MW-45V
		09/06/2023	02/28/2022	07/26/2022	03/15/2023	09/11/2023	02/23/2022	07/20/2022	03/21/2023	09/12/2023	02/23/2022
Appendix III											
Boron	mg/L	0.095 J	<0.03	<0.03	<0.03	0.0347 J	0.109	0.148	0.0528 J	0.0692 J	0.038 J
Calcium	mg/L	61.5	2.59	3.48	3.16	5.59	9.73	22.1	9.04	20	5.61
Chloride	mg/L	489	28.1	32.1	44.4	87.4	155	399	212	294	54.2
Fluoride	mg/L	0.294	0.194	0.143	0.116 J	0.182	0.241	0.231	0.161	0.187	0.204
pH_Field	pH	7.11	7.88	7.88	7.81	7.51	7.45	7.41	7.71	7.49	7.86
Sulfate	mg/L	517	22.6	32.2	40.9	81.4	370	454	330	396	273
TDS	mg/L	--	--	--	--	--	--	--	--	--	--
Appendix IV											
Antimony	mg/L	<0.00071	<0.000508	<0.000508	<0.00071	<0.00071	<0.000508	<0.000508	<0.00071	<0.00071	<0.000508
Arsenic	mg/L	0.00268	0.000938	0.00101	0.000822	0.00137	0.00249	0.00228	0.000654	0.00104	0.00106
Barium	mg/L	0.0803	0.0131	0.0171	0.0314	0.0771	0.0486	0.0815	0.0197	0.0269	0.0207
Beryllium	mg/L	<0.000406	<0.000406	<0.000406	<0.000406	<0.000406	<0.000406	<0.000406	<0.000406	<0.000406	<0.000406
Cadmium	mg/L	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005
Chromium	mg/L	<0.000203	0.000371 J	0.000407 J	0.00024 J	<0.000203	0.000509 J	0.000397 J	<0.000203	<0.000203	0.000204 J
Cobalt	mg/L	0.000599	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	0.00025	0.000249	<6.8e-005	8.77e-005 J	<6.8e-005
Combined Radium 226 + 228	pCi/L	0.517 U	0.739 U	0.5 U	0.545 U	0.17 U	0.57 U	0.762 U	0.189 U	0.567 U	0.442 U
Fluoride	mg/L	0.294	0.194	0.143	0.116 J	0.182	0.241	0.231	0.161	0.187	0.204
Lead	mg/L	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	0.00014 J	7.23e-005 J	<6.8e-005	<6.8e-005	7.41e-005 J
Lithium	mg/L	0.0545	0.0312	0.0357	0.0345	0.0369	0.0489	0.071	0.0825	0.103	0.0374
Mercury	mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Molybdenum	mg/L	0.0381	0.00315	0.00536	<0.005075	0.0093 J	0.0191	0.0489	0.02	0.0449	0.0047
Selenium	mg/L	<0.000508	<0.000508	<0.000508	<0.000508	<0.000508	<0.000508	<0.000508	<0.000508	<0.000508	<0.000508
Thallium	mg/L	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005

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

Southern Company

ANALYTICAL DATA SUMMARY
Ash Pond (08/01/2016 - 09/19/2023)
APC Plant Gorgas
Walker County Alabama

Analyte	Units	GS-AP-MW-45V			GS-AP-MW-46				GS-AP-MW-47			
		08/08/2022	03/28/2023	09/18/2023	02/23/2022	08/02/2022	03/27/2023	09/18/2023	02/28/2022	07/26/2022	03/14/2023	03/15/2023
Appendix III												
Boron	mg/L	0.0415 J	0.0582 J	0.0954 J	0.768	0.832	0.881	0.913	<0.03	<0.03	--	<0.03
Calcium	mg/L	6.3	19	43.3	1.2	1.21	0.975	0.873	28.7	29	--	30.2
Chloride	mg/L	58.8	209	425	43.9	37	30.2	30.8	11.7	15.4	--	19.8
Fluoride	mg/L	0.154	0.249	0.302	0.226	0.252	0.271	0.293	0.121	0.0601 J	--	0.107 J
pH_Field	pH	7.74	7.47	7.44	8.69	8.67	8.81	8.63	7.15	7.32	--	7.44
Sulfate	mg/L	273	489	746	317	208	168	130	14.4	16.7	--	24.3
TDS	mg/L	--	--	--	--	--	--	--	--	--	--	--
Appendix IV												
Antimony	mg/L	<0.000508	<0.00071	<0.00071	<0.000508	<0.000508	<0.00071	0.000764 J	<0.000508	<0.000508	--	<0.00071
Arsenic	mg/L	0.000618	0.0013	0.002	0.105	0.119	0.0955	0.179	0.000385	0.000423	--	0.00102
Barium	mg/L	0.0257	0.073	0.0851	0.0652	0.0699	0.0655	0.0535	0.772	0.728	--	0.638
Beryllium	mg/L	<0.000406	<0.000406	<0.000406	<0.000406	<0.000406	<0.000406	<0.000406	<0.000406	<0.000406	--	<0.000406
Cadmium	mg/L	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	--	<6.8e-005
Chromium	mg/L	0.000882 J	0.000479 J	0.000372 J	<0.000203	0.000302 J	0.000222 J	0.000206 J	0.000331 J	0.000389 J	--	0.000359 J
Cobalt	mg/L	<6.8e-005	<6.8e-005	0.000125 J	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	0.000118 J	0.000112 J	--	0.000135 J
Combined Radium 226 + 228	pCi/L	0.469 U	0.647 U	0.741 U	0.0974 U	0.314 U	0.0303 U	0.2 U	0.174 U	0.441 U	0.767 U	--
Fluoride	mg/L	0.154	0.249	0.302	0.226	0.252	0.271	0.293	0.121	0.0601 J	--	0.107 J
Lead	mg/L	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	--	<6.8e-005
Lithium	mg/L	0.0486	0.0531	0.0931	0.0653	0.0756	0.0593	0.0583	0.04	0.0429	--	0.0394
Mercury	mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	--	<0.0003
Molybdenum	mg/L	0.00454	0.0123	0.0326	0.00678	0.00955	0.0114	0.0161	0.00165	0.00213	--	<0.005075
Selenium	mg/L	<0.000508	<0.000508	<0.000508	<0.000508	<0.000508	<0.000508	<0.000508	<0.000508	<0.000508	--	<0.000508
Thallium	mg/L	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	--	<6.8e-005

Notes:

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

Southern Company

ANALYTICAL DATA SUMMARY
Ash Pond (08/01/2016 - 09/19/2023)
APC Plant Gorgas
Walker County Alabama

Analyte	Units	GS-AP-MW-47	GS-AP-MW-5R				GS-AP-MW-9R				GS-AP-PZ-18R
		09/12/2023	03/01/2022	08/02/2022	03/20/2023	09/12/2023	03/01/2022	07/19/2022	03/27/2023	09/13/2023	02/21/2022
Appendix III											
Boron	mg/L	<0.03	0.036 J	0.0384 J	0.038 J	0.0374 J	0.106	0.104	0.152	0.193	0.0925 J
Calcium	mg/L	37.2	97.3	107	94.8	109	54	52	43	38.9	69
Chloride	mg/L	60	46.4	54.5	54.6	57.9	65.9	24.5	19.1	13.7	5.32
Fluoride	mg/L	0.103 J	0.147	0.144	0.117 J	0.118 J	0.218	0.245	0.207	0.158	0.207
pH_Field	pH	7.07	6.77	6.72	6.8	6.84	6.4	6.31	6.01	6.25	7.37
Sulfate	mg/L	72.9	348	294	290	271	104	86.6	80.6	57.5	55.5
TDS	mg/L	--	--	--	--	--	--	--	--	--	--
Appendix IV											
Antimony	mg/L	<0.00071	<0.000508	<0.000508	<0.00071	<0.00071	<0.000508	<0.000508	<0.00071	<0.00071	<0.000508
Arsenic	mg/L	0.000627	0.000484	0.000325	0.000194 J	0.000161 J	0.00529	0.00629	0.00564	0.00449	0.00167
Barium	mg/L	0.317	0.0695	0.0605	0.0567	0.0454	0.0425	0.0339	0.0344	0.0315	0.0662
Beryllium	mg/L	<0.000406	<0.000406	<0.000406	<0.000406	<0.000406	<0.000406	<0.000406	<0.000406	<0.000406	<0.000406
Cadmium	mg/L	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005
Chromium	mg/L	<0.000203	0.000353 J	0.00036 J	0.000222 J	0.000209 J	0.000269 J	0.000384 J	0.000216 J	<0.000203	0.000262 J
Cobalt	mg/L	0.000174 J	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	9.26e-005 J	<6.8e-005	<6.8e-005	<6.8e-005	0.000136 J
Combined Radium 226 + 228	pCi/L	0.193 U	0.799 U	0.479 U	0.742 U	0.763 U	0.663 U	0.803 U	0.263 U	0.591 U	0.775 U
Fluoride	mg/L	0.103 J	0.147	0.144	0.117 J	0.118 J	0.218	0.245	0.207	0.158	0.207
Lead	mg/L	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005
Lithium	mg/L	0.0427	0.0644	0.0827	0.0711	0.0717	0.0361	0.0356	0.0351	0.0352	0.0157 J
Mercury	mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Molybdenum	mg/L	0.0112	0.00212	0.00237	<0.005075	<0.005075	0.00313	0.00308	<0.005075	<0.005075	0.00091
Selenium	mg/L	<0.000508	<0.000508	<0.000508	<0.000508	<0.000508	<0.000508	<0.000508	<0.000508	<0.000508	<0.000508
Thallium	mg/L	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005

Notes:

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

ANALYTICAL DATA SUMMARY
Ash Pond (08/01/2016 - 09/19/2023)
APC Plant Gorgas
Walker County Alabama

Analyte	Units	GS-AP-PZ-18R			GS-AP-MW-2							
		07/27/2022	03/28/2023	09/19/2023	08/02/2016	09/19/2016	10/24/2016	12/13/2016	02/08/2017	03/30/2017	04/26/2017	06/06/2017
Appendix III												
Boron	mg/L	0.0879 J	0.0871 J	0.0868 J	0.178	0.0937 J	0.0986 J	0.0965 J	0.0896 J	0.0871 J	0.0818 J	0.0805 J
Calcium	mg/L	63.8	61.8	60.5	2.25	0.724	0.635	0.714	0.722	0.686	0.646	0.569
Chloride	mg/L	4.98	4.05	3.86	6.15	5.98	5.93	5.7	8.44	11	10	9.6
Fluoride	mg/L	0.162	0.175	0.123 J	1.76	1.55	1.29	1.19	1.6	1.5	1.4	1.3
pH_Field	pH	7.18	7.22	7.08	9.18	9.18	9.14	9.2	9.17	9.08	9.22	9.22
Sulfate	mg/L	48.2	45.1	42.7	2.87	1.22	<0.3	<0.3	19.4	31	29	37
TDS	mg/L	--	--	--	390	398	395	381	376	391	384	404
Appendix IV												
Antimony	mg/L	<0.000508	<0.00071	<0.00071	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006
Arsenic	mg/L	0.00143	0.00106	0.00104	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Barium	mg/L	0.0642	0.0711	0.0688	0.0895	0.0744	0.0787	0.0758	0.0823	0.0768	0.077	0.0711
Beryllium	mg/L	<0.000406	<0.000406	<0.000406	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006
Cadmium	mg/L	<6.8e-005	<6.8e-005	<6.8e-005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Chromium	mg/L	0.000299 J	0.000212 J	<0.000203	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Cobalt	mg/L	0.000105 J	7.36e-005 J	8.83e-005 J	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Combined Radium 226 + 228	pCi/L	0.14 U	0.526 U	0.538 U	0.274 U	0.0478 U	1.41	0.733	0.0206 U	0.122 U	0.397 U	0.0873 U
Fluoride	mg/L	0.162	0.175	0.123 J	1.76	1.55	1.29	1.19	1.6	1.5	1.4	1.3
Lead	mg/L	<6.8e-005	<6.8e-005	<6.8e-005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Lithium	mg/L	0.0169 J	0.0155 J	0.0166 J	0.0495 J	0.049 J	0.0488 J	0.0483 J	0.0644	0.0597	0.0459 J	0.0491 J
Mercury	mg/L	<0.0003	<0.0003	<0.0003	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025
Molybdenum	mg/L	0.000624	<0.005075	<0.005075	<0.002	<0.002	<0.002	<0.002	0.00359 J	0.00485 J	0.00444 J	0.00489 J
Selenium	mg/L	<0.000508	<0.000508	<0.000508	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Thallium	mg/L	<6.8e-005	<6.8e-005	<6.8e-005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002

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

ANALYTICAL DATA SUMMARY
Ash Pond (08/01/2016 - 09/19/2023)
APC Plant Gorgas
Walker County Alabama

Analyte	Units	GS-AP-MW-2										
		08/21/2017	02/21/2018	05/16/2018	10/16/2018	04/17/2019	09/25/2019	03/25/2020	05/13/2020	09/22/2020	02/01/2021	08/04/2021
Appendix III												
Boron	mg/L	0.102	--	0.147	0.169	0.165	0.153	0.163	0.154	0.133	0.13	0.117
Calcium	mg/L	0.634	--	0.588	0.714	0.511	0.581	0.518	0.493 J	0.503	0.517	0.564
Chloride	mg/L	12	--	12	20	9.5	12	9.7	8.25	6.33	8.42	7.25
Fluoride	mg/L	1.4	1.1	1.1	1	0.868	0.86	0.855	0.777	0.921	0.865	0.932
pH_Field	pH	9.12	9.17	9.28	9.35	9.26	9.31	9.29	9.43	9.41	9.31	9.08
Sulfate	mg/L	55	--	34	90	48.6	47.7	38.5	33.6	21.5	21.3	16.8
TDS	mg/L	416	--	365	430	341	358	337	328	318	--	--
Appendix IV												
Antimony	mg/L	--	<0.0006	<0.0006	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.000507	<0.000508
Arsenic	mg/L	--	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<6.8e-005	<6.8e-005
Barium	mg/L	--	0.0864	0.0658	0.0846	0.0576	0.065	0.0602	0.0528	0.0563	0.0578	0.0702
Beryllium	mg/L	--	<0.0006	<0.0006	0.00138 J	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.000406	<0.000406
Cadmium	mg/L	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<6.8e-005	<6.8e-005
Chromium	mg/L	--	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.000505 J	0.000849 J
Cobalt	mg/L	--	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<6.8e-005	<6.8e-005
Combined Radium 226 + 228	pCi/L	--	0.562	1.44	0.736	0.0905 U	0.537 U	4	0.289 U	0.712	0.518 U	0.502 U
Fluoride	mg/L	1.4	1.1	1.1	1	0.868	0.86	0.855	0.777	0.921	0.865	0.932
Lead	mg/L	--	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<6.8e-005	<6.8e-005
Lithium	mg/L	--	0.0534	0.0451 J	0.0511	0.0421	0.0457	0.0434	0.0409	0.0395	0.0445	0.0443
Mercury	mg/L	--	<0.00025	<0.00025	<0.00025	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Molybdenum	mg/L	--	0.0112	0.00547 J	0.00919 J	0.00293 J	0.00803 J	0.00343 J	0.00224 J	0.00308 J	0.00427	0.00168
Selenium	mg/L	--	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.000507	<0.000508
Thallium	mg/L	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<6.8e-005	<6.8e-005

Notes:

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

ANALYTICAL DATA SUMMARY
Ash Pond (08/01/2016 - 09/19/2023)
APC Plant Gorgas
Walker County Alabama

Analyte	Units	GS-AP-MW-2				GS-AP-MW-3					
		02/22/2022	07/19/2022	03/22/2023	09/18/2023	02/17/2021	08/03/2021	02/16/2022	07/20/2022	03/21/2023	09/12/2023
Appendix III											
Boron	mg/L	0.112	0.106	0.0989 J	0.0952 J	0.426	0.386	0.311	0.292	0.341	0.192
Calcium	mg/L	0.413	0.359 J	0.4 J	0.668	39.3	30.8	18.6	17.6	19.4	9.92
Chloride	mg/L	6.05	4.42	4.23	6.28	17.4	13.6	14	15.3	16	12.5
Fluoride	mg/L	0.819	0.752	0.72	0.822	0.1	0.102	<0.06	<0.06	0.0689 J	0.0808 J
pH_Field	pH	9.42	9.6	9.27	9	7.71	7.82	7.78	8.1	8.19	7.86
Sulfate	mg/L	17.1	19.4	8.17	2.96	158	99.4	91.2	78.6	83.1	47.9
TDS	mg/L	--	--	--	--	--	--	--	--	--	--
Appendix IV											
Antimony	mg/L	<0.000508	<0.000508	<0.00071	<0.00071	<0.000507	<0.000508	<0.000508	<0.000508	<0.00071	<0.00071
Arsenic	mg/L	<6.8e-005	8.33e-005 J	<0.000112	0.000122 J	0.000168 J	0.000144 J	0.000202 J	0.000137 J	0.000162 J	0.000177 J
Barium	mg/L	0.0501	0.0474	0.0456	0.0732	0.59	0.589	0.498	0.492	0.611	0.348
Beryllium	mg/L	<0.000406	<0.000406	<0.000406	<0.000406	<0.000406	<0.000406	<0.000406	<0.000406	<0.000406	<0.000406
Cadmium	mg/L	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005
Chromium	mg/L	0.000443 J	0.000469 J	0.000254 J	0.000325 J	0.000326 J	0.000268 J	0.000267 J	0.000315 J	0.000239 J	0.000254 J
Cobalt	mg/L	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005
Combined Radium 226 + 228	pCi/L	0.21 U	0.306 U	0.0664 U	0.353 U	0.331 U	0.978 U	0.601 U	0.473 U	1.08	0.397 U
Fluoride	mg/L	0.819	0.752	0.72	0.822	0.1	0.102	<0.06	<0.06	0.0689 J	0.0808 J
Lead	mg/L	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	7.3e-005 J
Lithium	mg/L	0.0354	0.033	0.0359	0.0452	0.0995	0.088	0.0732	0.07	0.075	0.0686
Mercury	mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Molybdenum	mg/L	0.00327	0.00146	<0.005075	0.0052 J	0.0113	0.00977	0.00722	0.0066	0.00847 J	<0.005075
Selenium	mg/L	<0.000508	<0.000508	<0.000508	<0.000508	<0.000507	<0.000508	<0.000508	<0.000508	<0.000508	<0.000508
Thallium	mg/L	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005

Notes:

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

ANALYTICAL DATA SUMMARY
Ash Pond (08/01/2016 - 09/19/2023)
APC Plant Gorgas
Walker County Alabama

Analyte	**Units**	GS-AP-MW-6S									
		08/03/2016	09/20/2016	10/26/2016	12/12/2016	02/06/2017	03/27/2017	04/24/2017	06/06/2017	08/21/2017	02/19/2018
Appendix III											
Boron	mg/L	1.16	1.16	1.24	1.24	1.1	1.04	1	1.02	1.05	--
Calcium	mg/L	42.5	51.1	65.6	66.5	73.1	71.9	73.5	71.8	63.5	--
Chloride	mg/L	21.9	20.9	20.7	21.1	23.3	25	24	22	21	--
Fluoride	mg/L	0.099 J	0.074 J	0.032 J	0.034 J	0.06 J	0.07 J	0.08 J	0.09 J	0.1	0.1
pH_Field	pH	6.81	6.72	6.68	6.76	6.75	6.67	6.81	6.8	6.78	6.85
Sulfate	mg/L	203	209	224	249	309	290	300	310	260	--
TDS	mg/L	394	444	456	491	580	554	566	580	524	--
Appendix IV											
Antimony	mg/L	<0.0006	<0.0006	<0.0006	0.000727 J	<0.0006	<0.0006	<0.0006	<0.0006	--	<0.0006
Arsenic	mg/L	0.0103	0.0103	0.0115	0.0106	0.0106	0.00989	0.00907	0.0105	--	0.0108
Barium	mg/L	0.27	0.228	0.23	0.276	0.25	0.196	0.159	0.137	--	0.145
Beryllium	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	--	<0.0006
Cadmium	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	--	<0.0003
Chromium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002
Cobalt	mg/L	<0.002	<0.002	<0.002	0.00212 J	0.00247 J	0.00224 J	<0.002	0.00222 J	--	<0.002
Combined Radium 226 + 228	pCi/L	1.38	1.3	0.721 U	1.36	0.702	0.325 U	0.436 U	0.592	--	0.776
Fluoride	mg/L	0.099 J	0.074 J	0.032 J	0.034 J	0.06 J	0.07 J	0.08 J	0.09 J	0.1	0.1
Lead	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	--	<0.001
Lithium	mg/L	<0.01	<0.01	0.0199 J	<0.01	<0.01	<0.01	<0.01	<0.01	--	<0.01
Mercury	mg/L	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	--	<0.00025
Molybdenum	mg/L	<0.002	0.00202 J	0.00599 J	0.00214 J	<0.002	<0.002	<0.002	<0.002	--	<0.002
Selenium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002
Thallium	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	--	<0.0002

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

ANALYTICAL DATA SUMMARY
Ash Pond (08/01/2016 - 09/19/2023)
APC Plant Gorgas
Walker County Alabama

Analyte	Units	GS-AP-MW-6S										
		05/14/2018	10/15/2018	04/16/2019	09/23/2019	03/17/2020	09/16/2020	02/03/2021	07/27/2021	02/14/2022	07/26/2022	03/14/2023
Appendix III												
Boron	mg/L	0.99	1.05	0.961	1.08	0.867	0.8	0.817	0.873	0.978	1.12	0.933
Calcium	mg/L	67.5	68.9	57.1	60	59.3	55.9	50.7	52.6	60.1	51.8	50.4
Chloride	mg/L	20	20	23.1	23.4	17.4	14.6	14.9	17	20.5	22.8	18.6
Fluoride	mg/L	0.13	0.14	0.147	0.142	0.231	0.308	0.195	0.2	0.164	0.164	0.153
pH_Field	pH	6.82	6.78	6.82	6.51	6.92	6.93	7.05	6.67	6.99	6.97	7.04
Sulfate	mg/L	210	170	195	176	148	115	116	114	120	109	96.1
TDS	mg/L	458	404	382	381	328	269	--	--	--	--	--
Appendix IV												
Antimony	mg/L	<0.0006	<0.0008	<0.0008	<0.0008	<0.0008	0.000948 J	0.00055 J	0.00123	0.00071 J	0.000656 J	<0.00071
Arsenic	mg/L	0.00864	0.00832	0.0164	0.0105	0.00778	0.00611	0.0071	0.00634	0.0108	0.00935	0.00908
Barium	mg/L	0.12	0.118	0.124	0.124	0.0725	0.0682	0.0779	0.0876	0.097	0.0978	0.108
Beryllium	mg/L	<0.0006	0.000794 J	<0.0006	<0.0006	<0.0006	<0.0006	<0.000406	<0.000406	<0.000406	<0.000406	<0.000406
Cadmium	mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005
Chromium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.000268 J	0.000239 J	0.000259 J	0.000359 J	<0.000203
Cobalt	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.000663	0.000643	0.000708	0.000733	0.000702
Combined Radium 226 + 228	pCi/L	-0.169 U	0.792	1.11	1.06	0.351 U	1.05	0.489 U	0.87 U	0.14 U	--	0.424 U
Fluoride	mg/L	0.13	0.14	0.147	0.142	0.231	0.308	0.195	0.2	0.164	0.164	0.153
Lead	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<6.8e-005	7.75e-005 J	<6.8e-005	9.8e-005 J	<6.8e-005
Lithium	mg/L	0.0238 J	0.03	<0.01	0.0105 J	0.0695	0.066	0.0455	0.0576	0.0625	0.0665	0.0468
Mercury	mg/L	<0.00025	<0.00025	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Molybdenum	mg/L	0.00526 J	0.00644 J	0.00246 J	0.00412 J	0.0272	0.0427	0.0218	0.0452	0.0411	0.0377	0.0298
Selenium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.000794 J	0.00124	0.000883 J	0.00086 J	0.000886 J
Thallium	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005

Notes:

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

Southern Company

ANALYTICAL DATA SUMMARY
Ash Pond (08/01/2016 - 09/19/2023)
APC Plant Gorgas
Walker County Alabama

Analyte	Units	GS-AP-MW-6S	GS-AP-MW-6D								
		09/05/2023	08/03/2016	09/20/2016	10/24/2016	12/12/2016	02/06/2017	03/27/2017	04/24/2017	06/06/2017	08/21/2017
Appendix III											
Boron	mg/L	1.15	1.04	1.01	1.08	1.09	1.06	1.07	1.08	1.11	0.906
Calcium	mg/L	55.7	48.1	51.2	49.5	54.3	51.2	51.4	54.7	53.9	47.3
Chloride	mg/L	19.1	5.2	5.31	5.4	5.46	5.28	6.4	6.5	4.7	6.1
Fluoride	mg/L	0.152	0.127 J	0.087 J	0.019 J	0.043 J	0.11	0.12	0.11	0.12	0.15
pH_Field	pH	6.69	7.27	7.27	7.25	7.26	7.24	7.29	7.46	7.29	7.21
Sulfate	mg/L	111	52	56	57.5	50	54.9	50	56	63	35
TDS	mg/L	--	302	298	306	291	285	305	301	311	289
Appendix IV											
Antimony	mg/L	<0.00071	<0.0006	<0.0006	<0.0006	0.00104 J	<0.0006	<0.0006	<0.0006	<0.0006	--
Arsenic	mg/L	0.0126	0.0547	0.0625	0.0695	0.0611	0.0618	0.0711	0.0787	0.0778	--
Barium	mg/L	0.102	0.852	0.685	0.711	0.789	0.779	0.77	0.716	0.611	--
Beryllium	mg/L	<0.000406	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	--
Cadmium	mg/L	<6.8e-005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	--
Chromium	mg/L	<0.000203	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--
Cobalt	mg/L	0.000639	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--
Combined Radium 226 + 228	pCi/L	0.382 U	0.42 U	1.13	0.327 U	1.26	0.532	0.334 U	0.492	0.156 U	--
Fluoride	mg/L	0.152	0.127 J	0.087 J	0.019 J	0.043 J	0.11	0.12	0.11	0.12	0.15
Lead	mg/L	<6.8e-005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	--
Lithium	mg/L	0.0773	0.204	0.223	0.243	0.22	0.247	0.263	0.237	0.259	--
Mercury	mg/L	<0.0003	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	--
Molybdenum	mg/L	0.0408	0.00372 J	0.00481 J	0.00496 J	0.00467 J	0.00468 J	0.00548 J	0.00606 J	0.00545 J	--
Selenium	mg/L	<0.000508	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--
Thallium	mg/L	<6.8e-005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	--

Notes:

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

ANALYTICAL DATA SUMMARY
Ash Pond (08/01/2016 - 09/19/2023)
APC Plant Gorgas
Walker County Alabama

Analyte	Units	GS-AP-MW-6D										
		02/19/2018	05/14/2018	10/15/2018	04/16/2019	09/23/2019	03/17/2020	09/17/2020	02/03/2021	07/27/2021	02/14/2022	07/25/2022
Appendix III												
Boron	mg/L	--	1.04	1.06	1.09	1.15	1.17	1.22	1.24	1.29	1.29	1.39
Calcium	mg/L	--	54.8	53.9	53.5	56.1	57.2	61.5	56.9	55.5	55.7	57.9
Chloride	mg/L	--	6	7	8.93	8.72	10.1	10.5	12.2	11.1	11.7	9.59
Fluoride	mg/L	0.13	0.13	0.16	0.193	0.132	0.132	0.133	0.135	0.127	0.108	0.1 J
pH_Field	pH	7.36	7.36	7.33	7.26	7.23	7.39	7.41	7.55	6.79	7.43	6.95
Sulfate	mg/L	--	46	37	46.2	47.9	59.5	65.1	58.9	64.4	58.3	57.7
TDS	mg/L	--	303	309	277	296	303	314	--	--	--	--
Appendix IV												
Antimony	mg/L	<0.0006	<0.0006	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.000507	<0.000508	<0.000508	<0.000508
Arsenic	mg/L	0.0616	0.074	0.0758	0.0869	0.0876	0.105	0.0931	0.104	0.107	0.12	0.114
Barium	mg/L	0.872	0.914	0.896	0.865	0.903	0.638	0.378	0.443	0.488	0.599	0.544
Beryllium	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.000406	<0.000406	<0.000406	<0.000406
Cadmium	mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005
Chromium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.000264 J	0.000241 J	0.000243 J	0.000301 J
Cobalt	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005
Combined Radium 226 + 228	pCi/L	0.283 U	0.083 U	0.656	0.528	0.677	0.629	0.32 U	0.647 U	0.919 U	1.24	0.513 U
Fluoride	mg/L	0.13	0.13	0.16	0.193	0.132	0.132	0.133	0.135	0.127	0.108	0.1 J
Lead	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<6.8e-005	<6.8e-005	<6.8e-005	0.000171 J
Lithium	mg/L	0.213	0.239	0.236	0.266	0.264	0.292	0.299	0.312	0.326	0.302	0.348
Mercury	mg/L	<0.00025	<0.00025	<0.00025	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Molybdenum	mg/L	0.00537 J	0.00564 J	0.00538 J	0.00762 J	0.00758 J	0.00959 J	0.00924 J	0.0095	0.0101	0.0115	0.011
Selenium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.000507	<0.000508	<0.000508	<0.000508
Thallium	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005

Notes:

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

ANALYTICAL DATA SUMMARY
Ash Pond (08/01/2016 - 09/19/2023)
APC Plant Gorgas
Walker County Alabama

Analyte	Units	GS-AP-MW-6D		GS-AP-MW-7								
		03/14/2023	09/05/2023	08/02/2016	09/21/2016	10/24/2016	12/12/2016	02/06/2017	03/28/2017	04/24/2017	06/07/2017	08/21/2017
Appendix III												
Boron	mg/L	1.32	1.36	1.57	1.4	1.42	1.38	1.44	1.44	1.41	1.45	1.39
Calcium	mg/L	52.4	53.9	19.4	15.4	14.8	15	14.9	14.3	14.5	14.1	12.6
Chloride	mg/L	9.66	9.14	3.7	3.74	3.75	4.06	3.92	4.3	4.6	4.3	4.7
Fluoride	mg/L	0.122 J	0.107 J	0.098 J	0.061 J	<0.01	0.01 J	0.07 J	0.07 J	0.08 J	0.09 J	0.09 J
pH_Field	pH	7.33	7.23	7.72	7.6	7.68	7.72	7.64	7.58	7.68	7.56	7.61
Sulfate	mg/L	57.5	58.7	154	146	131	141	135	140	140	150	140
TDS	mg/L	--	--	358	370	370	353	338	352	362	348	362
Appendix IV												
Antimony	mg/L	<0.00071	<0.00071	<0.0006	<0.0006	<0.0006	0.000891 J	<0.0006	<0.0006	<0.0006	<0.0006	--
Arsenic	mg/L	0.108	0.1	0.188	0.179	0.151	0.181	0.194	0.205	0.202	0.193	--
Barium	mg/L	0.604	0.571	0.0927	0.0979	0.0751	0.0737	0.0773	0.0728	0.0724	0.0581	--
Beryllium	mg/L	<0.000406	<0.000406	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	--
Cadmium	mg/L	<6.8e-005	<6.8e-005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	--
Chromium	mg/L	<0.000203	<0.000203	<0.002	<0.002	0.00216 J	<0.002	<0.002	<0.002	<0.002	<0.002	--
Cobalt	mg/L	<6.8e-005	<6.8e-005	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--
Combined Radium 226 + 228	pCi/L	0.656 U	0.269 U	0.87	0.107 U	0.337 U	0.803	-0.0165 U	0.00697 U	0.672	0.096 U	--
Fluoride	mg/L	0.122 J	0.107 J	0.098 J	0.061 J	<0.01	0.01 J	0.07 J	0.07 J	0.08 J	0.09 J	0.09 J
Lead	mg/L	<6.8e-005	<6.8e-005	0.00279 J	0.0024 J	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	--
Lithium	mg/L	0.308	0.309	0.144	0.136	0.135	0.146	0.182	0.175	0.143	0.152	--
Mercury	mg/L	<0.0003	<0.0003	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	--
Molybdenum	mg/L	0.0104	0.011	0.146	0.146	0.136	0.14	0.15	0.159	0.16	0.15	--
Selenium	mg/L	<0.000508	<0.000508	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--
Thallium	mg/L	<6.8e-005	<6.8e-005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	--

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

ANALYTICAL DATA SUMMARY
Ash Pond (08/01/2016 - 09/19/2023)
APC Plant Gorgas
Walker County Alabama

Analyte	Units	GS-AP-MW-7										
		02/19/2018	05/15/2018	10/15/2018	04/23/2019	09/24/2019	03/17/2020	09/16/2020	02/02/2021	08/09/2021	02/08/2022	07/25/2022
Appendix III												
Boron	mg/L	--	1.5	1.53	1.5	1.6	1.58	1.54	1.6	1.62	1.69	1.73
Calcium	mg/L	--	12.9	12.5	13.8	13.4	13.5	12.2	12.2	11.6	10.7	10.6
Chloride	mg/L	--	4.3	5.1	5.16	5.76	6.65	6.17	6.76	7.03	7.45	7.86
Fluoride	mg/L	0.09 J	0.09 J	0.11	0.111	0.106	0.107	0.126	0.124	0.11	0.0945 J	0.112 J
pH_Field	pH	7.65	7.69	7.62	7.83	7.38	7.72	7.74	7.77	7.49	7.71	7.64
Sulfate	mg/L	--	120	130	156	145	149	131	130	133	138	131
TDS	mg/L	--	338	333	354	344	334	351	--	--	--	--
Appendix IV												
Antimony	mg/L	<0.0006	<0.0006	<0.0008	0.00105 J	<0.0008	<0.0008	<0.0008	<0.000507	<0.000508	<0.000508	<0.000508
Arsenic	mg/L	0.182	0.211	0.217	0.207	0.233	0.285	0.282	0.275	0.282	0.281	0.272
Barium	mg/L	0.0464	0.0501	0.049	0.113	0.0834	0.174	0.124	0.115	0.0891	0.0747	0.0677
Beryllium	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.000406	<0.000406	<0.000406	<0.000406
Cadmium	mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005
Chromium	mg/L	<0.002	<0.002	<0.002	0.00435 J	<0.002	0.0076 J	0.00482 J	0.00435	0.00234	0.00103	0.00103
Cobalt	mg/L	<0.002	<0.002	<0.002	0.00231 J	<0.002	0.00476 J	0.00301 J	0.00248	0.0011	0.000507	0.000372
Combined Radium 226 + 228	pCi/L	0.207 U	0.0311 U	0.309 U	0.0403 U	0.34 U	1.2	1.74	0.373 U	1.23 U	0.355 U	0.455 U
Fluoride	mg/L	0.09 J	0.09 J	0.11	0.111	0.106	0.107	0.126	0.124	0.11	0.0945 J	0.112 J
Lead	mg/L	<0.001	<0.001	<0.001	0.00207 J	<0.001	0.00386 J	0.00295 J	0.00243	0.00119	0.000804	0.000431
Lithium	mg/L	0.143	0.151	0.155	0.144	0.156	0.161	0.16	0.183	0.205	0.203	0.227
Mercury	mg/L	<0.00025	<0.00025	<0.00025	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Molybdenum	mg/L	0.172	0.177	0.168	0.185	0.178	0.193	0.215	0.202	0.207	0.221	0.214
Selenium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.000507	<0.000508	<0.000508	<0.000508
Thallium	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005

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

ANALYTICAL DATA SUMMARY
Ash Pond (08/01/2016 - 09/19/2023)
APC Plant Gorgas
Walker County Alabama

Analyte	Units	GS-AP-MW-7		GS-AP-MW-8								
		03/14/2023	09/11/2023	08/03/2016	09/21/2016	10/25/2016	12/13/2016	02/06/2017	03/28/2017	04/24/2017	06/07/2017	08/21/2017
Appendix III												
Boron	mg/L	1.64	1.71	0.0239 J	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Calcium	mg/L	11	11.2	6.85	11.7	10.8	5.86	9.76	5.28	6.89	3.58	3.38
Chloride	mg/L	7.98	8.17	3.21	2.95	3.03	3.21	3	3.3	3.8	3.5	3.6
Fluoride	mg/L	0.177	0.0913 J	0.125 J	0.098 J	0.025 J	0.045 J	0.1	0.08 J	0.09 J	0.08 J	0.08 J
pH_Field	pH	7.67	7.23	5.84	5.99	5.94	5.84	5.9	5.67	5.79	5.71	5.7
Sulfate	mg/L	130	124	4.2	4.27	2.78	3.18	3.74	3.4 J	2.7 J	2.7 J	3.9 J
TDS	mg/L	--	--	113	128	121	101	108	91	89.3	84	91.3
Appendix IV												
Antimony	mg/L	<0.00071	<0.00071	<0.0006	<0.0006	<0.0006	0.00067 J	<0.0006	<0.0006	<0.0006	<0.0006	--
Arsenic	mg/L	0.249	0.244	0.00214 J	0.00112 J	<0.001	<0.001	0.00111 J	0.00109 J	<0.001	<0.001	--
Barium	mg/L	0.0631	0.0607	0.0274	0.0811	0.0576	0.0241	0.0747	0.0183	0.04	0.00769 J	--
Beryllium	mg/L	<0.000406	<0.000406	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	--
Cadmium	mg/L	<6.8e-005	<6.8e-005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	--
Chromium	mg/L	0.000482 J	0.00042 J	<0.002	0.00266 J	<0.002	<0.002	<0.002	0.00322 J	<0.002	0.00227 J	--
Cobalt	mg/L	9.22e-005 J	0.00025	0.0026 J	0.00362 J	0.00305 J	<0.002	0.00308 J	<0.002	<0.002	<0.002	--
Combined Radium 226 + 228	pCi/L	0.351 U	0.555 U	0.299 U	0.835	0.0629 U	0.547	0.251 U	-0.109 U	0.293 U	0.529	--
Fluoride	mg/L	0.177	0.0913 J	0.125 J	0.098 J	0.025 J	0.045 J	0.1	0.08 J	0.09 J	0.08 J	0.08 J
Lead	mg/L	0.000188 J	0.000325	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	--
Lithium	mg/L	0.207	0.213	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	--
Mercury	mg/L	<0.0003	<0.0003	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	--
Molybdenum	mg/L	0.215	0.228	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--
Selenium	mg/L	<0.000508	<0.000508	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--
Thallium	mg/L	<6.8e-005	<6.8e-005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	--

Notes:

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

ANALYTICAL DATA SUMMARY
Ash Pond (08/01/2016 - 09/19/2023)
APC Plant Gorgas
Walker County Alabama

Analyte	Units	GS-AP-MW-8										
		02/19/2018	05/15/2018	10/16/2018	04/16/2019	09/24/2019	03/18/2020	09/21/2020	02/02/2021	08/10/2021	02/16/2022	08/02/2022
Appendix III												
Boron	mg/L	--	<0.02	<0.02	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Calcium	mg/L	--	4.25	3.21	4.43	7.24	4.51	5.19	4.35	4.47	4.42	5.28
Chloride	mg/L	--	3.3	3.3	3.69	3.21	4.35	3.22	3.85	4.04	4.42	4.35
Fluoride	mg/L	0.08 J	0.1	0.09 J	0.143	0.128	0.108	0.125	0.114	0.0924 J	0.0616 J	0.0815 J
pH_Field	pH	5.78	5.84	5.75	5.76	5.27	5.81	5.75	5.69	5.02	5.8	5.78
Sulfate	mg/L	--	2.5 J	2.4 J	4.53	6.61	4.86	4.69	4.83	3.77	4.68	4.18
TDS	mg/L	--	94.7	76.7	92	109	90.7	94	--	--	--	--
Appendix IV												
Antimony	mg/L	<0.0006	<0.0006	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.000507	<0.000508	<0.000508	<0.000508
Arsenic	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.000228	0.00039	0.000278	0.00016 J
Barium	mg/L	0.00762 J	0.00701 J	0.0094 J	0.00459 J	0.0434	0.00507 J	0.026	0.0068	0.00805	0.00763	0.0116
Beryllium	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.000406	<0.000406	<0.000406	<0.000406
Cadmium	mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005
Chromium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.000389 J	0.000579 J	0.000396 J	0.000629 J
Cobalt	mg/L	<0.002	<0.002	<0.002	<0.002	0.00234 J	<0.002	<0.002	0.000384	0.000586	0.000548	0.00124
Combined Radium 226 + 228	pCi/L	0.497	-0.601 U	0.2 U	0.733	0.753	0.465 U	1.25	0.223 U	0.77 U	0.561 U	0.154 U
Fluoride	mg/L	0.08 J	0.1	0.09 J	0.143	0.128	0.108	0.125	0.114	0.0924 J	0.0616 J	0.0815 J
Lead	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	8.09e-005 J	0.000149 J	<6.8e-005	8.33e-005 J
Lithium	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.00796 J	0.00832 J	0.00826 J	0.01 J
Mercury	mg/L	<0.00025	<0.00025	<0.00025	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Molybdenum	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<6.8e-005	<6.8e-005	0.000118 J	<0.000102
Selenium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.000507	<0.000508	<0.000508	<0.000508
Thallium	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005

Notes:

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

Southern
Company

ANALYTICAL DATA SUMMARY
Ash Pond (08/01/2016 - 09/19/2023)
APC Plant Gorgas
Walker County Alabama

Analyte	Units	GS-AP-MW-8		GS-AP-MW-9								
		03/27/2023	09/18/2023	08/03/2016	09/21/2016	10/25/2016	12/13/2016	02/08/2017	03/28/2017	04/26/2017	06/07/2017	08/22/2017
Appendix III												
Boron	mg/L	<0.03	<0.03	0.264	0.192	0.167	0.143	0.16	0.187	0.187	0.185	0.191
Calcium	mg/L	4.77	6.08	80.8	81.5	81.7	70.1	77.6	84.1	85	83.9	77.6
Chloride	mg/L	4.17	3.07	2.18	2.11	2.06	2.05	2.21	2.3	2.7	2.6	3.3
Fluoride	mg/L	0.112 J	0.106 J	0.123 J	0.09 J	0.028 J	0.049 J	0.1	0.11	0.12	0.12	0.14
pH_Field	pH	5.82	5.42	6.51	6.57	6.58	6.71	6.66	6.65	6.63	6.61	6.7
Sulfate	mg/L	4.41	10.1	218	195	163	155	157	170	160	180	170
TDS	mg/L	--	--	514	508	470	441	442	472	469	503	474
Appendix IV												
Antimony	mg/L	<0.00071	<0.00071	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	--
Arsenic	mg/L	0.000162 J	0.000244	0.00781	0.0062	0.00525	0.00535	0.00659	0.00735	0.00689	0.00743	--
Barium	mg/L	0.00644	0.0289	0.029	0.0218	0.0253	0.0268	0.0264	0.0264	0.0234	0.0229	--
Beryllium	mg/L	<0.000406	<0.000406	<0.0006	<0.0006	<0.0006	<0.0006	0.000705 J	<0.0006	<0.0006	<0.0006	--
Cadmium	mg/L	<6.8e-005	<6.8e-005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	--
Chromium	mg/L	0.000761 J	0.000368 J	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--
Cobalt	mg/L	0.000254	0.00251	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--
Combined Radium 226 + 228	pCi/L	0.142 U	0.74 U	0.241 U	0.304 U	1.34	0.683	0.27 U	0.129 U	0.16 U	0.0871 U	--
Fluoride	mg/L	0.112 J	0.106 J	0.123 J	0.09 J	0.028 J	0.049 J	0.1	0.11	0.12	0.12	0.14
Lead	mg/L	<6.8e-005	<6.8e-005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	--
Lithium	mg/L	0.00968 J	0.00906 J	0.101	0.0902	0.0825	0.0693	0.0935	0.108	0.0901	0.0937	--
Mercury	mg/L	<0.0003	<0.0003	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	--
Molybdenum	mg/L	<0.005075	<0.005075	0.00571 J	0.005 J	0.00452 J	0.00467 J	0.0067 J	0.00752 J	0.00676 J	0.00701 J	--
Selenium	mg/L	<0.000508	<0.000508	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--
Thallium	mg/L	<6.8e-005	<6.8e-005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	--

Notes:

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

ANALYTICAL DATA SUMMARY
Ash Pond (08/01/2016 - 09/19/2023)
APC Plant Gorgas
Walker County Alabama

Analyte	Units	GS-AP-MW-9				GS-AP-MW-10	GS-AP-MW-11				
		02/20/2018	05/15/2018	10/16/2018	04/16/2019	03/27/2023	08/02/2016	09/21/2016	10/25/2016	12/13/2016	02/08/2017
Appendix III											
Boron	mg/L	--	0.16	0.1 J	0.0979 J	--	<0.02	<0.02	<0.02	0.0362 J	<0.02
Calcium	mg/L	--	76.2	71.2	73.3	--	43.5	43.6	42.6	41.4	44.6
Chloride	mg/L	--	2.1	2.3	2.81	--	6.7	6.28	5.53	4.84	4.84
Fluoride	mg/L	0.13	0.14	0.15	0.154	--	0.14 J	0.098 J	0.031 J	0.04 J	0.11
pH_Field	pH	6.75	6.78	6.72	6.69	--	7.14	7.05	6.97	7.01	6.93
Sulfate	mg/L	--	130	120	154	--	20.5	21.3	20.1	21.7	21.1
TDS	mg/L	--	426	417	397	--	235	232	229	227	236
Appendix IV											
Antimony	mg/L	<0.0006	<0.0006	<0.0008	<0.0008	--	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006
Arsenic	mg/L	0.00676	0.00698	0.00473 J	0.00403 J	--	<0.001	<0.001	<0.001	<0.001	<0.001
Barium	mg/L	0.0255	0.0258	0.0282	0.0256	--	0.245	0.203	0.218	0.22	0.234
Beryllium	mg/L	<0.0006	<0.0006	0.000893 J	<0.0006	--	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006
Cadmium	mg/L	<0.0003	<0.0003	<0.0003	<0.0003	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Chromium	mg/L	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.002	<0.002
Cobalt	mg/L	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.002	<0.002
Combined Radium 226 + 228	pCi/L	0.882	-0.462 U	0.761	-0.065 U	0.422 U	0.105 U	0.694	0.241 U	0.499	0.596
Fluoride	mg/L	0.13	0.14	0.15	0.154	--	0.14 J	0.098 J	0.031 J	0.04 J	0.11
Lead	mg/L	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	<0.001
Lithium	mg/L	0.0833	0.0861	0.0676	0.0673	--	0.0146 J	0.0141 J	0.012 J	0.0138 J	0.0148 J
Mercury	mg/L	<0.00025	<0.00025	<0.00025	<0.0003	--	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025
Molybdenum	mg/L	0.00747 J	0.00736 J	0.00425 J	0.00462 J	--	0.00217 J	<0.002	<0.002	<0.002	<0.002
Selenium	mg/L	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.002	<0.002
Thallium	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002

Notes:

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

ANALYTICAL DATA SUMMARY
Ash Pond (08/01/2016 - 09/19/2023)
APC Plant Gorgas
Walker County Alabama

Analyte	Units	GS-AP-MW-11								
		03/28/2017	03/29/2017	04/26/2017	06/07/2017	08/22/2017	02/20/2018	05/15/2018	10/16/2018	04/16/2019
Appendix III										
Boron	mg/L	<0.02	--	<0.02	<0.02	<0.02	--	0.0255 J	0.0221 J	<0.03
Calcium	mg/L	44.4	--	46	45.1	42.4	--	47	47.7	46.7
Chloride	mg/L	4.4	--	5.5	5.1	6	--	6.9	8.1	8.06
Fluoride	mg/L	0.12	--	0.13	0.13	0.14	0.13	0.14	0.16	0.177
pH_Field	pH	6.92	--	6.91	6.92	7.01	6.98	7.01	7.01	6.93
Sulfate	mg/L	23	--	23	22	21	--	23	22	23.2
TDS	mg/L	228	--	234	223	244	--	246	242	226
Appendix IV										
Antimony	mg/L	<0.0006	--	<0.0006	<0.0006	--	<0.0006	<0.0006	<0.0008	<0.0008
Arsenic	mg/L	<0.001	--	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001
Barium	mg/L	0.226	--	0.222	0.201	--	0.201	0.214	0.233	0.21
Beryllium	mg/L	<0.0006	--	<0.0006	<0.0006	--	<0.0006	<0.0006	<0.0006	<0.0006
Cadmium	mg/L	<0.0002	--	<0.0002	<0.0002	--	<0.0003	<0.0003	<0.0003	<0.0003
Chromium	mg/L	<0.002	--	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.002
Cobalt	mg/L	<0.002	--	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.002
Combined Radium 226 + 228	pCi/L	--	0.403 U	0.258 U	0.077 U	--	0.303 U	-0.232 U	0.307 U	0.609 U
Fluoride	mg/L	0.12	--	0.13	0.13	0.14	0.13	0.14	0.16	0.177
Lead	mg/L	<0.001	--	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001
Lithium	mg/L	0.0149 J	--	0.0123 J	0.0125 J	--	0.0119 J	0.013 J	0.012 J	0.0129 J
Mercury	mg/L	<0.00025	--	<0.00025	<0.00025	--	<0.00025	<0.00025	<0.00025	<0.0003
Molybdenum	mg/L	<0.002	--	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.002
Selenium	mg/L	<0.002	--	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.002
Thallium	mg/L	<0.0002	--	<0.0002	<0.0002	--	<0.0002	<0.0002	<0.0002	<0.0002

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

ANALYTICAL DATA SUMMARY
Ash Pond (08/01/2016 - 09/19/2023)
APC Plant Gorgas
Walker County Alabama

Analyte	Units	GS-AP-MW-12										
		08/03/2016	09/20/2016	10/25/2016	12/13/2016	02/08/2017	03/29/2017	04/26/2017	06/07/2017	08/22/2017	02/20/2018	05/15/2018
Appendix III												
Boron	mg/L	0.34	0.299	0.323	0.294	0.264	0.246	0.234	0.194	0.156	--	0.0781 J
Calcium	mg/L	36.1	27	26.1	29.4	31.9	31.8	34.6	33.4	31.5	--	34.8
Chloride	mg/L	14.5	12.9	12.2	10.4	8.77	10	9.8	8	6.5	--	4.4
Fluoride	mg/L	0.656	0.691	0.588	0.545	0.79	0.51	0.49	0.43	0.41	0.27	0.23
pH_Field	pH	7.36	7.28	7.23	7.27	7.25	7.34	7.19	7.24	7.31	7.69	7.69
Sulfate	mg/L	19.2	1.42	<0.3	3.21	3.3	3.8 J	1.4 J	1.7 J	4.2 J	--	14
TDS	mg/L	546	542	518	424	379	334	332	308	286	--	235
Appendix IV												
Antimony	mg/L	<0.0006	<0.0006	<0.0006	0.000681 J	<0.0006	<0.0006	<0.0006	<0.0006	--	<0.0006	<0.0006
Arsenic	mg/L	0.11	0.0746	0.0728	0.0538	0.0427	0.0404	0.0372	0.0307	--	0.0282	0.0253
Barium	mg/L	0.144	0.102	0.109	0.115	0.122	0.116	0.127	0.115	--	0.132	0.163
Beryllium	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	--	<0.0006	<0.0006
Cadmium	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	--	<0.0003	<0.0003
Chromium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002
Cobalt	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002
Combined Radium 226 + 228	pCi/L	1.08	0.848	0.92	0.974	0.535	0.194 U	0.384 U	0.729	--	0.242 U	0.433 U
Fluoride	mg/L	0.656	0.691	0.588	0.545	0.79	0.51	0.49	0.43	0.41	0.27	0.23
Lead	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001
Lithium	mg/L	0.0265 J	0.0225 J	0.0217 J	0.026 J	0.0315 J	0.0308 J	0.0248 J	0.0234 J	--	0.058	0.0489 J
Mercury	mg/L	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	--	<0.00025	<0.00025
Molybdenum	mg/L	0.0269	0.00762 J	0.00456 J	0.00411 J	0.00235 J	<0.002	<0.002	<0.002	--	<0.002	<0.002
Selenium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002
Thallium	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	--	<0.0002	<0.0002

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

ANALYTICAL DATA SUMMARY
Ash Pond (08/01/2016 - 09/19/2023)
APC Plant Gorgas
Walker County Alabama

Analyte	Units	GS-AP-MW-12										
		10/16/2018	04/16/2019	09/25/2019	03/18/2020	09/23/2020	02/01/2021	08/09/2021	02/28/2022	07/19/2022	03/22/2023	09/13/2023
Appendix III												
Boron	mg/L	0.057 J	0.0385 J	0.122	0.0449 J	0.0446 J	0.0672 J	<0.03	0.0305 J	<0.03	<0.03	<0.03
Calcium	mg/L	35.6	38.3	48.1	44	45.9	45.8	40.2	37.9	37.6	36.4	41.8
Chloride	mg/L	3.1	3.22	6.68	4.22	3.15	3.32	2.75	3.34	2.99	2.73	3.19
Fluoride	mg/L	0.23	0.188	0.168	0.122	0.12	0.126	0.139	0.12	0.0983 J	0.0941 J	0.0944 J
pH_Field	pH	7.51	7.41	7.38	7.56	8.3	7.55	7.98	8.12	8.79	8.15	8.96
Sulfate	mg/L	13	13.3	25.5	20.8	19.1	18.7	17.3	17.9	18.5	18.3	18.9
TDS	mg/L	211	193	253	236	216	--	--	--	--	--	--
Appendix IV												
Antimony	mg/L	<0.0008	<0.0008	<0.0008	0.0022 J	0.00202 J	0.000518 J	0.00179	0.00415	0.00556	0.00257	0.00236
Arsenic	mg/L	0.0203	0.014	0.0135	0.00693	0.00616	0.00747	0.00308	0.00343	0.00407	0.00135	0.00071
Barium	mg/L	0.159	0.161	0.202	0.195	0.193	0.201	0.194	0.173	0.188	0.22	0.182
Beryllium	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.000406	<0.000406	<0.000406	<0.000406	<0.000406	<0.000406
Cadmium	mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005
Chromium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.000203	0.000308 J	<0.000203	0.000322 J	<0.000203	<0.000203
Cobalt	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005
Combined Radium 226 + 228	pCi/L	0.421 U	0.184 U	0.442 U	0.605	0.811 U	0.946 U	0.907 U	0.725 U	0.934 U	1.18	0.495 U
Fluoride	mg/L	0.23	0.188	0.168	0.122	0.12	0.126	0.139	0.12	0.0983 J	0.0941 J	0.0944 J
Lead	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005
Lithium	mg/L	0.0341	0.0261	0.028	0.0297	0.0279	0.0249	0.0354	0.0523	0.0631	0.0468	0.0481
Mercury	mg/L	<0.00025	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Molybdenum	mg/L	<0.002	<0.002	<0.002	0.00444 J	0.00577 J	0.00792	0.00452	0.00903	0.0112	0.00512 J	0.00555 J
Selenium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.000507	<0.000508	<0.000508	<0.000508	<0.000508	<0.000508
Thallium	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005

Notes:

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

ANALYTICAL DATA SUMMARY
Ash Pond (08/01/2016 - 09/19/2023)
APC Plant Gorgas
Walker County Alabama

Analyte	Units	GS-AP-MW-13										
		08/02/2016	09/20/2016	10/25/2016	12/13/2016	02/08/2017	03/29/2017	04/26/2017	06/07/2017	08/22/2017	02/20/2018	05/15/2018
Appendix III												
Boron	mg/L	<0.02	<0.02	<0.02	<0.0322	<0.02	<0.02	<0.02	<0.02	<0.02	--	<0.02
Calcium	mg/L	47.2	46.3	46.6	43.1	47.5	46.8	48.1	44.4	42.9	--	44.3
Chloride	mg/L	2.91	2.94	2.94	2.93	2.85	3.4	3.7	3.3	3.4	--	3.2
Fluoride	mg/L	0.161 J	0.122 J	0.058 J	0.072 J	0.16	0.14	0.16	0.15	0.18	0.17	0.17
pH_Field	pH	6.8	6.8	6.85	6.8	6.76	6.76	6.71	6.71	6.84	6.77	6.8
Sulfate	mg/L	12	11.2	10.1	11.4	10.9	11	11	11	11	--	11
TDS	mg/L	221	221	226	211	212	217	202	218	224	--	209
Appendix IV												
Antimony	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	--	<0.0006	<0.0006
Arsenic	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001
Barium	mg/L	0.184	0.153	0.176	0.184	0.189	0.184	0.177	0.164	--	0.165	0.172
Beryllium	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	--	<0.0006	<0.0006
Cadmium	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	--	<0.0003	<0.0003
Chromium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002
Cobalt	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002
Combined Radium 226 + 228	pCi/L	0.0177 U	0.725	0.494 U	0.39 U	0.455 U	0.251 U	0.0762 U	0.32 U	--	0.465	0.0571 U
Fluoride	mg/L	0.161 J	0.122 J	0.058 J	0.072 J	0.16	0.14	0.16	0.15	0.18	0.17	0.17
Lead	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001
Lithium	mg/L	0.0121 J	0.0116 J	0.0114 J	0.0116 J	0.0118 J	0.0118 J	<0.01	<0.01	--	<0.01	0.0101
Mercury	mg/L	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	--	<0.00025	<0.00025
Molybdenum	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002
Selenium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002
Thallium	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	--	<0.0002	<0.0002

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

ANALYTICAL DATA SUMMARY
Ash Pond (08/01/2016 - 09/19/2023)
APC Plant Gorgas
Walker County Alabama

Analyte	Units	GS-AP-MW-13		GS-AP-MW-14								
		10/17/2018	04/16/2019	08/02/2016	09/19/2016	10/25/2016	12/13/2016	02/08/2017	03/28/2017	04/26/2017	06/07/2017	08/22/2017
Appendix III												
Boron	mg/L	<0.02	<0.03	<0.02	<0.02	<0.02	<0.0322	<0.02	<0.02	<0.02	<0.02	<0.02
Calcium	mg/L	41.8	38.6	36.4	33.9	35.8	35.9	35.7	33.3	35.6	35.8	35.3
Chloride	mg/L	2.3	3.23	5.17	4.9	5.08	5.1	5	5.5	7	6.2	5.9
Fluoride	mg/L	0.19	0.197	0.154 J	0.108 J	0.04 J	0.058 J	0.15	0.15	0.16	0.15	0.17
pH_Field	pH	6.67	6.64	7.39	7.2	7.23	7.19	7.09	7.35	7.16	7.13	7.18
Sulfate	mg/L	12	12.1	10.6	9.9	8.12	10.5	11.1	14	13	13	12
TDS	mg/L	208	185	222	225	219	207	208	222	222	223	243
Appendix IV												
Antimony	mg/L	<0.0008	<0.0008	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	--
Arsenic	mg/L	<0.001	<0.001	0.00189 J	0.00173 J	0.00199 J	0.00186 J	0.00157 J	0.00125 J	0.0011 J	0.00108 J	--
Barium	mg/L	0.165	0.16	0.249	0.219	0.252	0.276	0.277	0.243	0.246	0.225	--
Beryllium	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	--
Cadmium	mg/L	<0.0003	<0.0003	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	--
Chromium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--
Cobalt	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--
Combined Radium 226 + 228	pCi/L	0.482	0.506 U	0.657	0.543	1.12	1.37	0.717	0.618	0.442	-0.113 U	--
Fluoride	mg/L	0.19	0.197	0.154 J	0.108 J	0.04 J	0.058 J	0.15	0.15	0.16	0.15	0.17
Lead	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	--
Lithium	mg/L	<0.01	0.0101 J	0.0425 J	0.0344 J	0.0321 J	0.0281 J	0.0348 J	0.0488 J	0.0431 J	0.0397 J	--
Mercury	mg/L	<0.00025	<0.0003	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	--
Molybdenum	mg/L	<0.002	<0.002	0.00283 J	<0.002	<0.002	<0.002	<0.002	<0.002	0.00212 J	<0.002	--
Selenium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--
Thallium	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	--

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

ANALYTICAL DATA SUMMARY
Ash Pond (08/01/2016 - 09/19/2023)
APC Plant Gorgas
Walker County Alabama

Analyte	Units	GS-AP-MW-14				GS-AP-MW-15						
		02/20/2018	05/16/2018	10/17/2018	04/16/2019	08/01/2016	09/20/2016	10/25/2016	12/14/2016	02/08/2017	03/28/2017	04/26/2017
Appendix III												
Boron	mg/L	--	<0.02	<0.02	<0.03	0.0955 J	0.0706 J	0.0849 J	0.0914 J	0.0524 J	0.0532 J	0.0598 J
Calcium	mg/L	--	39.9	39.3	39.5	10.5	14.7	14.7	11.9	14.4	12.9	10.4
Chloride	mg/L	--	6.5	6.9	7.7	15.6	8.6	7.96	6.94	4.96	5.2	6
Fluoride	mg/L	0.17	0.17	0.18	0.204	1.16	0.7	0.544	0.51	0.56	0.59	0.72
pH_Field	pH	7.19	7.12	7.1	7.03	11.74	10.33	10.24	10.09	9.75	9.9	10.08
Sulfate	mg/L	--	13	13	16.9	102	53.3	49.8	40.9	25	27	29
TDS	mg/L	--	225	199	184	640	434	394	387	303	305	329
Appendix IV												
Antimony	mg/L	<0.0006	<0.0006	<0.0008	<0.0008	0.00115 J	0.000876 J	<0.0006	0.000858 J	<0.0006	<0.0006	<0.0006
Arsenic	mg/L	0.00139 J	0.00112 J	0.00132 J	0.0011 J	0.015	0.0111	0.0109	0.011	0.00625	0.00558	0.007
Barium	mg/L	0.276	0.286	0.314	0.305	0.117	0.193	0.222	0.222	0.294	0.288	0.24
Beryllium	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006
Cadmium	mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Chromium	mg/L	<0.002	<0.002	<0.002	<0.002	0.00209 J	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Cobalt	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Combined Radium 226 + 228	pCi/L	0.186 U	1.07	0.101 U	0.408 U	0.682	1.2	0.194 U	0.688	0.254 U	-0.0411 U	0.207 U
Fluoride	mg/L	0.17	0.17	0.18	0.204	1.16	0.7	0.544	0.51	0.56	0.59	0.72
Lead	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Lithium	mg/L	0.0353 J	0.033 J	0.0327	0.0328	0.393	0.144	0.152	0.136	0.15	0.137	0.123
Mercury	mg/L	<0.00025	<0.00025	<0.00025	<0.0003	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025
Molybdenum	mg/L	<0.002	<0.002	<0.002	<0.002	0.142	0.0683	0.063	0.0604	0.0346	0.0331	0.038
Selenium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Thallium	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002

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

ANALYTICAL DATA SUMMARY
Ash Pond (08/01/2016 - 09/19/2023)
APC Plant Gorgas
Walker County Alabama

Analyte	Units	GS-AP-MW-15										
		06/06/2017	08/22/2017	02/20/2018	05/15/2018	10/15/2018	04/17/2019	09/24/2019	03/18/2020	09/23/2020	02/09/2021	08/03/2021
Appendix III												
Boron	mg/L	0.0576 J	0.0702 J	--	0.0567 J	0.07 J	0.0388 J	0.0607 J	0.0596 J	0.0537 J	0.0521 J	0.0491 J
Calcium	mg/L	9.41	6.89	--	6.86	6.28	8.53	3.26	5.25	3.83	4.38	3.55
Chloride	mg/L	4.9	5.3	--	3.8	6.6	5.2	5.96	8	6	6.12	6.22
Fluoride	mg/L	0.65	0.9	0.6	0.57	0.77	0.463	0.628	0.647	0.452	0.591	0.615
pH_Field	pH	10.2	10.57	10.63	10.71	11.51	10.76	11.7	11.47	11.89	11.88	11.56
Sulfate	mg/L	23	22	--	13	14	9.02	12.4	15.9	13.2	10.6	9.77
TDS	mg/L	331	364	--	340	448	354	536	515	600	--	--
Appendix IV												
Antimony	mg/L	<0.0006	--	0.000636 J	<0.0006	<0.0008	<0.0008	<0.0008	0.000976 J	0.000844 J	0.00075 J	0.000652 J
Arsenic	mg/L	0.00663	--	0.00724	0.00749	0.0123	0.00633	0.011	0.0217	0.0165	0.0145	0.0139
Barium	mg/L	0.228	--	0.224	0.212	0.133	0.264	0.0913	0.14	0.119	0.132	0.129
Beryllium	mg/L	<0.0006	--	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.000406	<0.000406
Cadmium	mg/L	<0.0002	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<6.8e-005	<6.8e-005
Chromium	mg/L	<0.002	--	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.00072 J	0.000802 J
Cobalt	mg/L	<0.002	--	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<6.8e-005	8.79e-005 J
Combined Radium 226 + 228	pCi/L	0.0618 U	--	0.0898 U	0.829	0.708	-0.11 U	0.951	0.939	0.547 U	0.442 U	0.65 U
Fluoride	mg/L	0.65	0.9	0.6	0.57	0.77	0.463	0.628	0.647	0.452	0.591	0.615
Lead	mg/L	<0.001	--	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	8.74e-005 J	7.98e-005 J
Lithium	mg/L	0.123	--	0.149	0.159	0.297	0.19	0.469	0.378	0.414	0.493	0.536
Mercury	mg/L	<0.00025	--	<0.00025	<0.00025	<0.00025	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Molybdenum	mg/L	0.0327	--	0.0362	0.0344	0.0525	0.029	0.0597	0.0673	0.0744	0.0644	0.0663
Selenium	mg/L	<0.002	--	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.000507	<0.000508
Thallium	mg/L	<0.0002	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<6.8e-005	<6.8e-005

Notes:

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

ANALYTICAL DATA SUMMARY
Ash Pond (08/01/2016 - 09/19/2023)
APC Plant Gorgas
Walker County Alabama

Analyte	Units	GS-AP-MW-15				GS-AP-MW-16S						
		02/16/2022	08/02/2022	03/20/2023	09/11/2023	09/21/2020	02/10/2021	06/09/2021	08/03/2021	02/15/2022	05/11/2022	08/02/2022
Appendix III												
Boron	mg/L	0.0323 J	0.0426 J	0.0308 J	0.0337 J	0.0777 J	0.0762 J	0.0817 J	0.0639 J	<0.03	--	<0.03
Calcium	mg/L	6.76	3.31	6.6	5.21	10.9	15.7	4.84	23.9	93.6	--	141
Chloride	mg/L	5.86	4.36	5.41	5.04	5.42	6.17	3.81	3.29	4.03	--	3.82
Fluoride	mg/L	0.349	0.373	0.333	0.425	0.572	0.529	0.527	0.481	0.151	--	0.114 J
pH_Field	pH	11.57	11.84	11.26	11.61	9.99	10.37	9.36	10.68	11.52	--	12.53
Sulfate	mg/L	7.37	9.11	6.57	8.43	2.95	3.84	7.41	9.32	6.47	--	7.43
TDS	mg/L	--	--	--	--	426	--	--	--	--	--	--
Appendix IV												
Antimony	mg/L	0.000778 J	0.000663 J	<0.00071	0.001 J	<0.0008	<0.000507	<0.000507	<0.000508	0.000675 J	--	<0.000508
Arsenic	mg/L	0.00592	0.0104	0.00427	0.00545	0.00174 J	0.00173	0.00256	0.00323	0.0011	--	0.0011
Barium	mg/L	0.271	0.131	0.276	0.188	0.0766	0.0976	0.0177	0.0565	0.255	--	0.41
Beryllium	mg/L	<0.000406	<0.000406	<0.000406	<0.000406	<0.0006	<0.000406	<0.000406	<0.000406	<0.000406	--	<0.000406
Cadmium	mg/L	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<0.0003	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	--	<6.8e-005
Chromium	mg/L	0.000485 J	0.000913 J	0.000384 J	0.000451 J	<0.002	0.000246 J	0.000977 J	0.000844 J	0.000342 J	--	0.000531 J
Cobalt	mg/L	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<0.002	<6.8e-005	0.000113 J	0.000192 J	0.000203	--	0.000299
Combined Radium 226 + 228	pCi/L	0.234 U	1.12	0.679 U	0.497 U	0.47 U	0.63 U	0.61 U	0.362 U	1.23	0.746 U	1.43
Fluoride	mg/L	0.349	0.373	0.333	0.425	0.572	0.529	0.527	0.481	0.151	--	0.114 J
Lead	mg/L	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<0.001	0.000105 J	0.000395	0.000389	<6.8e-005	--	0.000128 J
Lithium	mg/L	0.263	0.529	0.305	0.307	0.074	0.103	0.0574	0.0707	0.0911	--	0.14
Mercury	mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	--	<0.0003
Molybdenum	mg/L	0.0306	0.0642	0.0315	0.0387	0.041	0.0402	0.0217	0.0254	0.0337	--	0.0446
Selenium	mg/L	<0.000508	<0.000508	<0.000508	<0.000508	<0.002	<0.000507	<0.000507	<0.000508	<0.000508	--	0.000526 J
Thallium	mg/L	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<0.0002	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	--	<6.8e-005

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

ANALYTICAL DATA SUMMARY
Ash Pond (08/01/2016 - 09/19/2023)
APC Plant Gorgas
Walker County Alabama

Analyte	Units	GS-AP-MW-16S		GS-AP-MW-16D								
		03/21/2023	09/12/2023	08/01/2016	09/19/2016	10/25/2016	12/13/2016	02/08/2017	03/29/2017	04/26/2017	06/06/2017	08/22/2017
Appendix III												
Boron	mg/L	<0.03	<0.03	0.0266 J	0.0262 J	0.0273 J	0.0258 J	0.0249 J	0.0247 J	0.0264 J	0.0247 J	0.0246 J
Calcium	mg/L	59.2	56.7	33	31.7	32.2	33.1	32.7	32.7	33.8	32.2	30.9
Chloride	mg/L	3.99	4.22	2.6	2.51	2.53	2.53	2.5	2.9	3.2	2.6	2.9
Fluoride	mg/L	0.123 J	0.134	0.117 J	0.078 J	0.018 J	0.035 J	0.1	0.08 J	0.11	0.11	0.11
pH_Field	pH	12.2	12.2	7.53	7.5	7.44	7.45	7.41	7.44	7.47	7.37	7.48
Sulfate	mg/L	7.08	7.94	13.4	12.9	11.6	12.7	12.2	12	13	12	12
TDS	mg/L	--	--	222	220	223	211	206	215	212	227	230
Appendix IV												
Antimony	mg/L	<0.00071	0.000728 J	<0.0006	<0.0006	<0.0006	0.000633 J	<0.0006	<0.0006	<0.0006	<0.0006	--
Arsenic	mg/L	0.00171	0.00259	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	--
Barium	mg/L	0.424	0.252	0.316	0.276	0.3	0.314	0.324	0.316	0.323	0.29	--
Beryllium	mg/L	<0.000406	<0.000406	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	--
Cadmium	mg/L	<6.8e-005	<6.8e-005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	--
Chromium	mg/L	0.00022 J	<0.000203	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--
Cobalt	mg/L	0.000183 J	0.000162 J	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--
Combined Radium 226 + 228	pCi/L	1.04 U	0.858 U	0.363 U	0.435 U	0.725	0.309 U	0.00772 U	0.36 U	0.0175 U	0.464	--
Fluoride	mg/L	0.123 J	0.134	0.117 J	0.078 J	0.018 J	0.035 J	0.1	0.08 J	0.11	0.11	0.11
Lead	mg/L	8.06e-005 J	7.69e-005 J	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	--
Lithium	mg/L	0.101	0.102	0.036 J	0.0346 J	0.0353 J	0.0361 J	0.0401 J	0.0379 J	0.0318 J	0.032 J	--
Mercury	mg/L	<0.0003	<0.0003	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	--
Molybdenum	mg/L	0.0409	0.0432	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--
Selenium	mg/L	0.000703 J	<0.000508	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--
Thallium	mg/L	<6.8e-005	<6.8e-005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	--

Notes:

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

Southern Company

ANALYTICAL DATA SUMMARY
Ash Pond (08/01/2016 - 09/19/2023)
APC Plant Gorgas
Walker County Alabama

Analyte	Units	GS-AP-MW-16D										
		02/21/2018	05/16/2018	10/17/2018	04/17/2019	09/24/2019	03/24/2020	09/22/2020	02/10/2021	08/09/2021	02/15/2022	08/02/2022
Appendix III												
Boron	mg/L	--	0.0247 J	0.0251 J	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Calcium	mg/L	--	33.5	32	32.3	34.3	34.1	32	34.6	33.2	31.5	33.8
Chloride	mg/L	--	3	2.2	2.82	2.9	2.88	2.94	3.19	3.08	3.58	3.65
Fluoride	mg/L	0.11	0.12	0.13	0.171	0.124	0.109	0.123	0.103	0.131	0.114	0.112 J
pH_Field	pH	7.44	7.45	7.41	7.33	7.43	7.46	7.52	7.73	7.53	7.48	7.49
Sulfate	mg/L	--	13	13	14.1	14.1	14.1	13.6	15.8	14.4	14.7	15.6
TDS	mg/L	--	216	191	207	208	205	218	--	--	--	--
Appendix IV												
Antimony	mg/L	<0.0006	<0.0006	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.000507	<0.000508	<0.000508	<0.000508
Arsenic	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.000491	9.58e-005 J	0.000117 J	<8.1e-005
Barium	mg/L	0.3	0.315	0.331	0.322	0.342	0.323	0.342	0.356	0.334	0.322	0.355
Beryllium	mg/L	<0.0006	<0.0006	0.00109 J	<0.0006	<0.0006	<0.0006	<0.0006	<0.000406	<0.000406	<0.000406	<0.000406
Cadmium	mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005
Chromium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.00107	0.000675 J	0.000249 J	0.000402 J
Cobalt	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.000252	8.52e-005 J	<6.8e-005	<6.8e-005
Combined Radium 226 + 228	pCi/L	0.44	0.209 U	0.368 U	0.121 U	-0.033 U	0.636	0.59 U	0.285 U	1.07 U	0.557 U	0.696 U
Fluoride	mg/L	0.11	0.12	0.13	0.171	0.124	0.109	0.123	0.103	0.131	0.114	0.112 J
Lead	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.000873	0.00016 J	<6.8e-005	<6.8e-005
Lithium	mg/L	0.0327 J	0.0337 J	0.0336	0.0349	0.0362	0.035	0.0343	0.0376	0.0326	0.033	0.0343
Mercury	mg/L	<0.00025	<0.00025	<0.00025	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Molybdenum	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.00014 J	0.00069	0.000322	0.000984
Selenium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.000507	<0.000508	<0.000508	<0.000508
Thallium	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005

Notes:

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

ANALYTICAL DATA SUMMARY
Ash Pond (08/01/2016 - 09/19/2023)
APC Plant Gorgas
Walker County Alabama

Analyte	Units	GS-AP-MW-16D		GS-AP-MW-17								
		03/21/2023	09/12/2023	08/01/2016	09/19/2016	10/24/2016	12/13/2016	02/06/2017	03/27/2017	04/24/2017	06/05/2017	08/22/2017
Appendix III												
Boron	mg/L	<0.03	<0.03	0.0712 J	0.0716 J	0.0858 J	0.0875 J	0.0729 J	0.0706 J	0.0737 J	0.0767 J	0.0786 J
Calcium	mg/L	32	33.1	4.52	4.3	4.02	5.5	3.79	3.13	3.41	3.32	3.52
Chloride	mg/L	3.72	4.14	6.47	7.78	7.29	12.2	7.68	9	10	10	12
Fluoride	mg/L	0.0849 J	0.106 J	0.214 J	0.151 J	0.086 J	0.14 J	0.2	0.21	0.2	0.2	0.24
pH_Field	pH	7.51	7.22	8.39	8.42	8.42	8.43	8.38	8.43	8.39	8.42	8.4
Sulfate	mg/L	14.7	15.3	9.56	12.7	8.58	31	14.7	14	22	30	42
TDS	mg/L	--	--	408	441	424	466	414	444	446	493	500
Appendix IV												
Antimony	mg/L	<0.00071	<0.00071	<0.0006	0.000636 J	<0.0006	0.00072 J	<0.0006	<0.0006	<0.0006	<0.0006	--
Arsenic	mg/L	<0.000112	0.000205	0.00138 J	0.00137 J	0.00122 J	0.00243 J	0.00158 J	0.0011 J	0.00133 J	0.00115 J	--
Barium	mg/L	0.324	0.324	0.0696	0.0503	0.0468	0.0472	0.0498	0.0559	0.055	0.0552	--
Beryllium	mg/L	<0.000406	<0.000406	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	--
Cadmium	mg/L	<6.8e-005	<6.8e-005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	--
Chromium	mg/L	<0.000203	0.000226 J	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--
Cobalt	mg/L	<6.8e-005	<6.8e-005	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--
Combined Radium 226 + 228	pCi/L	0.861 U	1.07 U	0.508 U	0.216 U	0.694	0.614	-0.0283 U	0.0736 U	0.114 U	0.476	--
Fluoride	mg/L	0.0849 J	0.106 J	0.214 J	0.151 J	0.086 J	0.14 J	0.2	0.21	0.2	0.2	0.24
Lead	mg/L	<6.8e-005	8.99e-005 J	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	--
Lithium	mg/L	0.034	0.0348	0.0479 J	0.0467 J	0.0462 J	0.0296 J	0.064	0.0683	0.0534	0.0574	--
Mercury	mg/L	<0.0003	<0.0003	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	--
Molybdenum	mg/L	<0.005075	<0.005075	0.00738 J	0.00889 J	0.00819 J	0.0189	0.00852 J	0.00592 J	0.00644 J	0.00537 J	--
Selenium	mg/L	<0.000508	<0.000508	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--
Thallium	mg/L	<6.8e-005	<6.8e-005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	--

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

ANALYTICAL DATA SUMMARY
Ash Pond (08/01/2016 - 09/19/2023)
APC Plant Gorgas
Walker County Alabama

Analyte	Units	GS-AP-MW-17										
		02/19/2018	05/15/2018	10/15/2018	04/17/2019	09/23/2019	03/16/2020	05/12/2020	09/21/2020	02/02/2021	08/03/2021	02/14/2022
Appendix III												
Boron	mg/L	--	0.0953 J	0.0842 J	0.0916 J	0.116	0.0894 J	0.0862 J	0.102	0.0946 J	0.0724 J	0.073 J
Calcium	mg/L	--	4.53	3.38	3.86	5.43	3	2.95	3.73	3.3	2.17	2.17
Chloride	mg/L	--	13	10	12.7	16.2	9.95	9.16	13.8	10.2	5.75	7.15
Fluoride	mg/L	0.34	0.27	0.23	0.354	0.351	0.261	0.263	0.371	0.276	0.3	0.206
pH_Field	pH	8.33	8.3	8.37	8.36	8.37	8.45	8.42	8.22	8.43	8.6	8.32
Sulfate	mg/L	--	54	34	76.6	124	48.6	44.4	104	55.1	7.92	14.4
TDS	mg/L	--	528	462	540	684	516	493	658	--	--	--
Appendix IV												
Antimony	mg/L	<0.0006	<0.0006	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.000507	<0.000508	<0.000508
Arsenic	mg/L	0.00424 J	0.00352 J	0.0018 J	0.00343 J	0.00631	0.00268 J	0.00326 J	0.0055	0.00478	0.000842	0.00112
Barium	mg/L	0.077	0.0751	0.0682	0.0946	0.135	0.0883	0.0941	0.128	0.107	0.0875	0.0945
Beryllium	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.000406	<0.000406	<0.000406
Cadmium	mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<6.8e-005	<6.8e-005	<6.8e-005
Chromium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.00255	0.000408 J	0.000337 J
Cobalt	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.000102 J	<6.8e-005	<6.8e-005
Combined Radium 226 + 228	pCi/L	0.322 U	0.526	0.199 U	0.00935 U	0.983	0.185 U	0.0339 U	0.651 U	2.53	0.667 U	0.523 U
Fluoride	mg/L	0.34	0.27	0.23	0.354	0.351	0.261	0.263	0.371	0.276	0.3	0.206
Lead	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.000175 J	<6.8e-005	<6.8e-005
Lithium	mg/L	0.0481 J	0.0551	0.0606	0.0574	0.0583	0.0665	0.0602	0.0579	0.0634	0.0678	0.0572
Mercury	mg/L	<0.00025	<0.00025	<0.00025	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Molybdenum	mg/L	0.0134	0.00789 J	0.00376 J	0.00661 J	0.011	0.00504 J	0.00436 J	0.00776 J	0.00538	0.00157	0.00252
Selenium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.000507	<0.000508	<0.000508
Thallium	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<6.8e-005	<6.8e-005	<6.8e-005

Notes:

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

ANALYTICAL DATA SUMMARY
Ash Pond (08/01/2016 - 09/19/2023)
APC Plant Gorgas
Walker County Alabama

Analyte	Units	GS-AP-MW-17			GS-AP-MW-18							
		08/08/2022	03/22/2023	09/11/2023	08/02/2016	09/21/2016	10/24/2016	12/12/2016	02/08/2017	03/28/2017	04/26/2017	06/06/2017
Appendix III												
Boron	mg/L	0.0717 J	0.0721 J	0.0835 J	1.21	1.32	1.6	1.82	1.79	1.62	1.53	1.73
Calcium	mg/L	2.44	2.07	2.93	64.2	110	166	204	199	162	159	159
Chloride	mg/L	6.21	5.96	7.59	20.8	23.3	27.9	36	33.3	35	34	36
Fluoride	mg/L	0.257	0.183	0.269	0.219 J	0.213 J	0.141 J	0.206 J	0.34	0.36	0.31	0.29
pH_Field	pH	8.38	8.56	8.19	7.65	7.47	7.44	7.39	7.31	7.6	7.5	7.34
Sulfate	mg/L	8.35	4.78	23.1	295	440	608	755	672	610	600	670
TDS	mg/L	--	--	--	586	848	1100	1260	1160	1100	1090	1170
Appendix IV												
Antimony	mg/L	<0.000508	<0.00071	<0.00071	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006
Arsenic	mg/L	0.000878	0.000896	0.00337	0.0505	0.0527	0.0597	0.0659	0.0669	0.0668	0.0722	0.0673
Barium	mg/L	0.0875	0.0835	0.1	0.21	0.107	0.0999	0.0772	0.0625	0.0581	0.0587	0.0452
Beryllium	mg/L	<0.000406	<0.000406	<0.000406	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006
Cadmium	mg/L	<6.8e-005	<6.8e-005	<6.8e-005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Chromium	mg/L	0.000334 J	<0.000203	0.000262 J	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Cobalt	mg/L	<6.8e-005	<6.8e-005	<6.8e-005	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Combined Radium 226 + 228	pCi/L	0.0413 U	0.602 U	0.43 U	0.665	0.801	0.809	0.628 U	-0.0851 U	0.0973 U	0.388 U	0.0674 U
Fluoride	mg/L	0.257	0.183	0.269	0.219 J	0.213 J	0.141 J	0.206 J	0.34	0.36	0.31	0.29
Lead	mg/L	<6.8e-005	<6.8e-005	<6.8e-005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Lithium	mg/L	0.0646	0.0594	0.0569	0.196	0.25	0.293	0.284 J	0.371	0.316	0.24	0.262
Mercury	mg/L	<0.0003	<0.0003	<0.0003	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025
Molybdenum	mg/L	0.00154	<0.005075	<0.005075	0.0516	0.0567	0.0517	0.0431	0.0381	0.0333	0.0348	0.0384
Selenium	mg/L	<0.000508	<0.000508	<0.000508	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Thallium	mg/L	<6.8e-005	<6.8e-005	<6.8e-005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002

Notes:

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

ANALYTICAL DATA SUMMARY
Ash Pond (08/01/2016 - 09/19/2023)
APC Plant Gorgas
Walker County Alabama

Analyte	Units	GS-AP-MW-18									GS-AP-MW-19	
		08/23/2017	02/21/2018	05/16/2018	10/16/2018	04/17/2019	09/24/2019	03/18/2020	09/23/2020	02/08/2021	08/01/2016	09/21/2016
Appendix III												
Boron	mg/L	1.71	--	1.23	2.12	0.449	0.883	0.492	0.491	0.546	0.0279 J	0.0235 J
Calcium	mg/L	153	--	92.1	203	40.8	57.4	90.9	38.8	45.6	39.6	38.1
Chloride	mg/L	31	--	22	35	6.57	12.3	6.68	5.29	5.48	6.67	6.54
Fluoride	mg/L	0.34	0.46	0.43	0.64	0.638	0.578	0.437	0.575	0.485	0.385	0.303
pH_Field	pH	7.4	7.44	7.47	7.06	7.58	7.49	6.99	7.54	7.49	8.05	8.14
Sulfate	mg/L	560	--	260	520	68.7	119	216	88.9	72.6	9.02	8.38
TDS	mg/L	1020	--	658	1030	358	372	618	380	--	245	267
Appendix IV												
Antimony	mg/L	--	<0.0006	<0.0006	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.000507	<0.0006	<0.0006
Arsenic	mg/L	--	0.0922	0.0876	0.0158	0.0042 J	0.00854	0.00583	0.00873	0.00826	<0.001	<0.001
Barium	mg/L	--	0.0455	0.0505	0.0436	0.0963	0.0896	0.0587	0.0911	0.126	0.492	0.371
Beryllium	mg/L	--	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.000406	<0.0006	<0.0006
Cadmium	mg/L	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<6.8e-005	<0.0002	<0.0002
Chromium	mg/L	--	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.000296 J	<0.002	<0.002
Cobalt	mg/L	--	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<6.8e-005	<0.002	<0.002
Combined Radium 226 + 228	pCi/L	--	0.418 U	1.04	0.779	0.196 U	0.375 U	0.281 U	0.888	0.647 U	0.697 U	1.79
Fluoride	mg/L	0.34	0.46	0.43	0.64	0.638	0.578	0.437	0.575	0.485	0.385	0.303
Lead	mg/L	--	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<6.8e-005	<0.001	<0.001
Lithium	mg/L	--	0.189	0.172	0.314	0.0943	0.114	0.116	0.0895	0.108	0.0252 J	0.0223 J
Mercury	mg/L	--	<0.00025	<0.00025	<0.00025	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.00025	<0.00025
Molybdenum	mg/L	--	0.0441	0.0374	0.0425	0.0114	0.0504	0.00927 J	0.044	0.033	0.00752 J	0.0117
Selenium	mg/L	--	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.000507	<0.002	<0.002
Thallium	mg/L	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<6.8e-005	<0.0002	<0.0002

Notes:

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

ANALYTICAL DATA SUMMARY
Ash Pond (08/01/2016 - 09/19/2023)
APC Plant Gorgas
Walker County Alabama

Analyte	Units	GS-AP-MW-19										
		10/24/2016	12/13/2016	02/07/2017	03/28/2017	04/26/2017	06/06/2017	08/22/2017	02/21/2018	05/16/2018	10/16/2018	04/17/2019
Appendix III												
Boron	mg/L	0.0444 J	0.0285 J	0.03 J	0.0309 J	0.0273 J	0.0212 J	0.0294 J	--	0.0356 J	0.0363 J	0.0336 J
Calcium	mg/L	34.7	44	39	43.9	42.8	43.1	40.7	--	45.3	40.9	38.4
Chloride	mg/L	8.77	6.16	7.57	5.9	6.5	5.5	6.5	--	6.6	6.2	7.27
Fluoride	mg/L	0.24 J	0.188 J	0.38	0.32	0.31	0.31	0.35	0.39	0.36	0.37	0.27
pH_Field	pH	8.55	8.08	8.61	7.94	8.26	8.23	8.1	8.48	8.12	8.22	8.06
Sulfate	mg/L	18.5	7.4	8.16	6.4	4.6 J	5.2	5.3	--	6	5.6	14.3
TDS	mg/L	275	255	272	271	265	287	293	--	301	303	296
Appendix IV												
Antimony	mg/L	<0.0006	0.000613 J	<0.0006	<0.0006	<0.0006	<0.0006	--	<0.0006	<0.0006	<0.0008	<0.0008
Arsenic	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	--	0.00138 J	0.00114 J	0.00216 J	0.00302 J
Barium	mg/L	0.311	0.374	0.368	0.391	0.371	0.33	--	0.291	0.343	0.35	0.316
Beryllium	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	--	<0.0006	<0.0006	<0.0006	<0.0006
Cadmium	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	--	<0.0003	<0.0003	<0.0003	<0.0003
Chromium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.002
Cobalt	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.002
Combined Radium 226 + 228	pCi/L	1.53	0.758	0.473	0.0705 U	0.238 U	0.909	--	0.349 U	1.12	0.856	0.507 U
Fluoride	mg/L	0.24 J	0.188 J	0.38	0.32	0.31	0.31	0.35	0.39	0.36	0.37	0.27
Lead	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001
Lithium	mg/L	0.0247 J	0.0312 J	0.0406 J	0.0309 J	0.0267 J	0.0311 J	--	0.0472 J	0.0391 J	0.0406	0.0429
Mercury	mg/L	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	--	<0.00025	<0.00025	<0.00025	<0.0003
Molybdenum	mg/L	0.0198	0.00703 J	0.0103	0.00599 J	0.00845 J	0.00624 J	--	0.00903 J	0.00515 J	0.00593 J	0.00703 J
Selenium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.002
Thallium	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	--	<0.0002	<0.0002	<0.0002	<0.0002

Notes:

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

ANALYTICAL DATA SUMMARY
Ash Pond (08/01/2016 - 09/19/2023)
APC Plant Gorgas
Walker County Alabama

Analyte	Units	GS-AP-MW-19	GS-AP-MW-19								GS-AP-MW-6V	
		09/24/2019	03/24/2020	09/22/2020	02/08/2021	08/10/2021	02/22/2022	08/03/2022	03/21/2023	09/19/2023	09/08/2020	09/15/2020
Appendix III												
Boron	mg/L	0.0375 J	0.0398 J	0.037 J	0.0336 J	<0.03	<0.03	0.0329 J	0.0334 J	0.0314 J	0.0974 J	0.0974 J
Calcium	mg/L	48.4	41.7	46.9	56.8	54.8	54.6	56.4	46.9	53.5	1.8	1.74
Chloride	mg/L	5.83	6.29	6.6	6	4.85	4.82	5.35	5.22	4.82	50.4	49.8
Fluoride	mg/L	0.307	0.327	0.339	0.319	0.29	0.259	0.231	0.24	0.211	4.46	4.59
pH_Field	pH	7.8	7.93	8.17	7.89	7.72	7.71	7.87	7.85	7.3	8.67	8.76
Sulfate	mg/L	13.8	15.2	16.9	16.2	14.8	13.6	17.1	16.4	13.5	9.06	7.02
TDS	mg/L	302	302	300	--	--	--	--	--	--	810	857
Appendix IV												
Antimony	mg/L	<0.0008	<0.0008	<0.0008	<0.000507	<0.000508	<0.000508	<0.000508	<0.00071	<0.00071	<0.0008	<0.0008
Arsenic	mg/L	0.00289 J	0.00313 J	0.00313 J	0.00178	0.00115	0.000814	0.00223	0.00197	0.0012	<0.001	<0.001
Barium	mg/L	0.356	0.324	0.337	0.36	0.343	0.334	0.348	0.304	0.325	0.164	0.16
Beryllium	mg/L	<0.0006	<0.0006	<0.0006	<0.000406	<0.000406	<0.000406	<0.000406	<0.000406	<0.000406	<0.0006	<0.0006
Cadmium	mg/L	<0.0003	<0.0003	<0.0003	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<0.0003	<0.0003
Chromium	mg/L	<0.002	<0.002	<0.002	0.000258 J	0.000322 J	<0.000203	0.000412 J	<0.000203	0.000417 J	<0.002	<0.002
Cobalt	mg/L	<0.002	<0.002	<0.002	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<0.002	<0.002
Combined Radium 226 + 228	pCi/L	0.664	1.07	2.09	0.947 U	1.42 U	0.639 U	0.53 U	0.407 U	0.662 U	-0.0377 U	1.25
Fluoride	mg/L	0.307	0.327	0.339	0.319	0.29	0.259	0.231	0.24	0.211	4.46	4.59
Lead	mg/L	<0.001	<0.001	<0.001	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<0.001	<0.001
Lithium	mg/L	0.0392	0.0417	0.0435	0.0368	0.0305	0.0269	0.0416	0.0402	0.0336	0.138	0.136
Mercury	mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Molybdenum	mg/L	0.00562 J	0.00605 J	0.0063 J	0.00366	0.00271	0.00267	0.00355	<0.005075	<0.005075	0.00317 J	0.00256 J
Selenium	mg/L	<0.002	<0.002	<0.002	<0.000507	<0.000508	<0.000508	<0.000508	<0.000508	<0.000508	<0.002	<0.002
Thallium	mg/L	<0.0002	<0.0002	<0.0002	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<0.0002	<0.0002

Notes:

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

ANALYTICAL DATA SUMMARY
Ash Pond (08/01/2016 - 09/19/2023)
APC Plant Gorgas
Walker County Alabama

Analyte	Units	GS-AP-MW-6V						GS-AP-MW-21				
		02/03/2021	08/02/2021	02/09/2022	07/25/2022	03/08/2023	09/11/2023	08/02/2016	09/21/2016	10/25/2016	12/14/2016	02/08/2017
Appendix III												
Boron	mg/L	0.1 J	0.101 J	0.101 J	0.0978 J	0.101 J	0.104	0.176	0.0723 J	0.0867 J	0.092 J	0.0803 J
Calcium	mg/L	1.5	2.1	1.29	1.52	1.46	1.22	5.29	4.51	4.92	3.5	3.75
Chloride	mg/L	48	94.1	53.3	50.7	50.4	44.6	28.1	26.8	26	25.3	23.8
Fluoride	mg/L	4.28	4.45	4.35	4.56	4.58	4.33	0.282 J	0.231 J	0.137 J	0.131 J	0.25
pH_Field	pH	8.9	8.76	8.8	8.66	8.7	8.44	10.26	10.45	10.42	10.12	10.28
Sulfate	mg/L	4.29	14.1	8.6	6.09	15.2	2.59	9.14	8.71	8.54	11.5	17
TDS	mg/L	--	--	--	--	--	--	348	368	348	352	352
Appendix IV												
Antimony	mg/L	<0.000507	<0.000508	<0.000508	<0.000508	<0.000508	<0.00071	<0.0006	<0.0006	<0.0006	0.00119 J	<0.0006
Arsenic	mg/L	0.000767	0.000936	0.000904	0.000844	0.00113	0.000641	0.0027 J	0.00258 J	0.00214 J	0.00193 J	0.00188 J
Barium	mg/L	0.124	0.143	0.156	0.161	0.183	0.175	0.0535	0.0458	0.0489	0.0494	0.0449
Beryllium	mg/L	<0.000406	<0.000406	<0.000406	<0.000406	<0.000406	<0.000406	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006
Cadmium	mg/L	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Chromium	mg/L	0.000274 J	0.000573 J	0.000418 J	0.000519 J	0.00361	0.00107	<0.002	0.00233 J	0.00204 J	<0.002	<0.002
Cobalt	mg/L	8.19e-005 J	0.000114 J	0.000119 J	0.000146 J	0.000224	0.000263	<0.002	<0.002	<0.002	<0.002	<0.002
Combined Radium 226 + 228	pCi/L	0.2 U	1.53	0.209 U	0.908	0.351 U	0.446 U	0.665	0.532 U	0.601	1.02	-0.074 U
Fluoride	mg/L	4.28	4.45	4.35	4.56	4.58	4.33	0.282 J	0.231 J	0.137 J	0.131 J	0.25
Lead	mg/L	0.000155 J	0.000233	0.000186 J	0.000278	0.00037	0.000503	<0.001	<0.001	<0.001	<0.001	<0.001
Lithium	mg/L	0.156	0.152	0.121	0.138	0.126	0.138	0.145	0.153	0.171	0.182	0.178
Mercury	mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025
Molybdenum	mg/L	0.00284	0.00438	0.00336	0.00208	<0.005075	<0.005075	0.0365	0.0362	0.0326	0.0345	0.0419
Selenium	mg/L	<0.000507	<0.000508	<0.000508	<0.000508	<0.000508	<0.000508	<0.002	<0.002	<0.002	<0.002	<0.002
Thallium	mg/L	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002

Notes:

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

ANALYTICAL DATA SUMMARY
Ash Pond (08/01/2016 - 09/19/2023)
APC Plant Gorgas
Walker County Alabama

Analyte	Units	GS-AP-MW-21										
		03/28/2017	04/26/2017	06/06/2017	08/23/2017	02/20/2018	05/15/2018	10/16/2018	04/17/2019	09/24/2019	03/18/2020	09/23/2020
Appendix III												
Boron	mg/L	0.0804 J	0.0801 J	0.0795 J	0.0764 J	--	0.0769 J	0.0764 J	0.0675 J	0.0843 J	0.0824 J	0.0871 J
Calcium	mg/L	3.63	3.3	3.24	6.6	--	7.57	4.4	2.88	2.47	2.35	1.96
Chloride	mg/L	28	27	28	29	--	27	31	32.3	36	49.5	56.9
Fluoride	mg/L	0.27	0.24	0.25	0.3	0.23	0.24	0.25	0.272	0.209	0.234	0.208
pH_Field	pH	10.67	10.42	10.51	11.91	11.57	11.26	11.34	11.71	11.24	11.37	10.71
Sulfate	mg/L	25	28	33	43	--	110	160	215	224	228	248
TDS	mg/L	370	342	367	508	--	438	520	582	630	661	642
Appendix IV												
Antimony	mg/L	<0.0006	<0.0006	<0.0006	--	<0.0006	<0.0006	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008
Arsenic	mg/L	0.00153 J	0.00135 J	0.00131 J	--	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Barium	mg/L	0.0446	0.0424	0.0402	--	0.0441	0.0456	0.0909	0.0914	0.114	0.105	0.157
Beryllium	mg/L	<0.0006	<0.0006	<0.0006	--	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006
Cadmium	mg/L	<0.0002	<0.0002	<0.0002	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Chromium	mg/L	<0.002	<0.002	<0.002	--	0.00219 J	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Cobalt	mg/L	<0.002	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Combined Radium 226 + 228	pCi/L	0.3 U	0.982 U	0.312 U	--	0.321 U	1.7	0.586	0.47 U	1.08	0.732	0.468 U
Fluoride	mg/L	0.27	0.24	0.25	0.3	0.23	0.24	0.25	0.272	0.209	0.234	0.208
Lead	mg/L	<0.001	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Lithium	mg/L	0.161	0.126	0.135	--	0.158	0.174	0.219	0.312	0.276	0.379	0.179
Mercury	mg/L	<0.00025	<0.00025	<0.00025	--	<0.00025	<0.00025	<0.00025	<0.0003	<0.0003	<0.0003	<0.0003
Molybdenum	mg/L	0.0523	0.0502	0.05	--	0.0966	0.0687	0.061	0.0885	0.0613	0.102	0.0404
Selenium	mg/L	<0.002	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Thallium	mg/L	<0.0002	<0.0002	<0.0002	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002

Notes:

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

Southern Company

ANALYTICAL DATA SUMMARY
Ash Pond (08/01/2016 - 09/19/2023)
APC Plant Gorgas
Walker County Alabama

Analyte	Units	GS-AP-MW-21						GS-AP-MW-9V				
		02/08/2021	08/04/2021	02/08/2022	08/10/2022	03/21/2023	09/05/2023	03/23/2020	09/22/2020	02/02/2021	08/10/2021	02/21/2022
Appendix III												
Boron	mg/L	0.0991 J	0.0993 J	0.111	0.119	0.13	0.14	0.0316 J	0.0348 J	0.0358 J	<0.03	0.0349 J
Calcium	mg/L	1.95	1.76	1.98	3.49	2.74	2	42.9	45.3	44.8	45.1	47.7
Chloride	mg/L	39.8	54.8	41.4	44	38.5	36.6	5.13	7.57	10.8	18.8	18.4
Fluoride	mg/L	0.203	0.24	0.175	0.186	0.194	0.188	0.187	0.174	0.183	0.166	0.177
pH_Field	pH	10.69	10.95	10.26	9.26	9.56	9.81	6.97	7.08	6.94	7.12	7
Sulfate	mg/L	232	231	241	245	238	214	18.7	21.2	31.2	32.7	32.4
TDS	mg/L	--	--	--	--	--	--	268	285	--	--	--
Appendix IV												
Antimony	mg/L	<0.000507	<0.000508	<0.000508	<0.000508	<0.00071	<0.00071	<0.0008	<0.0008	<0.000507	<0.000508	<0.000508
Arsenic	mg/L	0.000624	0.000537	0.000459	0.000495	0.000472	0.000578	<0.001	<0.001	0.000101 J	0.000318	0.000209
Barium	mg/L	0.151	0.148	0.143	0.135	0.127	0.122	0.215	0.187	0.17	0.165	0.161
Beryllium	mg/L	<0.000406	<0.000406	<0.000406	<0.000406	<0.000406	<0.000406	<0.0006	<0.0006	<0.000406	<0.000406	<0.000406
Cadmium	mg/L	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<0.0003	<0.0003	<6.8e-005	<6.8e-005	<6.8e-005
Chromium	mg/L	0.000705 J	0.000422 J	0.000401 J	0.000827 J	0.000459 J	0.000303 J	<0.002	<0.002	0.000228 J	0.000292 J	<0.000203
Cobalt	mg/L	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<0.002	<0.002	<6.8e-005	<6.8e-005	<6.8e-005
Combined Radium 226 + 228	pCi/L	0.667 U	0.337 U	0.529 U	0.395 U	0.213 U	0.199 U	0.156 U	0.536 U	0.154 U	0.895 U	0.134 U
Fluoride	mg/L	0.203	0.24	0.175	0.186	0.194	0.188	0.187	0.174	0.183	0.166	0.177
Lead	mg/L	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<0.001	<0.001	<6.8e-005	<6.8e-005	<6.8e-005
Lithium	mg/L	0.239	0.213	0.0996	0.0868	0.0884	0.102	0.0309	0.0293	0.0299	0.031	0.0293
Mercury	mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Molybdenum	mg/L	0.0396	0.0367	0.0153	0.00802	0.0103	0.0139	<0.002	<0.002	0.000538	0.00269	0.0022
Selenium	mg/L	<0.000507	<0.000508	<0.000508	<0.000508	<0.000508	<0.000508	<0.002	<0.002	<0.000507	<0.000508	<0.000508
Thallium	mg/L	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<0.0002	<0.0002	<6.8e-005	<6.8e-005	<6.8e-005

Notes:

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

ANALYTICAL DATA SUMMARY
Ash Pond (08/01/2016 - 09/19/2023)
APC Plant Gorgas
Walker County Alabama

Analyte	Units	GS-AP-MW-9V			GS-AP-MW-12V							
		07/19/2022	03/27/2023	09/13/2023	02/21/2019	09/25/2019	03/24/2020	09/23/2020	02/01/2021	08/09/2021	02/23/2022	07/20/2022
Appendix III												
Boron	mg/L	0.0327 J	0.0359 J	0.0414 J	0.0303 J	0.0347 J	0.0343 J	0.0322 J	<0.03	<0.03	<0.03	<0.03
Calcium	mg/L	54.7	49	56	52.3	33.4	48.9	44.8	48.9	35.7	46.3	47.5
Chloride	mg/L	18.8	23.2	45.8	3.77	3.84	4.46	4.63	3.86	4.44	3.83	3.85
Fluoride	mg/L	0.159	0.164	0.145	0.205	0.185	0.155	0.176	0.169	0.187	0.153	0.18
pH_Field	pH	6.99	7	6.97	7.82	9.29	7.8	8.84	7.3	8.77	7.73	8.52
Sulfate	mg/L	37.1	47.9	85.2	<0.5	1.61	<0.5	6.56	<0.5	1.85	0.741 J	1.08 J
TDS	mg/L	--	--	--	237	183	206	195	--	--	--	--
Appendix IV												
Antimony	mg/L	<0.000508	<0.00071	<0.00071	0.000841 J	0.0025 J	0.00128 J	0.00152 J	0.000861 J	0.000891 J	0.000555 J	0.000577 J
Arsenic	mg/L	0.000252	0.000153 J	0.000133 J	<0.001	0.00129 J	0.00266 J	0.00176 J	0.00154	0.00112	0.00102	0.00102
Barium	mg/L	0.178	0.184	0.153	1.35	1.06	1.43	1.27	1.6	1.07	1.34	1.21
Beryllium	mg/L	<0.000406	<0.000406	<0.000406	<0.0006	<0.0006	<0.0006	<0.0006	<0.000406	<0.000406	<0.000406	<0.000406
Cadmium	mg/L	<6.8e-005	<6.8e-005	<6.8e-005	<0.0003	<0.0003	<0.0003	<0.0003	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005
Chromium	mg/L	0.000323 J	0.000236 J	<0.000203	<0.002	0.00202 J	0.00774 J	0.00362 J	0.00311	0.00146	0.000607 J	0.000485 J
Cobalt	mg/L	<6.8e-005	<6.8e-005	<6.8e-005	<0.002	<0.002	0.00277 J	<0.002	0.00129	0.000433	0.000127 J	<6.8e-005
Combined Radium 226 + 228	pCi/L	1.03	0.414 U	0.348 U	0.296 U	1.03	0.877 U	1.38	0.944 U	1.19 U	1.3	0.596 U
Fluoride	mg/L	0.159	0.164	0.145	0.205	0.185	0.155	0.176	0.169	0.187	0.153	0.18
Lead	mg/L	<6.8e-005	<6.8e-005	<6.8e-005	<0.001	<0.001	0.00279 J	0.0014 J	0.0013	0.000476	0.00019 J	<6.8e-005
Lithium	mg/L	0.029	0.0298	0.0326	0.0468	0.0611	0.0462	0.0409	0.0384	0.0398	0.0279	0.0309
Mercury	mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Molybdenum	mg/L	0.00146	<0.005075	<0.005075	0.00253 J	0.00942 J	0.00454 J	0.00463 J	0.00164	0.00302	0.00144	0.00204
Selenium	mg/L	<0.000508	<0.000508	<0.000508	<0.002	<0.002	<0.002	<0.002	<0.000507	<0.000508	<0.000508	<0.000508
Thallium	mg/L	<6.8e-005	<6.8e-005	<6.8e-005	<0.0002	<0.0002	<0.0002	<0.0002	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005

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

ANALYTICAL DATA SUMMARY
Ash Pond (08/01/2016 - 09/19/2023)
APC Plant Gorgas
Walker County Alabama

Analyte	Units	GS-AP-MW-12V		GS-AP-MW-15V								GS-AP-PZ-16
		03/22/2023	09/13/2023	03/18/2020	09/21/2020	02/09/2021	08/03/2021	02/16/2022	08/02/2022	03/20/2023	09/11/2023	03/24/2020
Appendix III												
Boron	mg/L	<0.03	<0.03	0.0565 J	0.0712 J	0.0722 J	0.0601 J	0.0594 J	0.0649 J	0.0536 J	0.0573 J	0.0772 J
Calcium	mg/L	38	39.2	8.01	8.2	10	10.6	14.3	22.2	18.2	20.3	13.9
Chloride	mg/L	3.77	4.38	108	171	197	176	129	126	93.5	83.9	5.72
Fluoride	mg/L	0.138	0.129	0.243	0.372	0.329	0.278	0.208	0.206	0.183	0.183	0.228
pH_Field	pH	9	8.95	10.89	10.07	9.55	8.97	8.65	8.21	7.96	7.64	7.89
Sulfate	mg/L	1.52 J	1.61 J	261	348	350	241	224	218	176	140	27.7
TDS	mg/L	--	--	873	1090	--	--	--	--	--	--	381
Appendix IV												
Antimony	mg/L	<0.00071	<0.00071	0.0028 J	0.0028 J	0.00237	0.000972 J	0.00113	0.00143	0.00133	0.00129	<0.0008
Arsenic	mg/L	0.000929	0.000958	0.011	0.0167	0.0165	0.0105	0.0081	0.00733	0.00375	0.00436	<0.001
Barium	mg/L	1.24	1.05	0.155	0.18	0.2	0.164	0.2	0.253	0.175	0.186	0.295
Beryllium	mg/L	<0.000406	<0.000406	<0.0006	<0.0006	<0.000406	<0.000406	<0.000406	<0.000406	<0.000406	<0.000406	<0.0006
Cadmium	mg/L	<6.8e-005	<6.8e-005	<0.0003	<0.0003	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<0.0003
Chromium	mg/L	0.000396 J	0.00023 J	0.00716 J	0.00239 J	0.00142	0.000507 J	0.000622 J	0.000427 J	<0.000203	0.000264 J	<0.002
Cobalt	mg/L	<6.8e-005	<6.8e-005	<0.002	<0.002	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<0.002
Combined Radium 226 + 228	pCi/L	1.17	0.427 U	0.566 U	0.494 U	0.55 U	1.13 U	0.841 U	0.437 U	0.484 U	0.44 U	0.847
Fluoride	mg/L	0.138	0.129	0.243	0.372	0.329	0.278	0.208	0.206	0.183	0.183	0.228
Lead	mg/L	8.97e-005 J	<6.8e-005	<0.001	<0.001	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<0.001
Lithium	mg/L	0.0304	0.0306	0.208	0.116	0.122	0.0986	0.0788	0.096	0.0787	0.0849	0.0714
Mercury	mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Molybdenum	mg/L	<0.005075	<0.005075	0.0327	0.0538	0.0522	0.0311	0.0272	0.0295	0.0195	0.0205	<0.002
Selenium	mg/L	<0.000508	<0.000508	<0.002	<0.002	<0.000507	<0.000508	<0.000508	<0.000508	<0.000508	<0.000508	<0.002
Thallium	mg/L	<6.8e-005	<6.8e-005	<0.0002	<0.0002	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<0.0002

Notes:

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

ANALYTICAL DATA SUMMARY
Ash Pond (08/01/2016 - 09/19/2023)
APC Plant Gorgas
Walker County Alabama

Analyte	Units	GS-AP-PZ-16							GS-AP-MW-17V			
		09/17/2020	02/17/2021	08/09/2021	02/15/2022	07/26/2022	03/21/2023	09/12/2023	02/20/2019	09/24/2019	03/25/2020	09/23/2020
Appendix III												
Boron	mg/L	0.0824 J	0.089 J	0.0747 J	0.0781 J	0.0612 J	0.0798 J	0.0808 J	0.0337 J	0.0532 J	0.0482 J	0.0478 J
Calcium	mg/L	9.69	9.59	18.5	11.5	13.7	12.4	10.4	30.6	29.7	31.1	29.3
Chloride	mg/L	6.57	6.69	6.22	5.84	4.94	5.96	6.03	3.56	3.69	3.72	3.74
Fluoride	mg/L	0.237	0.219	0.235	0.258	0.206	0.171	0.2	0.239	0.245	0.243	0.278
pH_Field	pH	9.15	8.32	9.09	9.34	9.29	8.44	7.95	8.03	7.65	7.63	7.53
Sulfate	mg/L	15.2	14.1	13.6	23.1	38	8.8	8.92	15.2	11.8	9.69	11.1
TDS	mg/L	387	--	--	--	--	--	--	346	365	364	368
Appendix IV												
Antimony	mg/L	<0.0008	<0.000507	<0.000508	<0.000508	<0.000508	<0.00071	<0.00071	0.00115 J	<0.0008	<0.0008	<0.0008
Arsenic	mg/L	<0.001	0.000258	0.00059	0.00112	0.00761	<0.000112	0.000121 J	0.0011 J	0.00149 J	<0.001	<0.001
Barium	mg/L	0.223	0.27	0.244	0.205	0.198	0.248	0.266	0.191	0.208	0.314	0.299
Beryllium	mg/L	<0.0006	<0.000406	<0.000406	<0.000406	<0.000406	<0.000406	<0.000406	<0.0006	<0.0006	<0.0006	<0.0006
Cadmium	mg/L	<0.0003	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<0.0003	<0.0003	<0.0003	<0.0003
Chromium	mg/L	<0.002	<0.000203	0.000403 J	0.000297 J	0.000449 J	<0.000203	<0.000203	<0.002	0.00405 J	<0.002	<0.002
Cobalt	mg/L	<0.002	<6.8e-005	<6.8e-005	8.11e-005 J	7.55e-005 J	<6.8e-005	<6.8e-005	<0.002	<0.002	<0.002	<0.002
Combined Radium 226 + 228	pCi/L	0.438 U	0.753 U	1.47	1.12 U	1.13	0.891 U	0.388 U	0.398 U	0.373 U	0.0656 U	0.542 U
Fluoride	mg/L	0.237	0.219	0.235	0.258	0.206	0.171	0.2	0.239	0.245	0.243	0.278
Lead	mg/L	<0.001	0.000148 J	0.000236	0.000665	0.000603	0.000192 J	0.000234	0.00189 J	<0.001	<0.001	<0.001
Lithium	mg/L	0.073	0.0762	0.0657	0.0614	0.0839	0.0522	0.0526	0.0671	0.0809	0.0646	0.0574
Mercury	mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Molybdenum	mg/L	0.00241 J	0.00132	0.00221	0.00266	0.0044	<0.005075	<0.005075	0.00577 J	0.00906 J	0.00508 J	0.00664 J
Selenium	mg/L	<0.002	<0.000507	<0.000508	<0.000508	<0.000508	<0.000508	<0.000508	<0.002	<0.002	<0.002	<0.002
Thallium	mg/L	<0.0002	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<0.0002	<0.0002	<0.0002	<0.0002

Notes:

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

ANALYTICAL DATA SUMMARY
Ash Pond (08/01/2016 - 09/19/2023)
APC Plant Gorgas
Walker County Alabama

Analyte	Units	GS-AP-MW-17V							GS-AP-PZ-18		
		02/02/2021	08/02/2021	02/14/2022	05/11/2022	08/09/2022	03/22/2023	09/11/2023	03/25/2020	09/22/2020	02/10/2021
Appendix III											
Boron	mg/L	0.0396 J	0.0368 J	0.0386 J	--	0.0418 J	0.0379 J	0.0388 J	0.0568 J	0.0603 J	0.0701 J
Calcium	mg/L	31.8	33	30.1	--	31.4	29.6	31.1	34.5	26.2	40.5
Chloride	mg/L	3.49	3.12	3.26	--	3.09	2.8	2.83	2.88	2.73	3.2
Fluoride	mg/L	0.244	0.276	0.237	--	0.245	0.198	0.278	0.396	0.392	0.368
pH_Field	pH	7.58	7.65	7.43	--	7.55	7.61	7.61	6.8	7	6.9
Sulfate	mg/L	8.81	10.2	9.09	--	8.13	10.6	10.7	355	245	390
TDS	mg/L	--	--	--	--	--	--	--	738	648	--
Appendix IV											
Antimony	mg/L	<0.000507	<0.000508	<0.000508	--	<0.000508	<0.00071	<0.00071	<0.0008	<0.0008	<0.000507
Arsenic	mg/L	0.000243	0.000135 J	0.000469	--	0.000807	0.000293	0.000554	0.0275	0.0119	0.016
Barium	mg/L	0.308	0.353	0.315	--	0.292	0.289	0.288	0.028	0.0432	0.0405
Beryllium	mg/L	<0.000406	<0.000406	<0.000406	--	<0.000406	<0.000406	<0.000406	<0.0006	<0.0006	<0.000406
Cadmium	mg/L	<6.8e-005	<6.8e-005	<6.8e-005	--	<6.8e-005	<6.8e-005	<6.8e-005	<0.0003	<0.0003	<6.8e-005
Chromium	mg/L	0.000313 J	0.000323 J	0.000205 J	--	0.000291 J	<0.000203	<0.000203	<0.002	<0.002	<0.000203
Cobalt	mg/L	<6.8e-005	<6.8e-005	<6.8e-005	--	<6.8e-005	<6.8e-005	<6.8e-005	0.00409 J	0.00226 J	0.00443
Combined Radium 226 + 228	pCi/L	0.448 U	0.738 U	7.76	0.553 U	0.584 U	0.707 U	0.308 U	0.13 U	0.96	0.773 U
Fluoride	mg/L	0.244	0.276	0.237	--	0.245	0.198	0.278	0.396	0.392	0.368
Lead	mg/L	<6.8e-005	<6.8e-005	<6.8e-005	--	<6.8e-005	<6.8e-005	<6.8e-005	<0.001	<0.001	<6.8e-005
Lithium	mg/L	0.0585	0.056	0.0499	--	0.0555	0.0507	0.0516	0.109	0.0789	0.12
Mercury	mg/L	<0.0003	<0.0003	<0.0003	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Molybdenum	mg/L	0.00252	0.00206	0.00276	--	0.00298	<0.005075	<0.005075	0.00919 J	0.00496 J	0.00511
Selenium	mg/L	<0.000507	<0.000508	<0.000508	--	<0.000508	<0.000508	<0.000508	<0.002	<0.002	<0.000507
Thallium	mg/L	<6.8e-005	<6.8e-005	<6.8e-005	--	<6.8e-005	<6.8e-005	<6.8e-005	<0.0002	<0.0002	<6.8e-005

Notes:

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

ANALYTICAL DATA SUMMARY
Ash Pond (08/01/2016 - 09/19/2023)
APC Plant Gorgas
Walker County Alabama

Analyte	Units	GS-AP-MW-18V					GS-AP-MW-21V				
		02/26/2019	03/25/2020	09/22/2020	02/03/2021	02/22/2022	03/23/2020	09/23/2020	02/09/2021	08/11/2021	02/08/2022
Appendix III											
Boron	mg/L	0.109	0.0834 J	0.0769 J	0.0766 J	--	0.122	0.126	0.114	0.0631 J	0.0938 J
Calcium	mg/L	13.6	6.18	5.12	5.57	--	110	119	73.8	13.8	37.2
Chloride	mg/L	7.13	6.23	5.57	5.68	--	981	1100	592	162	432
Fluoride	mg/L	0.165	0.353	0.368	0.334	--	0.494	0.641	0.546	0.41	0.398
pH_Field	pH	7.79	8.19	8.35	8.42	--	7.93	7.81	7.87	8.28	7.98
Sulfate	mg/L	39.9	16.5	14.4	14.6	--	1050	1120	645	137	451
TDS	mg/L	238	287	290	--	--	3410	3690	--	--	--
Appendix IV											
Antimony	mg/L	0.00098 J	<0.0008	<0.0008	<0.000507	--	0.000831 J	<0.0008	0.000661 J	<0.000508	<0.000508
Arsenic	mg/L	0.00368 J	0.0063	0.00654	0.00588	--	0.0159	0.01	0.0063	0.00161	0.00551
Barium	mg/L	0.243	0.234	0.253	0.26	--	0.0574	0.0438	0.028	0.0535	0.0631
Beryllium	mg/L	<0.0006	<0.0006	<0.0006	<0.000406	--	<0.0006	<0.0006	<0.000406	<0.000406	<0.000406
Cadmium	mg/L	<0.0003	<0.0003	<0.0003	<6.8e-005	--	<0.0003	<0.0003	<6.8e-005	<6.8e-005	<6.8e-005
Chromium	mg/L	<0.002	<0.002	<0.002	0.000212 J	--	<0.002	<0.002	0.000218 J	0.00134	0.00041 J
Cobalt	mg/L	<0.002	<0.002	<0.002	<6.8e-005	--	<0.002	<0.002	<6.8e-005	<6.8e-005	<6.8e-005
Combined Radium 226 + 228	pCi/L	0.278 U	-0.00344 U	1.02	0.921 U	0.187 U	0.982	0.563 U	0.867 U	0.782 U	0.467 U
Fluoride	mg/L	0.165	0.353	0.368	0.334	--	0.494	0.641	0.546	0.41	0.398
Lead	mg/L	<0.001	<0.001	<0.001	<6.8e-005	--	<0.001	<0.001	<6.8e-005	<6.8e-005	<6.8e-005
Lithium	mg/L	0.0423	0.0244	0.0254	0.0293	--	0.146	0.137	0.124	0.048	0.0835
Mercury	mg/L	<0.0003	<0.0003	<0.0003	<0.0003	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Molybdenum	mg/L	0.00696 J	0.0217	0.0248	0.0236	--	0.117	0.12	0.0983	0.0394	0.0819
Selenium	mg/L	<0.002	<0.002	<0.002	<0.000507	--	<0.002	<0.002	<0.000507	<0.000508	<0.000508
Thallium	mg/L	<0.0002	<0.0002	<0.0002	<6.8e-005	--	<0.0002	<0.0002	<6.8e-005	<6.8e-005	<6.8e-005

Notes:

1. mg/L - Milligrams per Liter
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Southern Company

ANALYTICAL DATA SUMMARY
Ash Pond (08/01/2016 - 09/19/2023)
APC Plant Gorgas
Walker County Alabama

Analyte	Units	GS-AP-MW-21V			GS-AP-PZ-22							
		08/09/2022	03/21/2023	09/05/2023	03/24/2020	09/17/2020	02/02/2021	08/03/2021	02/14/2022	08/09/2022	03/21/2023	09/11/2023
Appendix III												
Boron	mg/L	0.0869 J	0.106	0.103	0.0521 J	0.0454 J	0.0486 J	0.0478 J	0.047 J	0.0448 J	0.0442 J	0.0462 J
Calcium	mg/L	33	46.6	39.8	19.3	12.6	16.5	16	18.1	11.6	7.61	9.05
Chloride	mg/L	327	564	380	2.53	2.46	2.99	2.67	3.1	2.32	2.8	2.9
Fluoride	mg/L	0.406	0.381	0.391	0.387	0.402	0.389	0.419	0.422	0.338	0.393	0.472
pH_Field	pH	7.9	7.67	7.68	7.77	8.81	7.5	7.74	7.4	8.78	9.53	9.27
Sulfate	mg/L	360	595	430	70.1	79.9	84.1	74.7	91.1	53.8	62.9	66.8
TDS	mg/L	--	--	--	412	438	--	--	--	--	--	--
Appendix IV												
Antimony	mg/L	<0.000508	<0.00071	<0.00071	<0.0008	<0.0008	<0.000507	<0.000508	<0.000508	<0.000508	<0.00071	<0.00071
Arsenic	mg/L	0.00345	0.00444	0.00411	0.00367 J	0.00387 J	0.00338	0.00296	0.00358	0.00231	0.00226	0.00207
Barium	mg/L	0.0477	0.059	0.0484	0.104	0.109	0.0891	0.0953	0.0695	0.106	0.0615	0.0543
Beryllium	mg/L	<0.000406	<0.000406	<0.000406	<0.0006	<0.0006	<0.000406	<0.000406	<0.000406	<0.000406	<0.000406	<0.000406
Cadmium	mg/L	<6.8e-005	<6.8e-005	<6.8e-005	<0.0003	<0.0003	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005
Chromium	mg/L	0.000378 J	0.000223 J	0.000227 J	<0.002	<0.002	<0.000203	0.000242 J	0.000221 J	0.000258 J	<0.000203	<0.000203
Cobalt	mg/L	<6.8e-005	<6.8e-005	<6.8e-005	<0.002	<0.002	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005
Combined Radium 226 + 228	pCi/L	0.458 U	1.07 U	0.86 U	0.878	0.896	1.01 U	0.195 U	0.67 U	0.481 U	1.01 U	0.727 U
Fluoride	mg/L	0.406	0.381	0.391	0.387	0.402	0.389	0.419	0.422	0.338	0.393	0.472
Lead	mg/L	<6.8e-005	<6.8e-005	<6.8e-005	<0.001	<0.001	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	0.000117 J
Lithium	mg/L	0.0789	0.11	0.0928	0.0734	0.0862	0.0743	0.0685	0.055	0.071	0.094	0.0885
Mercury	mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Molybdenum	mg/L	0.0509	0.0361	0.0307	0.00333 J	0.00357 J	0.00367	0.00352	0.00419	0.00294	0.00545 J	0.00755 J
Selenium	mg/L	<0.000508	<0.000508	<0.000508	<0.002	<0.002	<0.000507	<0.000508	<0.000508	<0.000508	<0.000508	<0.000508
Thallium	mg/L	<6.8e-005	<6.8e-005	<6.8e-005	<0.0002	<0.0002	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005

Notes:

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

Southern Company

ANALYTICAL DATA SUMMARY
Ash Pond (08/01/2016 - 09/19/2023)
APC Plant Gorgas
Walker County Alabama

Analyte	Units	GS-AP-MW-23H									
		02/20/2019	09/23/2019	03/17/2020	09/17/2020	02/03/2021	07/27/2021	02/14/2022	07/26/2022	03/14/2023	09/06/2023
Appendix III											
Boron	mg/L	0.0498 J	0.0641 J	0.0504 J	0.0637 J	0.0425 J	0.0461 J	0.035 J	0.0338 J	0.0377 J	0.0411 J
Calcium	mg/L	64.5	80.6	79.8	87.2	75.6	75.5	74.4	72.4	59.5	76.3
Chloride	mg/L	2.58	2.26	2.62	1.92	2.07	2.25	13	12.9	9.24	5.93
Fluoride	mg/L	0.188	0.144	0.241	0.117	0.156	0.118	0.14	0.0867 J	0.165	0.0905 J
pH_Field	pH	6.5	5.76	5.95	5.74	6.22	5.65	5.8	5.73	5.93	5.49
Sulfate	mg/L	352	394	356	361	339	339	353	322	292	335
TDS	mg/L	560	598	626	648	--	--	--	--	--	--
Appendix IV											
Antimony	mg/L	0.000809 J	<0.0008	<0.0008	<0.0008	<0.000507	<0.000508	<0.000508	<0.000508	<0.00071	<0.00071
Arsenic	mg/L	0.0306	0.0369	0.0524	0.0579	0.0562	0.0494	0.061	0.0616	0.0731	0.0652
Barium	mg/L	0.0227	0.0148	0.0143	0.0146	0.0138	0.0133	0.0166	0.0154	0.0155	0.0127
Beryllium	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.000406	<0.000406	<0.000406	<0.000406	<0.000406	<0.000406
Cadmium	mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005
Chromium	mg/L	<0.002	<0.002	<0.002	<0.002	0.000222 J	0.000246 J	0.000203 J	0.000302 J	0.000226 J	<0.000203
Cobalt	mg/L	<0.002	<0.002	<0.002	<0.002	0.000512	0.000504	0.000548	0.000576	0.000974	0.0007
Combined Radium 226 + 228	pCi/L	0.0759 U	0.00709 U	0.989	0.66 U	0.767 U	0.124 U	0.153 U	0.223 U	0.741 U	0.446 U
Fluoride	mg/L	0.188	0.144	0.241	0.117	0.156	0.118	0.14	0.0867 J	0.165	0.0905 J
Lead	mg/L	<0.001	<0.001	<0.001	<0.001	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005
Lithium	mg/L	0.031	0.0324	0.0327	0.0333	0.0319	0.0309	0.0308	0.032	0.0286	0.0305
Mercury	mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Molybdenum	mg/L	<0.002	<0.002	<0.002	<0.002	0.000902	0.000813	0.000974	0.000783	<0.005075	<0.005075
Selenium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.000507	<0.000508	<0.000508	<0.000508	<0.000508	<0.000508
Thallium	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005

Notes:

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

ANALYTICAL DATA SUMMARY
Ash Pond (08/01/2016 - 09/19/2023)
APC Plant Gorgas
Walker County Alabama

Analyte	Units	GS-AP-MW-24H									
		02/26/2019	09/24/2019	03/18/2020	09/17/2020	02/02/2021	08/03/2021	02/15/2022	07/27/2022	03/15/2023	09/06/2023
Appendix III											
Boron	mg/L	0.0725 J	0.0821 J	0.0811 J	0.069 J	0.0685 J	0.071 J	0.0695 J	0.0641 J	0.0677 J	0.0665 J
Calcium	mg/L	45.9	46.5	44	45.5	42.4	43.4	42.4	41.9	41.2	43.8
Chloride	mg/L	3.33	2.89	3.5	3.19	3.06	2.91	3.18	3.28	2.94	3.11
Fluoride	mg/L	0.194	0.201	0.206	0.217	0.209	0.208	0.176	0.215	0.172	0.175
pH_Field	pH	7.04	6.59	7	7.02	6.93	6.94	7	6.98	6.93	5.56
Sulfate	mg/L	11.1	15.3	12.2	6.7	6.43	6.35	12.1	6.24	7.51	7.72
TDS	mg/L	252	253	250	250	--	--	--	--	--	--
Appendix IV											
Antimony	mg/L	0.000807 J	<0.0008	<0.0008	<0.0008	<0.000507	<0.000508	<0.000508	<0.000508	<0.00071	<0.00071
Arsenic	mg/L	<0.001	<0.001	<0.001	<0.001	0.000341	0.00021	0.000293	0.000219	0.000226	0.000239
Barium	mg/L	0.881	1.04	0.964	0.988	0.952	1.04	0.963	1.01	1.08	1.05
Beryllium	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.000406	<0.000406	<0.000406	<0.000406	<0.000406	<0.000406
Cadmium	mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005
Chromium	mg/L	<0.002	<0.002	<0.002	<0.002	0.000382 J	0.000284 J	0.000266 J	0.000446 J	0.000227 J	0.000248 J
Cobalt	mg/L	<0.002	<0.002	<0.002	<0.002	0.000192 J	0.000237	0.000238	0.00029	0.000286	0.000313
Combined Radium 226 + 228	pCi/L	0.9	1.23	0.788	0.298 U	1.03 U	1.3 U	1.16	0.833 U	1.03 U	0.947 U
Fluoride	mg/L	0.194	0.201	0.206	0.217	0.209	0.208	0.176	0.215	0.172	0.175
Lead	mg/L	<0.001	<0.001	<0.001	<0.001	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005
Lithium	mg/L	0.0282	0.0275	0.0264	0.0237	0.0247	0.0249	0.0239	0.0257	0.0233	0.0245
Mercury	mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Molybdenum	mg/L	<0.002	<0.002	<0.002	<0.002	0.000563	0.00054	0.000477	0.00055	<0.005075	<0.005075
Selenium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.000507	<0.000508	<0.000508	<0.000508	<0.000508	<0.000508
Thallium	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005

Notes:

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

Southern Company

ANALYTICAL DATA SUMMARY
Ash Pond (08/01/2016 - 09/19/2023)
APC Plant Gorgas
Walker County Alabama

Analyte	Units	GS-AP-MW-26H									
		02/27/2019	09/23/2019	03/25/2020	09/21/2020	02/09/2021	08/10/2021	02/15/2022	08/10/2022	03/22/2023	09/18/2023
Appendix III											
Boron	mg/L	<0.02	<0.03	<0.03	0.0334 J	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Calcium	mg/L	29.1	29.6	28.6	27.6	28.1	27.2	26.6	28.7	25.7	27.3
Chloride	mg/L	2.87	2.35	2.73	3.25	2.55	2.87	2.59	2.33	2.33	2.22
Fluoride	mg/L	0.14	0.146	0.131	0.151	0.112	0.152	0.101	0.131	0.123 J	0.147
pH_Field	pH	7.25	7.25	7.24	7.25	7.38	6.69	6.82	7.13	7.23	7.25
Sulfate	mg/L	4.89	16.9	3.25	4.54	5.76	4.73	7.16	4.09	4.65	4.78
TDS	mg/L	266	278	269	287	--	--	--	--	--	--
Appendix IV											
Antimony	mg/L	0.00094 J	<0.0008	<0.0008	<0.0008	<0.000507	<0.000508	<0.000508	<0.000508	<0.00071	<0.00071
Arsenic	mg/L	<0.001	<0.001	<0.001	0.00143 J	0.000192 J	0.000194 J	0.000254	0.000161 J	0.000149 J	<0.000112
Barium	mg/L	0.622	0.922	0.868	0.938	0.775	0.765	0.726	0.766	0.725	0.733
Beryllium	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.000406	<0.000406	<0.000406	<0.000406	<0.000406	<0.000406
Cadmium	mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005
Chromium	mg/L	<0.002	0.00295 J	0.00547 J	0.00804 J	<0.000203	0.000372 J	0.000306 J	0.000311 J	0.000429 J	0.000321 J
Cobalt	mg/L	<0.002	<0.002	0.00207 J	0.00357 J	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005
Combined Radium 226 + 228	pCi/L	0.492	0.564 U	0.707 U	2.05	0.674 U	1.05 U	1.19	0.178 U	0.546 U	0.276 U
Fluoride	mg/L	0.14	0.146	0.131	0.151	0.112	0.152	0.101	0.131	0.123 J	0.147
Lead	mg/L	<0.001	0.00109 J	0.0019 J	0.00309 J	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005
Lithium	mg/L	0.0966	0.0945	0.0946	0.0958	0.0928	0.0932	0.0917	0.0924	0.085	0.0856
Mercury	mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Molybdenum	mg/L	0.00286 J	<0.002	<0.002	<0.002	0.000207	0.000157 J	6.84e-005 J	<0.000102	<0.005075	<0.005075
Selenium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.000507	<0.000508	<0.000508	<0.000508	<0.000508	<0.000508
Thallium	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005

Notes:

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

ANALYTICAL DATA SUMMARY
Ash Pond (08/01/2016 - 09/19/2023)
APC Plant Gorgas
Walker County Alabama

Analyte	Units	GS-AP-MW-28H										
		03/13/2019	09/25/2019	03/16/2020	05/12/2020	09/22/2020	02/17/2021	08/09/2021	02/14/2022	07/27/2022	03/14/2023	09/11/2023
Appendix III												
Boron	mg/L	0.0819 J	0.0784 J	0.0751 J	0.0719 J	0.0728 J	0.0748 J	0.063 J	0.07 J	0.0663 J	0.0699 J	0.0745 J
Calcium	mg/L	3.42	2.52	2.4	2.83	2.37	2.02	1.75	1.66	1.45	1.99	1.84
Chloride	mg/L	8	8.93	10.6	12.7	12.2	10.3	7.85	8.32	7.71	8.63	9.86
Fluoride	mg/L	0.187	0.172	0.183	0.195	0.181	0.18	0.204	0.152	0.179	0.187	0.176
pH_Field	pH	8.3	8.57	8.31	8.35	8.24	8.31	8.5	8.37	8.43	8.31	8.16
Sulfate	mg/L	30	10.2	9.91	14.3	10.5	6.39	3.49	3.99	2.87	5.24	9.05
TDS	mg/L	514	443	449	464	456	--	--	--	--	--	--
Appendix IV												
Antimony	mg/L	0.00241 J	<0.0008	<0.0008	<0.0008	<0.0008	<0.000507	<0.000508	<0.000508	<0.000508	<0.00071	<0.00071
Arsenic	mg/L	0.00142 J	<0.001	<0.001	0.00135 J	0.00112 J	0.000796	0.000626	0.00054	0.000436	0.000553	0.000957
Barium	mg/L	0.164	0.0528	0.0411	0.0436	0.0385	0.0297	0.0407	0.0504	0.0482	0.052	0.0484
Beryllium	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.000406	<0.000406	<0.000406	<0.000406	<0.000406	<0.000406
Cadmium	mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005
Chromium	mg/L	<0.002	<0.002	<0.002	0.00281 J	<0.002	0.000352 J	0.000499 J	0.000248 J	0.000336 J	0.000248 J	<0.000203
Cobalt	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005
Combined Radium 226 + 228	pCi/L	0.136 U	0.648 U	0.762 U	0.425 U	1.02	0.911 U	0.706 U	0.31 U	0.742 U	0.739 U	0.755 U
Fluoride	mg/L	0.187	0.172	0.183	0.195	0.181	0.18	0.204	0.152	0.179	0.187	0.176
Lead	mg/L	0.00208 J	<0.001	<0.001	<0.001	<0.001	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005
Lithium	mg/L	0.0625	0.0619	0.0627	0.0569	0.0574	0.0686	0.0633	0.0544	0.0603	0.0561	0.0607
Mercury	mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Molybdenum	mg/L	0.00555 J	0.00338 J	0.00463 J	0.00644 J	0.00616 J	0.00454	0.00412	0.0048	0.00336	<0.005075	0.00893 J
Selenium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.000507	<0.000508	<0.000508	<0.000508	<0.000508	<0.000508
Thallium	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005

Notes:

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

Southern Company

ANALYTICAL DATA SUMMARY
Ash Pond (08/01/2016 - 09/19/2023)
APC Plant Gorgas
Walker County Alabama

Analyte	Units	GS-AP-MW-29H										GS-AP-MW-25HA
		02/27/2019	09/24/2019	03/25/2020	09/22/2020	02/03/2021	08/04/2021	02/14/2022	08/03/2022	03/28/2023	09/13/2023	03/24/2020
Appendix III												
Boron	mg/L	0.0359 J	0.0305 J	<0.03	0.175	0.809	0.447	0.542	0.399	0.36	0.293	0.146
Calcium	mg/L	12.1	32.8	27.8	28.1	26.1	17.7	13.9	14.5	12.2	11.7	2.42
Chloride	mg/L	3.09	3.11	3.1	13.2	18.9	13.8	14.2	7.1	5.09	5.7	38
Fluoride	mg/L	0.218	0.183	0.194	0.198	0.267	0.353	0.332	0.359	0.388	0.371	1.77
pH_Field	pH	8.01	7.11	7.45	7.42	7.63	7.68	7.77	7.83	7.82	7.83	8.67
Sulfate	mg/L	20.7	32.6	29.4	81.6	135	74	49.7	28.3	27.3	28.1	201
TDS	mg/L	414	389	371	430	--	--	--	--	--	--	948
Appendix IV												
Antimony	mg/L	0.000932 J	<0.0008	<0.0008	<0.0008	<0.000507	<0.000508	<0.000508	<0.000508	<0.00071	<0.00071	<0.0008
Arsenic	mg/L	<0.001	0.00155 J	0.00141 J	0.00109 J	0.00794	0.00317	0.00313	0.00248	0.00221	0.00158	0.00798
Barium	mg/L	0.517	0.712	0.527	0.499	0.318	0.264	0.231	0.248	0.263	0.242	0.147
Beryllium	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.000406	<0.000406	<0.000406	<0.000406	<0.000406	<0.000406	<0.0006
Cadmium	mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<0.0003
Chromium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.000203	0.000223 J	0.000286 J	0.000265 J	0.000258 J	0.000216 J	<0.002
Cobalt	mg/L	<0.002	<0.002	<0.002	<0.002	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<0.002
Combined Radium 226 + 228	pCi/L	0.556	1.09	0.036 U	0.591 U	0.102 U	1.02 U	0.725 U	0.535 U	0.397 U	0.223 U	-0.00194 U
Fluoride	mg/L	0.218	0.183	0.194	0.198	0.267	0.353	0.332	0.359	0.388	0.371	1.77
Lead	mg/L	<0.001	<0.001	<0.001	<0.001	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<0.001
Lithium	mg/L	0.07	0.0509	0.0528	0.0586	0.0915	0.0809	0.067	0.0811	0.0656	0.0677	0.0461
Mercury	mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Molybdenum	mg/L	<0.002	0.00424 J	0.0025 J	0.0281	0.0623	0.0377	0.0622	0.0341	0.0333	0.0658	0.0176
Selenium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.000507	<0.000508	<0.000508	<0.000508	<0.000508	<0.000508	<0.002
Thallium	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<0.0002

Notes:

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

ANALYTICAL DATA SUMMARY
Ash Pond (08/01/2016 - 09/19/2023)
APC Plant Gorgas
Walker County Alabama

Analyte	Units	GS-AP-MW-25HA								GS-AP-MW-30HA		
		09/17/2020	02/10/2021	08/12/2021	02/16/2022	05/10/2022	08/03/2022	03/22/2023	09/18/2023	03/18/2020	05/13/2020	09/21/2020
Appendix III												
Boron	mg/L	0.138	0.147	0.13	0.145	--	0.15	0.151	0.156	0.0734 J	0.0747 J	0.0814 J
Calcium	mg/L	1.99	2.11	1.79	1.82	--	1.86	1.84	2.05	36	35.3	29.4
Chloride	mg/L	38.3	43.7	36.3	34.3	--	30.5	28.5	27.8	5.14	4.24	3.45
Fluoride	mg/L	1.93	1.81	2.01	1.89	--	2.07	2.03	2.04	0.634	0.833	0.872
pH_Field	pH	8.83	8.77	8.78	8.5	--	8.55	8.78	8.88	7.2	7.27	7.56
Sulfate	mg/L	173	171	125	130	--	81.8	62.1	23.6	184	194	128
TDS	mg/L	960	--	--	--	--	--	--	--	612	624	592
Appendix IV												
Antimony	mg/L	<0.0008	<0.000507	<0.000508	0.000752 J	--	<0.000508	<0.00071	<0.00071	<0.0008	<0.0008	<0.0008
Arsenic	mg/L	0.00904	0.00923	0.00888	0.00968	--	0.0103	0.00851	0.00944	0.00813	0.00779	0.00551
Barium	mg/L	0.164	0.208	0.2	0.23	--	0.232	0.196	0.181	0.0791	0.0819	0.0811
Beryllium	mg/L	<0.0006	<0.000406	<0.000406	<0.000406	--	<0.000406	<0.000406	<0.000406	<0.0006	<0.0006	<0.0006
Cadmium	mg/L	<0.0003	<6.8e-005	<6.8e-005	<6.8e-005	--	<6.8e-005	<6.8e-005	<6.8e-005	<0.0003	<0.0003	<0.0003
Chromium	mg/L	<0.002	<0.000203	0.000354 J	0.00062 J	--	0.000794 J	0.00024 J	0.000337 J	<0.002	<0.002	<0.002
Cobalt	mg/L	<0.002	<6.8e-005	<6.8e-005	0.000108 J	--	6.81e-005 J	<6.8e-005	<6.8e-005	<0.002	<0.002	<0.002
Combined Radium 226 + 228	pCi/L	-0.369 U	0.422 U	0.129 U	0.763 U	0.565 U	0.73 U	1.72 U	0.227 U	2.26	0.604	1.1
Fluoride	mg/L	1.93	1.81	2.01	1.89	--	2.07	2.03	2.04	0.634	0.833	0.872
Lead	mg/L	<0.001	<6.8e-005	<6.8e-005	0.000181 J	--	0.000206	<6.8e-005	<6.8e-005	<0.001	<0.001	<0.001
Lithium	mg/L	0.0449	0.0579	0.0558	0.0504	--	0.061	0.0564	0.0574	0.0528	0.0536	0.0494
Mercury	mg/L	<0.0003	<0.0003	<0.0003	<0.0003	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Molybdenum	mg/L	0.0182	0.0158	0.0125	0.00977	--	0.00758	0.00584 J	<0.005075	0.00603 J	0.00519 J	0.00254 J
Selenium	mg/L	0.00636 J	<0.000507	<0.000508	<0.000508	--	<0.000508	<0.000508	<0.000508	<0.002	<0.002	<0.002
Thallium	mg/L	<0.0002	<6.8e-005	<6.8e-005	<6.8e-005	--	<6.8e-005	<6.8e-005	<6.8e-005	<0.0002	<0.0002	<0.0002

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

ANALYTICAL DATA SUMMARY
Ash Pond (08/01/2016 - 09/19/2023)
APC Plant Gorgas
Walker County Alabama

Analyte	Units	GS-AP-MW-30HA						GS-AP-MW-31H				
		02/17/2021	08/02/2021	02/08/2022	08/03/2022	03/13/2023	09/05/2023	03/18/2020	09/22/2020	02/01/2021	08/02/2021	02/08/2022
Appendix III												
Boron	mg/L	0.0668 J	0.06 J	0.0654 J	0.0761 J	0.0605 J	0.0607 J	<0.03	<0.03	<0.03	<0.03	<0.03
Calcium	mg/L	29.7	43.8	46.7	60.3	56	45.1	6.06	5.31	4.92	4.6	5.73
Chloride	mg/L	3.69	4.28	5.81	5.91	4.77	6.67	41.3	27.3	31.2	38.5	32.5
Fluoride	mg/L	0.884	1.49	1.66	2.2	1.61	1.86	0.15	0.148	0.176	0.191	0.119
pH_Field	pH	7.29	7.27	7.35	7.17	7.22	7.32	8.73	8.76	8.66	8.69	8.53
Sulfate	mg/L	136	201	215	279	228	244	50.4	22.1	32.2	35.1	29.5
TDS	mg/L	--	--	--	--	--	--	326	298	--	--	--
Appendix IV												
Antimony	mg/L	<0.000507	<0.000508	<0.000508	<0.000508	<0.00071	<0.00071	<0.0008	<0.0008	<0.000507	<0.000508	<0.000508
Arsenic	mg/L	0.00354	0.003	0.00331	0.00387	0.00298	0.00325	0.0012 J	<0.001	0.000325	0.000293	0.000341
Barium	mg/L	0.089	0.0965	0.1	0.113	0.115	0.116	0.106	0.0916	0.0974	0.102	0.14
Beryllium	mg/L	<0.000406	<0.000406	<0.000406	<0.000406	<0.000406	<0.000406	<0.0006	<0.0006	<0.000406	<0.000406	<0.000406
Cadmium	mg/L	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<0.0003	<0.0003	<6.8e-005	<6.8e-005	<6.8e-005
Chromium	mg/L	0.000418 J	0.000354 J	0.000375 J	0.000398 J	0.000264 J	0.000322 J	0.00264 J	<0.002	0.000345 J	0.000287 J	0.000271 J
Cobalt	mg/L	0.00016 J	0.000217	0.000184 J	0.000255	0.000168 J	0.000144 J	<0.002	<0.002	<6.8e-005	<6.8e-005	<6.8e-005
Combined Radium 226 + 228	pCi/L	0.902 U	1.8	0.806 U	1.29 U	0.963	0.998 U	0.0549 U	0.912	0.189 U	1.48 U	0.189 U
Fluoride	mg/L	0.884	1.49	1.66	2.2	1.61	1.86	0.15	0.148	0.176	0.191	0.119
Lead	mg/L	0.00028	0.000166 J	0.000117 J	0.000194 J	0.000162 J	0.000294	<0.001	<0.001	0.000102 J	<6.8e-005	<6.8e-005
Lithium	mg/L	0.0548	0.0582	0.0533	0.07	0.0516	0.0558	0.0347	0.0357	0.0417	0.0411	0.0366
Mercury	mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Molybdenum	mg/L	0.0019	0.00394	0.00529	0.00614	<0.005075	<0.005075	0.0102	0.00438 J	0.00447	0.00486	0.00596
Selenium	mg/L	<0.000507	<0.000508	<0.000508	<0.000508	<0.000508	<0.000508	<0.002	<0.002	<0.000507	<0.000508	<0.000508
Thallium	mg/L	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<0.0002	<0.0002	<6.8e-005	<6.8e-005	<6.8e-005

Notes:

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

ANALYTICAL DATA SUMMARY
Ash Pond (08/01/2016 - 09/19/2023)
APC Plant Gorgas
Walker County Alabama

Analyte	Units	GS-AP-MW-31H			GS-AP-MW-32H			GS-AP-MW-32H				
		08/03/2022	03/27/2023	09/13/2023	03/24/2020	09/21/2020	02/10/2021	08/10/2021	02/14/2022	07/27/2022	03/21/2023	09/13/2023
Appendix III												
Boron	mg/L	<0.03	<0.03	0.0318 J	0.0492 J	0.0455 J	0.0477 J	0.0393 J	0.0443 J	0.0414 J	0.0455 J	0.0464 J
Calcium	mg/L	4.85	3.9	3.21	2.62	3	3.24	3.59	2.53	2.86	2.42	2.08
Chloride	mg/L	21.6	18.4	32.6	20.5	28.2	39.4	36.6	29.8	33.2	32.6	26.5
Fluoride	mg/L	0.141	0.155	0.159	0.18	0.202	0.134	0.218	0.148	0.161	0.144	0.172
pH_Field	pH	8.85	8.86	8.49	8.47	8.15	8.03	8.35	8.22	7.88	8.3	8.07
Sulfate	mg/L	12.5	8.13	33.8	33.2	38.7	50.8	45.6	38.4	41.3	38.5	35.6
TDS	mg/L	--	--	--	331	357	--	--	--	--	--	--
Appendix IV												
Antimony	mg/L	<0.000508	<0.00071	<0.00071	<0.0008	<0.0008	<0.000507	<0.000508	<0.000508	<0.000508	<0.00071	<0.00071
Arsenic	mg/L	0.000201 J	0.00016 J	0.00041	<0.001	<0.001	0.000838	0.000575	0.000615	0.000353	0.000407	0.000575
Barium	mg/L	0.134	0.123	0.105	0.0362	0.0396	0.0511	0.0475	0.047	0.0499	0.0393	0.0408
Beryllium	mg/L	<0.000406	<0.000406	<0.000406	<0.0006	<0.0006	<0.000406	<0.000406	<0.000406	<0.000406	<0.000406	<0.000406
Cadmium	mg/L	<6.8e-005	<6.8e-005	<6.8e-005	<0.0003	<0.0003	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005
Chromium	mg/L	0.00035 J	0.000232 J	<0.000203	<0.002	<0.002	<0.000203	0.000268 J	0.000262 J	0.000353 J	<0.000203	<0.000203
Cobalt	mg/L	<6.8e-005	<6.8e-005	<6.8e-005	<0.002	<0.002	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005
Combined Radium 226 + 228	pCi/L	0.32 U	0.39 U	0.367 U	0.313 U	0.484 U	0.546 U	0.445 U	0.371 U	0.994 U	0.503 U	0.691 U
Fluoride	mg/L	0.141	0.155	0.159	0.18	0.202	0.134	0.218	0.148	0.161	0.144	0.172
Lead	mg/L	<6.8e-005	<6.8e-005	<6.8e-005	<0.001	<0.001	<6.8e-005	<6.8e-005	<6.8e-005	6.94e-005 J	<6.8e-005	<6.8e-005
Lithium	mg/L	0.0512	0.0435	0.0476	0.0428	0.0421	0.0471	0.0466	0.0407	0.0456	0.0418	0.0424
Mercury	mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Molybdenum	mg/L	0.00255	<0.005075	0.00646 J	0.0826	0.0896	0.0889	0.0858	0.0933	0.0865	0.086	0.0898
Selenium	mg/L	<0.000508	<0.000508	<0.000508	<0.002	<0.002	<0.000507	<0.000508	<0.000508	<0.000508	<0.000508	<0.000508
Thallium	mg/L	<6.8e-005	<6.8e-005	<6.8e-005	<0.0002	<0.0002	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005

Notes:

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

ANALYTICAL DATA SUMMARY
Ash Pond (08/01/2016 - 09/19/2023)
APC Plant Gorgas
Walker County Alabama

Analyte	Units	GS-AP-MW-33HO						GS-AP-MW-33HO			GS-AP-MW-34HO	
		03/17/2020	05/13/2020	09/15/2020	02/03/2021	07/27/2021	02/09/2022	07/26/2022	03/14/2023	08/30/2023	03/16/2020	05/12/2020
Appendix III												
Boron	mg/L	0.066 J	0.0409 J	0.0425 J	0.0453 J	0.0417 J	0.0416 J	<0.03	0.0312 J	0.04 J	0.0827 J	0.0929 J
Calcium	mg/L	42.3	25.2	29.5	30.3	30.5	25.2	20.1	18.2	22.1	83.8	80.4
Chloride	mg/L	108	63.3	75.6	55.2	75.3	68.9	14.7	15.3	28.5	101	148
Fluoride	mg/L	0.202	0.191	0.188	0.178	0.214	0.131	0.188	0.248	0.213	0.338	0.37
pH_Field	pH	7.67	7.7	7.66	7.64	7.59	7.64	7.43	7.71	7.58	7.35	7.44
Sulfate	mg/L	172	60	98.6	70.7	100	77.8	15.6	15.9	32.8	1480	1330
TDS	mg/L	827	457	538	--	--	--	--	--	--	2460	2440
Appendix IV												
Antimony	mg/L	<0.0008	<0.0008	<0.0008	<0.000507	<0.000508	<0.000508	<0.000508	<0.00071	<0.00071	<0.0008	<0.0008
Arsenic	mg/L	0.0044 J	0.00308 J	0.00275 J	0.00177	0.00143	0.000871	0.000298	0.000523	0.000822	0.00351 J	0.00668
Barium	mg/L	0.329	0.324	0.469	0.465	0.46	0.483	0.356	0.443	0.472	0.0309	0.0379
Beryllium	mg/L	<0.0006	<0.0006	<0.0006	<0.000406	<0.000406	<0.000406	<0.000406	<0.000406	<0.000406	<0.0006	<0.0006
Cadmium	mg/L	<0.0003	<0.0003	<0.0003	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<0.0003	<0.0003
Chromium	mg/L	<0.002	<0.002	<0.002	0.000207 J	0.000283 J	0.000263 J	0.000226 J	0.000368 J	0.000279 J	<0.002	<0.002
Cobalt	mg/L	<0.002	<0.002	<0.002	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	0.000136 J	<0.002	<0.002
Combined Radium 226 + 228	pCi/L	2.14	0.415 U	-0.106 U	0.313 U	0.408 U	0.767 U	0.771 U	2.94	0.322 U	-0.085 U	0.345 U
Fluoride	mg/L	0.202	0.191	0.188	0.178	0.214	0.131	0.188	0.248	0.213	0.338	0.37
Lead	mg/L	<0.001	<0.001	<0.001	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	0.000147 J	0.000224	<0.001	<0.001
Lithium	mg/L	0.0516	0.0455	0.0479	0.0534	0.0563	0.0517	0.0491	0.044	0.0489	0.205	0.18
Mercury	mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Molybdenum	mg/L	<0.002	0.00626 J	0.00496 J	0.00346	0.00574	0.00513	0.00195	<0.005075	<0.005075	0.00386 J	0.0088 J
Selenium	mg/L	<0.002	<0.002	<0.002	<0.000507	<0.000508	<0.000508	<0.000508	<0.000508	<0.000508	<0.002	<0.002
Thallium	mg/L	<0.0002	<0.0002	<0.0002	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<0.0002	<0.0002

Notes:

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

Southern Company

ANALYTICAL DATA SUMMARY
Ash Pond (08/01/2016 - 09/19/2023)
APC Plant Gorgas
Walker County Alabama

Analyte	Units	GS-AP-MW-34HO								GS-AP-MW-35HO		
		09/16/2020	02/03/2021	07/27/2021	02/09/2022	07/26/2022	03/08/2023	03/10/2023	08/31/2023	03/17/2020	05/12/2020	09/16/2020
Appendix III												
Boron	mg/L	0.0874 J	0.0964 J	0.106	0.106	0.109	0.0911 J	--	0.104	<0.03	<0.03	<0.03
Calcium	mg/L	86.9	100	102	105	107	64.5	--	77	5.27	3.04	3.04
Chloride	mg/L	210	156	371	392	496	354	--	290	23.9	14.5	20.9
Fluoride	mg/L	0.364	0.298	0.408	0.291	0.393	0.309	--	0.399	0.166	0.167	0.162
pH_Field	pH	7.45	7.26	7.32	7.4	7.06	7.26	--	7.42	8.4	8.46	8.48
Sulfate	mg/L	1390	1610	1580	1570	1420	1230	--	1210	40.1	22.6	24.6
TDS	mg/L	2720	--	--	--	--	--	--	--	365	311	326
Appendix IV												
Antimony	mg/L	<0.0008	<0.000507	<0.000508	<0.000508	0.00057 J	<0.000508	--	<0.00071	<0.0008	<0.0008	<0.0008
Arsenic	mg/L	0.00308 J	0.00257	0.00179	0.00112	0.00117	0.00105	--	0.00065	0.00105 J	<0.001	<0.001
Barium	mg/L	0.0451	0.0543	0.0649	0.0615	0.0559	0.1	--	0.04	0.0426	0.0472	0.0532
Beryllium	mg/L	<0.0006	<0.000406	<0.000406	<0.000406	<0.000406	<0.000406	--	<0.000406	<0.0006	<0.0006	<0.0006
Cadmium	mg/L	<0.0003	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	--	<6.8e-005	<0.0003	<0.0003	<0.0003
Chromium	mg/L	<0.002	0.000397 J	0.000475 J	0.000412 J	0.000307 J	0.000538 J	--	0.000348 J	<0.002	<0.002	<0.002
Cobalt	mg/L	<0.002	<6.8e-005	<6.8e-005	8.34e-005 J	<6.8e-005	0.000804	--	0.000184 J	<0.002	<0.002	<0.002
Combined Radium 226 + 228	pCi/L	0.286 U	0.485 U	0.732 U	0.213 U	0.901 U	--	0.868 U	0.735 U	7.32	1.02	0.435 U
Fluoride	mg/L	0.364	0.298	0.408	0.291	0.393	0.309	--	0.399	0.166	0.167	0.162
Lead	mg/L	<0.001	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	0.00103	--	0.000146 J	<0.001	<0.001	<0.001
Lithium	mg/L	0.18	0.249	0.205	0.185	0.183	0.149	--	0.155	0.074	0.0693	0.0685
Mercury	mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	--	<0.0003	<0.0003	<0.0003	<0.0003
Molybdenum	mg/L	0.00598 J	0.00753	0.0143	0.00959	0.0104	0.016	--	<0.005075	0.00222 J	<0.002	<0.002
Selenium	mg/L	<0.002	<0.000507	<0.000508	<0.000508	<0.000508	<0.000508	--	<0.000508	<0.002	<0.002	<0.002
Thallium	mg/L	<0.0002	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	--	<6.8e-005	<0.0002	<0.0002	<0.0002

Notes:

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

ANALYTICAL DATA SUMMARY
Ash Pond (08/01/2016 - 09/19/2023)
APC Plant Gorgas
Walker County Alabama

Analyte	Units	GS-AP-MW-35HO							GS-AP-MW-36H			
		02/04/2021	07/28/2021	02/09/2022	07/25/2022	03/08/2023	03/09/2023	08/31/2023	03/17/2020	05/13/2020	09/17/2020	02/17/2021
Appendix III												
Boron	mg/L	<0.03	<0.03	<0.03	<0.03	<0.03	--	<0.03	0.0394 J	0.0359 J	0.0345 J	0.0413 J
Calcium	mg/L	3.3	2.51	2.19	1.7	1.49	--	1.36	3.45	2.93	4.12	3.16
Chloride	mg/L	23.9	16.7	18	9.54	8.75	--	7.99	29.4	27.2	38.5	24.3
Fluoride	mg/L	0.152	0.207	0.122	0.201	0.171	--	0.143	0.214	0.224	0.209	0.22
pH_Field	pH	8.35	8.45	8.55	8.28	8.42	--	8.24	8.44	8.52	8.18	8.36
Sulfate	mg/L	25.3	20.7	22.3	16	15	--	14.5	57.1	47.8	50.2	28.9
TDS	mg/L	--	--	--	--	--	--	--	362	333	348	--
Appendix IV												
Antimony	mg/L	<0.000507	<0.000508	<0.000508	<0.000508	<0.000508	--	<0.00071	<0.0008	<0.0008	<0.0008	<0.000507
Arsenic	mg/L	0.000442	0.00024	0.000192 J	0.000116 J	<8.1e-005	--	<0.000112	0.00171 J	0.00122 J	0.0013 J	0.00102
Barium	mg/L	0.052	0.0492	0.052	0.0497	0.0521	--	0.0494	0.0353	0.03	0.0378	0.0463
Beryllium	mg/L	<0.000406	<0.000406	<0.000406	<0.000406	<0.000406	--	<0.000406	<0.0006	<0.0006	<0.0006	<0.000406
Cadmium	mg/L	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	--	<6.8e-005	<0.0003	<0.0003	<0.0003	<6.8e-005
Chromium	mg/L	0.000211 J	0.000415 J	0.000286 J	0.000218 J	<0.000203	--	<0.000203	<0.002	<0.002	<0.002	0.000271 J
Cobalt	mg/L	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	--	<6.8e-005	<0.002	<0.002	<0.002	0.000148 J
Combined Radium 226 + 228	pCi/L	0.527 U	0.0525 U	0.23 U	0.682 U	--	0.578 U	0.589 U	4.33	-0.225 U	-0.125 U	0.322 U
Fluoride	mg/L	0.152	0.207	0.122	0.201	0.171	--	0.143	0.214	0.224	0.209	0.22
Lead	mg/L	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	--	<6.8e-005	<0.001	<0.001	<0.001	8.8e-005 J
Lithium	mg/L	0.0734	0.0722	0.0632	0.0713	0.0633	--	0.0648	0.0342	0.0337	0.035	0.039
Mercury	mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Molybdenum	mg/L	0.00273	0.0017	0.00175	0.000692	0.0006	--	<0.005075	0.00571 J	0.00475 J	0.0105	0.0054
Selenium	mg/L	<0.000507	<0.000508	<0.000508	<0.000508	<0.000508	--	<0.000508	<0.002	<0.002	<0.002	<0.000507
Thallium	mg/L	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	--	<6.8e-005	<0.0002	<0.0002	<0.0002	<6.8e-005

Notes:

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

ANALYTICAL DATA SUMMARY
Ash Pond (08/01/2016 - 09/19/2023)
APC Plant Gorgas
Walker County Alabama

Analyte	Units	GS-AP-MW-36H						GS-AP-MW-40H				
		08/04/2021	02/14/2022	05/10/2022	07/20/2022	03/15/2023	09/06/2023	09/22/2020	02/02/2021	08/10/2021	02/15/2022	08/02/2022
Appendix III												
Boron	mg/L	0.0449 J	0.0467 J	--	0.0316 J	0.0446 J	0.0588 J	0.0326 J	0.0305 J	<0.03	0.0321 J	0.0327 J
Calcium	mg/L	5.78	4.69	--	1.16	5.26	5.89	205	199	197	203	211
Chloride	mg/L	59.8	77.7	--	10.6	66.6	99.3	30.4	36.8	28	18	12.7
Fluoride	mg/L	0.31	0.238	--	0.186	0.212	0.23	0.114	0.123	0.113	0.0854 J	0.151
pH_Field	pH	8.37	8.22	--	8.05	8.06	7.95	6.64	6.55	6.56	6.6	6.47
Sulfate	mg/L	83.7	112	--	11	77	152	626	644	661	684	732
TDS	mg/L	--	--	--	--	--	--	1310	--	--	--	--
Appendix IV												
Antimony	mg/L	<0.000508	<0.000508	--	<0.000508	<0.00071	<0.00071	<0.0008	<0.000507	<0.000508	<0.000508	<0.000508
Arsenic	mg/L	0.00246	0.00235	--	0.0004	0.00235	0.00225	0.00193 J	0.000958	0.000457	0.0004	0.000294
Barium	mg/L	0.0905	0.136	--	0.0393	0.142	0.137	0.0417	0.0384	0.0358	0.0298	0.0306
Beryllium	mg/L	<0.000406	<0.000406	--	<0.000406	<0.000406	<0.000406	<0.0006	<0.000406	<0.000406	<0.000406	<0.000406
Cadmium	mg/L	<6.8e-005	<6.8e-005	--	<6.8e-005	<6.8e-005	<6.8e-005	<0.0003	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005
Chromium	mg/L	0.000317 J	<0.000203	--	0.000451 J	0.00044 J	0.000674 J	<0.002	0.000222 J	0.00032 J	<0.000203	0.000337 J
Cobalt	mg/L	<6.8e-005	<6.8e-005	--	<6.8e-005	<6.8e-005	0.000155 J	0.0027 J	0.002	0.0011	0.000518	0.000206
Combined Radium 226 + 228	pCi/L	1.13	7.37	1.03 U	0.473 U	0.356 U	0.451 U	1.91	0.369 U	0.91 U	0.64 U	0.608 U
Fluoride	mg/L	0.31	0.238	--	0.186	0.212	0.23	0.114	0.123	0.113	0.0854 J	0.151
Lead	mg/L	<6.8e-005	<6.8e-005	--	<6.8e-005	0.00019 J	0.000364	<0.001	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005
Lithium	mg/L	0.0455	0.0417	--	0.0303	0.0449	0.0489	0.0405	0.0571	0.0567	0.0539	0.0705
Mercury	mg/L	<0.0003	<0.0003	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Molybdenum	mg/L	0.017	0.0189	--	0.00183	0.0183	0.0195	0.00293 J	0.00257	0.00171	0.002	0.00114
Selenium	mg/L	<0.000508	<0.000508	--	<0.000508	<0.000508	<0.000508	<0.002	<0.000507	<0.000508	<0.000508	<0.000508
Thallium	mg/L	<6.8e-005	<6.8e-005	--	<6.8e-005	<6.8e-005	<6.8e-005	<0.0002	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005

Notes:

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

ANALYTICAL DATA SUMMARY
Ash Pond (08/01/2016 - 09/19/2023)
APC Plant Gorgas
Walker County Alabama

Analyte	Units	GS-AP-MW-40H		GS-AP-MW-41HS						GS-AP-MW-38H		
		03/22/2023	09/18/2023	02/08/2021	07/28/2021	02/08/2022	07/26/2022	03/13/2023	08/30/2023	03/24/2020	09/22/2020	02/09/2021
Appendix III												
Boron	mg/L	0.0379 J	0.035 J	1.06	1.09	1.04	1.01	0.848	0.867	0.0468 J	0.0461 J	0.0504 J
Calcium	mg/L	196	219	49.8	45.1	30.6	36.7	33.3	28	9.33	9.56	10.6
Chloride	mg/L	15.5	9.85	9.18	8.34	6.72	7.24	6.83	7.77	12.6	24.8	28.1
Fluoride	mg/L	0.1 J	0.141	0.152	0.172	0.117	0.121 J	0.104 J	0.102 J	0.291	0.28	0.243
pH_Field	pH	6.6	6.7	6.77	6.86	6.66	6.19	6.49	6.13	7.99	7.96	8.06
Sulfate	mg/L	683	692	95.1	103	105	109	88.6	89	16.7	27	27
TDS	mg/L	--	--	--	--	--	--	--	--	335	339	--
Appendix IV												
Antimony	mg/L	<0.00071	<0.00071	<0.000507	<0.000508	<0.000508	<0.000508	<0.00071	<0.00071	<0.0008	<0.0008	<0.000507
Arsenic	mg/L	0.00081	0.000331	0.000551	0.000383	0.00144	0.000471	0.000483	0.000556	0.00302 J	0.00304 J	0.0026
Barium	mg/L	0.0302	0.028	0.0544	0.0445	0.0542	0.0497	0.0572	0.0518	0.253	0.319	0.356
Beryllium	mg/L	<0.000406	<0.000406	<0.000406	<0.000406	<0.000406	<0.000406	<0.000406	<0.000406	<0.0006	<0.0006	<0.000406
Cadmium	mg/L	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<0.0003	<0.0003	<6.8e-005
Chromium	mg/L	0.000209 J	0.0003 J	<0.000203	0.000311 J	0.000348 J	0.000309 J	<0.000203	<0.000203	<0.002	<0.002	<0.000203
Cobalt	mg/L	0.000195 J	9.85e-005 J	0.00175	0.000294	0.00378	0.00237	0.00193	0.00374	<0.002	<0.002	<6.8e-005
Combined Radium 226 + 228	pCi/L	0.772 U	0.884 U	0.49 U	0.759 U	0.267 U	0.728 U	0.305 U	0.616 U	0.862	1.1	0.746 U
Fluoride	mg/L	0.1 J	0.141	0.152	0.172	0.117	0.121 J	0.104 J	0.102 J	0.291	0.28	0.243
Lead	mg/L	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<0.001	<0.001	8.23e-005 J
Lithium	mg/L	0.0548	0.0616	0.14	0.178	0.0817	0.0954	0.0511	0.0532	0.0632	0.0591	0.0676
Mercury	mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Molybdenum	mg/L	<0.005075	<0.005075	0.00288	0.0044	0.00104	0.000889	<0.005075	<0.005075	0.00445 J	0.00423 J	0.00267
Selenium	mg/L	<0.000508	<0.000508	<0.000507	<0.000508	<0.000508	<0.000508	<0.000508	<0.000508	<0.002	<0.002	<0.000507
Thallium	mg/L	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<0.0002	<0.0002	<6.8e-005

Notes:

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

Southern Company

ANALYTICAL DATA SUMMARY
Ash Pond (08/01/2016 - 09/19/2023)
APC Plant Gorgas
Walker County Alabama

Analyte	**Units**	GS-AP-MW-38H				GS-AP-MW-38H	GS-AP-MW-41HD					
		08/04/2021	02/22/2022	08/10/2022	03/28/2023	09/19/2023	03/18/2020	09/17/2020	02/08/2021	08/03/2021	02/15/2022	07/27/2022
Appendix III												
Boron	mg/L	0.0479 J	0.0452 J	0.0498 J	0.0503 J	0.0486 J	1.45	1.42	1.48	1.48	1.52	1.62
Calcium	mg/L	12.2	10.8	15.1	13.4	10.7	56.6	61.1	60.8	57.1	57.6	57.5
Chloride	mg/L	33.1	31	59.3	45.8	31.6	6.02	6.63	6.44	6.07	6.67	7.18
Fluoride	mg/L	0.305	0.239	0.231	0.254	0.237	0.165	0.16	0.138	0.15	0.125	0.122 J
pH_Field	pH	7.75	7.89	7.49	7.85	7.59	7.2	7.22	7.36	6.97	7.35	7.16
Sulfate	mg/L	32.3	27.9	58.6	39.5	29.1	122	105	111	94.1	110	116
TDS	mg/L	--	--	--	--	--	309	318	--	--	--	--
Appendix IV												
Antimony	mg/L	<0.000508	<0.000508	<0.000508	<0.00071	<0.00071	<0.0008	<0.0008	<0.000507	<0.000508	<0.000508	<0.000508
Arsenic	mg/L	0.00287	0.00221	0.00294	0.00303	0.00194	<0.001	0.0016 J	0.00148	0.00289	0.00284	0.00271
Barium	mg/L	0.359	0.301	0.286	0.264	0.251	0.0393	0.0414	0.0434	0.045	0.0441	0.0475
Beryllium	mg/L	<0.000406	<0.000406	<0.000406	<0.000406	<0.000406	<0.0006	<0.0006	<0.000406	<0.000406	<0.000406	<0.000406
Cadmium	mg/L	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<0.0003	<0.0003	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005
Chromium	mg/L	<0.000203	<0.000203	0.000322 J	0.000213 J	0.000417 J	<0.002	<0.002	0.000235 J	0.000251 J	0.000258 J	0.000351 J
Cobalt	mg/L	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<0.002	<0.002	0.000585	0.000849	0.00102	0.000979
Combined Radium 226 + 228	pCi/L	0.844 U	0.341 U	0.411 U	0.502 U	1.13	0.64	0.14 U	0.409 U	0.453 U	0.256 U	0.42 U
Fluoride	mg/L	0.305	0.239	0.231	0.254	0.237	0.165	0.16	0.138	0.15	0.125	0.122 J
Lead	mg/L	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<0.001	<0.001	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005
Lithium	mg/L	0.0672	0.0594	0.0705	0.0603	0.0606	0.311	0.341	0.356	0.369	0.366	0.413
Mercury	mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Molybdenum	mg/L	0.00377	0.00322	0.00406	<0.005075	<0.005075	0.0158	0.026	0.0284	0.0286	0.0331	0.0351
Selenium	mg/L	<0.000508	<0.000508	<0.000508	<0.000508	<0.000508	<0.002	<0.002	<0.000507	<0.000508	<0.000508	<0.000508
Thallium	mg/L	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<0.0002	<0.0002	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005

Notes:

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

ANALYTICAL DATA SUMMARY
Ash Pond (08/01/2016 - 09/19/2023)
APC Plant Gorgas
Walker County Alabama

Analyte	**Units**	GS-AP-MW-41HD		GS-AP-MW-42H							
		03/15/2023	08/30/2023	03/24/2020	09/22/2020	02/03/2021	08/04/2021	02/16/2022	07/27/2022	03/15/2023	09/19/2023
Appendix III											
Boron	mg/L	1.52	1.59	<0.03	0.0469 J	0.053 J	0.0578 J	0.0502 J	0.05 J	0.055 J	0.0599 J
Calcium	mg/L	58.9	56	149	142	134	133	138	133	128	131
Chloride	mg/L	7.05	7.91	3.35	7.07	10.1	9.75	8.61	9.12	9.31	11
Fluoride	mg/L	0.18	0.137	0.13	0.121	0.131	0.203	0.0837 J	0.116 J	0.128	0.128
pH_Field	pH	--	7.27	6.28	6.51	6.47	6.41	6.54	6.59	6.63	6.58
Sulfate	mg/L	103	113	449	372	373	372	396	363	329	339
TDS	mg/L	--	--	850	800	--	--	--	--	--	--
Appendix IV											
Antimony	mg/L	<0.00071	<0.00071	<0.0008	<0.0008	<0.000507	<0.000508	<0.000508	<0.000508	<0.00071	<0.00071
Arsenic	mg/L	0.00301	0.00344	0.00944	0.00912	0.00806	0.00846	0.00846	0.00938	0.0105	0.0111
Barium	mg/L	0.0511	0.0519	0.0253	0.0237	0.0216	0.0256	0.0226	0.0238	0.0241	0.0223
Beryllium	mg/L	<0.000406	<0.000406	<0.0006	<0.0006	<0.000406	<0.000406	<0.000406	<0.000406	<0.000406	<0.000406
Cadmium	mg/L	<6.8e-005	<6.8e-005	<0.0003	<0.0003	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005
Chromium	mg/L	<0.000203	<0.000203	<0.002	<0.002	0.000298 J	0.000262 J	<0.000203	0.000306 J	0.000226 J	0.000271 J
Cobalt	mg/L	0.00097	0.000962	0.00218 J	<0.002	0.000752	0.000616	0.000453	0.000429	0.000371	0.000321
Combined Radium 226 + 228	pCi/L	0.534 U	0.183 U	0.0821 U	0.36 U	0.475 U	0.186 U	0.275 U	1.06 U	0.641 U	1.05 U
Fluoride	mg/L	0.18	0.137	0.13	0.121	0.131	0.203	0.0837 J	0.116 J	0.128	0.128
Lead	mg/L	<6.8e-005	<6.8e-005	<0.001	<0.001	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005
Lithium	mg/L	0.341	0.357	0.0346	0.0333	0.0356	0.0348	0.0313	0.035	0.0309	0.0346
Mercury	mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Molybdenum	mg/L	0.0339	0.0337	<0.002	<0.002	0.00174	0.00169	0.00155	0.00131	<0.005075	<0.005075
Selenium	mg/L	<0.000508	<0.000508	<0.002	<0.002	<0.000507	<0.000508	<0.000508	<0.000508	<0.000508	<0.000508
Thallium	mg/L	<6.8e-005	<6.8e-005	<0.0002	<0.0002	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005

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

ANALYTICAL DATA SUMMARY
Ash Pond (08/01/2016 - 09/19/2023)
APC Plant Gorgas
Walker County Alabama

Analyte	Units	GS-AP-MW-43HO								GS-AP-MW-44HO		
		03/25/2020	09/22/2020	02/17/2021	08/04/2021	02/21/2022	08/03/2022	03/28/2023	09/19/2023	08/27/2020	09/15/2020	02/03/2021
Appendix III												
Boron	mg/L	0.112	0.12	0.119	0.126	0.13	0.139	0.157	0.158	0.0366 J	0.0404 J	0.0472 J
Calcium	mg/L	4.11	2.82	4.82	4.58	4.56	5.62	17.4	6.7	2.89	2.94	2.87
Chloride	mg/L	90.6	78	96.3	69.4	104	84.5	228	134	27.1	36.2	44.8
Fluoride	mg/L	0.204	0.216	0.174	0.289	0.226	0.173	0.239	0.162	0.174	0.221	0.181
pH_Field	pH	8.24	8.66	8.72	8.75	8.58	8.51	7.92	8.25	8.9	8.94	8.9
Sulfate	mg/L	327	269	285	301	347	250	322	237	33.5	71.6	57
TDS	mg/L	930	910	--	--	--	--	--	--	435	564	--
Appendix IV												
Antimony	mg/L	<0.0008	<0.0008	<0.000507	<0.000508	<0.000508	<0.000508	<0.00071	<0.00071	0.0013 J	0.000819 J	<0.000507
Arsenic	mg/L	0.00509	0.0039 J	0.00132	0.00125	0.000889	0.00109	0.000779	0.000738	0.00321 J	0.00184 J	0.000795
Barium	mg/L	0.0927	0.0921	0.0894	0.102	0.0849	0.0956	0.18	0.0906	0.0867	0.0783	0.0602
Beryllium	mg/L	<0.0006	<0.0006	<0.000406	<0.000406	<0.000406	<0.000406	<0.000406	<0.000406	<0.0006	<0.0006	<0.000406
Cadmium	mg/L	<0.0003	<0.0003	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<0.0003	<0.0003	<6.8e-005
Chromium	mg/L	<0.002	<0.002	0.000219 J	0.00031 J	0.000272 J	0.000257 J	0.000229 J	0.000266 J	<0.002	<0.002	0.000255 J
Cobalt	mg/L	<0.002	<0.002	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<0.002	<0.002	<6.8e-005
Combined Radium 226 + 228	pCi/L	0.678 U	0.0466 U	0.629 U	0.949 U	0.509 U	0.252 U	0.833 U	0.396 U	0.798	0.311 U	0.145 U
Fluoride	mg/L	0.204	0.216	0.174	0.289	0.226	0.173	0.239	0.162	0.174	0.221	0.181
Lead	mg/L	<0.001	<0.001	0.000328	0.000265	0.000116 J	<6.8e-005	<6.8e-005	0.000197 J	<0.001	<0.001	<6.8e-005
Lithium	mg/L	0.0505	0.0587	0.0723	0.0706	0.0579	0.0749	0.0686	0.0686	0.0411	0.0494	0.063
Mercury	mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Molybdenum	mg/L	<0.002	<0.002	0.00292	0.00385	0.00309	0.00526	0.0074 J	<0.005075	0.0071 J	0.00858 J	0.00429
Selenium	mg/L	<0.002	<0.002	<0.000507	<0.000508	<0.000508	<0.000508	<0.000508	<0.000508	<0.002	<0.002	<0.000507
Thallium	mg/L	<0.0002	<0.0002	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<0.0002	<0.0002	<6.8e-005

Notes:

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

ANALYTICAL DATA SUMMARY
Ash Pond (08/01/2016 - 09/19/2023)
APC Plant Gorgas
Walker County Alabama

Analyte	Units	GS-AP-MW-44HO				
		07/27/2021	02/09/2022	07/20/2022	03/06/2023	09/05/2023
Appendix III						
Boron	mg/L	0.0429 J	0.043 J	0.0422 J	0.0433 J	0.0457 J
Calcium	mg/L	1.46	1.21	1.26	1.09	2.02
Chloride	mg/L	33.4	28.9	30.1	32	31.5
Fluoride	mg/L	0.254	0.142	0.146	0.227	0.153
pH_Field	pH	9.04	8.94	9.02	9.06	8.88
Sulfate	mg/L	38.6	27.7	28.9	23.1	25.5
TDS	mg/L	--	--	--	--	--
Appendix IV						
Antimony	mg/L	<0.000508	<0.000508	<0.000508	<0.000508	<0.00071
Arsenic	mg/L	0.000343	0.000353	0.000401	0.000275	0.000515
Barium	mg/L	0.0758	0.075	0.0697	0.0831	0.0867
Beryllium	mg/L	<0.000406	<0.000406	<0.000406	<0.000406	<0.000406
Cadmium	mg/L	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005
Chromium	mg/L	<0.000203	0.000233 J	0.000242 J	0.000245 J	<0.000203
Cobalt	mg/L	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005
Combined Radium 226 + 228	pCi/L	0.48 U	0.793 U	0.0778 U	1.11	0.396 U
Fluoride	mg/L	0.254	0.142	0.146	0.227	0.153
Lead	mg/L	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005
Lithium	mg/L	0.0567	0.0459	0.0529	0.0463	0.0474
Mercury	mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Molybdenum	mg/L	0.0035	0.00379	0.00328	0.00355	<0.005075
Selenium	mg/L	<0.000508	<0.000508	<0.000508	<0.000508	<0.000508
Thallium	mg/L	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005

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

Appendix B

Appendix B. Historical Groundwater Elevations Summary

Plant Gorgas Ash Pond
06/30/2016 - 08/29/2023

Well	Hydraulic Location	Geologic Unit	Measure Date																													
			06/30/16	07/07/16	07/27/16	08/01/16	09/19/16	10/24/16	12/12/16	02/06/17	03/27/17	04/24/17	06/05/17	08/21/17	02/19/18	04/02/18	05/14/18	10/15/18	03/13/19	04/15/19	07/27/19	09/23/19	03/16/20	09/14/20	02/01/21	06/09/21	07/26/21	12/16/21	02/07/22	07/18/22	03/06/23	08/29/23
GS-AP-MW-18R	Upgradient	Pottsville Fm - Pratt Strata																										367.05	422.48	422.78	423.69	422.56
GS-AP-MW-8	Upgradient	Pottsville Fm - Pratt Strata	388.3	388.22	387.95	388.05	387.65	386.81	387.48	388.46	388.59	389.32	389.28	389.87	391.02	390.73	391.08	389.43	391.66	391.88	NM	387.52	390.10	389.42	390.61	390.32	390.70	44.89	391.47	391.20	392.80	390.79
GS-AP-MW-17V	Upgradient	Pottsville Fm - Shallow Water Table																	424.68	NM	NM	419.40	425.61	423.83	426.50	425.16	426.11	422.88	425.19	422.40	426.16	425.67
GS-AP-MW-10R	Downgradient	Pottsville Fm - American Strata																										309.58	308.13	306.74	307.39	305.82
GS-AP-MW-11R	Downgradient	Pottsville Fm - Pratt Strata																									382.16	380.83	381.41	378.68	378.82	372.32
GS-AP-MW-13R	Downgradient	Pottsville Fm - Pratt Strata																									NM	360.90	361.99	359.58	360.13	352.97
GS-AP-MW-14R	Downgradient	Pottsville Fm - Pratt Strata																										368.90	370.38	369.46	372.72	370.64
GS-AP-MW-18VR	Downgradient	Pottsville Fm - Pratt Strata																										268.78	292.37	253.38	267.20	273.56
GS-AP-MW-1R	Downgradient	Pottsville Fm - American Strata																										316.21	326.46	308.46	315.59	315.23
GS-AP-MW-3V	Downgradient	Pottsville Fm - American Strata																										364.07	363.87	359.40	360.87	354.49
GS-AP-MW-45V	Downgradient	Pottsville Fm - American Strata																										348.61	352.05	347.30	348.80	344.08
GS-AP-MW-46	Downgradient	Pottsville Fm - Pratt Strata																										363.59	366.65	359.83	361.74	356.23
GS-AP-MW-47	Downgradient	Pottsville Fm - American Strata																										353.80	357.20	352.26	354.81	352.63
GS-AP-MW-5R	Downgradient	Pottsville Fm - American Strata																										344.66	347.20	344.43	346.25	341.88
GS-AP-MW-9R	Downgradient	Pottsville Fm - Pratt Strata																										361.20	361.49	360.71	360.50	357.71
GS-AP-MW-2	Downgradient	Pottsville Fm - Pratt Strata	376.71	376.55	376.65	376.68	376.46	376.33	376.28	376.54	376.63	376.63	376.58	376.47	376.69	376.59	376.49	376.18	376.50	376.10	NM	373.88	375.95	374.26	375.70	375.16	375.29	374.01	375.13	371.91	372.22	365.51
GS-AP-MW-3	Downgradient	Pottsville Fm - Pratt Strata	374.34	NM	374.64	374.7	374.67	374.54	374.44	374.81	374.89	374.83	374.66	374.63	375.18	374.99	374.88	374.64	375.16	374.79	NM	372.92	374.66	372.56	374.08	373.31	373.58	372.48	373.67	370.63	371.18	364.90
GS-AP-MW-6S	Downgradient	Pottsville Fm - Gillespy Transition	258.02	257.82	258.02	258.20	257.67	258.17	258.77	258.70	257.64	257.36	257.36	257.70	256.76	256.75	256.70	256.98	256.84	256.77	NM	257.27	257.81	258.31	258.14	258.29	257.65	257.12	257.16	257.26	257.31	257.36
GS-AP-MW-6D	Downgradient	Pottsville Fm - Gillespy Transition	263.74	263.70	263.95	264.17	263.67	263.80	264.52	264.45	263.52	263.34	263.02	263.30	262.01	262.11	261.95	263.06	262.62	262.89	NM	263.13	263.58	263.88	263.40	263.64	263.56	262.39	262.79	263.21	263.19	262.21
GS-AP-MW-7	Downgradient	Pottsville Fm - Gillespy Transition	305.40	305.35	305.41	305.49	305.29	305.50	305.64	305.73	305.48	305.31	305.29	305.35	304.76	304.73	304.58	304.81	303.63	303.43	NM	303.92	303.69	304.17	304.25	303.58	303.54	303.23	303.69	303.06	303.94	301.06
GS-AP-MW-12	Downgradient	Pottsville Fm - Pratt Strata	380.86	380.84	380.9	380.90	380.78	380.70	380.76	380.92	380.82	380.74	380.76	380.72	380.91	380.85	380.84	380.81	380.86	380.30	NM	378.16	380.13	378.74	380.21	379.78	380.22	378.80	379.83	376.59	376.24	366.71
GS-AP-MW-15	Downgradient	Pottsville Fm - Pratt Strata	373.37	373.44	373.36	373.32	373.09	373.24	373.10	373.46	373.86	373.84	373.57	373.54	374.57	374.55	374.40	373.88	375.36	374.58	NM	371.79	374.68	372.02	373.78	373.40	374.13	372.55	374.18	373.34	377.22	376.70
GS-AP-MW-16D	Downgradient	Pottsville Fm - Nickel Plate Strata	318.51	318.37	317.66	317.69	316.56	315.97	315.57	319.64	322.32	323.51	320.23	320.44	326.22	324.57	324.98	318.72	330.01	325.17	NM	316.03	329.36	316.17	323.09	316.11	316.97	313.30	324.05	308.37	314.88	317.66
GS-AP-MW-17	Downgradient	Pottsville Fm - Pratt Strata	350.67	350.39		349.78	349.31	349.16	349.44	354.10	355.00	354.18	351.51	351.56	358.80	357.07	355.09		358.92	360.49	NM	349.34	359.09	350.15	359.58	352.62	354.23	350.56	361.30	350.35	360.51	351.76
GS-AP-MW-19	Downgradient	Pottsville Fm - Pratt Strata	381.98	382.22	382.13	382.1	381.86	382.6	382.76	382.94	383.05	383.05	382.97	383.01	383.40	383.50	383.52	383.72	384.44	384.09	382.13	382.96	383.82	382.54	384.03	384.22	384.71	382.90	382.54	381.08	384.48	384.79
GS-AP-MW-21	Downgradient	Pottsville Fm - Pratt Strata	346.52	346.5	346.11	346.04	345.05	344.39	344.04	345.97	348.27	349.53	347.3	347.58	349.73	349.98	350.33	346.15	352.67	349.05	NM	343.85	352.02	344.25	347.94	344.56	344.31	340.37	346.63	335.17	339.30	336.67
GS-AP-MW-9V	Downgradient	Pottsville Fm - American Strata																					368.30	365.63	367.46	366.86	366.98	365.53	366.19	363.58	363.44	358.10
GS-AP-MW-12V	Downgradient	Pottsville Fm - American Strata																	392.70	NM	NM	389.97	392.16	358.83	360.26	359.98	360.25	358.69	360.06	357.51	356.69	351.74
GS-AP-MW-15V	Downgradient	Pottsville Fm - American Strata																					314.63	301.24	309.63	300.36	301.57	294.79	308.68	285.35	295.61	298.91
GS-AP-MW-21V	Downgradient	Pottsville Fm - American Strata																					NM	334.94	339.54	335.16	334.36	330.22	337.62	324.13	329.41	327.75
GS-AP-MW-23V	Vertical Delineation	Pottsville Fm - Gillespy Transition																										261.96	262.68	262.94	262.94	261.98
GS-AP-MW-31V	Vertical Delineation	Pottsville Fm - American Strata																										305.59	315.78	300.19	306.25	307.18
GS-AP-MW-36V	Vertical Delineation	Pottsville Fm - American Strata																										277.14	293.92	264.68	277.39	282.12
GS-AP-PZ-18R	Vertical Delineation	Pottsville Fm - Nickel Plate Strata																										367.11	367.23	367.20	367.58	367.71
GS-AP-MW-6V	Vertical Delineation	Pottsville Fm - Gillespy Transition																						264.51	262.18	262.03	262.12	261.80	261.88	261.48	261.73	260.83
GS-AP-PZ-16	Vertical Delineation	Pottsville Fm - American Strata	280.99	NM	278.86	278.51	276.29	274.83	273.94	282.67	286.2	287.23	281.58	179.77	294.14	288.58	288.38	278.22	294.54		NM	276.24	295.03	276.65	291.64	273.98	277.41	268.33	292.09	252.45	266.74	273.18
GS-AP-PZ-22	Vertical Delineation	Pottsville Fm - American Strata	NM	NM	NM	278.43	276.31	274.79	273.88	282.63	286.16	287.18	281.54	282.46	294.14	288.52	288.29	278.18	294.43	290.48	NM	276.21	295.02	276.58	291.50	273.92	277.43	268.26	291.96	252.42	266.75	273.12
GS-AP-MW-27HR	Horizontal Delineation	Pottsville Fm - Pratt Strata																									373.22	372.42	374.23	373.11	376.83	378.18
GS-AP-MW-37HR	Horizontal Delineation	Pottsville Fm - American Strata																									361.53	317.08	318.99	315.85	317.26	315.80
GS-AP-MW-23H	Horizontal Delineation	Pottsville Fm - Gillespy Transition																	276.82	NM	NM	275.77	277.13	276.74	277.08	276.74	277.06	276.60	277.28	276.29	277.00	275.47
GS-AP-MW-24H	Horizontal Delineation	Pottsville Fm - Gillespy Transition																	255.11	NM	NM	254.99	255.53	255.04	255.25	255.05	255.21	255.03	255.14	255.11	255.09	254.54
GS-AP-MW-26H	Horizontal Delineation	Pottsville Fm - American Strata																	299.13	NM	NM	297.55	299.07	297.98	298.98	299.00	299.34	298.94	299.19	298.02	298.78	297.57

Notes:
(1) Groundwater elevations measured in vertical feet relative to the North American Vertical Datum (NAVD) 1988.
(2) NM = Not Measured

Appendix B. Historical Groundwater Elevations Summary

Plant Gorgas Ash Pond
06/30/2016 - 08/29/2023

Well	Hydraulic Location	Geologic Unit	Measure Date																													
			06/30/16	07/07/16	07/27/16	08/01/16	09/19/16	10/24/16	12/12/16	02/06/17	03/27/17	04/24/17	06/05/17	08/21/17	02/19/18	04/02/18	05/14/18	10/15/18	03/13/19	04/15/19	07/27/19	09/23/19	03/16/20	09/14/20	02/01/21	06/09/21	07/26/21	12/16/21	02/07/22	07/18/22	03/06/23	08/29/23
GS-AP-MW-28H	Horizontal Delineation	Pottsville Fm - Pratt Strata																	359.02	NM	NM	349.40	360.20	350.26	359.97	357.78	354.34	350.7	361.41	350.17	360.62	351.88
GS-AP-MW-29H	Horizontal Delineation	Pottsville Fm - Pratt Strata																	359.98	NM	NM	350.64	361.32	351.19	360.64	353.45	354.99	351.34	362.03	361.39	361.29	352.52
GS-AP-MW-25HA	Horizontal Delineation	Pottsville Fm - Gillespy Transition																					NM	285.88	286.74	287.89	287.36	285.81	286.61	286.31	285.97	285.18
GS-AP-MW-30HA	Horizontal Delineation	Pottsville Fm - American Strata																					295.09	276.84	291.89	274.08	277.52	267.47	292.21	252.32	266.69	273.09
GS-AP-MW-31H	Horizontal Delineation	Pottsville Fm - Pratt Strata																					355.18	351.86	352.97	352.56	352.30	350.71	352.32	350.18	351.23	348.51
GS-AP-MW-32H	Horizontal Delineation	Pottsville Fm - Pratt Strata																					309.74	293.82	302.28	292.82	292.48	286.70	300.21	277.84	285.95	289.27
GS-AP-MW-33HO	Horizontal Delineation	Pottsville Fm - Pratt Strata																					303.00	287.38	296.87	285.47	286.69	280.42	294.16	271.89	279.88	283.63
GS-AP-MW-34HO	Horizontal Delineation	Pottsville Fm - American Strata																					294.92	288.81	291.46	281.61	277.34	298.30	291.88	252.45	266.77	273.21
GS-AP-MW-35HO	Horizontal Delineation	Pottsville Fm - Pratt Strata																					311.18	295.81	302.71	298.14	295.39	289.59	300.71	282.35	289.10	292.21
GS-AP-MW-36H	Horizontal Delineation	Pottsville Fm - Pratt Strata																					313.77	300.53	306.41	300.27	300.00	289.30	304.70	288.45	294.89	297.30
GS-AP-MW-40H	Horizontal Delineation	Pottsville Fm - American Strata																						NM	278.12	277.29	278.02	277.06	278.33	277.20	278.36	277.58
GS-AP-MW-41HS	Horizontal Delineation	Pottsville Fm - Gillespy Transition																					264.27	262.29	263.20	262.31	262.34	263.78	264.22	262.82	264.10	263.19
GS-AP-MW-38H	Horizontal Delineation	Pottsville Fm - American Strata																					298.28	297.55	298.39	298.49	298.77	298.62	298.71	297.66	298.02	297.26
GS-AP-MW-41HD	Horizontal Delineation	Pottsville Fm - Gillespy Transition																					283.38	282.72	282.96	282.46	282.25	282.37	282.56	283.02	283.48	282.48
GS-AP-MW-42H	Horizontal Delineation	Pottsville Fm - Gillespy Transition																					286.94	287.88	288.11	288.00	288.39	287.70	288.48	287.56	288.08	286.60
GS-AP-MW-43HO	Horizontal Delineation	Pottsville Fm - Pratt Strata																					366.54	364.31	365.67	365.14	365.14	363.71	365.06	362.51	363.21	358.51
GS-AP-MW-44HO	Horizontal Delineation	Pottsville Fm - Pratt Strata																						364.14	365.48	364.70	363.18	363.50	365.05	362.30	363.04	358.23
GS-AP-MW-4	Piezometer	Pottsville Fm - Pratt Strata	371.33	NM	371.14	371.14	370.85	370.61	371.22	371.89	371.95	371.79	371.68	371.70	372.80	372.49	372.08	371.39	372.97	372.86	NM	369.36	372.65	370.44	370.95	371.57	371.64	370.60	372.01	370.01	370.18	364.48
GS-AP-MW-16S	Piezometer	Pottsville Fm - Shallow Water Table	405.15	NM		404.77	404.08	403.78	403.64	403.68	404.37	404.63	404.32	403.98	403.27	403.66	404.03	402.97	404.62		NM	403.02	404.20	403.36	407.07	405.94	406.03	404.67	406.04	403.61	406.10	404.62
GS-AP-MW-20	Piezometer	Pottsville Fm - Pratt Strata	322.95	NM	322.1	321.92	319.6	319.68	319.05	322.46	325.75	327.55	323.89	324.46	328.52	328.12	329.38	326.44	335.64	329.33	NM	329.45	331.81	320.81	325.90	320.61	320.43	315.44	321.03	308.77	315.04	315.34
GS-AP-MW-7VR	Piezometer	Pottsville Fm - Gillespy Transition																						233.28	264.39	264.37	264.51	263.97	264.13	263.65	263.68	262.80
GS-AP-MW-7V	Piezometer	Pottsville Fm - Gillespy Transition																	129.68	NM	NM	138.68	144.22	121.83	117.24	120.97	122.43	128.65	128.22	132.98	139.30	144.28
GS-AP-MW-25H	Piezometer	Pottsville Fm - Pratt Strata																	301.10	NM	NM	302.31	301.11	300.39	301.87	301.47	302.15	301.79	301.37	300.63	301.69	300.38
GS-AP-MW-30H	Piezometer	Pottsville Fm - Pratt Strata																		NM	NM	311.02	313.15	307.96	309.19	308.66	308.31	306.9	315.17	309.87	309.98	310.21
GS-AP-MW-30HS	Piezometer	Pottsville Fm - Shallow Water Table																		NM	NM	DRY	535.15	DRY	534.83	534.95	534.84	534.72	534.75	534.77	535.11	534.64
GS-AP-MW-39H	Piezometer	Pottsville Fm - Unassigned																					152.45	142.01	144.33	157.64	164.61	157.10	176.00	185.11	196.33	204.11
GS-AP-MW-1	Abandoned	Pottsville Fm - Pratt Strata	382.93	NM	DRY	382.95	382.91	382.91	382.93	382.92	382.94	382.93	382.87	382.90	382.93	Dry	382.89	382.88	385.41	382.90	NM	383.18	382.94	382.88	382.92	382.88	382.93					
GS-AP-MW-5	Abandoned	Pottsville Fm - Pratt Strata	368.33	NM	368.33	368.33	367.97	367.42	367.13	367.75	367.67	367.91	367.23	367.25	368.42	368.07	368.09	367.27	369.39	369.01	NM	NM										
GS-AP-MW-9	Abandoned	Pottsville Fm - Pratt Strata	369.91	369.76	369.78	369.95	372.11	373.89	374.89	375.28	374.81	375.02	374.67	374.81	375.43	375.70	375.58	375.47	375.94	375.28	NM	NM										
GS-AP-MW-10	Abandoned	Pottsville Fm - Unassigned	330.26	NM	333.22	333.86	338.12	340.33	342.14	343.26	343.99	344.09	343.47	343.78	343.71	344.09	344.10	343.35	NM	344.05	NM	NM										
GS-AP-MW-11	Abandoned	Pottsville Fm - Pratt Strata	381.98	381.94	381.97	382.10	381.78	381.62	381.76	381.92	381.89	381.79	381.81	381.73	382.14	382.13	382.20	382.13	382.54	381.68	NM	NM										
GS-AP-MW-13	Abandoned	Pottsville Fm - Pratt Strata	394.80	394.63	394.37	394.33	393.71	393.37	393.00	392.75	392.67	392.74	392.69	392.78	392.39	392.79	393.22	392.99	395.09	395.73	NM	NM										
GS-AP-MW-14	Abandoned	Pottsville Fm - Pratt Strata	371.58	371.47	371.46	371.50	371.26	371.31	371.30	371.55	371.57	371.62	371.54	371.46	372.11	372.11	371.88	371.77	372.46	371.98	NM	NM										
GS-AP-MW-18	Abandoned	Pottsville Fm - Pratt Strata	350.82	350.54	349.88	349.9	349.37	349.3	349.52	354.13	355.05	354.31	351.59	351.67	358.87	357.03	354.99	350.59	359.11	360.66	NM	349.49	360.25	350.36	359.98	352.77	354.30					
GS-AP-PZ-18	Abandoned	Pottsville Fm - American Strata	NM	NM	278.86	278.52	276.36	274.9	273.9	282.71		287.28	281.54	282.54	294.05	288.46	288.27	278.21	294.43	290.47	NM	276.23	294.86	276.72	291.61	274.01	277.47					
GS-AP-MW-18V	Abandoned	Pottsville Fm - American Strata																	295.94	NM	NM	285.03	297.99	284.79	286.96	284.80	283.75					
GS-AP-MW-27H	Abandoned	Pottsville Fm - American Strata																	299.24	NM	NM		305.94	302.84	299.70	299.49	NM					
GS-AP-MW-37H	Abandoned	Pottsville Fm - Pratt Strata																					326.07	305.24	306.35	306.63	NM					

Notes:
(1) Groundwater elevations measured in vertical feet relative to the North American Vertical Datum (NAVD) 1988.
(2) NM = Not Measured

Appendix C

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

Field Case Narrative

Gorgas Ash Pond

2023 Compliance Event 1

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

Turbidity levels less than 10 NTU were not able to be achieved after extended pumping for well MW-6V. A complete sample set for totals analysis was collected followed by a field filtered set for dissolved analysis.

Due to low yield, well MW-32H was sampled using the Minimal Purge Method, as defined in the SAP.

All pH field readings for well MW-16S and the first 2 pH field readings for MW-12 were qualified due to pH readings falling outside of the bracketed calibration range. The below qualifier was used:

- E – Estimated reported value exceeded calibration range

Field quality control procedures were performed as follows:

- Blanks and Sample Duplicates were collected as described in the SAP.
    - Field Blank 6 (FB-6) had results above the reporting limit (RL) for Fluoride.

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

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

Field Case Narrative

Gorgas Ash Pond

MW-33HO, MW-34HO & MW-35HO 2023 Event 1

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

Field quality control procedures were performed as follows:

- Blanks and Sample Duplicates were collected as described in the SAP.
- Calibration verification for all required field parameters were performed daily, before and after sample collection.

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

Field Case Narrative

Gorgas Ash Pond

MW-44HO (Salter Well) 2023 Event 1

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

Field quality control procedures were performed as follows:

- Blanks and Sample Duplicates were collected as described in the SAP.
- Calibration verifications for all required field parameters were performed daily, before and after sample collection.

Water Level Record/Well Inspection
Groundwater

APC General Testing Laboratory
General Service Complex Building 8

Y

User Name: Dfgentry
PIN: 123654
Reason: Submit

Submit

Date: 03/06/2023
Location: Gorgas Ash Pond
Collector: Dallas Gentry
Weather: Partly Cloudy 75

			In Good Condition					
Well	Time	Water Level (ft)	Locks	Bollards	Pad	Protective Casing	Name Plate	Comment
MW-01R	1358	175.78	☑	☑	☑	☑	☑	Collected by TJD
MW-2	1411	149.81	☑	☑	☑	☑	☑	Collected by TJD
MW-3	1137	141.11	☑	☑	☑	☑	☑	Collected by TJD
MW-03V	1115	152.53	☑	☑	☑	☑	☑	Collected by TJD
MW-4	1204	137.72	☑	☑	☑	☑	☑	Collected by TJD
MW-05R	1217	142.34	☑	☑	☑	☑	☑	Collected by TJD
MW-6S	1234	17.36	☑	☑	☑	☑	☑	Collected by TJD
MW-6D	1236	11.31	☑	☑	☑	☑	☑	Collected by TJD
MW-6V	1238	13.71	☑	☑	☑	☑	☑	Collected by TJD
MW-7	1230	9.51	☑	☑	☑	☑	☑	Collected by TJD
MW-7V	1228	172.84	☑	☑	☑	☑	☑	Collected by TJD
MW-7VR	1226	50.21	☑	☑	☑	☑	☑	Collected by TJD
MW-8	1227	41.81	☑	☑	☑	☑	☑	
MW-9V	1149	57.42	☑	☑	☑	☑	☑	
MW-09R	1152	60.70	☑	☑	☑	☑	☑	
MW-10R	1131	145.40	☑	☑	☑	☑	☑	
MW-11R	1125	76.78	☑	☑	☑	☑	☑	
MW-12	1114	74.43	☑	☑	☑	☑	☑	
MW-12V	1117	93.05	☑	☑	☑	☑	☑	
MW-13R	1122	100.53	☑	☑	☑	☑	☑	
MW-14R	1109	101.60	☑	☑	☑	☑	☑	
MW-15	1042	77.67	☑	☑	☑	☑	☑	
MW-15V	1045	160.28	☑	☑	☑	☑	☑	
MW-16S	1028	56.32	☑	☑	☑	☑	☑	
MW-16D	1030	147.39	☑	☑	☑	☑	☑	
PZ-16	1033	195.55	☑	☑	☑	☑	☑	
MW-17	1336	171.37	☑	☑	☑	☑	☑	
MW-17V	1339	105.29	☑	☑	☑	☑	☑	
MW-18R	1420	39.38	☑	☑	☑	☑	☑	
MW-18VR	1416	195.60	☑	☑	☑	☑	☑	
PZ-18R	1422	95.55	☑	☑	☑	☑	☑	
MW-19	1458	111.10	☑	☑	☑	☑	☑	
MW-20	1516	213.11	☑	☑	☑	☑	☑	Collected by TJD

Water Level Record/Well Inspection Groundwater

APC General Testing Laboratory
General Service Complex Building 8

Y

User Name: Dfgentry
PIN: 123654
Reason: Submit

Submit

Date: 03/06/2023
Location: Gorgas Ash Pond
Collector: Dallas Gentry
Weather: Partly Cloudy 75

			In Good Condition					
Well	Time	Water Level (ft)	Locks	Bollards	Pad	Protective Casing	Name Plate	Comment
MW-21	1500	170.18	☑	☑	☑	☑	☑	Collected by TJD
MW-21V	1505	180.43	☑	☑	☐	☑	☑	Collected by TJD
PZ-22	1331	265.63	☑	☑	☑	☑	☑	
MW-23H	1245	27.98	☑	☑	☑	☑	☑	Collected by TJD
MW-23V	1243	43.46	☑	☑	☑	☑	☑	Collected by TJD
MW-24H	1303	6.26	☑	☑	☑	☑	☑	Collected by TJD
MW-25H	1201	160.10	☑	☑	☑	☑	☑	
MW-25HA	1157	176.30	☑	☑	☑	☑	☑	
MW-26H	1208	95.90	☑	☑	☑	☑	☑	
MW-27HR	1258	158.43	☑	☑	☑	☑	☑	
MW-28H	1344	153.20	☑	☐	☑	☑	☑	
MW-29H	1406	79.66	☑	☐	☑	☑	☑	
MW-30H	1447	272.51	☑	☑	☑	☑	☑	Collected by TJD
MW-30HA	1439	315.71	☑	☑	☑	☑	☑	Collected by TJD
MW-30HS	1444	47.42	☑	☑	☑	☑	☑	Collected by TJD
MW-31H	1345	236.16	☑	☑	☑	☑	☑	Collected by TJD
MW-31V	1340	282.24	☑	☑	☑	☑	☑	Collected by TJD
MW-32H	1449	264.08	☑	☑	☑	☑	☑	
MW-33HO	1431	246.91	☑	☑	☑	☑	☑	
MW-34HO	1355	257.05	☑	☑	☑	☑	☑	
MW-35HO	1317	264.25	☑	☑	☑	☑	☑	
MW-36H	1246	241.72	☑	☑	☑	☑	☑	
MW-36V	1251	259.66	☑	☑	☑	☑	☑	
MW-37HR	1053	142.79	☑	☑	☑	☑	☑	
MW-38H	1142	47.72	☑	☑	☑	☑	☑	
MW-39H	1135	254.80	☑	☑	☑	☑	☑	
MW-40H	1217	79.55	☑	☑	☑	☑	☑	
MW-41HS	1256	20.55	☑	☑	☑	☑	☑	Collected by TJD
MW-41HD	1258	1.06	☑	☑	☑	☑	☑	Collected by TJD
MW-42H	1313	52.54	☑	☑	☑	☑	☑	Collected by TJD
MW-43H	1327	151.41	☑	☑	☑	☑	☑	Collected by TJD
MW-44HO	1323	143.17	☑	☑	☑	☑	☑	Collected by AWG
MW-45V	1145	201.79	☑	☑	☑	☑	☑	Collected by TJD

Water Level Record/Well Inspection
Groundwater

APC General Testing Laboratory
General Service Complex Building 8

Y

User Name: Dfgentry
PIN: 123654
Reason: Submit

Submit

Date: 03/06/2023
Location: Gorgas Ash Pond
Collector: Dallas Gentry

Weather: Partly Cloudy 75

			In Good Condition					
Well	Time	Water Level (ft)	Locks	Bollards	Pad	Protective Casing	Name Plate	Comment
MW-46	1356	129.51	☑	☑	☑	☑	☑	Collected by TJD
MW-47	1106	120.28	☑	☑	☑	☑	☑	
			☐	☐	☐	☐	☐	
			☐	☐	☐	☐	☐	
			☐	☐	☐	☐	☐	
			☐	☐	☐	☐	☐	
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			☐	☐	☐	☐	☐	
			☐	☐	☐	☐	☐	
			☐	☐	☐	☐	☐	

Field Parameters Summary
Plant Gorgas Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GS-AP-MW-14R	COND	Conductivity	3/15/2023 14:24	412.82	uS/cm
GS-AP-MW-14R	DO	DO	3/15/2023 14:24	0.25	mg/L
GS-AP-MW-14R	DTW	Depth to Water Detail	3/15/2023 14:24	106.91	ft
GS-AP-MW-14R	ORP	Oxidation Reduction Potention	3/15/2023 14:24	-36.33	mv
GS-AP-MW-14R	PH	pH	3/15/2023 14:24	6.61	SU
GS-AP-MW-14R	TEMP	Temperature	3/15/2023 14:24	16.96	C
GS-AP-MW-14R	TURB	Turbidity	3/15/2023 14:24	7.33	NTU
GS-AP-MW-14R	COND	Conductivity	3/15/2023 14:29	410.11	uS/cm
GS-AP-MW-14R	DO	DO	3/15/2023 14:29	0.19	mg/L
GS-AP-MW-14R	DTW	Depth to Water Detail	3/15/2023 14:29	111.74	ft
GS-AP-MW-14R	ORP	Oxidation Reduction Potention	3/15/2023 14:29	-29.98	mv
GS-AP-MW-14R	PH	pH	3/15/2023 14:29	6.59	SU
GS-AP-MW-14R	TEMP	Temperature	3/15/2023 14:29	16.87	C
GS-AP-MW-14R	TURB	Turbidity	3/15/2023 14:29	2.05	NTU
GS-AP-MW-14R	COND	Conductivity	3/15/2023 14:34	403.37	uS/cm
GS-AP-MW-14R	DO	DO	3/15/2023 14:34	0.17	mg/L
GS-AP-MW-14R	DTW	Depth to Water Detail	3/15/2023 14:34	115.32	ft
GS-AP-MW-14R	ORP	Oxidation Reduction Potention	3/15/2023 14:34	-32.93	mv
GS-AP-MW-14R	PH	pH	3/15/2023 14:34	6.58	SU
GS-AP-MW-14R	TEMP	Temperature	3/15/2023 14:34	16.7	C
GS-AP-MW-14R	TURB	Turbidity	3/15/2023 14:34	1.94	NTU
GS-AP-MW-14R	COND	Conductivity	3/15/2023 14:39	401.16	uS/cm
GS-AP-MW-14R	DO	DO	3/15/2023 14:39	0.56	mg/L
GS-AP-MW-14R	DTW	Depth to Water Detail	3/15/2023 14:39	115.19	ft
GS-AP-MW-14R	ORP	Oxidation Reduction Potention	3/15/2023 14:39	-33.69	mv
GS-AP-MW-14R	PH	pH	3/15/2023 14:39	6.6	SU
GS-AP-MW-14R	TEMP	Temperature	3/15/2023 14:39	16.75	C
GS-AP-MW-14R	TURB	Turbidity	3/15/2023 14:39	1.9	NTU
GS-AP-MW-14R	COND	Conductivity	3/15/2023 14:44	399.47	uS/cm
GS-AP-MW-14R	DO	DO	3/15/2023 14:44	0.72	mg/L
GS-AP-MW-14R	DTW	Depth to Water Detail	3/15/2023 14:44	115.02	ft
GS-AP-MW-14R	ORP	Oxidation Reduction Potention	3/15/2023 14:44	-33.24	mv
GS-AP-MW-14R	PH	pH	3/15/2023 14:44	6.61	SU
GS-AP-MW-14R	TEMP	Temperature	3/15/2023 14:44	17.04	C
GS-AP-MW-14R	TURB	Turbidity	3/15/2023 14:44	1.88	NTU
GS-AP-MW-14R	COND	Conductivity	3/15/2023 14:49	386.48	uS/cm
GS-AP-MW-14R	DO	DO	3/15/2023 14:49	0.72	mg/L
GS-AP-MW-14R	DTW	Depth to Water Detail	3/15/2023 14:49	114.83	ft
GS-AP-MW-14R	ORP	Oxidation Reduction Potention	3/15/2023 14:49	-39.96	mv
GS-AP-MW-14R	PH	pH	3/15/2023 14:49	6.63	SU
GS-AP-MW-14R	SULFIDE	Sulfide	3/15/2023 14:49	1	mg/L
GS-AP-MW-14R	TEMP	Temperature	3/15/2023 14:49	17.11	C
GS-AP-MW-14R	TURB	Turbidity	3/15/2023 14:49	1.82	NTU

Field Parameters Summary
Plant Gorgas Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GS-AP-MW-27HR	COND	Conductivity	3/14/2023 12:01	7931.83	uS/cm
GS-AP-MW-27HR	DO	DO	3/14/2023 12:01	0.4	mg/L
GS-AP-MW-27HR	DTW	Depth to Water Detail	3/14/2023 12:01	163.71	ft
GS-AP-MW-27HR	ORP	Oxidation Reduction Potention	3/14/2023 12:01	-112.52	mv
GS-AP-MW-27HR	PH	pH	3/14/2023 12:01	7.04	SU
GS-AP-MW-27HR	TEMP	Temperature	3/14/2023 12:01	16.46	C
GS-AP-MW-27HR	TURB	Turbidity	3/14/2023 12:01	4.98	NTU
GS-AP-MW-27HR	COND	Conductivity	3/14/2023 12:06	8530.42	uS/cm
GS-AP-MW-27HR	DO	DO	3/14/2023 12:06	0.27	mg/L
GS-AP-MW-27HR	DTW	Depth to Water Detail	3/14/2023 12:06	166.92	ft
GS-AP-MW-27HR	ORP	Oxidation Reduction Potention	3/14/2023 12:06	-121.88	mv
GS-AP-MW-27HR	PH	pH	3/14/2023 12:06	7.02	SU
GS-AP-MW-27HR	TEMP	Temperature	3/14/2023 12:06	16.55	C
GS-AP-MW-27HR	TURB	Turbidity	3/14/2023 12:06	3.11	NTU
GS-AP-MW-27HR	COND	Conductivity	3/14/2023 12:11	7873.44	uS/cm
GS-AP-MW-27HR	DO	DO	3/14/2023 12:11	0.25	mg/L
GS-AP-MW-27HR	DTW	Depth to Water Detail	3/14/2023 12:11	170.04	ft
GS-AP-MW-27HR	ORP	Oxidation Reduction Potention	3/14/2023 12:11	-134.59	mv
GS-AP-MW-27HR	PH	pH	3/14/2023 12:11	7.08	SU
GS-AP-MW-27HR	TEMP	Temperature	3/14/2023 12:11	16.48	C
GS-AP-MW-27HR	TURB	Turbidity	3/14/2023 12:11	2.39	NTU
GS-AP-MW-27HR	COND	Conductivity	3/14/2023 12:16	5464.92	uS/cm
GS-AP-MW-27HR	DO	DO	3/14/2023 12:16	0.26	mg/L
GS-AP-MW-27HR	DTW	Depth to Water Detail	3/14/2023 12:16	171.89	ft
GS-AP-MW-27HR	ORP	Oxidation Reduction Potention	3/14/2023 12:16	-150.92	mv
GS-AP-MW-27HR	PH	pH	3/14/2023 12:16	7.25	SU
GS-AP-MW-27HR	TEMP	Temperature	3/14/2023 12:16	16.52	C
GS-AP-MW-27HR	TURB	Turbidity	3/14/2023 12:16	2.24	NTU
GS-AP-MW-27HR	COND	Conductivity	3/14/2023 12:21	4404.15	uS/cm
GS-AP-MW-27HR	DO	DO	3/14/2023 12:21	0.6	mg/L
GS-AP-MW-27HR	DTW	Depth to Water Detail	3/14/2023 12:21	172.48	ft
GS-AP-MW-27HR	ORP	Oxidation Reduction Potention	3/14/2023 12:21	-147.81	mv
GS-AP-MW-27HR	PH	pH	3/14/2023 12:21	7.33	SU
GS-AP-MW-27HR	TEMP	Temperature	3/14/2023 12:21	15.62	C
GS-AP-MW-27HR	TURB	Turbidity	3/14/2023 12:21	2.1	NTU
GS-AP-MW-27HR	COND	Conductivity	3/14/2023 12:26	4125.09	uS/cm
GS-AP-MW-27HR	DO	DO	3/14/2023 12:26	0.66	mg/L
GS-AP-MW-27HR	DTW	Depth to Water Detail	3/14/2023 12:26	172.61	ft
GS-AP-MW-27HR	ORP	Oxidation Reduction Potention	3/14/2023 12:26	-142.69	mv
GS-AP-MW-27HR	PH	pH	3/14/2023 12:26	7.37	SU
GS-AP-MW-27HR	TEMP	Temperature	3/14/2023 12:26	15.49	C
GS-AP-MW-27HR	TURB	Turbidity	3/14/2023 12:26	2.3	NTU
GS-AP-MW-27HR	COND	Conductivity	3/14/2023 12:31	4080.94	uS/cm
GS-AP-MW-27HR	DO	DO	3/14/2023 12:31	0.72	mg/L
GS-AP-MW-27HR	DTW	Depth to Water Detail	3/14/2023 12:31	172.7	ft
GS-AP-MW-27HR	ORP	Oxidation Reduction Potention	3/14/2023 12:31	-138.67	mv
GS-AP-MW-27HR	PH	pH	3/14/2023 12:31	7.38	SU

Field Parameters Summary
Plant Gorgas Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GS-AP-MW-27HR	TEMP	Temperature	3/14/2023 12:31	15.38	C
GS-AP-MW-27HR	TURB	Turbidity	3/14/2023 12:31	2.49	NTU
GS-AP-MW-27HR	COND	Conductivity	3/14/2023 12:36	4225.18	uS/cm
GS-AP-MW-27HR	DO	DO	3/14/2023 12:36	0.82	mg/L
GS-AP-MW-27HR	DTW	Depth to Water Detail	3/14/2023 12:36	172.82	ft
GS-AP-MW-27HR	ORP	Oxidation Reduction Potention	3/14/2023 12:36	-135.88	mv
GS-AP-MW-27HR	PH	pH	3/14/2023 12:36	7.36	SU
GS-AP-MW-27HR	TEMP	Temperature	3/14/2023 12:36	15.13	C
GS-AP-MW-27HR	TURB	Turbidity	3/14/2023 12:36	3.13	NTU
GS-AP-MW-27HR	COND	Conductivity	3/14/2023 12:41	4668.89	uS/cm
GS-AP-MW-27HR	DO	DO	3/14/2023 12:41	0.65	mg/L
GS-AP-MW-27HR	DTW	Depth to Water Detail	3/14/2023 12:41	172.89	ft
GS-AP-MW-27HR	ORP	Oxidation Reduction Potention	3/14/2023 12:41	-133.49	mv
GS-AP-MW-27HR	PH	pH	3/14/2023 12:41	7.32	SU
GS-AP-MW-27HR	TEMP	Temperature	3/14/2023 12:41	15.53	C
GS-AP-MW-27HR	TURB	Turbidity	3/14/2023 12:41	2.95	NTU
GS-AP-MW-27HR	COND	Conductivity	3/14/2023 12:46	5206.82	uS/cm
GS-AP-MW-27HR	DO	DO	3/14/2023 12:46	0.6	mg/L
GS-AP-MW-27HR	DTW	Depth to Water Detail	3/14/2023 12:46	173.04	ft
GS-AP-MW-27HR	ORP	Oxidation Reduction Potention	3/14/2023 12:46	-134.43	mv
GS-AP-MW-27HR	PH	pH	3/14/2023 12:46	7.27	SU
GS-AP-MW-27HR	TEMP	Temperature	3/14/2023 12:46	15.7	C
GS-AP-MW-27HR	TURB	Turbidity	3/14/2023 12:46	2.81	NTU
GS-AP-MW-27HR	COND	Conductivity	3/14/2023 12:51	5431.33	uS/cm
GS-AP-MW-27HR	DO	DO	3/14/2023 12:51	0.7	mg/L
GS-AP-MW-27HR	DTW	Depth to Water Detail	3/14/2023 12:51	173.12	ft
GS-AP-MW-27HR	ORP	Oxidation Reduction Potention	3/14/2023 12:51	-136.78	mv
GS-AP-MW-27HR	PH	pH	3/14/2023 12:51	7.26	SU
GS-AP-MW-27HR	TEMP	Temperature	3/14/2023 12:51	15.36	C
GS-AP-MW-27HR	TURB	Turbidity	3/14/2023 12:51	2.56	NTU
GS-AP-MW-27HR	COND	Conductivity	3/14/2023 12:56	5452.37	uS/cm
GS-AP-MW-27HR	DO	DO	3/14/2023 12:56	0.71	mg/L
GS-AP-MW-27HR	DTW	Depth to Water Detail	3/14/2023 12:56	173.19	ft
GS-AP-MW-27HR	ORP	Oxidation Reduction Potention	3/14/2023 12:56	-139.43	mv
GS-AP-MW-27HR	PH	pH	3/14/2023 12:56	7.26	SU
GS-AP-MW-27HR	TEMP	Temperature	3/14/2023 12:56	15.37	C
GS-AP-MW-27HR	TURB	Turbidity	3/14/2023 12:56	2.51	NTU
GS-AP-MW-27HR	COND	Conductivity	3/14/2023 13:01	5249.37	uS/cm
GS-AP-MW-27HR	DO	DO	3/14/2023 13:01	0.72	mg/L
GS-AP-MW-27HR	DTW	Depth to Water Detail	3/14/2023 13:01	173.24	ft
GS-AP-MW-27HR	ORP	Oxidation Reduction Potention	3/14/2023 13:01	-142.76	mv
GS-AP-MW-27HR	PH	pH	3/14/2023 13:01	7.28	SU
GS-AP-MW-27HR	SULFIDE	Sulfide	3/14/2023 13:01	2	mg/L
GS-AP-MW-27HR	TEMP	Temperature	3/14/2023 13:01	15.54	C
GS-AP-MW-27HR	TURB	Turbidity	3/14/2023 13:01	2.27	NTU

Field Parameters Summary
Plant Gorgas Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GS-AP-MW-28H	COND	Conductivity	3/14/2023 14:39	794.25	uS/cm
GS-AP-MW-28H	DO	DO	3/14/2023 14:39	0.55	mg/L
GS-AP-MW-28H	DTW	Depth to Water Detail	3/14/2023 14:39	152.26	ft
GS-AP-MW-28H	ORP	Oxidation Reduction Potention	3/14/2023 14:39	-148.81	mv
GS-AP-MW-28H	PH	pH	3/14/2023 14:39	7.96	SU
GS-AP-MW-28H	TEMP	Temperature	3/14/2023 14:39	17.47	C
GS-AP-MW-28H	TURB	Turbidity	3/14/2023 14:39	2.36	NTU
GS-AP-MW-28H	COND	Conductivity	3/14/2023 14:44	751.29	uS/cm
GS-AP-MW-28H	DO	DO	3/14/2023 14:44	0.41	mg/L
GS-AP-MW-28H	DTW	Depth to Water Detail	3/14/2023 14:44	152.26	ft
GS-AP-MW-28H	ORP	Oxidation Reduction Potention	3/14/2023 14:44	-176.39	mv
GS-AP-MW-28H	PH	pH	3/14/2023 14:44	8.18	SU
GS-AP-MW-28H	TEMP	Temperature	3/14/2023 14:44	17.38	C
GS-AP-MW-28H	TURB	Turbidity	3/14/2023 14:44	2.1	NTU
GS-AP-MW-28H	COND	Conductivity	3/14/2023 14:49	734.4	uS/cm
GS-AP-MW-28H	DO	DO	3/14/2023 14:49	0.35	mg/L
GS-AP-MW-28H	DTW	Depth to Water Detail	3/14/2023 14:49	152.26	ft
GS-AP-MW-28H	ORP	Oxidation Reduction Potention	3/14/2023 14:49	-183.71	mv
GS-AP-MW-28H	PH	pH	3/14/2023 14:49	8.26	SU
GS-AP-MW-28H	TEMP	Temperature	3/14/2023 14:49	17.37	C
GS-AP-MW-28H	TURB	Turbidity	3/14/2023 14:49	1.95	NTU
GS-AP-MW-28H	COND	Conductivity	3/14/2023 14:54	725.54	uS/cm
GS-AP-MW-28H	DO	DO	3/14/2023 14:54	0.31	mg/L
GS-AP-MW-28H	DTW	Depth to Water Detail	3/14/2023 14:54	152.26	ft
GS-AP-MW-28H	ORP	Oxidation Reduction Potention	3/14/2023 14:54	-186.98	mv
GS-AP-MW-28H	PH	pH	3/14/2023 14:54	8.31	SU
GS-AP-MW-28H	SULFIDE	Sulfide	3/14/2023 14:54	0	mg/L
GS-AP-MW-28H	TEMP	Temperature	3/14/2023 14:54	17.39	C
GS-AP-MW-28H	TURB	Turbidity	3/14/2023 14:54	1.98	NTU

Field Parameters Summary
Plant Gorgas Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GS-AP-MW-30HA	COND	Conductivity	3/13/2023 12:42	1154.26	uS/cm
GS-AP-MW-30HA	DO	DO	3/13/2023 12:42	5.08	mg/L
GS-AP-MW-30HA	DTW	Depth to Water Detail	3/13/2023 12:42	317.61	ft
GS-AP-MW-30HA	ORP	Oxidation Reduction Potention	3/13/2023 12:42	146.25	mv
GS-AP-MW-30HA	PH	pH	3/13/2023 12:42	7	SU
GS-AP-MW-30HA	TEMP	Temperature	3/13/2023 12:42	17.95	C
GS-AP-MW-30HA	TURB	Turbidity	3/13/2023 12:42	7.65	NTU
GS-AP-MW-30HA	COND	Conductivity	3/13/2023 12:47	1164.64	uS/cm
GS-AP-MW-30HA	DO	DO	3/13/2023 12:47	3.45	mg/L
GS-AP-MW-30HA	DTW	Depth to Water Detail	3/13/2023 12:47	317.61	ft
GS-AP-MW-30HA	ORP	Oxidation Reduction Potention	3/13/2023 12:47	125.05	mv
GS-AP-MW-30HA	PH	pH	3/13/2023 12:47	6.92	SU
GS-AP-MW-30HA	TEMP	Temperature	3/13/2023 12:47	18.54	C
GS-AP-MW-30HA	TURB	Turbidity	3/13/2023 12:47	5.33	NTU
GS-AP-MW-30HA	COND	Conductivity	3/13/2023 12:52	1151.33	uS/cm
GS-AP-MW-30HA	DO	DO	3/13/2023 12:52	1.84	mg/L
GS-AP-MW-30HA	DTW	Depth to Water Detail	3/13/2023 12:52	317.61	ft
GS-AP-MW-30HA	ORP	Oxidation Reduction Potention	3/13/2023 12:52	-40.65	mv
GS-AP-MW-30HA	PH	pH	3/13/2023 12:52	6.93	SU
GS-AP-MW-30HA	TEMP	Temperature	3/13/2023 12:52	18.1	C
GS-AP-MW-30HA	TURB	Turbidity	3/13/2023 12:52	6.55	NTU
GS-AP-MW-30HA	COND	Conductivity	3/13/2023 12:57	1050.36	uS/cm
GS-AP-MW-30HA	DO	DO	3/13/2023 12:57	0.93	mg/L
GS-AP-MW-30HA	DTW	Depth to Water Detail	3/13/2023 12:57	317.61	ft
GS-AP-MW-30HA	ORP	Oxidation Reduction Potention	3/13/2023 12:57	-106.22	mv
GS-AP-MW-30HA	PH	pH	3/13/2023 12:57	7.08	SU
GS-AP-MW-30HA	TEMP	Temperature	3/13/2023 12:57	17.93	C
GS-AP-MW-30HA	TURB	Turbidity	3/13/2023 12:57	6.64	NTU
GS-AP-MW-30HA	COND	Conductivity	3/13/2023 13:02	997.27	uS/cm
GS-AP-MW-30HA	DO	DO	3/13/2023 13:02	0.83	mg/L
GS-AP-MW-30HA	DTW	Depth to Water Detail	3/13/2023 13:02	317.61	ft
GS-AP-MW-30HA	ORP	Oxidation Reduction Potention	3/13/2023 13:02	-118.99	mv
GS-AP-MW-30HA	PH	pH	3/13/2023 13:02	7.16	SU
GS-AP-MW-30HA	TEMP	Temperature	3/13/2023 13:02	17.74	C
GS-AP-MW-30HA	TURB	Turbidity	3/13/2023 13:02	11.4	NTU
GS-AP-MW-30HA	COND	Conductivity	3/13/2023 13:07	1007.36	uS/cm
GS-AP-MW-30HA	DO	DO	3/13/2023 13:07	0.68	mg/L
GS-AP-MW-30HA	DTW	Depth to Water Detail	3/13/2023 13:07	317.61	ft
GS-AP-MW-30HA	ORP	Oxidation Reduction Potention	3/13/2023 13:07	-122.18	mv
GS-AP-MW-30HA	PH	pH	3/13/2023 13:07	7.2	SU
GS-AP-MW-30HA	TEMP	Temperature	3/13/2023 13:07	18.37	C
GS-AP-MW-30HA	TURB	Turbidity	3/13/2023 13:07	9.49	NTU
GS-AP-MW-30HA	COND	Conductivity	3/13/2023 13:12	1010.37	uS/cm
GS-AP-MW-30HA	DO	DO	3/13/2023 13:12	0.63	mg/L
GS-AP-MW-30HA	DTW	Depth to Water Detail	3/13/2023 13:12	317.61	ft
GS-AP-MW-30HA	ORP	Oxidation Reduction Potention	3/13/2023 13:12	-122.1	mv
GS-AP-MW-30HA	PH	pH	3/13/2023 13:12	7.22	SU

Field Parameters Summary
Plant Gorgas Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GS-AP-MW-30HA	TEMP	Temperature	3/13/2023 13:12	18.25	C
GS-AP-MW-30HA	TURB	Turbidity	3/13/2023 13:12	7.42	NTU
GS-AP-MW-30HA	COND	Conductivity	3/13/2023 13:17	1013.84	uS/cm
GS-AP-MW-30HA	DO	DO	3/13/2023 13:17	0.64	mg/L
GS-AP-MW-30HA	DTW	Depth to Water Detail	3/13/2023 13:17	317.61	ft
GS-AP-MW-30HA	ORP	Oxidation Reduction Potention	3/13/2023 13:17	-120.83	mv
GS-AP-MW-30HA	PH	pH	3/13/2023 13:17	7.22	SU
GS-AP-MW-30HA	SULFIDE	Sulfide	3/13/2023 13:17	0	mg/L
GS-AP-MW-30HA	TEMP	Temperature	3/13/2023 13:17	18.09	C
GS-AP-MW-30HA	TURB	Turbidity	3/13/2023 13:17	7.03	NTU

Field Parameters Summary
Plant Gorgas Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GS-AP-MW-36V	COND	Conductivity	3/14/2023 10:17	3398.12	uS/cm
GS-AP-MW-36V	DO	DO	3/14/2023 10:17	0.48	mg/L
GS-AP-MW-36V	DTW	Depth to Water Detail	3/14/2023 10:17	270.02	ft
GS-AP-MW-36V	ORP	Oxidation Reduction Potention	3/14/2023 10:17	-82.16	mv
GS-AP-MW-36V	PH	pH	3/14/2023 10:17	7.2	SU
GS-AP-MW-36V	TEMP	Temperature	3/14/2023 10:17	16.92	C
GS-AP-MW-36V	TURB	Turbidity	3/14/2023 10:17	8.22	NTU
GS-AP-MW-36V	COND	Conductivity	3/14/2023 10:22	3422.6	uS/cm
GS-AP-MW-36V	DO	DO	3/14/2023 10:22	0.39	mg/L
GS-AP-MW-36V	DTW	Depth to Water Detail	3/14/2023 10:22	273.09	ft
GS-AP-MW-36V	ORP	Oxidation Reduction Potention	3/14/2023 10:22	-83.49	mv
GS-AP-MW-36V	PH	pH	3/14/2023 10:22	7.22	SU
GS-AP-MW-36V	TEMP	Temperature	3/14/2023 10:22	17.01	C
GS-AP-MW-36V	TURB	Turbidity	3/14/2023 10:22	7.89	NTU
GS-AP-MW-36V	COND	Conductivity	3/14/2023 10:27	3431.09	uS/cm
GS-AP-MW-36V	DO	DO	3/14/2023 10:27	0.31	mg/L
GS-AP-MW-36V	DTW	Depth to Water Detail	3/14/2023 10:27	275.91	ft
GS-AP-MW-36V	ORP	Oxidation Reduction Potention	3/14/2023 10:27	-84.81	mv
GS-AP-MW-36V	PH	pH	3/14/2023 10:27	7.24	SU
GS-AP-MW-36V	TEMP	Temperature	3/14/2023 10:27	17.1	C
GS-AP-MW-36V	TURB	Turbidity	3/14/2023 10:27	7.11	NTU
GS-AP-MW-36V	COND	Conductivity	3/14/2023 10:32	3420.42	uS/cm
GS-AP-MW-36V	DO	DO	3/14/2023 10:32	0.29	mg/L
GS-AP-MW-36V	DTW	Depth to Water Detail	3/14/2023 10:32	278.8	ft
GS-AP-MW-36V	ORP	Oxidation Reduction Potention	3/14/2023 10:32	-86.67	mv
GS-AP-MW-36V	PH	pH	3/14/2023 10:32	7.23	SU
GS-AP-MW-36V	TEMP	Temperature	3/14/2023 10:32	17.05	C
GS-AP-MW-36V	TURB	Turbidity	3/14/2023 10:32	6.3	NTU
GS-AP-MW-36V	COND	Conductivity	3/14/2023 10:37	3413.19	uS/cm
GS-AP-MW-36V	DO	DO	3/14/2023 10:37	0.26	mg/L
GS-AP-MW-36V	DTW	Depth to Water Detail	3/14/2023 10:37	281.64	ft
GS-AP-MW-36V	ORP	Oxidation Reduction Potention	3/14/2023 10:37	-94.65	mv
GS-AP-MW-36V	PH	pH	3/14/2023 10:37	7.25	SU
GS-AP-MW-36V	TEMP	Temperature	3/14/2023 10:37	17.13	C
GS-AP-MW-36V	TURB	Turbidity	3/14/2023 10:37	6.08	NTU
GS-AP-MW-36V	COND	Conductivity	3/14/2023 10:42	3385.47	uS/cm
GS-AP-MW-36V	DO	DO	3/14/2023 10:42	0.25	mg/L
GS-AP-MW-36V	DTW	Depth to Water Detail	3/14/2023 10:42	284.81	ft
GS-AP-MW-36V	ORP	Oxidation Reduction Potention	3/14/2023 10:42	-100.59	mv
GS-AP-MW-36V	PH	pH	3/14/2023 10:42	7.25	SU
GS-AP-MW-36V	TEMP	Temperature	3/14/2023 10:42	17.25	C
GS-AP-MW-36V	TURB	Turbidity	3/14/2023 10:42	3.22	NTU
GS-AP-MW-36V	COND	Conductivity	3/14/2023 10:47	3330.46	uS/cm
GS-AP-MW-36V	DO	DO	3/14/2023 10:47	0.23	mg/L
GS-AP-MW-36V	DTW	Depth to Water Detail	3/14/2023 10:47	287.6	ft
GS-AP-MW-36V	ORP	Oxidation Reduction Potention	3/14/2023 10:47	-109.85	mv
GS-AP-MW-36V	PH	pH	3/14/2023 10:47	7.26	SU

Field Parameters Summary
Plant Gorgas Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GS-AP-MW-36V	TEMP	Temperature	3/14/2023 10:47	17.12	C
GS-AP-MW-36V	TURB	Turbidity	3/14/2023 10:47	5.42	NTU
GS-AP-MW-36V	COND	Conductivity	3/14/2023 10:52	3298.2	uS/cm
GS-AP-MW-36V	DO	DO	3/14/2023 10:52	0.75	mg/L
GS-AP-MW-36V	DTW	Depth to Water Detail	3/14/2023 10:52	287.38	ft
GS-AP-MW-36V	ORP	Oxidation Reduction Potention	3/14/2023 10:52	-114.91	mv
GS-AP-MW-36V	PH	pH	3/14/2023 10:52	7.28	SU
GS-AP-MW-36V	TEMP	Temperature	3/14/2023 10:52	16.76	C
GS-AP-MW-36V	TURB	Turbidity	3/14/2023 10:52	6.76	NTU
GS-AP-MW-36V	COND	Conductivity	3/14/2023 10:57	3271.62	uS/cm
GS-AP-MW-36V	DO	DO	3/14/2023 10:57	0.62	mg/L
GS-AP-MW-36V	DTW	Depth to Water Detail	3/14/2023 10:57	287.29	ft
GS-AP-MW-36V	ORP	Oxidation Reduction Potention	3/14/2023 10:57	-118.33	mv
GS-AP-MW-36V	PH	pH	3/14/2023 10:57	7.27	SU
GS-AP-MW-36V	TEMP	Temperature	3/14/2023 10:57	16.35	C
GS-AP-MW-36V	TURB	Turbidity	3/14/2023 10:57	8.7	NTU
GS-AP-MW-36V	COND	Conductivity	3/14/2023 11:02	3239.42	uS/cm
GS-AP-MW-36V	DO	DO	3/14/2023 11:02	0.64	mg/L
GS-AP-MW-36V	DTW	Depth to Water Detail	3/14/2023 11:02	287.29	ft
GS-AP-MW-36V	ORP	Oxidation Reduction Potention	3/14/2023 11:02	-122.37	mv
GS-AP-MW-36V	PH	pH	3/14/2023 11:02	7.28	SU
GS-AP-MW-36V	TEMP	Temperature	3/14/2023 11:02	16.87	C
GS-AP-MW-36V	TURB	Turbidity	3/14/2023 11:02	8.39	NTU
GS-AP-MW-36V	COND	Conductivity	3/14/2023 11:07	3138.49	uS/cm
GS-AP-MW-36V	DO	DO	3/14/2023 11:07	0.61	mg/L
GS-AP-MW-36V	DTW	Depth to Water Detail	3/14/2023 11:07	287.29	ft
GS-AP-MW-36V	ORP	Oxidation Reduction Potention	3/14/2023 11:07	-125.69	mv
GS-AP-MW-36V	PH	pH	3/14/2023 11:07	7.27	SU
GS-AP-MW-36V	SULFIDE	Sulfide	3/14/2023 11:07	2	mg/L
GS-AP-MW-36V	TEMP	Temperature	3/14/2023 11:07	16.94	C
GS-AP-MW-36V	TURB	Turbidity	3/14/2023 11:07	8.27	NTU

Field Parameters Summary
Plant Gorgas Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GS-AP-MW-37HR	COND	Conductivity	3/15/2023 10:20	1201.39	uS/cm
GS-AP-MW-37HR	DO	DO	3/15/2023 10:20	0.95	mg/L
GS-AP-MW-37HR	DTW	Depth to Water Detail	3/15/2023 10:20	148.23	ft
GS-AP-MW-37HR	ORP	Oxidation Reduction Potention	3/15/2023 10:20	-81.92	mv
GS-AP-MW-37HR	PH	pH	3/15/2023 10:20	7.72	SU
GS-AP-MW-37HR	TEMP	Temperature	3/15/2023 10:20	16.38	C
GS-AP-MW-37HR	TURB	Turbidity	3/15/2023 10:20	3.45	NTU
GS-AP-MW-37HR	COND	Conductivity	3/15/2023 10:25	1289.25	uS/cm
GS-AP-MW-37HR	DO	DO	3/15/2023 10:25	0.71	mg/L
GS-AP-MW-37HR	DTW	Depth to Water Detail	3/15/2023 10:25	151.71	ft
GS-AP-MW-37HR	ORP	Oxidation Reduction Potention	3/15/2023 10:25	-53	mv
GS-AP-MW-37HR	PH	pH	3/15/2023 10:25	7.7	SU
GS-AP-MW-37HR	TEMP	Temperature	3/15/2023 10:25	16.51	C
GS-AP-MW-37HR	TURB	Turbidity	3/15/2023 10:25	2.8	NTU
GS-AP-MW-37HR	COND	Conductivity	3/15/2023 10:30	1294.02	uS/cm
GS-AP-MW-37HR	DO	DO	3/15/2023 10:30	0.44	mg/L
GS-AP-MW-37HR	DTW	Depth to Water Detail	3/15/2023 10:30	154.55	ft
GS-AP-MW-37HR	ORP	Oxidation Reduction Potention	3/15/2023 10:30	-40.15	mv
GS-AP-MW-37HR	PH	pH	3/15/2023 10:30	7.71	SU
GS-AP-MW-37HR	TEMP	Temperature	3/15/2023 10:30	16.5	C
GS-AP-MW-37HR	TURB	Turbidity	3/15/2023 10:30	2.73	NTU
GS-AP-MW-37HR	COND	Conductivity	3/15/2023 10:35	1289.83	uS/cm
GS-AP-MW-37HR	DO	DO	3/15/2023 10:35	0.45	mg/L
GS-AP-MW-37HR	DTW	Depth to Water Detail	3/15/2023 10:35	157.55	ft
GS-AP-MW-37HR	ORP	Oxidation Reduction Potention	3/15/2023 10:35	-43.4	mv
GS-AP-MW-37HR	PH	pH	3/15/2023 10:35	7.72	SU
GS-AP-MW-37HR	TEMP	Temperature	3/15/2023 10:35	16.69	C
GS-AP-MW-37HR	TURB	Turbidity	3/15/2023 10:35	2.55	NTU
GS-AP-MW-37HR	COND	Conductivity	3/15/2023 10:40	1285.79	uS/cm
GS-AP-MW-37HR	DO	DO	3/15/2023 10:40	0.4	mg/L
GS-AP-MW-37HR	DTW	Depth to Water Detail	3/15/2023 10:40	160.34	ft
GS-AP-MW-37HR	ORP	Oxidation Reduction Potention	3/15/2023 10:40	-70.68	mv
GS-AP-MW-37HR	PH	pH	3/15/2023 10:40	7.73	SU
GS-AP-MW-37HR	TEMP	Temperature	3/15/2023 10:40	16.66	C
GS-AP-MW-37HR	TURB	Turbidity	3/15/2023 10:40	2.53	NTU
GS-AP-MW-37HR	COND	Conductivity	3/15/2023 10:45	1268.94	uS/cm
GS-AP-MW-37HR	DO	DO	3/15/2023 10:45	0.41	mg/L
GS-AP-MW-37HR	DTW	Depth to Water Detail	3/15/2023 10:45	163.5	ft
GS-AP-MW-37HR	ORP	Oxidation Reduction Potention	3/15/2023 10:45	-91.13	mv
GS-AP-MW-37HR	PH	pH	3/15/2023 10:45	7.73	SU
GS-AP-MW-37HR	TEMP	Temperature	3/15/2023 10:45	16.61	C
GS-AP-MW-37HR	TURB	Turbidity	3/15/2023 10:45	2.91	NTU
GS-AP-MW-37HR	COND	Conductivity	3/15/2023 10:50	1231.34	uS/cm
GS-AP-MW-37HR	DO	DO	3/15/2023 10:50	0.4	mg/L
GS-AP-MW-37HR	DTW	Depth to Water Detail	3/15/2023 10:50	166.23	ft
GS-AP-MW-37HR	ORP	Oxidation Reduction Potention	3/15/2023 10:50	-99.4	mv
GS-AP-MW-37HR	PH	pH	3/15/2023 10:50	7.69	SU

Field Parameters Summary
Plant Gorgas Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GS-AP-MW-37HR	TEMP	Temperature	3/15/2023 10:50	16.61	C
GS-AP-MW-37HR	TURB	Turbidity	3/15/2023 10:50	2.88	NTU
GS-AP-MW-37HR	COND	Conductivity	3/15/2023 10:55	1194.25	uS/cm
GS-AP-MW-37HR	DO	DO	3/15/2023 10:55	0.35	mg/L
GS-AP-MW-37HR	DTW	Depth to Water Detail	3/15/2023 10:55	168.21	ft
GS-AP-MW-37HR	ORP	Oxidation Reduction Potention	3/15/2023 10:55	-106.7	mv
GS-AP-MW-37HR	PH	pH	3/15/2023 10:55	7.72	SU
GS-AP-MW-37HR	TEMP	Temperature	3/15/2023 10:55	16.72	C
GS-AP-MW-37HR	TURB	Turbidity	3/15/2023 10:55	2.76	NTU
GS-AP-MW-37HR	COND	Conductivity	3/15/2023 11:00	1176.83	uS/cm
GS-AP-MW-37HR	DO	DO	3/15/2023 11:00	0.71	mg/L
GS-AP-MW-37HR	DTW	Depth to Water Detail	3/15/2023 11:00	168.82	ft
GS-AP-MW-37HR	ORP	Oxidation Reduction Potention	3/15/2023 11:00	-107.95	mv
GS-AP-MW-37HR	PH	pH	3/15/2023 11:00	7.74	SU
GS-AP-MW-37HR	TEMP	Temperature	3/15/2023 11:00	16.46	C
GS-AP-MW-37HR	TURB	Turbidity	3/15/2023 11:00	2.8	NTU
GS-AP-MW-37HR	COND	Conductivity	3/15/2023 11:05	1163.92	uS/cm
GS-AP-MW-37HR	DO	DO	3/15/2023 11:05	0.75	mg/L
GS-AP-MW-37HR	DTW	Depth to Water Detail	3/15/2023 11:05	168.71	ft
GS-AP-MW-37HR	ORP	Oxidation Reduction Potention	3/15/2023 11:05	-108.42	mv
GS-AP-MW-37HR	PH	pH	3/15/2023 11:05	7.74	SU
GS-AP-MW-37HR	TEMP	Temperature	3/15/2023 11:05	16.64	C
GS-AP-MW-37HR	TURB	Turbidity	3/15/2023 11:05	2.18	NTU
GS-AP-MW-37HR	COND	Conductivity	3/15/2023 11:10	1135.49	uS/cm
GS-AP-MW-37HR	DO	DO	3/15/2023 11:10	0.74	mg/L
GS-AP-MW-37HR	DTW	Depth to Water Detail	3/15/2023 11:10	168.64	ft
GS-AP-MW-37HR	ORP	Oxidation Reduction Potention	3/15/2023 11:10	-109.92	mv
GS-AP-MW-37HR	PH	pH	3/15/2023 11:10	7.75	SU
GS-AP-MW-37HR	TEMP	Temperature	3/15/2023 11:10	16.63	C
GS-AP-MW-37HR	TURB	Turbidity	3/15/2023 11:10	2.14	NTU
GS-AP-MW-37HR	COND	Conductivity	3/15/2023 11:15	966.47	uS/cm
GS-AP-MW-37HR	DO	DO	3/15/2023 11:15	0.54	mg/L
GS-AP-MW-37HR	DTW	Depth to Water Detail	3/15/2023 11:15	168.6	ft
GS-AP-MW-37HR	ORP	Oxidation Reduction Potention	3/15/2023 11:15	-118.85	mv
GS-AP-MW-37HR	PH	pH	3/15/2023 11:15	7.75	SU
GS-AP-MW-37HR	TEMP	Temperature	3/15/2023 11:15	16.64	C
GS-AP-MW-37HR	TURB	Turbidity	3/15/2023 11:15	2.08	NTU
GS-AP-MW-37HR	COND	Conductivity	3/15/2023 11:20	850.51	uS/cm
GS-AP-MW-37HR	DO	DO	3/15/2023 11:20	0.79	mg/L
GS-AP-MW-37HR	DTW	Depth to Water Detail	3/15/2023 11:20	168.6	ft
GS-AP-MW-37HR	ORP	Oxidation Reduction Potention	3/15/2023 11:20	-130.51	mv
GS-AP-MW-37HR	PH	pH	3/15/2023 11:20	7.8	SU
GS-AP-MW-37HR	TEMP	Temperature	3/15/2023 11:20	16.68	C
GS-AP-MW-37HR	TURB	Turbidity	3/15/2023 11:20	2.19	NTU
GS-AP-MW-37HR	COND	Conductivity	3/15/2023 11:25	791.55	uS/cm
GS-AP-MW-37HR	DO	DO	3/15/2023 11:25	0.92	mg/L
GS-AP-MW-37HR	DTW	Depth to Water Detail	3/15/2023 11:25	168.6	ft

Field Parameters Summary
Plant Gorgas Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GS-AP-MW-37HR	ORP	Oxidation Reduction Potention	3/15/2023 11:25	-134.65	mv
GS-AP-MW-37HR	PH	pH	3/15/2023 11:25	7.81	SU
GS-AP-MW-37HR	TEMP	Temperature	3/15/2023 11:25	16.63	C
GS-AP-MW-37HR	TURB	Turbidity	3/15/2023 11:25	2.36	NTU
GS-AP-MW-37HR	COND	Conductivity	3/15/2023 11:30	748.22	uS/cm
GS-AP-MW-37HR	DO	DO	3/15/2023 11:30	1.1	mg/L
GS-AP-MW-37HR	DTW	Depth to Water Detail	3/15/2023 11:30	168.6	ft
GS-AP-MW-37HR	ORP	Oxidation Reduction Potention	3/15/2023 11:30	-135.43	mv
GS-AP-MW-37HR	PH	pH	3/15/2023 11:30	7.83	SU
GS-AP-MW-37HR	TEMP	Temperature	3/15/2023 11:30	16.59	C
GS-AP-MW-37HR	TURB	Turbidity	3/15/2023 11:30	2.2	NTU
GS-AP-MW-37HR	COND	Conductivity	3/15/2023 11:35	719.54	uS/cm
GS-AP-MW-37HR	DO	DO	3/15/2023 11:35	1.11	mg/L
GS-AP-MW-37HR	DTW	Depth to Water Detail	3/15/2023 11:35	168.6	ft
GS-AP-MW-37HR	ORP	Oxidation Reduction Potention	3/15/2023 11:35	-135.44	mv
GS-AP-MW-37HR	PH	pH	3/15/2023 11:35	7.84	SU
GS-AP-MW-37HR	TEMP	Temperature	3/15/2023 11:35	16.78	C
GS-AP-MW-37HR	TURB	Turbidity	3/15/2023 11:35	2.02	NTU
GS-AP-MW-37HR	COND	Conductivity	3/15/2023 11:40	691.25	uS/cm
GS-AP-MW-37HR	DO	DO	3/15/2023 11:40	1.07	mg/L
GS-AP-MW-37HR	DTW	Depth to Water Detail	3/15/2023 11:40	168.6	ft
GS-AP-MW-37HR	ORP	Oxidation Reduction Potention	3/15/2023 11:40	-131.64	mv
GS-AP-MW-37HR	PH	pH	3/15/2023 11:40	7.79	SU
GS-AP-MW-37HR	TEMP	Temperature	3/15/2023 11:40	16.58	C
GS-AP-MW-37HR	TURB	Turbidity	3/15/2023 11:40	1.97	NTU
GS-AP-MW-37HR	COND	Conductivity	3/15/2023 11:45	672.4	uS/cm
GS-AP-MW-37HR	DO	DO	3/15/2023 11:45	0.97	mg/L
GS-AP-MW-37HR	DTW	Depth to Water Detail	3/15/2023 11:45	168.6	ft
GS-AP-MW-37HR	ORP	Oxidation Reduction Potention	3/15/2023 11:45	-133.38	mv
GS-AP-MW-37HR	PH	pH	3/15/2023 11:45	7.83	SU
GS-AP-MW-37HR	TEMP	Temperature	3/15/2023 11:45	16.82	C
GS-AP-MW-37HR	TURB	Turbidity	3/15/2023 11:45	1.9	NTU
GS-AP-MW-37HR	COND	Conductivity	3/15/2023 11:50	658.96	uS/cm
GS-AP-MW-37HR	DO	DO	3/15/2023 11:50	0.73	mg/L
GS-AP-MW-37HR	DTW	Depth to Water Detail	3/15/2023 11:50	168.6	ft
GS-AP-MW-37HR	ORP	Oxidation Reduction Potention	3/15/2023 11:50	-134.75	mv
GS-AP-MW-37HR	PH	pH	3/15/2023 11:50	7.84	SU
GS-AP-MW-37HR	TEMP	Temperature	3/15/2023 11:50	16.83	C
GS-AP-MW-37HR	TURB	Turbidity	3/15/2023 11:50	1.95	NTU
GS-AP-MW-37HR	COND	Conductivity	3/15/2023 11:55	645.11	uS/cm
GS-AP-MW-37HR	DO	DO	3/15/2023 11:55	0.93	mg/L
GS-AP-MW-37HR	DTW	Depth to Water Detail	3/15/2023 11:55	168.6	ft
GS-AP-MW-37HR	ORP	Oxidation Reduction Potention	3/15/2023 11:55	-126.15	mv
GS-AP-MW-37HR	PH	pH	3/15/2023 11:55	7.84	SU
GS-AP-MW-37HR	TEMP	Temperature	3/15/2023 11:55	16.96	C
GS-AP-MW-37HR	TURB	Turbidity	3/15/2023 11:55	2.03	NTU
GS-AP-MW-37HR	COND	Conductivity	3/15/2023 12:00	640.15	uS/cm

Field Parameters Summary
Plant Gorgas Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GS-AP-MW-37HR	DO	DO	3/15/2023 12:00	0.85	mg/L
GS-AP-MW-37HR	DTW	Depth to Water Detail	3/15/2023 12:00	168.6	ft
GS-AP-MW-37HR	ORP	Oxidation Reduction Potention	3/15/2023 12:00	-132.63	mv
GS-AP-MW-37HR	PH	pH	3/15/2023 12:00	7.85	SU
GS-AP-MW-37HR	TEMP	Temperature	3/15/2023 12:00	17	C
GS-AP-MW-37HR	TURB	Turbidity	3/15/2023 12:00	1.92	NTU
GS-AP-MW-37HR	COND	Conductivity	3/15/2023 12:05	625.16	uS/cm
GS-AP-MW-37HR	DO	DO	3/15/2023 12:05	0.78	mg/L
GS-AP-MW-37HR	DTW	Depth to Water Detail	3/15/2023 12:05	168.6	ft
GS-AP-MW-37HR	ORP	Oxidation Reduction Potention	3/15/2023 12:05	-130.57	mv
GS-AP-MW-37HR	PH	pH	3/15/2023 12:05	7.81	SU
GS-AP-MW-37HR	SULFIDE	Sulfide	3/15/2023 12:05	0	mg/L
GS-AP-MW-37HR	TEMP	Temperature	3/15/2023 12:05	17.13	C
GS-AP-MW-37HR	TURB	Turbidity	3/15/2023 12:05	1.9	NTU

Field Parameters Summary
Plant Gorgas Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GS-AP-MW-47	COND	Conductivity	3/15/2023 12:53	747.42	uS/cm
GS-AP-MW-47	DO	DO	3/15/2023 12:53	0.53	mg/L
GS-AP-MW-47	DTW	Depth to Water Detail	3/15/2023 12:53	126.92	ft
GS-AP-MW-47	ORP	Oxidation Reduction Potention	3/15/2023 12:53	-33.58	mv
GS-AP-MW-47	PH	pH	3/15/2023 12:53	7.12	SU
GS-AP-MW-47	TEMP	Temperature	3/15/2023 12:53	17.12	C
GS-AP-MW-47	TURB	Turbidity	3/15/2023 12:53	4.4	NTU
GS-AP-MW-47	COND	Conductivity	3/15/2023 12:58	729.43	uS/cm
GS-AP-MW-47	DO	DO	3/15/2023 12:58	0.38	mg/L
GS-AP-MW-47	DTW	Depth to Water Detail	3/15/2023 12:58	129.14	ft
GS-AP-MW-47	ORP	Oxidation Reduction Potention	3/15/2023 12:58	-43.46	mv
GS-AP-MW-47	PH	pH	3/15/2023 12:58	7.12	SU
GS-AP-MW-47	TEMP	Temperature	3/15/2023 12:58	17.06	C
GS-AP-MW-47	TURB	Turbidity	3/15/2023 12:58	3.04	NTU
GS-AP-MW-47	COND	Conductivity	3/15/2023 13:03	696.06	uS/cm
GS-AP-MW-47	DO	DO	3/15/2023 13:03	0.35	mg/L
GS-AP-MW-47	DTW	Depth to Water Detail	3/15/2023 13:03	131.64	ft
GS-AP-MW-47	ORP	Oxidation Reduction Potention	3/15/2023 13:03	-56.61	mv
GS-AP-MW-47	PH	pH	3/15/2023 13:03	7.15	SU
GS-AP-MW-47	TEMP	Temperature	3/15/2023 13:03	17.15	C
GS-AP-MW-47	TURB	Turbidity	3/15/2023 13:03	2.31	NTU
GS-AP-MW-47	COND	Conductivity	3/15/2023 13:08	650.52	uS/cm
GS-AP-MW-47	DO	DO	3/15/2023 13:08	0.34	mg/L
GS-AP-MW-47	DTW	Depth to Water Detail	3/15/2023 13:08	133.96	ft
GS-AP-MW-47	ORP	Oxidation Reduction Potention	3/15/2023 13:08	-65.41	mv
GS-AP-MW-47	PH	pH	3/15/2023 13:08	7.17	SU
GS-AP-MW-47	TEMP	Temperature	3/15/2023 13:08	17.12	C
GS-AP-MW-47	TURB	Turbidity	3/15/2023 13:08	2.28	NTU
GS-AP-MW-47	COND	Conductivity	3/15/2023 13:13	602.07	uS/cm
GS-AP-MW-47	DO	DO	3/15/2023 13:13	0.3	mg/L
GS-AP-MW-47	DTW	Depth to Water Detail	3/15/2023 13:13	135.79	ft
GS-AP-MW-47	ORP	Oxidation Reduction Potention	3/15/2023 13:13	-72.37	mv
GS-AP-MW-47	PH	pH	3/15/2023 13:13	7.21	SU
GS-AP-MW-47	TEMP	Temperature	3/15/2023 13:13	17.13	C
GS-AP-MW-47	TURB	Turbidity	3/15/2023 13:13	2.33	NTU
GS-AP-MW-47	COND	Conductivity	3/15/2023 13:18	584.16	uS/cm
GS-AP-MW-47	DO	DO	3/15/2023 13:18	0.68	mg/L
GS-AP-MW-47	DTW	Depth to Water Detail	3/15/2023 13:18	135.22	ft
GS-AP-MW-47	ORP	Oxidation Reduction Potention	3/15/2023 13:18	-76.1	mv
GS-AP-MW-47	PH	pH	3/15/2023 13:18	7.26	SU
GS-AP-MW-47	TEMP	Temperature	3/15/2023 13:18	17.69	C
GS-AP-MW-47	TURB	Turbidity	3/15/2023 13:18	2.31	NTU
GS-AP-MW-47	COND	Conductivity	3/15/2023 13:23	573.34	uS/cm
GS-AP-MW-47	DO	DO	3/15/2023 13:23	0.84	mg/L
GS-AP-MW-47	DTW	Depth to Water Detail	3/15/2023 13:23	134.14	ft
GS-AP-MW-47	ORP	Oxidation Reduction Potention	3/15/2023 13:23	-79.12	mv
GS-AP-MW-47	PH	pH	3/15/2023 13:23	7.33	SU

Field Parameters Summary
Plant Gorgas Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GS-AP-MW-47	TEMP	Temperature	3/15/2023 13:23	17.82	C
GS-AP-MW-47	TURB	Turbidity	3/15/2023 13:23	2.11	NTU
GS-AP-MW-47	COND	Conductivity	3/15/2023 13:28	549.23	uS/cm
GS-AP-MW-47	DO	DO	3/15/2023 13:28	0.45	mg/L
GS-AP-MW-47	DTW	Depth to Water Detail	3/15/2023 13:28	134.02	ft
GS-AP-MW-47	ORP	Oxidation Reduction Potention	3/15/2023 13:28	-83.51	mv
GS-AP-MW-47	PH	pH	3/15/2023 13:28	7.37	SU
GS-AP-MW-47	TEMP	Temperature	3/15/2023 13:28	17.58	C
GS-AP-MW-47	TURB	Turbidity	3/15/2023 13:28	1.89	NTU
GS-AP-MW-47	COND	Conductivity	3/15/2023 13:33	465.54	uS/cm
GS-AP-MW-47	DO	DO	3/15/2023 13:33	0.41	mg/L
GS-AP-MW-47	DTW	Depth to Water Detail	3/15/2023 13:33	133.91	ft
GS-AP-MW-47	ORP	Oxidation Reduction Potention	3/15/2023 13:33	-93.34	mv
GS-AP-MW-47	PH	pH	3/15/2023 13:33	7.39	SU
GS-AP-MW-47	TEMP	Temperature	3/15/2023 13:33	17.5	C
GS-AP-MW-47	TURB	Turbidity	3/15/2023 13:33	1.9	NTU
GS-AP-MW-47	COND	Conductivity	3/15/2023 13:38	399.39	uS/cm
GS-AP-MW-47	DO	DO	3/15/2023 13:38	0.4	mg/L
GS-AP-MW-47	DTW	Depth to Water Detail	3/15/2023 13:38	134.03	ft
GS-AP-MW-47	ORP	Oxidation Reduction Potention	3/15/2023 13:38	-99.94	mv
GS-AP-MW-47	PH	pH	3/15/2023 13:38	7.42	SU
GS-AP-MW-47	TEMP	Temperature	3/15/2023 13:38	17.66	C
GS-AP-MW-47	TURB	Turbidity	3/15/2023 13:38	2	NTU
GS-AP-MW-47	COND	Conductivity	3/15/2023 13:43	390.36	uS/cm
GS-AP-MW-47	DO	DO	3/15/2023 13:43	0.39	mg/L
GS-AP-MW-47	DTW	Depth to Water Detail	3/15/2023 13:43	134.08	ft
GS-AP-MW-47	ORP	Oxidation Reduction Potention	3/15/2023 13:43	-99.88	mv
GS-AP-MW-47	PH	pH	3/15/2023 13:43	7.42	SU
GS-AP-MW-47	TEMP	Temperature	3/15/2023 13:43	17.76	C
GS-AP-MW-47	TURB	Turbidity	3/15/2023 13:43	2.21	NTU
GS-AP-MW-47	COND	Conductivity	3/15/2023 13:48	394.2	uS/cm
GS-AP-MW-47	DO	DO	3/15/2023 13:48	0.4	mg/L
GS-AP-MW-47	DTW	Depth to Water Detail	3/15/2023 13:48	134.12	ft
GS-AP-MW-47	ORP	Oxidation Reduction Potention	3/15/2023 13:48	-100.08	mv
GS-AP-MW-47	PH	pH	3/15/2023 13:48	7.44	SU
GS-AP-MW-47	SULFIDE	Sulfide	3/15/2023 13:48	0	mg/L
GS-AP-MW-47	TEMP	Temperature	3/15/2023 13:48	17.53	C
GS-AP-MW-47	TURB	Turbidity	3/15/2023 13:48	2.18	NTU

Field Parameters Summary
Plant Gorgas Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GS-AP-MW-36H	COND	Conductivity	3/15/2023 10:33	903.24	uS/cm
GS-AP-MW-36H	DO	DO	3/15/2023 10:33	3.03	mg/L
GS-AP-MW-36H	DTW	Depth to Water Detail	3/15/2023 10:33	245.1	ft
GS-AP-MW-36H	ORP	Oxidation Reduction Potention	3/15/2023 10:33	164.03	mv
GS-AP-MW-36H	PH	pH	3/15/2023 10:33	7.84	SU
GS-AP-MW-36H	TEMP	Temperature	3/15/2023 10:33	15.35	C
GS-AP-MW-36H	TURB	Turbidity	3/15/2023 10:33	8.59	NTU
GS-AP-MW-36H	COND	Conductivity	3/15/2023 10:38	902.41	uS/cm
GS-AP-MW-36H	DO	DO	3/15/2023 10:38	1.71	mg/L
GS-AP-MW-36H	DTW	Depth to Water Detail	3/15/2023 10:38	245.48	ft
GS-AP-MW-36H	ORP	Oxidation Reduction Potention	3/15/2023 10:38	152.33	mv
GS-AP-MW-36H	PH	pH	3/15/2023 10:38	7.89	SU
GS-AP-MW-36H	TEMP	Temperature	3/15/2023 10:38	15.96	C
GS-AP-MW-36H	TURB	Turbidity	3/15/2023 10:38	9.08	NTU
GS-AP-MW-36H	COND	Conductivity	3/15/2023 10:43	893.94	uS/cm
GS-AP-MW-36H	DO	DO	3/15/2023 10:43	1.14	mg/L
GS-AP-MW-36H	DTW	Depth to Water Detail	3/15/2023 10:43	246.7	ft
GS-AP-MW-36H	ORP	Oxidation Reduction Potention	3/15/2023 10:43	141.72	mv
GS-AP-MW-36H	PH	pH	3/15/2023 10:43	7.92	SU
GS-AP-MW-36H	TEMP	Temperature	3/15/2023 10:43	15.74	C
GS-AP-MW-36H	TURB	Turbidity	3/15/2023 10:43	8.55	NTU
GS-AP-MW-36H	COND	Conductivity	3/15/2023 10:48	891.05	uS/cm
GS-AP-MW-36H	DO	DO	3/15/2023 10:48	0.88	mg/L
GS-AP-MW-36H	DTW	Depth to Water Detail	3/15/2023 10:48	246.7	ft
GS-AP-MW-36H	ORP	Oxidation Reduction Potention	3/15/2023 10:48	132.03	mv
GS-AP-MW-36H	PH	pH	3/15/2023 10:48	7.94	SU
GS-AP-MW-36H	TEMP	Temperature	3/15/2023 10:48	15.82	C
GS-AP-MW-36H	TURB	Turbidity	3/15/2023 10:48	8.34	NTU
GS-AP-MW-36H	COND	Conductivity	3/15/2023 10:53	890.04	uS/cm
GS-AP-MW-36H	DO	DO	3/15/2023 10:53	0.67	mg/L
GS-AP-MW-36H	DTW	Depth to Water Detail	3/15/2023 10:53	246.45	ft
GS-AP-MW-36H	ORP	Oxidation Reduction Potention	3/15/2023 10:53	120.45	mv
GS-AP-MW-36H	PH	pH	3/15/2023 10:53	7.97	SU
GS-AP-MW-36H	TEMP	Temperature	3/15/2023 10:53	15.92	C
GS-AP-MW-36H	TURB	Turbidity	3/15/2023 10:53	8.05	NTU
GS-AP-MW-36H	COND	Conductivity	3/15/2023 10:58	877.17	uS/cm
GS-AP-MW-36H	DO	DO	3/15/2023 10:58	0.58	mg/L
GS-AP-MW-36H	DTW	Depth to Water Detail	3/15/2023 10:58	247.3	ft
GS-AP-MW-36H	ORP	Oxidation Reduction Potention	3/15/2023 10:58	108.99	mv
GS-AP-MW-36H	PH	pH	3/15/2023 10:58	7.99	SU
GS-AP-MW-36H	TEMP	Temperature	3/15/2023 10:58	15.71	C
GS-AP-MW-36H	TURB	Turbidity	3/15/2023 10:58	8.09	NTU
GS-AP-MW-36H	COND	Conductivity	3/15/2023 11:03	889.05	uS/cm
GS-AP-MW-36H	DO	DO	3/15/2023 11:03	0.49	mg/L
GS-AP-MW-36H	DTW	Depth to Water Detail	3/15/2023 11:03	247.65	ft
GS-AP-MW-36H	ORP	Oxidation Reduction Potention	3/15/2023 11:03	95.36	mv
GS-AP-MW-36H	PH	pH	3/15/2023 11:03	8.01	SU

Field Parameters Summary
Plant Gorgas Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GS-AP-MW-36H	TEMP	Temperature	3/15/2023 11:03	16.23	C
GS-AP-MW-36H	TURB	Turbidity	3/15/2023 11:03	7.74	NTU
GS-AP-MW-36H	COND	Conductivity	3/15/2023 11:08	877.05	uS/cm
GS-AP-MW-36H	DO	DO	3/15/2023 11:08	0.45	mg/L
GS-AP-MW-36H	DTW	Depth to Water Detail	3/15/2023 11:08	247.65	ft
GS-AP-MW-36H	ORP	Oxidation Reduction Potention	3/15/2023 11:08	77.06	mv
GS-AP-MW-36H	PH	pH	3/15/2023 11:08	8.04	SU
GS-AP-MW-36H	TEMP	Temperature	3/15/2023 11:08	16.24	C
GS-AP-MW-36H	TURB	Turbidity	3/15/2023 11:08	7.13	NTU
GS-AP-MW-36H	COND	Conductivity	3/15/2023 11:13	858.23	uS/cm
GS-AP-MW-36H	DO	DO	3/15/2023 11:13	0.42	mg/L
GS-AP-MW-36H	DTW	Depth to Water Detail	3/15/2023 11:13	247.65	ft
GS-AP-MW-36H	ORP	Oxidation Reduction Potention	3/15/2023 11:13	57.5	mv
GS-AP-MW-36H	PH	pH	3/15/2023 11:13	8.06	SU
GS-AP-MW-36H	SULFIDE	Sulfide	3/15/2023 11:13	0	mg/L
GS-AP-MW-36H	TEMP	Temperature	3/15/2023 11:13	16.3	C
GS-AP-MW-36H	TURB	Turbidity	3/15/2023 11:13	7.48	NTU

Field Parameters Summary
Plant Gorgas Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GS-AP-MW-2	COND	Conductivity	3/22/2023 13:39	487.61	uS/cm
GS-AP-MW-2	DO	DO	3/22/2023 13:39	0.12	mg/L
GS-AP-MW-2	DTW	Depth to Water Detail	3/22/2023 13:39	152.65	ft
GS-AP-MW-2	ORP	Oxidation Reduction Potention	3/22/2023 13:39	-195.45	mv
GS-AP-MW-2	PH	pH	3/22/2023 13:39	9.2	SU
GS-AP-MW-2	TEMP	Temperature	3/22/2023 13:39	17.46	C
GS-AP-MW-2	TURB	Turbidity	3/22/2023 13:39	2.19	NTU
GS-AP-MW-2	COND	Conductivity	3/22/2023 13:44	479.33	uS/cm
GS-AP-MW-2	DO	DO	3/22/2023 13:44	0.1	mg/L
GS-AP-MW-2	DTW	Depth to Water Detail	3/22/2023 13:44	153	ft
GS-AP-MW-2	ORP	Oxidation Reduction Potention	3/22/2023 13:44	-202.66	mv
GS-AP-MW-2	PH	pH	3/22/2023 13:44	9.22	SU
GS-AP-MW-2	TEMP	Temperature	3/22/2023 13:44	17.57	C
GS-AP-MW-2	TURB	Turbidity	3/22/2023 13:44	2.06	NTU
GS-AP-MW-2	COND	Conductivity	3/22/2023 13:49	473.87	uS/cm
GS-AP-MW-2	DO	DO	3/22/2023 13:49	0.08	mg/L
GS-AP-MW-2	DTW	Depth to Water Detail	3/22/2023 13:49	153	ft
GS-AP-MW-2	ORP	Oxidation Reduction Potention	3/22/2023 13:49	-208.27	mv
GS-AP-MW-2	PH	pH	3/22/2023 13:49	9.24	SU
GS-AP-MW-2	TEMP	Temperature	3/22/2023 13:49	17.38	C
GS-AP-MW-2	TURB	Turbidity	3/22/2023 13:49	2.22	NTU
GS-AP-MW-2	COND	Conductivity	3/22/2023 13:54	469.8	uS/cm
GS-AP-MW-2	DO	DO	3/22/2023 13:54	0.07	mg/L
GS-AP-MW-2	DTW	Depth to Water Detail	3/22/2023 13:54	153	ft
GS-AP-MW-2	ORP	Oxidation Reduction Potention	3/22/2023 13:54	-213.6	mv
GS-AP-MW-2	PH	pH	3/22/2023 13:54	9.27	SU
GS-AP-MW-2	SULFIDE	Sulfide	3/22/2023 13:54	1	mg/L
GS-AP-MW-2	TEMP	Temperature	3/22/2023 13:54	17.48	C
GS-AP-MW-2	TURB	Turbidity	3/22/2023 13:54	2.16	NTU

Field Parameters Summary
Plant Gorgas Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GS-AP-MW-17	COND	Conductivity	3/22/2023 9:55	759.35	uS/cm
GS-AP-MW-17	DO	DO	3/22/2023 9:55	0.33	mg/L
GS-AP-MW-17	DTW	Depth to Water Detail	3/22/2023 9:55	173.65	ft
GS-AP-MW-17	ORP	Oxidation Reduction Potention	3/22/2023 9:55	-110.09	mv
GS-AP-MW-17	PH	pH	3/22/2023 9:55	8.39	SU
GS-AP-MW-17	TEMP	Temperature	3/22/2023 9:55	16.58	C
GS-AP-MW-17	TURB	Turbidity	3/22/2023 9:55	1.85	NTU
GS-AP-MW-17	COND	Conductivity	3/22/2023 10:00	738.23	uS/cm
GS-AP-MW-17	DO	DO	3/22/2023 10:00	0.19	mg/L
GS-AP-MW-17	DTW	Depth to Water Detail	3/22/2023 10:00	173.65	ft
GS-AP-MW-17	ORP	Oxidation Reduction Potention	3/22/2023 10:00	-159.35	mv
GS-AP-MW-17	PH	pH	3/22/2023 10:00	8.38	SU
GS-AP-MW-17	TEMP	Temperature	3/22/2023 10:00	16.64	C
GS-AP-MW-17	TURB	Turbidity	3/22/2023 10:00	1.7	NTU
GS-AP-MW-17	COND	Conductivity	3/22/2023 10:05	687.99	uS/cm
GS-AP-MW-17	DO	DO	3/22/2023 10:05	0.15	mg/L
GS-AP-MW-17	DTW	Depth to Water Detail	3/22/2023 10:05	173.65	ft
GS-AP-MW-17	ORP	Oxidation Reduction Potention	3/22/2023 10:05	-185.4	mv
GS-AP-MW-17	PH	pH	3/22/2023 10:05	8.5	SU
GS-AP-MW-17	TEMP	Temperature	3/22/2023 10:05	16.77	C
GS-AP-MW-17	TURB	Turbidity	3/22/2023 10:05	1.82	NTU
GS-AP-MW-17	COND	Conductivity	3/22/2023 10:10	656.84	uS/cm
GS-AP-MW-17	DO	DO	3/22/2023 10:10	0.13	mg/L
GS-AP-MW-17	DTW	Depth to Water Detail	3/22/2023 10:10	173.65	ft
GS-AP-MW-17	ORP	Oxidation Reduction Potention	3/22/2023 10:10	-194.8	mv
GS-AP-MW-17	PH	pH	3/22/2023 10:10	8.52	SU
GS-AP-MW-17	TEMP	Temperature	3/22/2023 10:10	16.78	C
GS-AP-MW-17	TURB	Turbidity	3/22/2023 10:10	1.74	NTU
GS-AP-MW-17	COND	Conductivity	3/22/2023 10:15	619.4	uS/cm
GS-AP-MW-17	DO	DO	3/22/2023 10:15	0.11	mg/L
GS-AP-MW-17	DTW	Depth to Water Detail	3/22/2023 10:15	173.65	ft
GS-AP-MW-17	ORP	Oxidation Reduction Potention	3/22/2023 10:15	-197.57	mv
GS-AP-MW-17	PH	pH	3/22/2023 10:15	8.49	SU
GS-AP-MW-17	TEMP	Temperature	3/22/2023 10:15	17.06	C
GS-AP-MW-17	TURB	Turbidity	3/22/2023 10:15	1.58	NTU
GS-AP-MW-17	COND	Conductivity	3/22/2023 10:20	599.57	uS/cm
GS-AP-MW-17	DO	DO	3/22/2023 10:20	0.1	mg/L
GS-AP-MW-17	DTW	Depth to Water Detail	3/22/2023 10:20	173.65	ft
GS-AP-MW-17	ORP	Oxidation Reduction Potention	3/22/2023 10:20	-205.35	mv
GS-AP-MW-17	PH	pH	3/22/2023 10:20	8.56	SU
GS-AP-MW-17	TEMP	Temperature	3/22/2023 10:20	17.07	C
GS-AP-MW-17	TURB	Turbidity	3/22/2023 10:20	1.96	NTU
GS-AP-MW-17	COND	Conductivity	3/22/2023 10:25	590.08	uS/cm
GS-AP-MW-17	DO	DO	3/22/2023 10:25	0.09	mg/L
GS-AP-MW-17	DTW	Depth to Water Detail	3/22/2023 10:25	173.65	ft
GS-AP-MW-17	ORP	Oxidation Reduction Potention	3/22/2023 10:25	-206.67	mv
GS-AP-MW-17	PH	pH	3/22/2023 10:25	8.56	SU

Field Parameters Summary
Plant Gorgas Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GS-AP-MW-17	SULFIDE	Sulfide	3/22/2023 10:25	0	mg/L
GS-AP-MW-17	TEMP	Temperature	3/22/2023 10:25	16.9	C
GS-AP-MW-17	TURB	Turbidity	3/22/2023 10:25	2.44	NTU

Field Parameters Summary
Plant Gorgas Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GS-AP-MW-17V	COND	Conductivity	3/22/2023 11:17	569.6	uS/cm
GS-AP-MW-17V	DO	DO	3/22/2023 11:17	0.06	mg/L
GS-AP-MW-17V	DTW	Depth to Water Detail	3/22/2023 11:17	112.32	ft
GS-AP-MW-17V	ORP	Oxidation Reduction Potention	3/22/2023 11:17	-161.38	mv
GS-AP-MW-17V	PH	pH	3/22/2023 11:17	7.69	SU
GS-AP-MW-17V	TEMP	Temperature	3/22/2023 11:17	17.22	C
GS-AP-MW-17V	TURB	Turbidity	3/22/2023 11:17	3.18	NTU
GS-AP-MW-17V	COND	Conductivity	3/22/2023 11:22	568.64	uS/cm
GS-AP-MW-17V	DO	DO	3/22/2023 11:22	0.05	mg/L
GS-AP-MW-17V	DTW	Depth to Water Detail	3/22/2023 11:22	114.3	ft
GS-AP-MW-17V	ORP	Oxidation Reduction Potention	3/22/2023 11:22	-165.76	mv
GS-AP-MW-17V	PH	pH	3/22/2023 11:22	7.7	SU
GS-AP-MW-17V	TEMP	Temperature	3/22/2023 11:22	17.25	C
GS-AP-MW-17V	TURB	Turbidity	3/22/2023 11:22	3.14	NTU
GS-AP-MW-17V	COND	Conductivity	3/22/2023 11:27	567.57	uS/cm
GS-AP-MW-17V	DO	DO	3/22/2023 11:27	0.07	mg/L
GS-AP-MW-17V	DTW	Depth to Water Detail	3/22/2023 11:27	115.3	ft
GS-AP-MW-17V	ORP	Oxidation Reduction Potention	3/22/2023 11:27	-165.93	mv
GS-AP-MW-17V	PH	pH	3/22/2023 11:27	7.7	SU
GS-AP-MW-17V	TEMP	Temperature	3/22/2023 11:27	17.46	C
GS-AP-MW-17V	TURB	Turbidity	3/22/2023 11:27	1.99	NTU
GS-AP-MW-17V	COND	Conductivity	3/22/2023 11:32	567.44	uS/cm
GS-AP-MW-17V	DO	DO	3/22/2023 11:32	0.11	mg/L
GS-AP-MW-17V	DTW	Depth to Water Detail	3/22/2023 11:32	115.8	ft
GS-AP-MW-17V	ORP	Oxidation Reduction Potention	3/22/2023 11:32	-167.11	mv
GS-AP-MW-17V	PH	pH	3/22/2023 11:32	7.72	SU
GS-AP-MW-17V	TEMP	Temperature	3/22/2023 11:32	17.61	C
GS-AP-MW-17V	TURB	Turbidity	3/22/2023 11:32	2.58	NTU
GS-AP-MW-17V	COND	Conductivity	3/22/2023 11:37	564.79	uS/cm
GS-AP-MW-17V	DO	DO	3/22/2023 11:37	0.09	mg/L
GS-AP-MW-17V	DTW	Depth to Water Detail	3/22/2023 11:37	116.11	ft
GS-AP-MW-17V	ORP	Oxidation Reduction Potention	3/22/2023 11:37	-169.84	mv
GS-AP-MW-17V	PH	pH	3/22/2023 11:37	7.74	SU
GS-AP-MW-17V	TEMP	Temperature	3/22/2023 11:37	17.52	C
GS-AP-MW-17V	TURB	Turbidity	3/22/2023 11:37	3.04	NTU
GS-AP-MW-17V	COND	Conductivity	3/22/2023 11:42	562.63	uS/cm
GS-AP-MW-17V	DO	DO	3/22/2023 11:42	0.09	mg/L
GS-AP-MW-17V	DTW	Depth to Water Detail	3/22/2023 11:42	116.45	ft
GS-AP-MW-17V	ORP	Oxidation Reduction Potention	3/22/2023 11:42	-171.24	mv
GS-AP-MW-17V	PH	pH	3/22/2023 11:42	7.74	SU
GS-AP-MW-17V	TEMP	Temperature	3/22/2023 11:42	18.15	C
GS-AP-MW-17V	TURB	Turbidity	3/22/2023 11:42	2.05	NTU
GS-AP-MW-17V	COND	Conductivity	3/22/2023 11:47	556.49	uS/cm
GS-AP-MW-17V	DO	DO	3/22/2023 11:47	0.09	mg/L
GS-AP-MW-17V	DTW	Depth to Water Detail	3/22/2023 11:47	116.68	ft
GS-AP-MW-17V	ORP	Oxidation Reduction Potention	3/22/2023 11:47	-166.14	mv
GS-AP-MW-17V	PH	pH	3/22/2023 11:47	7.67	SU

Field Parameters Summary
Plant Gorgas Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GS-AP-MW-17V	TEMP	Temperature	3/22/2023 11:47	18.02	C
GS-AP-MW-17V	TURB	Turbidity	3/22/2023 11:47	2.2	NTU
GS-AP-MW-17V	COND	Conductivity	3/22/2023 11:52	553.61	uS/cm
GS-AP-MW-17V	DO	DO	3/22/2023 11:52	0.08	mg/L
GS-AP-MW-17V	DTW	Depth to Water Detail	3/22/2023 11:52	116.9	ft
GS-AP-MW-17V	ORP	Oxidation Reduction Potention	3/22/2023 11:52	-164.64	mv
GS-AP-MW-17V	PH	pH	3/22/2023 11:52	7.66	SU
GS-AP-MW-17V	TEMP	Temperature	3/22/2023 11:52	18.33	C
GS-AP-MW-17V	TURB	Turbidity	3/22/2023 11:52	2.42	NTU
GS-AP-MW-17V	COND	Conductivity	3/22/2023 11:57	552.26	uS/cm
GS-AP-MW-17V	DO	DO	3/22/2023 11:57	0.08	mg/L
GS-AP-MW-17V	DTW	Depth to Water Detail	3/22/2023 11:57	117.1	ft
GS-AP-MW-17V	ORP	Oxidation Reduction Potention	3/22/2023 11:57	-163.66	mv
GS-AP-MW-17V	PH	pH	3/22/2023 11:57	7.65	SU
GS-AP-MW-17V	TEMP	Temperature	3/22/2023 11:57	18.77	C
GS-AP-MW-17V	TURB	Turbidity	3/22/2023 11:57	2.05	NTU
GS-AP-MW-17V	COND	Conductivity	3/22/2023 12:02	551.45	uS/cm
GS-AP-MW-17V	DO	DO	3/22/2023 12:02	0.08	mg/L
GS-AP-MW-17V	DTW	Depth to Water Detail	3/22/2023 12:02	117.45	ft
GS-AP-MW-17V	ORP	Oxidation Reduction Potention	3/22/2023 12:02	-162.29	mv
GS-AP-MW-17V	PH	pH	3/22/2023 12:02	7.64	SU
GS-AP-MW-17V	TEMP	Temperature	3/22/2023 12:02	19.1	C
GS-AP-MW-17V	TURB	Turbidity	3/22/2023 12:02	2.2	NTU
GS-AP-MW-17V	COND	Conductivity	3/22/2023 12:07	554.29	uS/cm
GS-AP-MW-17V	DO	DO	3/22/2023 12:07	0.01	mg/L
GS-AP-MW-17V	DTW	Depth to Water Detail	3/22/2023 12:07	119.2	ft
GS-AP-MW-17V	ORP	Oxidation Reduction Potention	3/22/2023 12:07	-160.85	mv
GS-AP-MW-17V	PH	pH	3/22/2023 12:07	7.62	SU
GS-AP-MW-17V	TEMP	Temperature	3/22/2023 12:07	17.67	C
GS-AP-MW-17V	TURB	Turbidity	3/22/2023 12:07	2.41	NTU
GS-AP-MW-17V	COND	Conductivity	3/22/2023 12:12	554.33	uS/cm
GS-AP-MW-17V	DO	DO	3/22/2023 12:12	0.01	mg/L
GS-AP-MW-17V	DTW	Depth to Water Detail	3/22/2023 12:12	120.9	ft
GS-AP-MW-17V	ORP	Oxidation Reduction Potention	3/22/2023 12:12	-160.64	mv
GS-AP-MW-17V	PH	pH	3/22/2023 12:12	7.61	SU
GS-AP-MW-17V	TEMP	Temperature	3/22/2023 12:12	17.82	C
GS-AP-MW-17V	TURB	Turbidity	3/22/2023 12:12	2.23	NTU
GS-AP-MW-17V	COND	Conductivity	3/22/2023 12:17	553.09	uS/cm
GS-AP-MW-17V	DO	DO	3/22/2023 12:17	0.06	mg/L
GS-AP-MW-17V	DTW	Depth to Water Detail	3/22/2023 12:17	121.72	ft
GS-AP-MW-17V	ORP	Oxidation Reduction Potention	3/22/2023 12:17	-160.18	mv
GS-AP-MW-17V	PH	pH	3/22/2023 12:17	7.64	SU
GS-AP-MW-17V	TEMP	Temperature	3/22/2023 12:17	18.39	C
GS-AP-MW-17V	TURB	Turbidity	3/22/2023 12:17	2.29	NTU
GS-AP-MW-17V	COND	Conductivity	3/22/2023 12:22	545.94	uS/cm
GS-AP-MW-17V	DO	DO	3/22/2023 12:22	0.07	mg/L
GS-AP-MW-17V	DTW	Depth to Water Detail	3/22/2023 12:22	121.75	ft

Field Parameters Summary
Plant Gorgas Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GS-AP-MW-17V	ORP	Oxidation Reduction Potention	3/22/2023 12:22	-159.19	mv
GS-AP-MW-17V	PH	pH	3/22/2023 12:22	7.62	SU
GS-AP-MW-17V	TEMP	Temperature	3/22/2023 12:22	18.96	C
GS-AP-MW-17V	TURB	Turbidity	3/22/2023 12:22	2.44	NTU
GS-AP-MW-17V	COND	Conductivity	3/22/2023 12:27	545.07	uS/cm
GS-AP-MW-17V	DO	DO	3/22/2023 12:27	0.07	mg/L
GS-AP-MW-17V	DTW	Depth to Water Detail	3/22/2023 12:27	121.82	ft
GS-AP-MW-17V	ORP	Oxidation Reduction Potention	3/22/2023 12:27	-157.18	mv
GS-AP-MW-17V	PH	pH	3/22/2023 12:27	7.61	SU
GS-AP-MW-17V	SULFIDE	Sulfide	3/22/2023 12:27	0	mg/L
GS-AP-MW-17V	TEMP	Temperature	3/22/2023 12:27	18.59	C
GS-AP-MW-17V	TURB	Turbidity	3/22/2023 12:27	1.95	NTU

Field Parameters Summary
Plant Gorgas Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GS-AP-MW-19	COND	Conductivity	3/21/2023 12:14	514.51	uS/cm
GS-AP-MW-19	DO	DO	3/21/2023 12:14	0.21	mg/L
GS-AP-MW-19	DTW	Depth to Water Detail	3/21/2023 12:14	112	ft
GS-AP-MW-19	ORP	Oxidation Reduction Potention	3/21/2023 12:14	-182.59	mv
GS-AP-MW-19	PH	pH	3/21/2023 12:14	8.03	SU
GS-AP-MW-19	TEMP	Temperature	3/21/2023 12:14	17.11	C
GS-AP-MW-19	TURB	Turbidity	3/21/2023 12:14	1.68	NTU
GS-AP-MW-19	COND	Conductivity	3/21/2023 12:19	514.59	uS/cm
GS-AP-MW-19	DO	DO	3/21/2023 12:19	0.14	mg/L
GS-AP-MW-19	DTW	Depth to Water Detail	3/21/2023 12:19	112	ft
GS-AP-MW-19	ORP	Oxidation Reduction Potention	3/21/2023 12:19	-191.8	mv
GS-AP-MW-19	PH	pH	3/21/2023 12:19	7.99	SU
GS-AP-MW-19	TEMP	Temperature	3/21/2023 12:19	17.03	C
GS-AP-MW-19	TURB	Turbidity	3/21/2023 12:19	1.54	NTU
GS-AP-MW-19	COND	Conductivity	3/21/2023 12:24	515.44	uS/cm
GS-AP-MW-19	DO	DO	3/21/2023 12:24	0.11	mg/L
GS-AP-MW-19	DTW	Depth to Water Detail	3/21/2023 12:24	112	ft
GS-AP-MW-19	ORP	Oxidation Reduction Potention	3/21/2023 12:24	-188.57	mv
GS-AP-MW-19	PH	pH	3/21/2023 12:24	7.88	SU
GS-AP-MW-19	TEMP	Temperature	3/21/2023 12:24	16.99	C
GS-AP-MW-19	TURB	Turbidity	3/21/2023 12:24	1.45	NTU
GS-AP-MW-19	COND	Conductivity	3/21/2023 12:29	516.74	uS/cm
GS-AP-MW-19	DO	DO	3/21/2023 12:29	0.08	mg/L
GS-AP-MW-19	DTW	Depth to Water Detail	3/21/2023 12:29	112	ft
GS-AP-MW-19	ORP	Oxidation Reduction Potention	3/21/2023 12:29	-189.29	mv
GS-AP-MW-19	PH	pH	3/21/2023 12:29	7.85	SU
GS-AP-MW-19	SULFIDE	Sulfide	3/21/2023 12:29	0	mg/L
GS-AP-MW-19	TEMP	Temperature	3/21/2023 12:29	16.91	C
GS-AP-MW-19	TURB	Turbidity	3/21/2023 12:29	1.4	NTU

Field Parameters Summary
Plant Gorgas Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GS-AP-PZ-22	COND	Conductivity	3/21/2023 13:20	604.39	uS/cm
GS-AP-PZ-22	DO	DO	3/21/2023 13:20	0.78	mg/L
GS-AP-PZ-22	DTW	Depth to Water Detail	3/21/2023 13:20	269.39	ft
GS-AP-PZ-22	ORP	Oxidation Reduction Potention	3/21/2023 13:20	-249.11	mv
GS-AP-PZ-22	PH	pH	3/21/2023 13:20	9.25	SU
GS-AP-PZ-22	TEMP	Temperature	3/21/2023 13:20	17.36	C
GS-AP-PZ-22	TURB	Turbidity	3/21/2023 13:20	2.93	NTU
GS-AP-PZ-22	COND	Conductivity	3/21/2023 13:25	667.76	uS/cm
GS-AP-PZ-22	DO	DO	3/21/2023 13:25	0.24	mg/L
GS-AP-PZ-22	DTW	Depth to Water Detail	3/21/2023 13:25	269.39	ft
GS-AP-PZ-22	ORP	Oxidation Reduction Potention	3/21/2023 13:25	-250.7	mv
GS-AP-PZ-22	PH	pH	3/21/2023 13:25	9.7	SU
GS-AP-PZ-22	TEMP	Temperature	3/21/2023 13:25	17.25	C
GS-AP-PZ-22	TURB	Turbidity	3/21/2023 13:25	2.5	NTU
GS-AP-PZ-22	COND	Conductivity	3/21/2023 13:30	670.56	uS/cm
GS-AP-PZ-22	DO	DO	3/21/2023 13:30	0.11	mg/L
GS-AP-PZ-22	DTW	Depth to Water Detail	3/21/2023 13:30	269.39	ft
GS-AP-PZ-22	ORP	Oxidation Reduction Potention	3/21/2023 13:30	-257.48	mv
GS-AP-PZ-22	PH	pH	3/21/2023 13:30	9.59	SU
GS-AP-PZ-22	TEMP	Temperature	3/21/2023 13:30	17.63	C
GS-AP-PZ-22	TURB	Turbidity	3/21/2023 13:30	3.47	NTU
GS-AP-PZ-22	COND	Conductivity	3/21/2023 13:35	669.22	uS/cm
GS-AP-PZ-22	DO	DO	3/21/2023 13:35	0.06	mg/L
GS-AP-PZ-22	DTW	Depth to Water Detail	3/21/2023 13:35	269.39	ft
GS-AP-PZ-22	ORP	Oxidation Reduction Potention	3/21/2023 13:35	-270.47	mv
GS-AP-PZ-22	PH	pH	3/21/2023 13:35	9.53	SU
GS-AP-PZ-22	SULFIDE	Sulfide	3/21/2023 13:35	0	mg/L
GS-AP-PZ-22	TEMP	Temperature	3/21/2023 13:35	17.74	C
GS-AP-PZ-22	TURB	Turbidity	3/21/2023 13:35	3.09	NTU

Field Parameters Summary
Plant Gorgas Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GS-AP-MW-32H	COND	Conductivity	3/21/2023 10:19	564.55	uS/cm
GS-AP-MW-32H	DO	DO	3/21/2023 10:19	0.86	mg/L
GS-AP-MW-32H	DTW	Depth to Water Detail	3/21/2023 10:19	268.7	ft
GS-AP-MW-32H	ORP	Oxidation Reduction Potention	3/21/2023 10:19	-126.8	mv
GS-AP-MW-32H	PH	pH	3/21/2023 10:19	7.91	SU
GS-AP-MW-32H	TEMP	Temperature	3/21/2023 10:19	15.5	C
GS-AP-MW-32H	TURB	Turbidity	3/21/2023 10:19	3.91	NTU
GS-AP-MW-32H	COND	Conductivity	3/21/2023 10:37	567.87	uS/cm
GS-AP-MW-32H	DO	DO	3/21/2023 10:37	0.36	mg/L
GS-AP-MW-32H	DTW	Depth to Water Detail	3/21/2023 10:37	270.2	ft
GS-AP-MW-32H	ORP	Oxidation Reduction Potention	3/21/2023 10:37	-82.72	mv
GS-AP-MW-32H	PH	pH	3/21/2023 10:37	8.3	SU
GS-AP-MW-32H	SULFIDE	Sulfide	3/21/2023 10:37	0	mg/L
GS-AP-MW-32H	TEMP	Temperature	3/21/2023 10:37	16.16	C
GS-AP-MW-32H	TURB	Turbidity	3/21/2023 10:37	3.04	NTU

Field Parameters Summary
Plant Gorgas Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GS-AP-MW-15	COND	Conductivity	3/20/2023 13:18	1931.29	uS/cm
GS-AP-MW-15	DO	DO	3/20/2023 13:18	0.27	mg/L
GS-AP-MW-15	DTW	Depth to Water Detail	3/20/2023 13:18	80.28	ft
GS-AP-MW-15	ORP	Oxidation Reduction Potention	3/20/2023 13:18	-292.73	mv
GS-AP-MW-15	PH	pH	3/20/2023 13:18	11.69	SU
GS-AP-MW-15	TEMP	Temperature	3/20/2023 13:18	17.1	C
GS-AP-MW-15	TURB	Turbidity	3/20/2023 13:18	2.86	NTU
GS-AP-MW-15	COND	Conductivity	3/20/2023 13:23	1934.68	uS/cm
GS-AP-MW-15	DO	DO	3/20/2023 13:23	0.53	mg/L
GS-AP-MW-15	DTW	Depth to Water Detail	3/20/2023 13:23	82.52	ft
GS-AP-MW-15	ORP	Oxidation Reduction Potention	3/20/2023 13:23	-284.6	mv
GS-AP-MW-15	PH	pH	3/20/2023 13:23	11.73	SU
GS-AP-MW-15	TEMP	Temperature	3/20/2023 13:23	16.7	C
GS-AP-MW-15	TURB	Turbidity	3/20/2023 13:23	2.46	NTU
GS-AP-MW-15	COND	Conductivity	3/20/2023 13:28	1912.66	uS/cm
GS-AP-MW-15	DO	DO	3/20/2023 13:28	0.23	mg/L
GS-AP-MW-15	DTW	Depth to Water Detail	3/20/2023 13:28	84.05	ft
GS-AP-MW-15	ORP	Oxidation Reduction Potention	3/20/2023 13:28	-299.21	mv
GS-AP-MW-15	PH	pH	3/20/2023 13:28	11.75	SU
GS-AP-MW-15	TEMP	Temperature	3/20/2023 13:28	17.04	C
GS-AP-MW-15	TURB	Turbidity	3/20/2023 13:28	2.2	NTU
GS-AP-MW-15	COND	Conductivity	3/20/2023 13:33	1894.72	uS/cm
GS-AP-MW-15	DO	DO	3/20/2023 13:33	0.19	mg/L
GS-AP-MW-15	DTW	Depth to Water Detail	3/20/2023 13:33	86.13	ft
GS-AP-MW-15	ORP	Oxidation Reduction Potention	3/20/2023 13:33	-306.14	mv
GS-AP-MW-15	PH	pH	3/20/2023 13:33	11.76	SU
GS-AP-MW-15	TEMP	Temperature	3/20/2023 13:33	17.14	C
GS-AP-MW-15	TURB	Turbidity	3/20/2023 13:33	2.29	NTU
GS-AP-MW-15	COND	Conductivity	3/20/2023 13:38	1880.96	uS/cm
GS-AP-MW-15	DO	DO	3/20/2023 13:38	0.27	mg/L
GS-AP-MW-15	DTW	Depth to Water Detail	3/20/2023 13:38	87.81	ft
GS-AP-MW-15	ORP	Oxidation Reduction Potention	3/20/2023 13:38	-296.35	mv
GS-AP-MW-15	PH	pH	3/20/2023 13:38	11.79	SU
GS-AP-MW-15	TEMP	Temperature	3/20/2023 13:38	16.99	C
GS-AP-MW-15	TURB	Turbidity	3/20/2023 13:38	2.18	NTU
GS-AP-MW-15	COND	Conductivity	3/20/2023 13:43	1873.35	uS/cm
GS-AP-MW-15	DO	DO	3/20/2023 13:43	0.45	mg/L
GS-AP-MW-15	DTW	Depth to Water Detail	3/20/2023 13:43	87.92	ft
GS-AP-MW-15	ORP	Oxidation Reduction Potention	3/20/2023 13:43	-289.62	mv
GS-AP-MW-15	PH	pH	3/20/2023 13:43	11.81	SU
GS-AP-MW-15	TEMP	Temperature	3/20/2023 13:43	16.63	C
GS-AP-MW-15	TURB	Turbidity	3/20/2023 13:43	1.88	NTU
GS-AP-MW-15	COND	Conductivity	3/20/2023 13:48	1842.09	uS/cm
GS-AP-MW-15	DO	DO	3/20/2023 13:48	0.46	mg/L
GS-AP-MW-15	DTW	Depth to Water Detail	3/20/2023 13:48	88.19	ft
GS-AP-MW-15	ORP	Oxidation Reduction Potention	3/20/2023 13:48	-290.39	mv
GS-AP-MW-15	PH	pH	3/20/2023 13:48	11.81	SU

Field Parameters Summary
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WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GS-AP-MW-15	TEMP	Temperature	3/20/2023 13:48	16.6	C
GS-AP-MW-15	TURB	Turbidity	3/20/2023 13:48	2.23	NTU
GS-AP-MW-15	COND	Conductivity	3/20/2023 13:53	1792.42	uS/cm
GS-AP-MW-15	DO	DO	3/20/2023 13:53	0.46	mg/L
GS-AP-MW-15	DTW	Depth to Water Detail	3/20/2023 13:53	88.4	ft
GS-AP-MW-15	ORP	Oxidation Reduction Potention	3/20/2023 13:53	-289.94	mv
GS-AP-MW-15	PH	pH	3/20/2023 13:53	11.79	SU
GS-AP-MW-15	TEMP	Temperature	3/20/2023 13:53	16.68	C
GS-AP-MW-15	TURB	Turbidity	3/20/2023 13:53	2.18	NTU
GS-AP-MW-15	COND	Conductivity	3/20/2023 13:58	1729.23	uS/cm
GS-AP-MW-15	DO	DO	3/20/2023 13:58	0.46	mg/L
GS-AP-MW-15	DTW	Depth to Water Detail	3/20/2023 13:58	88.64	ft
GS-AP-MW-15	ORP	Oxidation Reduction Potention	3/20/2023 13:58	-289.48	mv
GS-AP-MW-15	PH	pH	3/20/2023 13:58	11.77	SU
GS-AP-MW-15	TEMP	Temperature	3/20/2023 13:58	16.69	C
GS-AP-MW-15	TURB	Turbidity	3/20/2023 13:58	2.16	NTU
GS-AP-MW-15	COND	Conductivity	3/20/2023 14:03	1657.46	uS/cm
GS-AP-MW-15	DO	DO	3/20/2023 14:03	0.45	mg/L
GS-AP-MW-15	DTW	Depth to Water Detail	3/20/2023 14:03	88.81	ft
GS-AP-MW-15	ORP	Oxidation Reduction Potention	3/20/2023 14:03	-288.65	mv
GS-AP-MW-15	PH	pH	3/20/2023 14:03	11.74	SU
GS-AP-MW-15	TEMP	Temperature	3/20/2023 14:03	16.62	C
GS-AP-MW-15	TURB	Turbidity	3/20/2023 14:03	2.08	NTU
GS-AP-MW-15	COND	Conductivity	3/20/2023 14:08	1572.33	uS/cm
GS-AP-MW-15	DO	DO	3/20/2023 14:08	0.44	mg/L
GS-AP-MW-15	DTW	Depth to Water Detail	3/20/2023 14:08	89.01	ft
GS-AP-MW-15	ORP	Oxidation Reduction Potention	3/20/2023 14:08	-287.62	mv
GS-AP-MW-15	PH	pH	3/20/2023 14:08	11.71	SU
GS-AP-MW-15	TEMP	Temperature	3/20/2023 14:08	16.62	C
GS-AP-MW-15	TURB	Turbidity	3/20/2023 14:08	2.1	NTU
GS-AP-MW-15	COND	Conductivity	3/20/2023 14:13	1480.62	uS/cm
GS-AP-MW-15	DO	DO	3/20/2023 14:13	0.44	mg/L
GS-AP-MW-15	DTW	Depth to Water Detail	3/20/2023 14:13	89.17	ft
GS-AP-MW-15	ORP	Oxidation Reduction Potention	3/20/2023 14:13	-286.64	mv
GS-AP-MW-15	PH	pH	3/20/2023 14:13	11.67	SU
GS-AP-MW-15	TEMP	Temperature	3/20/2023 14:13	16.57	C
GS-AP-MW-15	TURB	Turbidity	3/20/2023 14:13	2.14	NTU
GS-AP-MW-15	COND	Conductivity	3/20/2023 14:18	1354.63	uS/cm
GS-AP-MW-15	DO	DO	3/20/2023 14:18	0.43	mg/L
GS-AP-MW-15	DTW	Depth to Water Detail	3/20/2023 14:18	89.35	ft
GS-AP-MW-15	ORP	Oxidation Reduction Potention	3/20/2023 14:18	-285.15	mv
GS-AP-MW-15	PH	pH	3/20/2023 14:18	11.6	SU
GS-AP-MW-15	TEMP	Temperature	3/20/2023 14:18	16.4	C
GS-AP-MW-15	TURB	Turbidity	3/20/2023 14:18	2.12	NTU
GS-AP-MW-15	COND	Conductivity	3/20/2023 14:23	1276.51	uS/cm
GS-AP-MW-15	DO	DO	3/20/2023 14:23	0.46	mg/L
GS-AP-MW-15	DTW	Depth to Water Detail	3/20/2023 14:23	89.5	ft

Field Parameters Summary
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WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GS-AP-MW-15	ORP	Oxidation Reduction Potention	3/20/2023 14:23	-283.39	mv
GS-AP-MW-15	PH	pH	3/20/2023 14:23	11.55	SU
GS-AP-MW-15	TEMP	Temperature	3/20/2023 14:23	16.42	C
GS-AP-MW-15	TURB	Turbidity	3/20/2023 14:23	1.96	NTU
GS-AP-MW-15	COND	Conductivity	3/20/2023 14:28	1233.69	uS/cm
GS-AP-MW-15	DO	DO	3/20/2023 14:28	0.59	mg/L
GS-AP-MW-15	DTW	Depth to Water Detail	3/20/2023 14:28	89.68	ft
GS-AP-MW-15	ORP	Oxidation Reduction Potention	3/20/2023 14:28	-279.35	mv
GS-AP-MW-15	PH	pH	3/20/2023 14:28	11.54	SU
GS-AP-MW-15	TEMP	Temperature	3/20/2023 14:28	16.51	C
GS-AP-MW-15	TURB	Turbidity	3/20/2023 14:28	1.9	NTU
GS-AP-MW-15	COND	Conductivity	3/20/2023 14:33	1152.23	uS/cm
GS-AP-MW-15	DO	DO	3/20/2023 14:33	0.54	mg/L
GS-AP-MW-15	DTW	Depth to Water Detail	3/20/2023 14:33	89.78	ft
GS-AP-MW-15	ORP	Oxidation Reduction Potention	3/20/2023 14:33	-279.77	mv
GS-AP-MW-15	PH	pH	3/20/2023 14:33	11.48	SU
GS-AP-MW-15	TEMP	Temperature	3/20/2023 14:33	16.56	C
GS-AP-MW-15	TURB	Turbidity	3/20/2023 14:33	1.92	NTU
GS-AP-MW-15	COND	Conductivity	3/20/2023 14:38	1097.85	uS/cm
GS-AP-MW-15	DO	DO	3/20/2023 14:38	0.5	mg/L
GS-AP-MW-15	DTW	Depth to Water Detail	3/20/2023 14:38	89.9	ft
GS-AP-MW-15	ORP	Oxidation Reduction Potention	3/20/2023 14:38	-280.86	mv
GS-AP-MW-15	PH	pH	3/20/2023 14:38	11.46	SU
GS-AP-MW-15	TEMP	Temperature	3/20/2023 14:38	16.48	C
GS-AP-MW-15	TURB	Turbidity	3/20/2023 14:38	1.89	NTU
GS-AP-MW-15	COND	Conductivity	3/20/2023 14:43	1049.38	uS/cm
GS-AP-MW-15	DO	DO	3/20/2023 14:43	0.51	mg/L
GS-AP-MW-15	DTW	Depth to Water Detail	3/20/2023 14:43	90.04	ft
GS-AP-MW-15	ORP	Oxidation Reduction Potention	3/20/2023 14:43	-278.1	mv
GS-AP-MW-15	PH	pH	3/20/2023 14:43	11.39	SU
GS-AP-MW-15	TEMP	Temperature	3/20/2023 14:43	16.52	C
GS-AP-MW-15	TURB	Turbidity	3/20/2023 14:43	1.88	NTU
GS-AP-MW-15	COND	Conductivity	3/20/2023 14:48	957.72	uS/cm
GS-AP-MW-15	DO	DO	3/20/2023 14:48	0.3	mg/L
GS-AP-MW-15	DTW	Depth to Water Detail	3/20/2023 14:48	90.17	ft
GS-AP-MW-15	ORP	Oxidation Reduction Potention	3/20/2023 14:48	-286.11	mv
GS-AP-MW-15	PH	pH	3/20/2023 14:48	11.29	SU
GS-AP-MW-15	TEMP	Temperature	3/20/2023 14:48	16.7	C
GS-AP-MW-15	TURB	Turbidity	3/20/2023 14:48	1.9	NTU
GS-AP-MW-15	COND	Conductivity	3/20/2023 14:53	887.87	uS/cm
GS-AP-MW-15	DO	DO	3/20/2023 14:53	0.26	mg/L
GS-AP-MW-15	DTW	Depth to Water Detail	3/20/2023 14:53	90.33	ft
GS-AP-MW-15	ORP	Oxidation Reduction Potention	3/20/2023 14:53	-289.07	mv
GS-AP-MW-15	PH	pH	3/20/2023 14:53	11.21	SU
GS-AP-MW-15	TEMP	Temperature	3/20/2023 14:53	16.75	C
GS-AP-MW-15	TURB	Turbidity	3/20/2023 14:53	1.86	NTU
GS-AP-MW-15	COND	Conductivity	3/20/2023 14:58	922.38	uS/cm

Field Parameters Summary
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WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GS-AP-MW-15	DO	DO	3/20/2023 14:58	0.25	mg/L
GS-AP-MW-15	DTW	Depth to Water Detail	3/20/2023 14:58	90.46	ft
GS-AP-MW-15	ORP	Oxidation Reduction Potention	3/20/2023 14:58	-291.77	mv
GS-AP-MW-15	PH	pH	3/20/2023 14:58	11.26	SU
GS-AP-MW-15	TEMP	Temperature	3/20/2023 14:58	16.79	C
GS-AP-MW-15	TURB	Turbidity	3/20/2023 14:58	1.8	NTU
GS-AP-MW-15	COND	Conductivity	3/20/2023 15:03	906.63	uS/cm
GS-AP-MW-15	DO	DO	3/20/2023 15:03	0.24	mg/L
GS-AP-MW-15	DTW	Depth to Water Detail	3/20/2023 15:03	90.55	ft
GS-AP-MW-15	ORP	Oxidation Reduction Potention	3/20/2023 15:03	-292.43	mv
GS-AP-MW-15	PH	pH	3/20/2023 15:03	11.26	SU
GS-AP-MW-15	SULFIDE	Sulfide	3/20/2023 15:03	1	mg/L
GS-AP-MW-15	TEMP	Temperature	3/20/2023 15:03	16.74	C
GS-AP-MW-15	TURB	Turbidity	3/20/2023 15:03	1.84	NTU

Field Parameters Summary
Plant Gorgas Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GS-AP-MW-15V	COND	Conductivity	3/20/2023 11:54	1316.03	uS/cm
GS-AP-MW-15V	DO	DO	3/20/2023 11:54	0.43	mg/L
GS-AP-MW-15V	DTW	Depth to Water Detail	3/20/2023 11:54	165.4	ft
GS-AP-MW-15V	ORP	Oxidation Reduction Potention	3/20/2023 11:54	-217.1	mv
GS-AP-MW-15V	PH	pH	3/20/2023 11:54	7.99	SU
GS-AP-MW-15V	TEMP	Temperature	3/20/2023 11:54	16.59	C
GS-AP-MW-15V	TURB	Turbidity	3/20/2023 11:54	23.8	NTU
GS-AP-MW-15V	COND	Conductivity	3/20/2023 11:59	1344.31	uS/cm
GS-AP-MW-15V	DO	DO	3/20/2023 11:59	0.32	mg/L
GS-AP-MW-15V	DTW	Depth to Water Detail	3/20/2023 11:59	167.18	ft
GS-AP-MW-15V	ORP	Oxidation Reduction Potention	3/20/2023 11:59	-190.85	mv
GS-AP-MW-15V	PH	pH	3/20/2023 11:59	7.91	SU
GS-AP-MW-15V	TEMP	Temperature	3/20/2023 11:59	16.71	C
GS-AP-MW-15V	TURB	Turbidity	3/20/2023 11:59	11.7	NTU
GS-AP-MW-15V	COND	Conductivity	3/20/2023 12:04	1344.74	uS/cm
GS-AP-MW-15V	DO	DO	3/20/2023 12:04	0.28	mg/L
GS-AP-MW-15V	DTW	Depth to Water Detail	3/20/2023 12:04	168.8	ft
GS-AP-MW-15V	ORP	Oxidation Reduction Potention	3/20/2023 12:04	-169.56	mv
GS-AP-MW-15V	PH	pH	3/20/2023 12:04	7.91	SU
GS-AP-MW-15V	TEMP	Temperature	3/20/2023 12:04	16.69	C
GS-AP-MW-15V	TURB	Turbidity	3/20/2023 12:04	5.29	NTU
GS-AP-MW-15V	COND	Conductivity	3/20/2023 12:09	1340.63	uS/cm
GS-AP-MW-15V	DO	DO	3/20/2023 12:09	0.25	mg/L
GS-AP-MW-15V	DTW	Depth to Water Detail	3/20/2023 12:09	170.11	ft
GS-AP-MW-15V	ORP	Oxidation Reduction Potention	3/20/2023 12:09	-161.62	mv
GS-AP-MW-15V	PH	pH	3/20/2023 12:09	7.92	SU
GS-AP-MW-15V	TEMP	Temperature	3/20/2023 12:09	16.71	C
GS-AP-MW-15V	TURB	Turbidity	3/20/2023 12:09	4.52	NTU
GS-AP-MW-15V	COND	Conductivity	3/20/2023 12:14	1329.26	uS/cm
GS-AP-MW-15V	DO	DO	3/20/2023 12:14	0.46	mg/L
GS-AP-MW-15V	DTW	Depth to Water Detail	3/20/2023 12:14	170.32	ft
GS-AP-MW-15V	ORP	Oxidation Reduction Potention	3/20/2023 12:14	-146.51	mv
GS-AP-MW-15V	PH	pH	3/20/2023 12:14	7.93	SU
GS-AP-MW-15V	TEMP	Temperature	3/20/2023 12:14	15.99	C
GS-AP-MW-15V	TURB	Turbidity	3/20/2023 12:14	3.67	NTU
GS-AP-MW-15V	COND	Conductivity	3/20/2023 12:19	1311.83	uS/cm
GS-AP-MW-15V	DO	DO	3/20/2023 12:19	0.46	mg/L
GS-AP-MW-15V	DTW	Depth to Water Detail	3/20/2023 12:19	170.38	ft
GS-AP-MW-15V	ORP	Oxidation Reduction Potention	3/20/2023 12:19	-141.07	mv
GS-AP-MW-15V	PH	pH	3/20/2023 12:19	7.94	SU
GS-AP-MW-15V	TEMP	Temperature	3/20/2023 12:19	16.02	C
GS-AP-MW-15V	TURB	Turbidity	3/20/2023 12:19	2.94	NTU
GS-AP-MW-15V	COND	Conductivity	3/20/2023 12:24	1291.78	uS/cm
GS-AP-MW-15V	DO	DO	3/20/2023 12:24	0.45	mg/L
GS-AP-MW-15V	DTW	Depth to Water Detail	3/20/2023 12:24	170.42	ft
GS-AP-MW-15V	ORP	Oxidation Reduction Potention	3/20/2023 12:24	-140.13	mv
GS-AP-MW-15V	PH	pH	3/20/2023 12:24	7.96	SU

Field Parameters Summary
Plant Gorgas Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GS-AP-MW-15V	SULFIDE	Sulfide	3/20/2023 12:24	0	mg/L
GS-AP-MW-15V	TEMP	Temperature	3/20/2023 12:24	16.07	C
GS-AP-MW-15V	TURB	Turbidity	3/20/2023 12:24	2.88	NTU

Field Parameters Summary
Plant Gorgas Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GS-AP-MW-16D	COND	Conductivity	3/21/2023 9:27	355.37	uS/cm
GS-AP-MW-16D	DO	DO	3/21/2023 9:27	0.5	mg/L
GS-AP-MW-16D	DTW	Depth to Water Detail	3/21/2023 9:27	151.35	ft
GS-AP-MW-16D	ORP	Oxidation Reduction Potention	3/21/2023 9:27	-73.98	mv
GS-AP-MW-16D	PH	pH	3/21/2023 9:27	7.5	SU
GS-AP-MW-16D	TEMP	Temperature	3/21/2023 9:27	16.17	C
GS-AP-MW-16D	TURB	Turbidity	3/21/2023 9:27	4.35	NTU
GS-AP-MW-16D	COND	Conductivity	3/21/2023 9:32	357.26	uS/cm
GS-AP-MW-16D	DO	DO	3/21/2023 9:32	0.33	mg/L
GS-AP-MW-16D	DTW	Depth to Water Detail	3/21/2023 9:32	152.96	ft
GS-AP-MW-16D	ORP	Oxidation Reduction Potention	3/21/2023 9:32	-80.66	mv
GS-AP-MW-16D	PH	pH	3/21/2023 9:32	7.54	SU
GS-AP-MW-16D	TEMP	Temperature	3/21/2023 9:32	16.29	C
GS-AP-MW-16D	TURB	Turbidity	3/21/2023 9:32	3.84	NTU
GS-AP-MW-16D	COND	Conductivity	3/21/2023 9:37	356.65	uS/cm
GS-AP-MW-16D	DO	DO	3/21/2023 9:37	0.28	mg/L
GS-AP-MW-16D	DTW	Depth to Water Detail	3/21/2023 9:37	154.35	ft
GS-AP-MW-16D	ORP	Oxidation Reduction Potention	3/21/2023 9:37	-81.61	mv
GS-AP-MW-16D	PH	pH	3/21/2023 9:37	7.55	SU
GS-AP-MW-16D	TEMP	Temperature	3/21/2023 9:37	16.39	C
GS-AP-MW-16D	TURB	Turbidity	3/21/2023 9:37	3.6	NTU
GS-AP-MW-16D	COND	Conductivity	3/21/2023 9:42	356.45	uS/cm
GS-AP-MW-16D	DO	DO	3/21/2023 9:42	0.25	mg/L
GS-AP-MW-16D	DTW	Depth to Water Detail	3/21/2023 9:42	155.53	ft
GS-AP-MW-16D	ORP	Oxidation Reduction Potention	3/21/2023 9:42	-79.69	mv
GS-AP-MW-16D	PH	pH	3/21/2023 9:42	7.54	SU
GS-AP-MW-16D	TEMP	Temperature	3/21/2023 9:42	16.4	C
GS-AP-MW-16D	TURB	Turbidity	3/21/2023 9:42	3.11	NTU
GS-AP-MW-16D	COND	Conductivity	3/21/2023 9:47	356.06	uS/cm
GS-AP-MW-16D	DO	DO	3/21/2023 9:47	0.4	mg/L
GS-AP-MW-16D	DTW	Depth to Water Detail	3/21/2023 9:47	155.55	ft
GS-AP-MW-16D	ORP	Oxidation Reduction Potention	3/21/2023 9:47	-73.25	mv
GS-AP-MW-16D	PH	pH	3/21/2023 9:47	7.54	SU
GS-AP-MW-16D	TEMP	Temperature	3/21/2023 9:47	16.02	C
GS-AP-MW-16D	TURB	Turbidity	3/21/2023 9:47	3.14	NTU
GS-AP-MW-16D	COND	Conductivity	3/21/2023 9:52	356.18	uS/cm
GS-AP-MW-16D	DO	DO	3/21/2023 9:52	0.43	mg/L
GS-AP-MW-16D	DTW	Depth to Water Detail	3/21/2023 9:52	155.41	ft
GS-AP-MW-16D	ORP	Oxidation Reduction Potention	3/21/2023 9:52	-66.78	mv
GS-AP-MW-16D	PH	pH	3/21/2023 9:52	7.49	SU
GS-AP-MW-16D	TEMP	Temperature	3/21/2023 9:52	16.11	C
GS-AP-MW-16D	TURB	Turbidity	3/21/2023 9:52	3.24	NTU
GS-AP-MW-16D	COND	Conductivity	3/21/2023 9:57	356.64	uS/cm
GS-AP-MW-16D	DO	DO	3/21/2023 9:57	0.44	mg/L
GS-AP-MW-16D	DTW	Depth to Water Detail	3/21/2023 9:57	155.36	ft
GS-AP-MW-16D	ORP	Oxidation Reduction Potention	3/21/2023 9:57	-66.44	mv
GS-AP-MW-16D	PH	pH	3/21/2023 9:57	7.51	SU

Field Parameters Summary
Plant Gorgas Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GS-AP-MW-16D	SULFIDE	Sulfide	3/21/2023 9:57	0	mg/L
GS-AP-MW-16D	TEMP	Temperature	3/21/2023 9:57	16.16	C
GS-AP-MW-16D	TURB	Turbidity	3/21/2023 9:57	2.98	NTU

Field Parameters Summary
Plant Gorgas Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GS-AP-MW-16S	COND	Conductivity	3/21/2023 10:42	3898.03	uS/cm
GS-AP-MW-16S	DO	DO	3/21/2023 10:42	3.23	mg/L
GS-AP-MW-16S	DTW	Depth to Water Detail	3/21/2023 10:42	58.06	ft
GS-AP-MW-16S	ORP	Oxidation Reduction Potention	3/21/2023 10:42	-150.52	mv
GS-AP-MW-16S	PH	pH	3/21/2023 10:42	12.25	SU
GS-AP-MW-16S	TEMP	Temperature	3/21/2023 10:42	16.75	C
GS-AP-MW-16S	TURB	Turbidity	3/21/2023 10:42	9.86	NTU
GS-AP-MW-16S	COND	Conductivity	3/21/2023 10:47	3898.83	uS/cm
GS-AP-MW-16S	DO	DO	3/21/2023 10:47	3.23	mg/L
GS-AP-MW-16S	DTW	Depth to Water Detail	3/21/2023 10:47	58.39	ft
GS-AP-MW-16S	ORP	Oxidation Reduction Potention	3/21/2023 10:47	-147.49	mv
GS-AP-MW-16S	PH	pH	3/21/2023 10:47	12.28	SU
GS-AP-MW-16S	TEMP	Temperature	3/21/2023 10:47	16.83	C
GS-AP-MW-16S	TURB	Turbidity	3/21/2023 10:47	6.7	NTU
GS-AP-MW-16S	COND	Conductivity	3/21/2023 10:52	3850.33	uS/cm
GS-AP-MW-16S	DO	DO	3/21/2023 10:52	3.07	mg/L
GS-AP-MW-16S	DTW	Depth to Water Detail	3/21/2023 10:52	58.5	ft
GS-AP-MW-16S	ORP	Oxidation Reduction Potention	3/21/2023 10:52	-145.43	mv
GS-AP-MW-16S	PH	pH	3/21/2023 10:52	12.29	SU
GS-AP-MW-16S	TEMP	Temperature	3/21/2023 10:52	16.86	C
GS-AP-MW-16S	TURB	Turbidity	3/21/2023 10:52	4.89	NTU
GS-AP-MW-16S	COND	Conductivity	3/21/2023 10:57	3634.25	uS/cm
GS-AP-MW-16S	DO	DO	3/21/2023 10:57	2.39	mg/L
GS-AP-MW-16S	DTW	Depth to Water Detail	3/21/2023 10:57	58.56	ft
GS-AP-MW-16S	ORP	Oxidation Reduction Potention	3/21/2023 10:57	-146.09	mv
GS-AP-MW-16S	PH	pH	3/21/2023 10:57	12.27	SU
GS-AP-MW-16S	TEMP	Temperature	3/21/2023 10:57	16.92	C
GS-AP-MW-16S	TURB	Turbidity	3/21/2023 10:57	4.6	NTU
GS-AP-MW-16S	COND	Conductivity	3/21/2023 11:02	3420.35	uS/cm
GS-AP-MW-16S	DO	DO	3/21/2023 11:02	1.68	mg/L
GS-AP-MW-16S	DTW	Depth to Water Detail	3/21/2023 11:02	58.56	ft
GS-AP-MW-16S	ORP	Oxidation Reduction Potention	3/21/2023 11:02	-149.31	mv
GS-AP-MW-16S	PH	pH	3/21/2023 11:02	12.25	SU
GS-AP-MW-16S	TEMP	Temperature	3/21/2023 11:02	16.82	C
GS-AP-MW-16S	TURB	Turbidity	3/21/2023 11:02	4.12	NTU
GS-AP-MW-16S	COND	Conductivity	3/21/2023 11:07	3281.69	uS/cm
GS-AP-MW-16S	DO	DO	3/21/2023 11:07	1.24	mg/L
GS-AP-MW-16S	DTW	Depth to Water Detail	3/21/2023 11:07	58.56	ft
GS-AP-MW-16S	ORP	Oxidation Reduction Potention	3/21/2023 11:07	-153.49	mv
GS-AP-MW-16S	PH	pH	3/21/2023 11:07	12.23	SU
GS-AP-MW-16S	TEMP	Temperature	3/21/2023 11:07	16.85	C
GS-AP-MW-16S	TURB	Turbidity	3/21/2023 11:07	4.08	NTU
GS-AP-MW-16S	COND	Conductivity	3/21/2023 11:12	3188.74	uS/cm
GS-AP-MW-16S	DO	DO	3/21/2023 11:12	0.97	mg/L
GS-AP-MW-16S	DTW	Depth to Water Detail	3/21/2023 11:12	58.56	ft
GS-AP-MW-16S	ORP	Oxidation Reduction Potention	3/21/2023 11:12	-157.84	mv
GS-AP-MW-16S	PH	pH	3/21/2023 11:12	12.22	SU

Field Parameters Summary
Plant Gorgas Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GS-AP-MW-16S	TEMP	Temperature	3/21/2023 11:12	16.92	C
GS-AP-MW-16S	TURB	Turbidity	3/21/2023 11:12	3.95	NTU
GS-AP-MW-16S	COND	Conductivity	3/21/2023 11:17	3116.31	uS/cm
GS-AP-MW-16S	DO	DO	3/21/2023 11:17	0.83	mg/L
GS-AP-MW-16S	DTW	Depth to Water Detail	3/21/2023 11:17	58.56	ft
GS-AP-MW-16S	ORP	Oxidation Reduction Potention	3/21/2023 11:17	-161.89	mv
GS-AP-MW-16S	PH	pH	3/21/2023 11:17	12.21	SU
GS-AP-MW-16S	TEMP	Temperature	3/21/2023 11:17	16.9	C
GS-AP-MW-16S	TURB	Turbidity	3/21/2023 11:17	4.02	NTU
GS-AP-MW-16S	COND	Conductivity	3/21/2023 11:22	3057.75	uS/cm
GS-AP-MW-16S	DO	DO	3/21/2023 11:22	0.76	mg/L
GS-AP-MW-16S	DTW	Depth to Water Detail	3/21/2023 11:22	58.56	ft
GS-AP-MW-16S	ORP	Oxidation Reduction Potention	3/21/2023 11:22	-165.25	mv
GS-AP-MW-16S	PH	pH	3/21/2023 11:22	12.21	SU
GS-AP-MW-16S	TEMP	Temperature	3/21/2023 11:22	16.89	C
GS-AP-MW-16S	TURB	Turbidity	3/21/2023 11:22	3.85	NTU
GS-AP-MW-16S	COND	Conductivity	3/21/2023 11:27	3001.38	uS/cm
GS-AP-MW-16S	DO	DO	3/21/2023 11:27	0.69	mg/L
GS-AP-MW-16S	DTW	Depth to Water Detail	3/21/2023 11:27	58.56	ft
GS-AP-MW-16S	ORP	Oxidation Reduction Potention	3/21/2023 11:27	-168.29	mv
GS-AP-MW-16S	PH	pH	3/21/2023 11:27	12.2	SU
GS-AP-MW-16S	SULFIDE	Sulfide	3/21/2023 11:27	0	mg/L
GS-AP-MW-16S	TEMP	Temperature	3/21/2023 11:27	16.91	C
GS-AP-MW-16S	TURB	Turbidity	3/21/2023 11:27	3.82	NTU

Field Parameters Summary
Plant Gorgas Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GS-AP-MW-21	COND	Conductivity	3/21/2023 12:36	1042.87	uS/cm
GS-AP-MW-21	DO	DO	3/21/2023 12:36	0.8	mg/L
GS-AP-MW-21	DTW	Depth to Water Detail	3/21/2023 12:36	172.14	ft
GS-AP-MW-21	ORP	Oxidation Reduction Potention	3/21/2023 12:36	-210.95	mv
GS-AP-MW-21	PH	pH	3/21/2023 12:36	9.79	SU
GS-AP-MW-21	TEMP	Temperature	3/21/2023 12:36	17.67	C
GS-AP-MW-21	TURB	Turbidity	3/21/2023 12:36	3.54	NTU
GS-AP-MW-21	COND	Conductivity	3/21/2023 12:41	1065.72	uS/cm
GS-AP-MW-21	DO	DO	3/21/2023 12:41	0.46	mg/L
GS-AP-MW-21	DTW	Depth to Water Detail	3/21/2023 12:41	172.38	ft
GS-AP-MW-21	ORP	Oxidation Reduction Potention	3/21/2023 12:41	-232.17	mv
GS-AP-MW-21	PH	pH	3/21/2023 12:41	10.01	SU
GS-AP-MW-21	TEMP	Temperature	3/21/2023 12:41	17.63	C
GS-AP-MW-21	TURB	Turbidity	3/21/2023 12:41	3.65	NTU
GS-AP-MW-21	COND	Conductivity	3/21/2023 12:46	1063.85	uS/cm
GS-AP-MW-21	DO	DO	3/21/2023 12:46	0.4	mg/L
GS-AP-MW-21	DTW	Depth to Water Detail	3/21/2023 12:46	172.45	ft
GS-AP-MW-21	ORP	Oxidation Reduction Potention	3/21/2023 12:46	-243.05	mv
GS-AP-MW-21	PH	pH	3/21/2023 12:46	10	SU
GS-AP-MW-21	TEMP	Temperature	3/21/2023 12:46	17.41	C
GS-AP-MW-21	TURB	Turbidity	3/21/2023 12:46	3.61	NTU
GS-AP-MW-21	COND	Conductivity	3/21/2023 12:51	1042.23	uS/cm
GS-AP-MW-21	DO	DO	3/21/2023 12:51	0.37	mg/L
GS-AP-MW-21	DTW	Depth to Water Detail	3/21/2023 12:51	172.51	ft
GS-AP-MW-21	ORP	Oxidation Reduction Potention	3/21/2023 12:51	-248.13	mv
GS-AP-MW-21	PH	pH	3/21/2023 12:51	9.88	SU
GS-AP-MW-21	TEMP	Temperature	3/21/2023 12:51	17.41	C
GS-AP-MW-21	TURB	Turbidity	3/21/2023 12:51	3.42	NTU
GS-AP-MW-21	COND	Conductivity	3/21/2023 12:56	1020.87	uS/cm
GS-AP-MW-21	DO	DO	3/21/2023 12:56	0.35	mg/L
GS-AP-MW-21	DTW	Depth to Water Detail	3/21/2023 12:56	172.57	ft
GS-AP-MW-21	ORP	Oxidation Reduction Potention	3/21/2023 12:56	-252.39	mv
GS-AP-MW-21	PH	pH	3/21/2023 12:56	9.75	SU
GS-AP-MW-21	TEMP	Temperature	3/21/2023 12:56	17.23	C
GS-AP-MW-21	TURB	Turbidity	3/21/2023 12:56	2.89	NTU
GS-AP-MW-21	COND	Conductivity	3/21/2023 13:01	1004.85	uS/cm
GS-AP-MW-21	DO	DO	3/21/2023 13:01	0.32	mg/L
GS-AP-MW-21	DTW	Depth to Water Detail	3/21/2023 13:01	172.62	ft
GS-AP-MW-21	ORP	Oxidation Reduction Potention	3/21/2023 13:01	-255.63	mv
GS-AP-MW-21	PH	pH	3/21/2023 13:01	9.65	SU
GS-AP-MW-21	TEMP	Temperature	3/21/2023 13:01	17.21	C
GS-AP-MW-21	TURB	Turbidity	3/21/2023 13:01	2.8	NTU
GS-AP-MW-21	COND	Conductivity	3/21/2023 13:06	993.99	uS/cm
GS-AP-MW-21	DO	DO	3/21/2023 13:06	0.32	mg/L
GS-AP-MW-21	DTW	Depth to Water Detail	3/21/2023 13:06	172.66	ft
GS-AP-MW-21	ORP	Oxidation Reduction Potention	3/21/2023 13:06	-257.5	mv
GS-AP-MW-21	PH	pH	3/21/2023 13:06	9.56	SU

Field Parameters Summary
Plant Gorgas Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GS-AP-MW-21	SULFIDE	Sulfide	3/21/2023 13:06	3	mg/L
GS-AP-MW-21	TEMP	Temperature	3/21/2023 13:06	17.1	C
GS-AP-MW-21	TURB	Turbidity	3/21/2023 13:06	2.76	NTU

Field Parameters Summary
Plant Gorgas Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GS-AP-MW-21V	COND	Conductivity	3/21/2023 13:47	3108.4	uS/cm
GS-AP-MW-21V	DO	DO	3/21/2023 13:47	0.62	mg/L
GS-AP-MW-21V	DTW	Depth to Water Detail	3/21/2023 13:47	183.8	ft
GS-AP-MW-21V	ORP	Oxidation Reduction Potention	3/21/2023 13:47	-244.88	mv
GS-AP-MW-21V	PH	pH	3/21/2023 13:47	7.65	SU
GS-AP-MW-21V	TEMP	Temperature	3/21/2023 13:47	17.52	C
GS-AP-MW-21V	TURB	Turbidity	3/21/2023 13:47	3.89	NTU
GS-AP-MW-21V	COND	Conductivity	3/21/2023 13:52	3696.28	uS/cm
GS-AP-MW-21V	DO	DO	3/21/2023 13:52	0.31	mg/L
GS-AP-MW-21V	DTW	Depth to Water Detail	3/21/2023 13:52	185.86	ft
GS-AP-MW-21V	ORP	Oxidation Reduction Potention	3/21/2023 13:52	-236.85	mv
GS-AP-MW-21V	PH	pH	3/21/2023 13:52	7.62	SU
GS-AP-MW-21V	TEMP	Temperature	3/21/2023 13:52	17.88	C
GS-AP-MW-21V	TURB	Turbidity	3/21/2023 13:52	2.71	NTU
GS-AP-MW-21V	COND	Conductivity	3/21/2023 13:57	3726.03	uS/cm
GS-AP-MW-21V	DO	DO	3/21/2023 13:57	0.19	mg/L
GS-AP-MW-21V	DTW	Depth to Water Detail	3/21/2023 13:57	188.13	ft
GS-AP-MW-21V	ORP	Oxidation Reduction Potention	3/21/2023 13:57	-242.22	mv
GS-AP-MW-21V	PH	pH	3/21/2023 13:57	7.62	SU
GS-AP-MW-21V	TEMP	Temperature	3/21/2023 13:57	17.68	C
GS-AP-MW-21V	TURB	Turbidity	3/21/2023 13:57	2.29	NTU
GS-AP-MW-21V	COND	Conductivity	3/21/2023 14:02	3731.35	uS/cm
GS-AP-MW-21V	DO	DO	3/21/2023 14:02	0.15	mg/L
GS-AP-MW-21V	DTW	Depth to Water Detail	3/21/2023 14:02	190.82	ft
GS-AP-MW-21V	ORP	Oxidation Reduction Potention	3/21/2023 14:02	-244.46	mv
GS-AP-MW-21V	PH	pH	3/21/2023 14:02	7.62	SU
GS-AP-MW-21V	TEMP	Temperature	3/21/2023 14:02	17.65	C
GS-AP-MW-21V	TURB	Turbidity	3/21/2023 14:02	2.24	NTU
GS-AP-MW-21V	COND	Conductivity	3/21/2023 14:07	3725.26	uS/cm
GS-AP-MW-21V	DO	DO	3/21/2023 14:07	0.15	mg/L
GS-AP-MW-21V	DTW	Depth to Water Detail	3/21/2023 14:07	193.47	ft
GS-AP-MW-21V	ORP	Oxidation Reduction Potention	3/21/2023 14:07	-245.82	mv
GS-AP-MW-21V	PH	pH	3/21/2023 14:07	7.63	SU
GS-AP-MW-21V	TEMP	Temperature	3/21/2023 14:07	17.64	C
GS-AP-MW-21V	TURB	Turbidity	3/21/2023 14:07	2.18	NTU
GS-AP-MW-21V	COND	Conductivity	3/21/2023 14:12	3723.25	uS/cm
GS-AP-MW-21V	DO	DO	3/21/2023 14:12	0.12	mg/L
GS-AP-MW-21V	DTW	Depth to Water Detail	3/21/2023 14:12	195.82	ft
GS-AP-MW-21V	ORP	Oxidation Reduction Potention	3/21/2023 14:12	-247.07	mv
GS-AP-MW-21V	PH	pH	3/21/2023 14:12	7.63	SU
GS-AP-MW-21V	TEMP	Temperature	3/21/2023 14:12	17.54	C
GS-AP-MW-21V	TURB	Turbidity	3/21/2023 14:12	2.12	NTU
GS-AP-MW-21V	COND	Conductivity	3/21/2023 14:17	3718.34	uS/cm
GS-AP-MW-21V	DO	DO	3/21/2023 14:17	0.12	mg/L
GS-AP-MW-21V	DTW	Depth to Water Detail	3/21/2023 14:17	197.76	ft
GS-AP-MW-21V	ORP	Oxidation Reduction Potention	3/21/2023 14:17	-248.75	mv
GS-AP-MW-21V	PH	pH	3/21/2023 14:17	7.64	SU

Field Parameters Summary
Plant Gorgas Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GS-AP-MW-21V	TEMP	Temperature	3/21/2023 14:17	17.61	C
GS-AP-MW-21V	TURB	Turbidity	3/21/2023 14:17	2.1	NTU
GS-AP-MW-21V	COND	Conductivity	3/21/2023 14:22	3691.58	uS/cm
GS-AP-MW-21V	DO	DO	3/21/2023 14:22	0.15	mg/L
GS-AP-MW-21V	DTW	Depth to Water Detail	3/21/2023 14:22	200.02	ft
GS-AP-MW-21V	ORP	Oxidation Reduction Potention	3/21/2023 14:22	-248.09	mv
GS-AP-MW-21V	PH	pH	3/21/2023 14:22	7.65	SU
GS-AP-MW-21V	TEMP	Temperature	3/21/2023 14:22	17.71	C
GS-AP-MW-21V	TURB	Turbidity	3/21/2023 14:22	2.23	NTU
GS-AP-MW-21V	COND	Conductivity	3/21/2023 14:27	3683.59	uS/cm
GS-AP-MW-21V	DO	DO	3/21/2023 14:27	0.35	mg/L
GS-AP-MW-21V	DTW	Depth to Water Detail	3/21/2023 14:27	200.29	ft
GS-AP-MW-21V	ORP	Oxidation Reduction Potention	3/21/2023 14:27	-236.81	mv
GS-AP-MW-21V	PH	pH	3/21/2023 14:27	7.65	SU
GS-AP-MW-21V	TEMP	Temperature	3/21/2023 14:27	18.21	C
GS-AP-MW-21V	TURB	Turbidity	3/21/2023 14:27	2.19	NTU
GS-AP-MW-21V	COND	Conductivity	3/21/2023 14:32	3673.76	uS/cm
GS-AP-MW-21V	DO	DO	3/21/2023 14:32	0.43	mg/L
GS-AP-MW-21V	DTW	Depth to Water Detail	3/21/2023 14:32	200.43	ft
GS-AP-MW-21V	ORP	Oxidation Reduction Potention	3/21/2023 14:32	-235.1	mv
GS-AP-MW-21V	PH	pH	3/21/2023 14:32	7.66	SU
GS-AP-MW-21V	TEMP	Temperature	3/21/2023 14:32	18.65	C
GS-AP-MW-21V	TURB	Turbidity	3/21/2023 14:32	2.41	NTU
GS-AP-MW-21V	COND	Conductivity	3/21/2023 14:37	3641.79	uS/cm
GS-AP-MW-21V	DO	DO	3/21/2023 14:37	0.43	mg/L
GS-AP-MW-21V	DTW	Depth to Water Detail	3/21/2023 14:37	200.56	ft
GS-AP-MW-21V	ORP	Oxidation Reduction Potention	3/21/2023 14:37	-234.51	mv
GS-AP-MW-21V	PH	pH	3/21/2023 14:37	7.67	SU
GS-AP-MW-21V	SULFIDE	Sulfide	3/21/2023 14:37	0	mg/L
GS-AP-MW-21V	TEMP	Temperature	3/21/2023 14:37	18.85	C
GS-AP-MW-21V	TURB	Turbidity	3/21/2023 14:37	2.33	NTU

Field Parameters Summary
Plant Gorgas Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GS-AP-MW-25HA	COND	Conductivity	3/22/2023 8:51	1348.94	uS/cm
GS-AP-MW-25HA	DO	DO	3/22/2023 8:51	0.43	mg/L
GS-AP-MW-25HA	DTW	Depth to Water Detail	3/22/2023 8:51	178.89	ft
GS-AP-MW-25HA	ORP	Oxidation Reduction Potention	3/22/2023 8:51	-245.14	mv
GS-AP-MW-25HA	PH	pH	3/22/2023 8:51	7.88	SU
GS-AP-MW-25HA	TEMP	Temperature	3/22/2023 8:51	16.64	C
GS-AP-MW-25HA	TURB	Turbidity	3/22/2023 8:51	7.84	NTU
GS-AP-MW-25HA	COND	Conductivity	3/22/2023 8:56	1431.95	uS/cm
GS-AP-MW-25HA	DO	DO	3/22/2023 8:56	0.16	mg/L
GS-AP-MW-25HA	DTW	Depth to Water Detail	3/22/2023 8:56	179.71	ft
GS-AP-MW-25HA	ORP	Oxidation Reduction Potention	3/22/2023 8:56	-261.93	mv
GS-AP-MW-25HA	PH	pH	3/22/2023 8:56	8.59	SU
GS-AP-MW-25HA	TEMP	Temperature	3/22/2023 8:56	16.74	C
GS-AP-MW-25HA	TURB	Turbidity	3/22/2023 8:56	6.95	NTU
GS-AP-MW-25HA	COND	Conductivity	3/22/2023 9:01	1450.08	uS/cm
GS-AP-MW-25HA	DO	DO	3/22/2023 9:01	0.11	mg/L
GS-AP-MW-25HA	DTW	Depth to Water Detail	3/22/2023 9:01	180.15	ft
GS-AP-MW-25HA	ORP	Oxidation Reduction Potention	3/22/2023 9:01	-253.97	mv
GS-AP-MW-25HA	PH	pH	3/22/2023 9:01	8.7	SU
GS-AP-MW-25HA	TEMP	Temperature	3/22/2023 9:01	16.77	C
GS-AP-MW-25HA	TURB	Turbidity	3/22/2023 9:01	6.23	NTU
GS-AP-MW-25HA	COND	Conductivity	3/22/2023 9:06	1444.95	uS/cm
GS-AP-MW-25HA	DO	DO	3/22/2023 9:06	0.11	mg/L
GS-AP-MW-25HA	DTW	Depth to Water Detail	3/22/2023 9:06	180.56	ft
GS-AP-MW-25HA	ORP	Oxidation Reduction Potention	3/22/2023 9:06	-251.78	mv
GS-AP-MW-25HA	PH	pH	3/22/2023 9:06	8.75	SU
GS-AP-MW-25HA	TEMP	Temperature	3/22/2023 9:06	16.85	C
GS-AP-MW-25HA	TURB	Turbidity	3/22/2023 9:06	5.78	NTU
GS-AP-MW-25HA	COND	Conductivity	3/22/2023 9:07	1444.54	uS/cm
GS-AP-MW-25HA	DO	DO	3/22/2023 9:07	0.11	mg/L
GS-AP-MW-25HA	DTW	Depth to Water Detail	3/22/2023 9:07	180.82	ft
GS-AP-MW-25HA	ORP	Oxidation Reduction Potention	3/22/2023 9:07	-251.41	mv
GS-AP-MW-25HA	PH	pH	3/22/2023 9:07	8.76	SU
GS-AP-MW-25HA	TEMP	Temperature	3/22/2023 9:07	16.82	C
GS-AP-MW-25HA	TURB	Turbidity	3/22/2023 9:07	5.22	NTU
GS-AP-MW-25HA	COND	Conductivity	3/22/2023 9:12	1430.74	uS/cm
GS-AP-MW-25HA	DO	DO	3/22/2023 9:12	0.11	mg/L
GS-AP-MW-25HA	DTW	Depth to Water Detail	3/22/2023 9:12	181.15	ft
GS-AP-MW-25HA	ORP	Oxidation Reduction Potention	3/22/2023 9:12	-251.07	mv
GS-AP-MW-25HA	PH	pH	3/22/2023 9:12	8.75	SU
GS-AP-MW-25HA	TEMP	Temperature	3/22/2023 9:12	16.78	C
GS-AP-MW-25HA	TURB	Turbidity	3/22/2023 9:12	5.11	NTU
GS-AP-MW-25HA	COND	Conductivity	3/22/2023 9:17	1347.75	uS/cm
GS-AP-MW-25HA	DO	DO	3/22/2023 9:17	0.13	mg/L
GS-AP-MW-25HA	DTW	Depth to Water Detail	3/22/2023 9:17	181.12	ft
GS-AP-MW-25HA	ORP	Oxidation Reduction Potention	3/22/2023 9:17	-254.22	mv
GS-AP-MW-25HA	PH	pH	3/22/2023 9:17	8.8	SU

Field Parameters Summary
Plant Gorgas Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GS-AP-MW-25HA	TEMP	Temperature	3/22/2023 9:17	16.79	C
GS-AP-MW-25HA	TURB	Turbidity	3/22/2023 9:17	5.18	NTU
GS-AP-MW-25HA	COND	Conductivity	3/22/2023 9:22	1404.27	uS/cm
GS-AP-MW-25HA	DO	DO	3/22/2023 9:22	0.14	mg/L
GS-AP-MW-25HA	DTW	Depth to Water Detail	3/22/2023 9:22	181.09	ft
GS-AP-MW-25HA	ORP	Oxidation Reduction Potention	3/22/2023 9:22	-254.65	mv
GS-AP-MW-25HA	PH	pH	3/22/2023 9:22	8.76	SU
GS-AP-MW-25HA	TEMP	Temperature	3/22/2023 9:22	16.77	C
GS-AP-MW-25HA	TURB	Turbidity	3/22/2023 9:22	5.32	NTU
GS-AP-MW-25HA	COND	Conductivity	3/22/2023 9:27	1397.98	uS/cm
GS-AP-MW-25HA	DO	DO	3/22/2023 9:27	0.12	mg/L
GS-AP-MW-25HA	DTW	Depth to Water Detail	3/22/2023 9:27	181.07	ft
GS-AP-MW-25HA	ORP	Oxidation Reduction Potention	3/22/2023 9:27	-258.58	mv
GS-AP-MW-25HA	PH	pH	3/22/2023 9:27	8.78	SU
GS-AP-MW-25HA	SULFIDE	Sulfide	3/22/2023 9:27	3	mg/L
GS-AP-MW-25HA	TEMP	Temperature	3/22/2023 9:27	16.71	C
GS-AP-MW-25HA	TURB	Turbidity	3/22/2023 9:27	5.1	NTU

Field Parameters Summary
Plant Gorgas Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GS-AP-MW-26H	COND	Conductivity	3/22/2023 10:24	651.99	uS/cm
GS-AP-MW-26H	DO	DO	3/22/2023 10:24	0.1	mg/L
GS-AP-MW-26H	DTW	Depth to Water Detail	3/22/2023 10:24	103.13	ft
GS-AP-MW-26H	ORP	Oxidation Reduction Potention	3/22/2023 10:24	-160.7	mv
GS-AP-MW-26H	PH	pH	3/22/2023 10:24	7.32	SU
GS-AP-MW-26H	TEMP	Temperature	3/22/2023 10:24	17.32	C
GS-AP-MW-26H	TURB	Turbidity	3/22/2023 10:24	8.91	NTU
GS-AP-MW-26H	COND	Conductivity	3/22/2023 10:29	504.11	uS/cm
GS-AP-MW-26H	DO	DO	3/22/2023 10:29	0.1	mg/L
GS-AP-MW-26H	DTW	Depth to Water Detail	3/22/2023 10:29	106.58	ft
GS-AP-MW-26H	ORP	Oxidation Reduction Potention	3/22/2023 10:29	-160.69	mv
GS-AP-MW-26H	PH	pH	3/22/2023 10:29	7.28	SU
GS-AP-MW-26H	TEMP	Temperature	3/22/2023 10:29	17.26	C
GS-AP-MW-26H	TURB	Turbidity	3/22/2023 10:29	5.63	NTU
GS-AP-MW-26H	COND	Conductivity	3/22/2023 10:34	478.67	uS/cm
GS-AP-MW-26H	DO	DO	3/22/2023 10:34	0.09	mg/L
GS-AP-MW-26H	DTW	Depth to Water Detail	3/22/2023 10:34	110.56	ft
GS-AP-MW-26H	ORP	Oxidation Reduction Potention	3/22/2023 10:34	-167.01	mv
GS-AP-MW-26H	PH	pH	3/22/2023 10:34	7.27	SU
GS-AP-MW-26H	TEMP	Temperature	3/22/2023 10:34	17.26	C
GS-AP-MW-26H	TURB	Turbidity	3/22/2023 10:34	3.91	NTU
GS-AP-MW-26H	COND	Conductivity	3/22/2023 10:39	473.97	uS/cm
GS-AP-MW-26H	DO	DO	3/22/2023 10:39	0.08	mg/L
GS-AP-MW-26H	DTW	Depth to Water Detail	3/22/2023 10:39	113.71	ft
GS-AP-MW-26H	ORP	Oxidation Reduction Potention	3/22/2023 10:39	-179.41	mv
GS-AP-MW-26H	PH	pH	3/22/2023 10:39	7.23	SU
GS-AP-MW-26H	TEMP	Temperature	3/22/2023 10:39	17.33	C
GS-AP-MW-26H	TURB	Turbidity	3/22/2023 10:39	3.1	NTU
GS-AP-MW-26H	COND	Conductivity	3/22/2023 10:44	420.93	uS/cm
GS-AP-MW-26H	DO	DO	3/22/2023 10:44	0.17	mg/L
GS-AP-MW-26H	DTW	Depth to Water Detail	3/22/2023 10:44	114.38	ft
GS-AP-MW-26H	ORP	Oxidation Reduction Potention	3/22/2023 10:44	-172.73	mv
GS-AP-MW-26H	PH	pH	3/22/2023 10:44	7.19	SU
GS-AP-MW-26H	TEMP	Temperature	3/22/2023 10:44	17.5	C
GS-AP-MW-26H	TURB	Turbidity	3/22/2023 10:44	2.61	NTU
GS-AP-MW-26H	COND	Conductivity	3/22/2023 10:49	410.4	uS/cm
GS-AP-MW-26H	DO	DO	3/22/2023 10:49	0.19	mg/L
GS-AP-MW-26H	DTW	Depth to Water Detail	3/22/2023 10:49	114.79	ft
GS-AP-MW-26H	ORP	Oxidation Reduction Potention	3/22/2023 10:49	-175.78	mv
GS-AP-MW-26H	PH	pH	3/22/2023 10:49	7.15	SU
GS-AP-MW-26H	TEMP	Temperature	3/22/2023 10:49	17.51	C
GS-AP-MW-26H	TURB	Turbidity	3/22/2023 10:49	2.72	NTU
GS-AP-MW-26H	COND	Conductivity	3/22/2023 10:54	400.73	uS/cm
GS-AP-MW-26H	DO	DO	3/22/2023 10:54	0.19	mg/L
GS-AP-MW-26H	DTW	Depth to Water Detail	3/22/2023 10:54	114.92	ft
GS-AP-MW-26H	ORP	Oxidation Reduction Potention	3/22/2023 10:54	-179.79	mv
GS-AP-MW-26H	PH	pH	3/22/2023 10:54	7.16	SU

Field Parameters Summary
Plant Gorgas Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GS-AP-MW-26H	TEMP	Temperature	3/22/2023 10:54	17.6	C
GS-AP-MW-26H	TURB	Turbidity	3/22/2023 10:54	2.7	NTU
GS-AP-MW-26H	COND	Conductivity	3/22/2023 10:59	383.03	uS/cm
GS-AP-MW-26H	DO	DO	3/22/2023 10:59	0.18	mg/L
GS-AP-MW-26H	DTW	Depth to Water Detail	3/22/2023 10:59	115.12	ft
GS-AP-MW-26H	ORP	Oxidation Reduction Potention	3/22/2023 10:59	-180.41	mv
GS-AP-MW-26H	PH	pH	3/22/2023 10:59	7.17	SU
GS-AP-MW-26H	TEMP	Temperature	3/22/2023 10:59	17.87	C
GS-AP-MW-26H	TURB	Turbidity	3/22/2023 10:59	2.56	NTU
GS-AP-MW-26H	COND	Conductivity	3/22/2023 11:04	370.47	uS/cm
GS-AP-MW-26H	DO	DO	3/22/2023 11:04	0.11	mg/L
GS-AP-MW-26H	DTW	Depth to Water Detail	3/22/2023 11:04	115.4	ft
GS-AP-MW-26H	ORP	Oxidation Reduction Potention	3/22/2023 11:04	-179.66	mv
GS-AP-MW-26H	PH	pH	3/22/2023 11:04	7.18	SU
GS-AP-MW-26H	TEMP	Temperature	3/22/2023 11:04	17.78	C
GS-AP-MW-26H	TURB	Turbidity	3/22/2023 11:04	2.52	NTU
GS-AP-MW-26H	COND	Conductivity	3/22/2023 11:09	391.14	uS/cm
GS-AP-MW-26H	DO	DO	3/22/2023 11:09	0.15	mg/L
GS-AP-MW-26H	DTW	Depth to Water Detail	3/22/2023 11:09	115.56	ft
GS-AP-MW-26H	ORP	Oxidation Reduction Potention	3/22/2023 11:09	-176.53	mv
GS-AP-MW-26H	PH	pH	3/22/2023 11:09	7.18	SU
GS-AP-MW-26H	TEMP	Temperature	3/22/2023 11:09	17.77	C
GS-AP-MW-26H	TURB	Turbidity	3/22/2023 11:09	2.44	NTU
GS-AP-MW-26H	COND	Conductivity	3/22/2023 11:14	385.16	uS/cm
GS-AP-MW-26H	DO	DO	3/22/2023 11:14	0.13	mg/L
GS-AP-MW-26H	DTW	Depth to Water Detail	3/22/2023 11:14	115.71	ft
GS-AP-MW-26H	ORP	Oxidation Reduction Potention	3/22/2023 11:14	-171.82	mv
GS-AP-MW-26H	PH	pH	3/22/2023 11:14	7.18	SU
GS-AP-MW-26H	TEMP	Temperature	3/22/2023 11:14	17.64	C
GS-AP-MW-26H	TURB	Turbidity	3/22/2023 11:14	2.36	NTU
GS-AP-MW-26H	COND	Conductivity	3/22/2023 11:19	419.35	uS/cm
GS-AP-MW-26H	DO	DO	3/22/2023 11:19	0.19	mg/L
GS-AP-MW-26H	DTW	Depth to Water Detail	3/22/2023 11:19	115.84	ft
GS-AP-MW-26H	ORP	Oxidation Reduction Potention	3/22/2023 11:19	-167.63	mv
GS-AP-MW-26H	PH	pH	3/22/2023 11:19	7.21	SU
GS-AP-MW-26H	TEMP	Temperature	3/22/2023 11:19	18.05	C
GS-AP-MW-26H	TURB	Turbidity	3/22/2023 11:19	2.3	NTU
GS-AP-MW-26H	COND	Conductivity	3/22/2023 11:24	411.36	uS/cm
GS-AP-MW-26H	DO	DO	3/22/2023 11:24	0.17	mg/L
GS-AP-MW-26H	DTW	Depth to Water Detail	3/22/2023 11:24	115.84	ft
GS-AP-MW-26H	ORP	Oxidation Reduction Potention	3/22/2023 11:24	-165.6	mv
GS-AP-MW-26H	PH	pH	3/22/2023 11:24	7.22	SU
GS-AP-MW-26H	TEMP	Temperature	3/22/2023 11:24	17.96	C
GS-AP-MW-26H	TURB	Turbidity	3/22/2023 11:24	2.27	NTU
GS-AP-MW-26H	COND	Conductivity	3/22/2023 11:29	404.65	uS/cm
GS-AP-MW-26H	DO	DO	3/22/2023 11:29	0.18	mg/L
GS-AP-MW-26H	DTW	Depth to Water Detail	3/22/2023 11:29	115.84	ft

Field Parameters Summary
Plant Gorgas Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GS-AP-MW-26H	ORP	Oxidation Reduction Potention	3/22/2023 11:29	-163.94	mv
GS-AP-MW-26H	PH	pH	3/22/2023 11:29	7.23	SU
GS-AP-MW-26H	SULFIDE	Sulfide	3/22/2023 11:29	0	mg/L
GS-AP-MW-26H	TEMP	Temperature	3/22/2023 11:29	17.99	C
GS-AP-MW-26H	TURB	Turbidity	3/22/2023 11:29	0.12	NTU

Field Parameters Summary
Plant Gorgas Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GS-AP-MW-40H	COND	Conductivity	3/22/2023 12:25	1693.75	uS/cm
GS-AP-MW-40H	DO	DO	3/22/2023 12:25	1.65	mg/L
GS-AP-MW-40H	DTW	Depth to Water Detail	3/22/2023 12:25	81.33	ft
GS-AP-MW-40H	ORP	Oxidation Reduction Potention	3/22/2023 12:25	-31.22	mv
GS-AP-MW-40H	PH	pH	3/22/2023 12:25	6.58	SU
GS-AP-MW-40H	TEMP	Temperature	3/22/2023 12:25	19.61	C
GS-AP-MW-40H	TURB	Turbidity	3/22/2023 12:25	20.2	NTU
GS-AP-MW-40H	COND	Conductivity	3/22/2023 12:30	1678.08	uS/cm
GS-AP-MW-40H	DO	DO	3/22/2023 12:30	0.71	mg/L
GS-AP-MW-40H	DTW	Depth to Water Detail	3/22/2023 12:30	81.5	ft
GS-AP-MW-40H	ORP	Oxidation Reduction Potention	3/22/2023 12:30	-60.18	mv
GS-AP-MW-40H	PH	pH	3/22/2023 12:30	6.57	SU
GS-AP-MW-40H	TEMP	Temperature	3/22/2023 12:30	19.34	C
GS-AP-MW-40H	TURB	Turbidity	3/22/2023 12:30	9.81	NTU
GS-AP-MW-40H	COND	Conductivity	3/22/2023 12:35	1666.16	uS/cm
GS-AP-MW-40H	DO	DO	3/22/2023 12:35	0.62	mg/L
GS-AP-MW-40H	DTW	Depth to Water Detail	3/22/2023 12:35	81.65	ft
GS-AP-MW-40H	ORP	Oxidation Reduction Potention	3/22/2023 12:35	-71.97	mv
GS-AP-MW-40H	PH	pH	3/22/2023 12:35	6.57	SU
GS-AP-MW-40H	TEMP	Temperature	3/22/2023 12:35	19.26	C
GS-AP-MW-40H	TURB	Turbidity	3/22/2023 12:35	7.33	NTU
GS-AP-MW-40H	COND	Conductivity	3/22/2023 12:40	1647.3	uS/cm
GS-AP-MW-40H	DO	DO	3/22/2023 12:40	0.61	mg/L
GS-AP-MW-40H	DTW	Depth to Water Detail	3/22/2023 12:40	81.71	ft
GS-AP-MW-40H	ORP	Oxidation Reduction Potention	3/22/2023 12:40	-77.77	mv
GS-AP-MW-40H	PH	pH	3/22/2023 12:40	6.58	SU
GS-AP-MW-40H	TEMP	Temperature	3/22/2023 12:40	19.77	C
GS-AP-MW-40H	TURB	Turbidity	3/22/2023 12:40	5.86	NTU
GS-AP-MW-40H	COND	Conductivity	3/22/2023 12:45	1626.76	uS/cm
GS-AP-MW-40H	DO	DO	3/22/2023 12:45	0.55	mg/L
GS-AP-MW-40H	DTW	Depth to Water Detail	3/22/2023 12:45	81.71	ft
GS-AP-MW-40H	ORP	Oxidation Reduction Potention	3/22/2023 12:45	-82.81	mv
GS-AP-MW-40H	PH	pH	3/22/2023 12:45	6.6	SU
GS-AP-MW-40H	SULFIDE	Sulfide	3/22/2023 12:45	0	mg/L
GS-AP-MW-40H	TEMP	Temperature	3/22/2023 12:45	19.43	C
GS-AP-MW-40H	TURB	Turbidity	3/22/2023 12:45	4.55	NTU

Field Parameters Summary
Plant Gorgas Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GS-AP-PZ-16	COND	Conductivity	3/21/2023 8:34	578.26	uS/cm
GS-AP-PZ-16	DO	DO	3/21/2023 8:34	0.52	mg/L
GS-AP-PZ-16	DTW	Depth to Water Detail	3/21/2023 8:34	199.08	ft
GS-AP-PZ-16	ORP	Oxidation Reduction Potention	3/21/2023 8:34	-196.68	mv
GS-AP-PZ-16	PH	pH	3/21/2023 8:34	8.5	SU
GS-AP-PZ-16	TEMP	Temperature	3/21/2023 8:34	15.67	C
GS-AP-PZ-16	TURB	Turbidity	3/21/2023 8:34	8.92	NTU
GS-AP-PZ-16	COND	Conductivity	3/21/2023 8:39	579.95	uS/cm
GS-AP-PZ-16	DO	DO	3/21/2023 8:39	0.34	mg/L
GS-AP-PZ-16	DTW	Depth to Water Detail	3/21/2023 8:39	199.08	ft
GS-AP-PZ-16	ORP	Oxidation Reduction Potention	3/21/2023 8:39	-200.13	mv
GS-AP-PZ-16	PH	pH	3/21/2023 8:39	8.48	SU
GS-AP-PZ-16	TEMP	Temperature	3/21/2023 8:39	15.99	C
GS-AP-PZ-16	TURB	Turbidity	3/21/2023 8:39	7.4	NTU
GS-AP-PZ-16	COND	Conductivity	3/21/2023 8:44	581.38	uS/cm
GS-AP-PZ-16	DO	DO	3/21/2023 8:44	0.25	mg/L
GS-AP-PZ-16	DTW	Depth to Water Detail	3/21/2023 8:44	199.08	ft
GS-AP-PZ-16	ORP	Oxidation Reduction Potention	3/21/2023 8:44	-206.13	mv
GS-AP-PZ-16	PH	pH	3/21/2023 8:44	8.47	SU
GS-AP-PZ-16	TEMP	Temperature	3/21/2023 8:44	15.91	C
GS-AP-PZ-16	TURB	Turbidity	3/21/2023 8:44	5.12	NTU
GS-AP-PZ-16	COND	Conductivity	3/21/2023 8:49	581.99	uS/cm
GS-AP-PZ-16	DO	DO	3/21/2023 8:49	0.21	mg/L
GS-AP-PZ-16	DTW	Depth to Water Detail	3/21/2023 8:49	199.08	ft
GS-AP-PZ-16	ORP	Oxidation Reduction Potention	3/21/2023 8:49	-205.85	mv
GS-AP-PZ-16	PH	pH	3/21/2023 8:49	8.44	SU
GS-AP-PZ-16	SULFIDE	Sulfide	3/21/2023 8:49	1	mg/L
GS-AP-PZ-16	TEMP	Temperature	3/21/2023 8:49	15.98	C
GS-AP-PZ-16	TURB	Turbidity	3/21/2023 8:49	4.36	NTU

Field Parameters Summary
Plant Gorgas Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GS-AP-MW-7	COND	Conductivity	3/14/2023 10:08	537.98	uS/cm
GS-AP-MW-7	DO	DO	3/14/2023 10:08	0.72	mg/L
GS-AP-MW-7	DTW	Depth to Water Detail	3/14/2023 10:08	9.88	ft
GS-AP-MW-7	ORP	Oxidation Reduction Potention	3/14/2023 10:08	-129.76	mv
GS-AP-MW-7	PH	pH	3/14/2023 10:08	7.55	SU
GS-AP-MW-7	TEMP	Temperature	3/14/2023 10:08	15.58	C
GS-AP-MW-7	TURB	Turbidity	3/14/2023 10:08	5.88	NTU
GS-AP-MW-7	COND	Conductivity	3/14/2023 10:13	538.08	uS/cm
GS-AP-MW-7	DO	DO	3/14/2023 10:13	0.61	mg/L
GS-AP-MW-7	DTW	Depth to Water Detail	3/14/2023 10:13	10.1	ft
GS-AP-MW-7	ORP	Oxidation Reduction Potention	3/14/2023 10:13	-140.46	mv
GS-AP-MW-7	PH	pH	3/14/2023 10:13	7.63	SU
GS-AP-MW-7	TEMP	Temperature	3/14/2023 10:13	15.5	C
GS-AP-MW-7	TURB	Turbidity	3/14/2023 10:13	5.54	NTU
GS-AP-MW-7	COND	Conductivity	3/14/2023 10:18	538.3	uS/cm
GS-AP-MW-7	DO	DO	3/14/2023 10:18	0.56	mg/L
GS-AP-MW-7	DTW	Depth to Water Detail	3/14/2023 10:18	10.11	ft
GS-AP-MW-7	ORP	Oxidation Reduction Potention	3/14/2023 10:18	-143.63	mv
GS-AP-MW-7	PH	pH	3/14/2023 10:18	7.64	SU
GS-AP-MW-7	TEMP	Temperature	3/14/2023 10:18	15.52	C
GS-AP-MW-7	TURB	Turbidity	3/14/2023 10:18	8.49	NTU
GS-AP-MW-7	COND	Conductivity	3/14/2023 10:23	538.18	uS/cm
GS-AP-MW-7	DO	DO	3/14/2023 10:23	0.54	mg/L
GS-AP-MW-7	DTW	Depth to Water Detail	3/14/2023 10:23	10.11	ft
GS-AP-MW-7	ORP	Oxidation Reduction Potention	3/14/2023 10:23	-147.43	mv
GS-AP-MW-7	PH	pH	3/14/2023 10:23	7.67	SU
GS-AP-MW-7	SULFIDE	Sulfide	3/14/2023 10:23	0	mg/L
GS-AP-MW-7	TEMP	Temperature	3/14/2023 10:23	15.56	C
GS-AP-MW-7	TURB	Turbidity	3/14/2023 10:23	9.93	NTU

Field Parameters Summary
Plant Gorgas Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GS-AP-MW-03V	COND	Conductivity	3/21/2023 14:06	1634.91	uS/cm
GS-AP-MW-03V	DO	DO	3/21/2023 14:06	1.49	mg/L
GS-AP-MW-03V	DTW	Depth to Water Detail	3/21/2023 14:06	160.41	ft
GS-AP-MW-03V	ORP	Oxidation Reduction Potention	3/21/2023 14:06	-79.09	mv
GS-AP-MW-03V	PH	pH	3/21/2023 14:06	7.7	SU
GS-AP-MW-03V	TEMP	Temperature	3/21/2023 14:06	17.36	C
GS-AP-MW-03V	TURB	Turbidity	3/21/2023 14:06	1.7	NTU
GS-AP-MW-03V	COND	Conductivity	3/21/2023 14:11	1536.38	uS/cm
GS-AP-MW-03V	DO	DO	3/21/2023 14:11	1.43	mg/L
GS-AP-MW-03V	DTW	Depth to Water Detail	3/21/2023 14:11	160.41	ft
GS-AP-MW-03V	ORP	Oxidation Reduction Potention	3/21/2023 14:11	-78.82	mv
GS-AP-MW-03V	PH	pH	3/21/2023 14:11	7.69	SU
GS-AP-MW-03V	TEMP	Temperature	3/21/2023 14:11	17.33	C
GS-AP-MW-03V	TURB	Turbidity	3/21/2023 14:11	1.46	NTU
GS-AP-MW-03V	COND	Conductivity	3/21/2023 14:16	1497.68	uS/cm
GS-AP-MW-03V	DO	DO	3/21/2023 14:16	1.47	mg/L
GS-AP-MW-03V	DTW	Depth to Water Detail	3/21/2023 14:16	160.41	ft
GS-AP-MW-03V	ORP	Oxidation Reduction Potention	3/21/2023 14:16	-80.4	mv
GS-AP-MW-03V	PH	pH	3/21/2023 14:16	7.71	SU
GS-AP-MW-03V	TEMP	Temperature	3/21/2023 14:16	17.47	C
GS-AP-MW-03V	TURB	Turbidity	3/21/2023 14:16	1.3	NTU
GS-AP-MW-03V	COND	Conductivity	3/21/2023 14:21	1483.23	uS/cm
GS-AP-MW-03V	DO	DO	3/21/2023 14:21	1.45	mg/L
GS-AP-MW-03V	DTW	Depth to Water Detail	3/21/2023 14:21	160.41	ft
GS-AP-MW-03V	ORP	Oxidation Reduction Potention	3/21/2023 14:21	-80.03	mv
GS-AP-MW-03V	PH	pH	3/21/2023 14:21	7.71	SU
GS-AP-MW-03V	SULFIDE	Sulfide	3/21/2023 14:21	0	mg/L
GS-AP-MW-03V	TEMP	Temperature	3/21/2023 14:21	17.53	C
GS-AP-MW-03V	TURB	Turbidity	3/21/2023 14:21	1.26	NTU

Field Parameters Summary
Plant Gorgas Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GS-AP-MW-3	COND	Conductivity	3/21/2023 10:35	445.21	uS/cm
GS-AP-MW-3	DO	DO	3/21/2023 10:35	0.77	mg/L
GS-AP-MW-3	DTW	Depth to Water Detail	3/21/2023 10:35	152	ft
GS-AP-MW-3	ORP	Oxidation Reduction Potention	3/21/2023 10:35	-110.56	mv
GS-AP-MW-3	PH	pH	3/21/2023 10:35	8.31	SU
GS-AP-MW-3	TEMP	Temperature	3/21/2023 10:35	16.19	C
GS-AP-MW-3	TURB	Turbidity	3/21/2023 10:35	1.28	NTU
GS-AP-MW-3	COND	Conductivity	3/21/2023 10:40	450.76	uS/cm
GS-AP-MW-3	DO	DO	3/21/2023 10:40	0.86	mg/L
GS-AP-MW-3	DTW	Depth to Water Detail	3/21/2023 10:40	152.08	ft
GS-AP-MW-3	ORP	Oxidation Reduction Potention	3/21/2023 10:40	-128.07	mv
GS-AP-MW-3	PH	pH	3/21/2023 10:40	8.35	SU
GS-AP-MW-3	TEMP	Temperature	3/21/2023 10:40	16.28	C
GS-AP-MW-3	TURB	Turbidity	3/21/2023 10:40	1.15	NTU
GS-AP-MW-3	COND	Conductivity	3/21/2023 10:45	459.37	uS/cm
GS-AP-MW-3	DO	DO	3/21/2023 10:45	0.87	mg/L
GS-AP-MW-3	DTW	Depth to Water Detail	3/21/2023 10:45	152.15	ft
GS-AP-MW-3	ORP	Oxidation Reduction Potention	3/21/2023 10:45	-141.83	mv
GS-AP-MW-3	PH	pH	3/21/2023 10:45	8.25	SU
GS-AP-MW-3	TEMP	Temperature	3/21/2023 10:45	16.31	C
GS-AP-MW-3	TURB	Turbidity	3/21/2023 10:45	1.04	NTU
GS-AP-MW-3	COND	Conductivity	3/21/2023 10:50	468.36	uS/cm
GS-AP-MW-3	DO	DO	3/21/2023 10:50	0.88	mg/L
GS-AP-MW-3	DTW	Depth to Water Detail	3/21/2023 10:50	152.22	ft
GS-AP-MW-3	ORP	Oxidation Reduction Potention	3/21/2023 10:50	-151.88	mv
GS-AP-MW-3	PH	pH	3/21/2023 10:50	8.19	SU
GS-AP-MW-3	SULFIDE	Sulfide	3/21/2023 10:50	0	mg/L
GS-AP-MW-3	TEMP	Temperature	3/21/2023 10:50	16.43	C
GS-AP-MW-3	TURB	Turbidity	3/21/2023 10:50	1.02	NTU

Field Parameters Summary
Plant Gorgas Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GS-AP-MW-05R	COND	Conductivity	3/20/2023 12:57	2108.17	uS/cm
GS-AP-MW-05R	DO	DO	3/20/2023 12:57	0.87	mg/L
GS-AP-MW-05R	DTW	Depth to Water Detail	3/20/2023 12:57	147.03	ft
GS-AP-MW-05R	ORP	Oxidation Reduction Potention	3/20/2023 12:57	-37.5	mv
GS-AP-MW-05R	PH	pH	3/20/2023 12:57	6.74	SU
GS-AP-MW-05R	TEMP	Temperature	3/20/2023 12:57	17.15	C
GS-AP-MW-05R	TURB	Turbidity	3/20/2023 12:57	12.8	NTU
GS-AP-MW-05R	COND	Conductivity	3/20/2023 13:02	2183.79	uS/cm
GS-AP-MW-05R	DO	DO	3/20/2023 13:02	0.62	mg/L
GS-AP-MW-05R	DTW	Depth to Water Detail	3/20/2023 13:02	148.36	ft
GS-AP-MW-05R	ORP	Oxidation Reduction Potention	3/20/2023 13:02	-47.54	mv
GS-AP-MW-05R	PH	pH	3/20/2023 13:02	6.77	SU
GS-AP-MW-05R	TEMP	Temperature	3/20/2023 13:02	17.02	C
GS-AP-MW-05R	TURB	Turbidity	3/20/2023 13:02	4.02	NTU
GS-AP-MW-05R	COND	Conductivity	3/20/2023 13:07	2092.23	uS/cm
GS-AP-MW-05R	DO	DO	3/20/2023 13:07	0.49	mg/L
GS-AP-MW-05R	DTW	Depth to Water Detail	3/20/2023 13:07	149.22	ft
GS-AP-MW-05R	ORP	Oxidation Reduction Potention	3/20/2023 13:07	-58.53	mv
GS-AP-MW-05R	PH	pH	3/20/2023 13:07	6.8	SU
GS-AP-MW-05R	TEMP	Temperature	3/20/2023 13:07	17.25	C
GS-AP-MW-05R	TURB	Turbidity	3/20/2023 13:07	12.7	NTU
GS-AP-MW-05R	COND	Conductivity	3/20/2023 13:12	1994.64	uS/cm
GS-AP-MW-05R	DO	DO	3/20/2023 13:12	0.47	mg/L
GS-AP-MW-05R	DTW	Depth to Water Detail	3/20/2023 13:12	150.02	ft
GS-AP-MW-05R	ORP	Oxidation Reduction Potention	3/20/2023 13:12	-66.79	mv
GS-AP-MW-05R	PH	pH	3/20/2023 13:12	6.81	SU
GS-AP-MW-05R	TEMP	Temperature	3/20/2023 13:12	17.2	C
GS-AP-MW-05R	TURB	Turbidity	3/20/2023 13:12	2.9	NTU
GS-AP-MW-05R	COND	Conductivity	3/20/2023 13:17	1704.91	uS/cm
GS-AP-MW-05R	DO	DO	3/20/2023 13:17	0.52	mg/L
GS-AP-MW-05R	DTW	Depth to Water Detail	3/20/2023 13:17	150.95	ft
GS-AP-MW-05R	ORP	Oxidation Reduction Potention	3/20/2023 13:17	-72.27	mv
GS-AP-MW-05R	PH	pH	3/20/2023 13:17	6.82	SU
GS-AP-MW-05R	TEMP	Temperature	3/20/2023 13:17	17.03	C
GS-AP-MW-05R	TURB	Turbidity	3/20/2023 13:17	1.81	NTU
GS-AP-MW-05R	COND	Conductivity	3/20/2023 13:22	1820.99	uS/cm
GS-AP-MW-05R	DO	DO	3/20/2023 13:22	0.48	mg/L
GS-AP-MW-05R	DTW	Depth to Water Detail	3/20/2023 13:22	151.23	ft
GS-AP-MW-05R	ORP	Oxidation Reduction Potention	3/20/2023 13:22	-75.51	mv
GS-AP-MW-05R	PH	pH	3/20/2023 13:22	6.82	SU
GS-AP-MW-05R	TEMP	Temperature	3/20/2023 13:22	17.33	C
GS-AP-MW-05R	TURB	Turbidity	3/20/2023 13:22	1.66	NTU
GS-AP-MW-05R	COND	Conductivity	3/20/2023 13:27	1496.91	uS/cm
GS-AP-MW-05R	DO	DO	3/20/2023 13:27	0.49	mg/L
GS-AP-MW-05R	DTW	Depth to Water Detail	3/20/2023 13:27	151.45	ft
GS-AP-MW-05R	ORP	Oxidation Reduction Potention	3/20/2023 13:27	-78.98	mv
GS-AP-MW-05R	PH	pH	3/20/2023 13:27	6.83	SU

Field Parameters Summary
Plant Gorgas Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GS-AP-MW-05R	TEMP	Temperature	3/20/2023 13:27	17.22	C
GS-AP-MW-05R	TURB	Turbidity	3/20/2023 13:27	1.44	NTU
GS-AP-MW-05R	COND	Conductivity	3/20/2023 13:32	1552.29	uS/cm
GS-AP-MW-05R	DO	DO	3/20/2023 13:32	0.47	mg/L
GS-AP-MW-05R	DTW	Depth to Water Detail	3/20/2023 13:32	152.03	ft
GS-AP-MW-05R	ORP	Oxidation Reduction Potention	3/20/2023 13:32	-81.22	mv
GS-AP-MW-05R	PH	pH	3/20/2023 13:32	6.83	SU
GS-AP-MW-05R	TEMP	Temperature	3/20/2023 13:32	16.91	C
GS-AP-MW-05R	TURB	Turbidity	3/20/2023 13:32	1.11	NTU
GS-AP-MW-05R	COND	Conductivity	3/20/2023 13:37	1479.37	uS/cm
GS-AP-MW-05R	DO	DO	3/20/2023 13:37	0.51	mg/L
GS-AP-MW-05R	DTW	Depth to Water Detail	3/20/2023 13:37	152.38	ft
GS-AP-MW-05R	ORP	Oxidation Reduction Potention	3/20/2023 13:37	-82.73	mv
GS-AP-MW-05R	PH	pH	3/20/2023 13:37	6.83	SU
GS-AP-MW-05R	TEMP	Temperature	3/20/2023 13:37	17.02	C
GS-AP-MW-05R	TURB	Turbidity	3/20/2023 13:37	1.54	NTU
GS-AP-MW-05R	COND	Conductivity	3/20/2023 13:42	1443.07	uS/cm
GS-AP-MW-05R	DO	DO	3/20/2023 13:42	0.78	mg/L
GS-AP-MW-05R	DTW	Depth to Water Detail	3/20/2023 13:42	152.45	ft
GS-AP-MW-05R	ORP	Oxidation Reduction Potention	3/20/2023 13:42	-81.68	mv
GS-AP-MW-05R	PH	pH	3/20/2023 13:42	6.82	SU
GS-AP-MW-05R	TEMP	Temperature	3/20/2023 13:42	16.9	C
GS-AP-MW-05R	TURB	Turbidity	3/20/2023 13:42	1.9	NTU
GS-AP-MW-05R	COND	Conductivity	3/20/2023 13:47	1374.67	uS/cm
GS-AP-MW-05R	DO	DO	3/20/2023 13:47	0.7	mg/L
GS-AP-MW-05R	DTW	Depth to Water Detail	3/20/2023 13:47	152.57	ft
GS-AP-MW-05R	ORP	Oxidation Reduction Potention	3/20/2023 13:47	-81.17	mv
GS-AP-MW-05R	PH	pH	3/20/2023 13:47	6.82	SU
GS-AP-MW-05R	TEMP	Temperature	3/20/2023 13:47	17.04	C
GS-AP-MW-05R	TURB	Turbidity	3/20/2023 13:47	2.79	NTU
GS-AP-MW-05R	COND	Conductivity	3/20/2023 13:52	1301.68	uS/cm
GS-AP-MW-05R	DO	DO	3/20/2023 13:52	0.8	mg/L
GS-AP-MW-05R	DTW	Depth to Water Detail	3/20/2023 13:52	152.69	ft
GS-AP-MW-05R	ORP	Oxidation Reduction Potention	3/20/2023 13:52	-81.11	mv
GS-AP-MW-05R	PH	pH	3/20/2023 13:52	6.82	SU
GS-AP-MW-05R	TEMP	Temperature	3/20/2023 13:52	17.06	C
GS-AP-MW-05R	TURB	Turbidity	3/20/2023 13:52	2.54	NTU
GS-AP-MW-05R	COND	Conductivity	3/20/2023 13:57	1289.04	uS/cm
GS-AP-MW-05R	DO	DO	3/20/2023 13:57	0.86	mg/L
GS-AP-MW-05R	DTW	Depth to Water Detail	3/20/2023 13:57	152.79	ft
GS-AP-MW-05R	ORP	Oxidation Reduction Potention	3/20/2023 13:57	-80.13	mv
GS-AP-MW-05R	PH	pH	3/20/2023 13:57	6.8	SU
GS-AP-MW-05R	TEMP	Temperature	3/20/2023 13:57	17.03	C
GS-AP-MW-05R	TURB	Turbidity	3/20/2023 13:57	2.37	NTU
GS-AP-MW-05R	COND	Conductivity	3/20/2023 14:02	1273.03	uS/cm
GS-AP-MW-05R	DO	DO	3/20/2023 14:02	0.72	mg/L
GS-AP-MW-05R	DTW	Depth to Water Detail	3/20/2023 14:02	152.86	ft

Field Parameters Summary
Plant Gorgas Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GS-AP-MW-05R	ORP	Oxidation Reduction Potention	3/20/2023 14:02	-81.16	mv
GS-AP-MW-05R	PH	pH	3/20/2023 14:02	6.8	SU
GS-AP-MW-05R	SULFIDE	Sulfide	3/20/2023 14:02	0	mg/L
GS-AP-MW-05R	TEMP	Temperature	3/20/2023 14:02	17.26	C
GS-AP-MW-05R	TURB	Turbidity	3/20/2023 14:02	3.32	NTU

Field Parameters Summary
Plant Gorgas Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GS-AP-MW-6D	COND	Conductivity	3/14/2023 12:37	487.28	uS/cm
GS-AP-MW-6D	DO	DO	3/14/2023 12:37	0.19	mg/L
GS-AP-MW-6D	DTW	Depth to Water Detail	3/14/2023 12:37	11.58	ft
GS-AP-MW-6D	ORP	Oxidation Reduction Potention	3/14/2023 12:37	-148.89	mv
GS-AP-MW-6D	PH	pH	3/14/2023 12:37	7.27	SU
GS-AP-MW-6D	TEMP	Temperature	3/14/2023 12:37	16.74	C
GS-AP-MW-6D	TURB	Turbidity	3/14/2023 12:37	1.25	NTU
GS-AP-MW-6D	COND	Conductivity	3/14/2023 12:42	486.9	uS/cm
GS-AP-MW-6D	DO	DO	3/14/2023 12:42	0.17	mg/L
GS-AP-MW-6D	DTW	Depth to Water Detail	3/14/2023 12:42	11.58	ft
GS-AP-MW-6D	ORP	Oxidation Reduction Potention	3/14/2023 12:42	-158.97	mv
GS-AP-MW-6D	PH	pH	3/14/2023 12:42	7.29	SU
GS-AP-MW-6D	TEMP	Temperature	3/14/2023 12:42	16.76	C
GS-AP-MW-6D	TURB	Turbidity	3/14/2023 12:42	0.63	NTU
GS-AP-MW-6D	COND	Conductivity	3/14/2023 12:47	488.51	uS/cm
GS-AP-MW-6D	DO	DO	3/14/2023 12:47	0.17	mg/L
GS-AP-MW-6D	DTW	Depth to Water Detail	3/14/2023 12:47	11.58	ft
GS-AP-MW-6D	ORP	Oxidation Reduction Potention	3/14/2023 12:47	-167.18	mv
GS-AP-MW-6D	PH	pH	3/14/2023 12:47	7.31	SU
GS-AP-MW-6D	TEMP	Temperature	3/14/2023 12:47	16.78	C
GS-AP-MW-6D	TURB	Turbidity	3/14/2023 12:47	0.51	NTU
GS-AP-MW-6D	COND	Conductivity	3/14/2023 12:52	487.96	uS/cm
GS-AP-MW-6D	DO	DO	3/14/2023 12:52	0.16	mg/L
GS-AP-MW-6D	DTW	Depth to Water Detail	3/14/2023 12:52	11.58	ft
GS-AP-MW-6D	ORP	Oxidation Reduction Potention	3/14/2023 12:52	-173.21	mv
GS-AP-MW-6D	PH	pH	3/14/2023 12:52	7.33	SU
GS-AP-MW-6D	SULFIDE	Sulfide	3/14/2023 12:52	5	mg/L
GS-AP-MW-6D	TEMP	Temperature	3/14/2023 12:52	16.87	C
GS-AP-MW-6D	TURB	Turbidity	3/14/2023 12:52	0.38	NTU

Field Parameters Summary
Plant Gorgas Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GS-AP-MW-6S	COND	Conductivity	3/14/2023 11:13	487.76	uS/cm
GS-AP-MW-6S	DO	DO	3/14/2023 11:13	0.23	mg/L
GS-AP-MW-6S	DTW	Depth to Water Detail	3/14/2023 11:13	17.36	ft
GS-AP-MW-6S	ORP	Oxidation Reduction Potention	3/14/2023 11:13	-107.42	mv
GS-AP-MW-6S	PH	pH	3/14/2023 11:13	6.96	SU
GS-AP-MW-6S	TEMP	Temperature	3/14/2023 11:13	16.14	C
GS-AP-MW-6S	TURB	Turbidity	3/14/2023 11:13	12.1	NTU
GS-AP-MW-6S	COND	Conductivity	3/14/2023 11:18	487.24	uS/cm
GS-AP-MW-6S	DO	DO	3/14/2023 11:18	0.2	mg/L
GS-AP-MW-6S	DTW	Depth to Water Detail	3/14/2023 11:18	17.36	ft
GS-AP-MW-6S	ORP	Oxidation Reduction Potention	3/14/2023 11:18	-109.85	mv
GS-AP-MW-6S	PH	pH	3/14/2023 11:18	7.01	SU
GS-AP-MW-6S	TEMP	Temperature	3/14/2023 11:18	16.15	C
GS-AP-MW-6S	TURB	Turbidity	3/14/2023 11:18	17.34	NTU
GS-AP-MW-6S	COND	Conductivity	3/14/2023 11:23	488.33	uS/cm
GS-AP-MW-6S	DO	DO	3/14/2023 11:23	0.19	mg/L
GS-AP-MW-6S	DTW	Depth to Water Detail	3/14/2023 11:23	17.36	ft
GS-AP-MW-6S	ORP	Oxidation Reduction Potention	3/14/2023 11:23	-110.45	mv
GS-AP-MW-6S	PH	pH	3/14/2023 11:23	7.03	SU
GS-AP-MW-6S	TEMP	Temperature	3/14/2023 11:23	16.07	C
GS-AP-MW-6S	TURB	Turbidity	3/14/2023 11:23	19.2	NTU
GS-AP-MW-6S	COND	Conductivity	3/14/2023 11:28	488.4	uS/cm
GS-AP-MW-6S	DO	DO	3/14/2023 11:28	0.19	mg/L
GS-AP-MW-6S	DTW	Depth to Water Detail	3/14/2023 11:28	17.36	ft
GS-AP-MW-6S	ORP	Oxidation Reduction Potention	3/14/2023 11:28	-110.16	mv
GS-AP-MW-6S	PH	pH	3/14/2023 11:28	7.05	SU
GS-AP-MW-6S	TEMP	Temperature	3/14/2023 11:28	16.13	C
GS-AP-MW-6S	TURB	Turbidity	3/14/2023 11:28	12.46	NTU
GS-AP-MW-6S	COND	Conductivity	3/14/2023 11:33	488.7	uS/cm
GS-AP-MW-6S	DO	DO	3/14/2023 11:33	0.21	mg/L
GS-AP-MW-6S	DTW	Depth to Water Detail	3/14/2023 11:33	17.36	ft
GS-AP-MW-6S	ORP	Oxidation Reduction Potention	3/14/2023 11:33	-108.36	mv
GS-AP-MW-6S	PH	pH	3/14/2023 11:33	7.06	SU
GS-AP-MW-6S	TEMP	Temperature	3/14/2023 11:33	16.17	C
GS-AP-MW-6S	TURB	Turbidity	3/14/2023 11:33	12.7	NTU
GS-AP-MW-6S	COND	Conductivity	3/14/2023 11:38	489.66	uS/cm
GS-AP-MW-6S	DO	DO	3/14/2023 11:38	0.25	mg/L
GS-AP-MW-6S	DTW	Depth to Water Detail	3/14/2023 11:38	17.36	ft
GS-AP-MW-6S	ORP	Oxidation Reduction Potention	3/14/2023 11:38	-104.77	mv
GS-AP-MW-6S	PH	pH	3/14/2023 11:38	7.06	SU
GS-AP-MW-6S	TEMP	Temperature	3/14/2023 11:38	16.2	C
GS-AP-MW-6S	TURB	Turbidity	3/14/2023 11:38	12.2	NTU
GS-AP-MW-6S	COND	Conductivity	3/14/2023 11:43	491.11	uS/cm
GS-AP-MW-6S	DO	DO	3/14/2023 11:43	0.32	mg/L
GS-AP-MW-6S	DTW	Depth to Water Detail	3/14/2023 11:43	17.36	ft
GS-AP-MW-6S	ORP	Oxidation Reduction Potention	3/14/2023 11:43	-98.66	mv
GS-AP-MW-6S	PH	pH	3/14/2023 11:43	7.04	SU

Field Parameters Summary
Plant Gorgas Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GS-AP-MW-6S	TEMP	Temperature	3/14/2023 11:43	16.25	C
GS-AP-MW-6S	TURB	Turbidity	3/14/2023 11:43	10.87	NTU
GS-AP-MW-6S	COND	Conductivity	3/14/2023 11:48	491.61	uS/cm
GS-AP-MW-6S	DO	DO	3/14/2023 11:48	0.38	mg/L
GS-AP-MW-6S	DTW	Depth to Water Detail	3/14/2023 11:48	17.36	ft
GS-AP-MW-6S	ORP	Oxidation Reduction Potention	3/14/2023 11:48	-94.12	mv
GS-AP-MW-6S	PH	pH	3/14/2023 11:48	7.04	SU
GS-AP-MW-6S	SULFIDE	Sulfide	3/14/2023 11:48	0	mg/L
GS-AP-MW-6S	TEMP	Temperature	3/14/2023 11:48	16.26	C
GS-AP-MW-6S	TURB	Turbidity	3/14/2023 11:48	9.24	NTU

Field Parameters Summary
Plant Gorgas Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GS-AP-MW-11R	COND	Conductivity	3/22/2023 14:10	431.32	uS/cm
GS-AP-MW-11R	DO	DO	3/22/2023 14:10	0.24	mg/L
GS-AP-MW-11R	DTW	Depth to Water Detail	3/22/2023 14:10	77.32	ft
GS-AP-MW-11R	ORP	Oxidation Reduction Potention	3/22/2023 14:10	-21.77	mv
GS-AP-MW-11R	PH	pH	3/22/2023 14:10	6.62	SU
GS-AP-MW-11R	TEMP	Temperature	3/22/2023 14:10	17.9	C
GS-AP-MW-11R	TURB	Turbidity	3/22/2023 14:10	71.8	NTU
GS-AP-MW-11R	COND	Conductivity	3/22/2023 14:15	433.6	uS/cm
GS-AP-MW-11R	DO	DO	3/22/2023 14:15	0.23	mg/L
GS-AP-MW-11R	DTW	Depth to Water Detail	3/22/2023 14:15	77.66	ft
GS-AP-MW-11R	ORP	Oxidation Reduction Potention	3/22/2023 14:15	-23.85	mv
GS-AP-MW-11R	PH	pH	3/22/2023 14:15	6.62	SU
GS-AP-MW-11R	TEMP	Temperature	3/22/2023 14:15	17.81	C
GS-AP-MW-11R	TURB	Turbidity	3/22/2023 14:15	64.4	NTU
GS-AP-MW-11R	COND	Conductivity	3/22/2023 14:20	432.92	uS/cm
GS-AP-MW-11R	DO	DO	3/22/2023 14:20	0.22	mg/L
GS-AP-MW-11R	DTW	Depth to Water Detail	3/22/2023 14:20	77.66	ft
GS-AP-MW-11R	ORP	Oxidation Reduction Potention	3/22/2023 14:20	-24.94	mv
GS-AP-MW-11R	PH	pH	3/22/2023 14:20	6.62	SU
GS-AP-MW-11R	TEMP	Temperature	3/22/2023 14:20	17.76	C
GS-AP-MW-11R	TURB	Turbidity	3/22/2023 14:20	45.8	NTU
GS-AP-MW-11R	COND	Conductivity	3/22/2023 14:25	434.01	uS/cm
GS-AP-MW-11R	DO	DO	3/22/2023 14:25	0.24	mg/L
GS-AP-MW-11R	DTW	Depth to Water Detail	3/22/2023 14:25	77.66	ft
GS-AP-MW-11R	ORP	Oxidation Reduction Potention	3/22/2023 14:25	-24.4	mv
GS-AP-MW-11R	PH	pH	3/22/2023 14:25	6.62	SU
GS-AP-MW-11R	TEMP	Temperature	3/22/2023 14:25	17.56	C
GS-AP-MW-11R	TURB	Turbidity	3/22/2023 14:25	30.2	NTU
GS-AP-MW-11R	COND	Conductivity	3/22/2023 14:30	432.45	uS/cm
GS-AP-MW-11R	DO	DO	3/22/2023 14:30	0.23	mg/L
GS-AP-MW-11R	DTW	Depth to Water Detail	3/22/2023 14:30	77.66	ft
GS-AP-MW-11R	ORP	Oxidation Reduction Potention	3/22/2023 14:30	-25.4	mv
GS-AP-MW-11R	PH	pH	3/22/2023 14:30	6.63	SU
GS-AP-MW-11R	TEMP	Temperature	3/22/2023 14:30	17.77	C
GS-AP-MW-11R	TURB	Turbidity	3/22/2023 14:30	20.9	NTU
GS-AP-MW-11R	COND	Conductivity	3/22/2023 14:35	432.35	uS/cm
GS-AP-MW-11R	DO	DO	3/22/2023 14:35	0.24	mg/L
GS-AP-MW-11R	DTW	Depth to Water Detail	3/22/2023 14:35	77.66	ft
GS-AP-MW-11R	ORP	Oxidation Reduction Potention	3/22/2023 14:35	-25.77	mv
GS-AP-MW-11R	PH	pH	3/22/2023 14:35	6.64	SU
GS-AP-MW-11R	TEMP	Temperature	3/22/2023 14:35	17.65	C
GS-AP-MW-11R	TURB	Turbidity	3/22/2023 14:35	18	NTU
GS-AP-MW-11R	COND	Conductivity	3/22/2023 14:40	431.39	uS/cm
GS-AP-MW-11R	DO	DO	3/22/2023 14:40	0.24	mg/L
GS-AP-MW-11R	DTW	Depth to Water Detail	3/22/2023 14:40	77.66	ft
GS-AP-MW-11R	ORP	Oxidation Reduction Potention	3/22/2023 14:40	-26.51	mv
GS-AP-MW-11R	PH	pH	3/22/2023 14:40	6.65	SU

Field Parameters Summary
Plant Gorgas Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GS-AP-MW-11R	TEMP	Temperature	3/22/2023 14:40	17.61	C
GS-AP-MW-11R	TURB	Turbidity	3/22/2023 14:40	14.5	NTU
GS-AP-MW-11R	COND	Conductivity	3/22/2023 14:45	431.09	uS/cm
GS-AP-MW-11R	DO	DO	3/22/2023 14:45	0.24	mg/L
GS-AP-MW-11R	DTW	Depth to Water Detail	3/22/2023 14:45	77.66	ft
GS-AP-MW-11R	ORP	Oxidation Reduction Potention	3/22/2023 14:45	-28.85	mv
GS-AP-MW-11R	PH	pH	3/22/2023 14:45	6.68	SU
GS-AP-MW-11R	TEMP	Temperature	3/22/2023 14:45	17.67	C
GS-AP-MW-11R	TURB	Turbidity	3/22/2023 14:45	10.69	NTU
GS-AP-MW-11R	COND	Conductivity	3/22/2023 14:50	431.37	uS/cm
GS-AP-MW-11R	DO	DO	3/22/2023 14:50	0.24	mg/L
GS-AP-MW-11R	DTW	Depth to Water Detail	3/22/2023 14:50	77.66	ft
GS-AP-MW-11R	ORP	Oxidation Reduction Potention	3/22/2023 14:50	-29.27	mv
GS-AP-MW-11R	PH	pH	3/22/2023 14:50	6.69	SU
GS-AP-MW-11R	SULFIDE	Sulfide	3/22/2023 14:50	0	mg/L
GS-AP-MW-11R	TEMP	Temperature	3/22/2023 14:50	17.52	C
GS-AP-MW-11R	TURB	Turbidity	3/22/2023 14:50	9.9	NTU

Field Parameters Summary
Plant Gorgas Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GS-AP-MW-12	COND	Conductivity	3/22/2023 12:15	413.75	uS/cm
GS-AP-MW-12	DO	DO	3/22/2023 12:15	1	mg/L
GS-AP-MW-12	DTW	Depth to Water Detail	3/22/2023 12:15	84.97	ft
GS-AP-MW-12	ORP	Oxidation Reduction Potention	3/22/2023 12:15	-104.06	mv
GS-AP-MW-12	PH	pH	3/22/2023 12:15	10.79	SU
GS-AP-MW-12	TEMP	Temperature	3/22/2023 12:15	18.75	C
GS-AP-MW-12	TURB	Turbidity	3/22/2023 12:15	1.67	NTU
GS-AP-MW-12	COND	Conductivity	3/22/2023 12:22	355.91	uS/cm
GS-AP-MW-12	DO	DO	3/22/2023 12:22	0.96	mg/L
GS-AP-MW-12	DTW	Depth to Water Detail	3/22/2023 12:22	85.06	ft
GS-AP-MW-12	ORP	Oxidation Reduction Potention	3/22/2023 12:22	-117.52	mv
GS-AP-MW-12	PH	pH	3/22/2023 12:22	10.54	SU
GS-AP-MW-12	TEMP	Temperature	3/22/2023 12:22	18.77	C
GS-AP-MW-12	TURB	Turbidity	3/22/2023 12:22	1.23	NTU
GS-AP-MW-12	COND	Conductivity	3/22/2023 12:27	310.59	uS/cm
GS-AP-MW-12	DO	DO	3/22/2023 12:27	0.81	mg/L
GS-AP-MW-12	DTW	Depth to Water Detail	3/22/2023 12:27	85.16	ft
GS-AP-MW-12	ORP	Oxidation Reduction Potention	3/22/2023 12:27	-113.92	mv
GS-AP-MW-12	PH	pH	3/22/2023 12:27	9.81	SU
GS-AP-MW-12	TEMP	Temperature	3/22/2023 12:27	18.48	C
GS-AP-MW-12	TURB	Turbidity	3/22/2023 12:27	1.01	NTU
GS-AP-MW-12	COND	Conductivity	3/22/2023 12:32	316.39	uS/cm
GS-AP-MW-12	DO	DO	3/22/2023 12:32	0.61	mg/L
GS-AP-MW-12	DTW	Depth to Water Detail	3/22/2023 12:32	85.18	ft
GS-AP-MW-12	ORP	Oxidation Reduction Potention	3/22/2023 12:32	-109.48	mv
GS-AP-MW-12	PH	pH	3/22/2023 12:32	9.27	SU
GS-AP-MW-12	TEMP	Temperature	3/22/2023 12:32	18.68	C
GS-AP-MW-12	TURB	Turbidity	3/22/2023 12:32	1.86	NTU
GS-AP-MW-12	COND	Conductivity	3/22/2023 12:37	329.19	uS/cm
GS-AP-MW-12	DO	DO	3/22/2023 12:37	0.53	mg/L
GS-AP-MW-12	DTW	Depth to Water Detail	3/22/2023 12:37	85.18	ft
GS-AP-MW-12	ORP	Oxidation Reduction Potention	3/22/2023 12:37	-107.6	mv
GS-AP-MW-12	PH	pH	3/22/2023 12:37	8.8	SU
GS-AP-MW-12	TEMP	Temperature	3/22/2023 12:37	18.55	C
GS-AP-MW-12	TURB	Turbidity	3/22/2023 12:37	1.23	NTU
GS-AP-MW-12	COND	Conductivity	3/22/2023 12:42	335.51	uS/cm
GS-AP-MW-12	DO	DO	3/22/2023 12:42	0.5	mg/L
GS-AP-MW-12	DTW	Depth to Water Detail	3/22/2023 12:42	85.18	ft
GS-AP-MW-12	ORP	Oxidation Reduction Potention	3/22/2023 12:42	-134.1	mv
GS-AP-MW-12	PH	pH	3/22/2023 12:42	8.47	SU
GS-AP-MW-12	TEMP	Temperature	3/22/2023 12:42	18.69	C
GS-AP-MW-12	TURB	Turbidity	3/22/2023 12:42	1.1	NTU
GS-AP-MW-12	COND	Conductivity	3/22/2023 12:47	338.37	uS/cm
GS-AP-MW-12	DO	DO	3/22/2023 12:47	0.46	mg/L
GS-AP-MW-12	DTW	Depth to Water Detail	3/22/2023 12:47	85.18	ft
GS-AP-MW-12	ORP	Oxidation Reduction Potention	3/22/2023 12:47	-151.04	mv
GS-AP-MW-12	PH	pH	3/22/2023 12:47	8.27	SU

Field Parameters Summary
Plant Gorgas Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GS-AP-MW-12	TEMP	Temperature	3/22/2023 12:47	18.53	C
GS-AP-MW-12	TURB	Turbidity	3/22/2023 12:47	0.6	NTU
GS-AP-MW-12	COND	Conductivity	3/22/2023 12:52	338.24	uS/cm
GS-AP-MW-12	DO	DO	3/22/2023 12:52	0.46	mg/L
GS-AP-MW-12	DTW	Depth to Water Detail	3/22/2023 12:52	85.18	ft
GS-AP-MW-12	ORP	Oxidation Reduction Potention	3/22/2023 12:52	-155.23	mv
GS-AP-MW-12	PH	pH	3/22/2023 12:52	8.17	SU
GS-AP-MW-12	TEMP	Temperature	3/22/2023 12:52	18.32	C
GS-AP-MW-12	TURB	Turbidity	3/22/2023 12:52	0.71	NTU
GS-AP-MW-12	COND	Conductivity	3/22/2023 12:57	339.15	uS/cm
GS-AP-MW-12	DO	DO	3/22/2023 12:57	0.44	mg/L
GS-AP-MW-12	DTW	Depth to Water Detail	3/22/2023 12:57	85.18	ft
GS-AP-MW-12	ORP	Oxidation Reduction Potention	3/22/2023 12:57	-158.03	mv
GS-AP-MW-12	PH	pH	3/22/2023 12:57	8.15	SU
GS-AP-MW-12	SULFIDE	Sulfide	3/22/2023 12:57	0	mg/L
GS-AP-MW-12	TEMP	Temperature	3/22/2023 12:57	18.59	C
GS-AP-MW-12	TURB	Turbidity	3/22/2023 12:57	0.73	NTU

Field Parameters Summary
Plant Gorgas Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GS-AP-MW-12V	COND	Conductivity	3/22/2023 10:20	217.28	uS/cm
GS-AP-MW-12V	DO	DO	3/22/2023 10:20	0.61	mg/L
GS-AP-MW-12V	DTW	Depth to Water Detail	3/22/2023 10:20	101.78	ft
GS-AP-MW-12V	ORP	Oxidation Reduction Potention	3/22/2023 10:20	-137.73	mv
GS-AP-MW-12V	PH	pH	3/22/2023 10:20	9.45	SU
GS-AP-MW-12V	TEMP	Temperature	3/22/2023 10:20	17.63	C
GS-AP-MW-12V	TURB	Turbidity	3/22/2023 10:20	9.52	NTU
GS-AP-MW-12V	COND	Conductivity	3/22/2023 10:25	222.96	uS/cm
GS-AP-MW-12V	DO	DO	3/22/2023 10:25	0.6	mg/L
GS-AP-MW-12V	DTW	Depth to Water Detail	3/22/2023 10:25	101.82	ft
GS-AP-MW-12V	ORP	Oxidation Reduction Potention	3/22/2023 10:25	-136.59	mv
GS-AP-MW-12V	PH	pH	3/22/2023 10:25	9.29	SU
GS-AP-MW-12V	TEMP	Temperature	3/22/2023 10:25	17.52	C
GS-AP-MW-12V	TURB	Turbidity	3/22/2023 10:25	10.03	NTU
GS-AP-MW-12V	COND	Conductivity	3/22/2023 10:30	224.44	uS/cm
GS-AP-MW-12V	DO	DO	3/22/2023 10:30	0.61	mg/L
GS-AP-MW-12V	DTW	Depth to Water Detail	3/22/2023 10:30	101.88	ft
GS-AP-MW-12V	ORP	Oxidation Reduction Potention	3/22/2023 10:30	-140.11	mv
GS-AP-MW-12V	PH	pH	3/22/2023 10:30	9.25	SU
GS-AP-MW-12V	TEMP	Temperature	3/22/2023 10:30	17.32	C
GS-AP-MW-12V	TURB	Turbidity	3/22/2023 10:30	9.35	NTU
GS-AP-MW-12V	COND	Conductivity	3/22/2023 10:35	236.08	uS/cm
GS-AP-MW-12V	DO	DO	3/22/2023 10:35	0.62	mg/L
GS-AP-MW-12V	DTW	Depth to Water Detail	3/22/2023 10:35	101.96	ft
GS-AP-MW-12V	ORP	Oxidation Reduction Potention	3/22/2023 10:35	-137.98	mv
GS-AP-MW-12V	PH	pH	3/22/2023 10:35	9.1	SU
GS-AP-MW-12V	TEMP	Temperature	3/22/2023 10:35	17.3	C
GS-AP-MW-12V	TURB	Turbidity	3/22/2023 10:35	8.34	NTU
GS-AP-MW-12V	COND	Conductivity	3/22/2023 10:40	242.28	uS/cm
GS-AP-MW-12V	DO	DO	3/22/2023 10:40	0.62	mg/L
GS-AP-MW-12V	DTW	Depth to Water Detail	3/22/2023 10:40	102.04	ft
GS-AP-MW-12V	ORP	Oxidation Reduction Potention	3/22/2023 10:40	-140.18	mv
GS-AP-MW-12V	PH	pH	3/22/2023 10:40	9.07	SU
GS-AP-MW-12V	TEMP	Temperature	3/22/2023 10:40	17.49	C
GS-AP-MW-12V	TURB	Turbidity	3/22/2023 10:40	8.97	NTU
GS-AP-MW-12V	COND	Conductivity	3/22/2023 10:45	252.1	uS/cm
GS-AP-MW-12V	DO	DO	3/22/2023 10:45	0.64	mg/L
GS-AP-MW-12V	DTW	Depth to Water Detail	3/22/2023 10:45	102.12	ft
GS-AP-MW-12V	ORP	Oxidation Reduction Potention	3/22/2023 10:45	-141.55	mv
GS-AP-MW-12V	PH	pH	3/22/2023 10:45	9.06	SU
GS-AP-MW-12V	TEMP	Temperature	3/22/2023 10:45	17.7	C
GS-AP-MW-12V	TURB	Turbidity	3/22/2023 10:45	8.43	NTU
GS-AP-MW-12V	COND	Conductivity	3/22/2023 10:50	253.08	uS/cm
GS-AP-MW-12V	DO	DO	3/22/2023 10:50	0.63	mg/L
GS-AP-MW-12V	DTW	Depth to Water Detail	3/22/2023 10:50	102.14	ft
GS-AP-MW-12V	ORP	Oxidation Reduction Potention	3/22/2023 10:50	-141.69	mv
GS-AP-MW-12V	PH	pH	3/22/2023 10:50	9	SU

Field Parameters Summary
Plant Gorgas Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GS-AP-MW-12V	SULFIDE	Sulfide	3/22/2023 10:50	0	mg/L
GS-AP-MW-12V	TEMP	Temperature	3/22/2023 10:50	17.61	C
GS-AP-MW-12V	TURB	Turbidity	3/22/2023 10:50	8.44	NTU

Field Parameters Summary
Plant Gorgas Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GS-AP-MW-23H	COND	Conductivity	3/14/2023 14:21	767.75	uS/cm
GS-AP-MW-23H	DO	DO	3/14/2023 14:21	0.42	mg/L
GS-AP-MW-23H	DTW	Depth to Water Detail	3/14/2023 14:21	28.03	ft
GS-AP-MW-23H	ORP	Oxidation Reduction Potention	3/14/2023 14:21	-7.71	mv
GS-AP-MW-23H	PH	pH	3/14/2023 14:21	5.84	SU
GS-AP-MW-23H	TEMP	Temperature	3/14/2023 14:21	16.78	C
GS-AP-MW-23H	TURB	Turbidity	3/14/2023 14:21	5.93	NTU
GS-AP-MW-23H	COND	Conductivity	3/14/2023 14:26	766.47	uS/cm
GS-AP-MW-23H	DO	DO	3/14/2023 14:26	0.34	mg/L
GS-AP-MW-23H	DTW	Depth to Water Detail	3/14/2023 14:26	28.49	ft
GS-AP-MW-23H	ORP	Oxidation Reduction Potention	3/14/2023 14:26	-4.99	mv
GS-AP-MW-23H	PH	pH	3/14/2023 14:26	5.86	SU
GS-AP-MW-23H	TEMP	Temperature	3/14/2023 14:26	16.79	C
GS-AP-MW-23H	TURB	Turbidity	3/14/2023 14:26	3.37	NTU
GS-AP-MW-23H	COND	Conductivity	3/14/2023 14:31	776.99	uS/cm
GS-AP-MW-23H	DO	DO	3/14/2023 14:31	0.31	mg/L
GS-AP-MW-23H	DTW	Depth to Water Detail	3/14/2023 14:31	28.53	ft
GS-AP-MW-23H	ORP	Oxidation Reduction Potention	3/14/2023 14:31	-5.99	mv
GS-AP-MW-23H	PH	pH	3/14/2023 14:31	5.9	SU
GS-AP-MW-23H	TEMP	Temperature	3/14/2023 14:31	16.87	C
GS-AP-MW-23H	TURB	Turbidity	3/14/2023 14:31	1.79	NTU
GS-AP-MW-23H	COND	Conductivity	3/14/2023 14:36	781.52	uS/cm
GS-AP-MW-23H	DO	DO	3/14/2023 14:36	0.29	mg/L
GS-AP-MW-23H	DTW	Depth to Water Detail	3/14/2023 14:36	28.67	ft
GS-AP-MW-23H	ORP	Oxidation Reduction Potention	3/14/2023 14:36	-7.19	mv
GS-AP-MW-23H	PH	pH	3/14/2023 14:36	5.93	SU
GS-AP-MW-23H	SULFIDE	Sulfide	3/14/2023 14:36	0	mg/L
GS-AP-MW-23H	TEMP	Temperature	3/14/2023 14:36	16.74	C
GS-AP-MW-23H	TURB	Turbidity	3/14/2023 14:36	1.88	NTU

Field Parameters Summary
Plant Gorgas Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GS-AP-MW-23V	COND	Conductivity	3/14/2023 13:36	787.91	uS/cm
GS-AP-MW-23V	DO	DO	3/14/2023 13:36	0.25	mg/L
GS-AP-MW-23V	DTW	Depth to Water Detail	3/14/2023 13:36	44.06	ft
GS-AP-MW-23V	ORP	Oxidation Reduction Potention	3/14/2023 13:36	-117.07	mv
GS-AP-MW-23V	PH	pH	3/14/2023 13:36	7.36	SU
GS-AP-MW-23V	TEMP	Temperature	3/14/2023 13:36	17.06	C
GS-AP-MW-23V	TURB	Turbidity	3/14/2023 13:36	2.36	NTU
GS-AP-MW-23V	COND	Conductivity	3/14/2023 13:41	720.34	uS/cm
GS-AP-MW-23V	DO	DO	3/14/2023 13:41	0.21	mg/L
GS-AP-MW-23V	DTW	Depth to Water Detail	3/14/2023 13:41	44.31	ft
GS-AP-MW-23V	ORP	Oxidation Reduction Potention	3/14/2023 13:41	-118.86	mv
GS-AP-MW-23V	PH	pH	3/14/2023 13:41	7.35	SU
GS-AP-MW-23V	TEMP	Temperature	3/14/2023 13:41	17	C
GS-AP-MW-23V	TURB	Turbidity	3/14/2023 13:41	3.82	NTU
GS-AP-MW-23V	COND	Conductivity	3/14/2023 13:46	702.37	uS/cm
GS-AP-MW-23V	DO	DO	3/14/2023 13:46	0.23	mg/L
GS-AP-MW-23V	DTW	Depth to Water Detail	3/14/2023 13:46	44.31	ft
GS-AP-MW-23V	ORP	Oxidation Reduction Potention	3/14/2023 13:46	-121.65	mv
GS-AP-MW-23V	PH	pH	3/14/2023 13:46	7.35	SU
GS-AP-MW-23V	TEMP	Temperature	3/14/2023 13:46	16.9	C
GS-AP-MW-23V	TURB	Turbidity	3/14/2023 13:46	3.59	NTU
GS-AP-MW-23V	COND	Conductivity	3/14/2023 13:51	686.58	uS/cm
GS-AP-MW-23V	DO	DO	3/14/2023 13:51	0.2	mg/L
GS-AP-MW-23V	DTW	Depth to Water Detail	3/14/2023 13:51	44.31	ft
GS-AP-MW-23V	ORP	Oxidation Reduction Potention	3/14/2023 13:51	-123.55	mv
GS-AP-MW-23V	PH	pH	3/14/2023 13:51	7.36	SU
GS-AP-MW-23V	TEMP	Temperature	3/14/2023 13:51	16.9	C
GS-AP-MW-23V	TURB	Turbidity	3/14/2023 13:51	3.24	NTU
GS-AP-MW-23V	COND	Conductivity	3/14/2023 13:56	674.91	uS/cm
GS-AP-MW-23V	DO	DO	3/14/2023 13:56	0.2	mg/L
GS-AP-MW-23V	DTW	Depth to Water Detail	3/14/2023 13:56	44.31	ft
GS-AP-MW-23V	ORP	Oxidation Reduction Potention	3/14/2023 13:56	-125.2	mv
GS-AP-MW-23V	PH	pH	3/14/2023 13:56	7.37	SU
GS-AP-MW-23V	SULFIDE	Sulfide	3/14/2023 13:56	0	mg/L
GS-AP-MW-23V	TEMP	Temperature	3/14/2023 13:56	16.85	C
GS-AP-MW-23V	TURB	Turbidity	3/14/2023 13:56	3.1	NTU

Field Parameters Summary
Plant Gorgas Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GS-AP-MW-41HS	COND	Conductivity	3/13/2023 14:24	430.37	uS/cm
GS-AP-MW-41HS	DO	DO	3/13/2023 14:24	2.04	mg/L
GS-AP-MW-41HS	DTW	Depth to Water Detail	3/13/2023 14:24	26.31	ft
GS-AP-MW-41HS	ORP	Oxidation Reduction Potention	3/13/2023 14:24	13.4	mv
GS-AP-MW-41HS	PH	pH	3/13/2023 14:24	6.49	SU
GS-AP-MW-41HS	TEMP	Temperature	3/13/2023 14:24	15.34	C
GS-AP-MW-41HS	TURB	Turbidity	3/13/2023 14:24	1.17	NTU
GS-AP-MW-41HS	COND	Conductivity	3/13/2023 14:29	432.22	uS/cm
GS-AP-MW-41HS	DO	DO	3/13/2023 14:29	1.87	mg/L
GS-AP-MW-41HS	DTW	Depth to Water Detail	3/13/2023 14:29	26.52	ft
GS-AP-MW-41HS	ORP	Oxidation Reduction Potention	3/13/2023 14:29	11.5	mv
GS-AP-MW-41HS	PH	pH	3/13/2023 14:29	6.49	SU
GS-AP-MW-41HS	TEMP	Temperature	3/13/2023 14:29	15.31	C
GS-AP-MW-41HS	TURB	Turbidity	3/13/2023 14:29	1.06	NTU
GS-AP-MW-41HS	COND	Conductivity	3/13/2023 14:34	430.56	uS/cm
GS-AP-MW-41HS	DO	DO	3/13/2023 14:34	1.78	mg/L
GS-AP-MW-41HS	DTW	Depth to Water Detail	3/13/2023 14:34	26.66	ft
GS-AP-MW-41HS	ORP	Oxidation Reduction Potention	3/13/2023 14:34	7.02	mv
GS-AP-MW-41HS	PH	pH	3/13/2023 14:34	6.49	SU
GS-AP-MW-41HS	TEMP	Temperature	3/13/2023 14:34	15.53	C
GS-AP-MW-41HS	TURB	Turbidity	3/13/2023 14:34	1.04	NTU
GS-AP-MW-41HS	COND	Conductivity	3/13/2023 14:39	428.31	uS/cm
GS-AP-MW-41HS	DO	DO	3/13/2023 14:39	1.71	mg/L
GS-AP-MW-41HS	DTW	Depth to Water Detail	3/13/2023 14:39	26.75	ft
GS-AP-MW-41HS	ORP	Oxidation Reduction Potention	3/13/2023 14:39	8.2	mv
GS-AP-MW-41HS	PH	pH	3/13/2023 14:39	6.49	SU
GS-AP-MW-41HS	SULFIDE	Sulfide	3/13/2023 14:39	0	mg/L
GS-AP-MW-41HS	TEMP	Temperature	3/13/2023 14:39	15.54	C
GS-AP-MW-41HS	TURB	Turbidity	3/13/2023 14:39	0.79	NTU

Field Parameters Summary
Plant Gorgas Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GS-AP-MW-24H	COND	Conductivity	3/15/2023 12:11	407.07	uS/cm
GS-AP-MW-24H	DO	DO	3/15/2023 12:11	0.45	mg/L
GS-AP-MW-24H	DTW	Depth to Water Detail	3/15/2023 12:11	6.89	ft
GS-AP-MW-24H	ORP	Oxidation Reduction Potention	3/15/2023 12:11	-79	mv
GS-AP-MW-24H	PH	pH	3/15/2023 12:11	6.87	SU
GS-AP-MW-24H	TEMP	Temperature	3/15/2023 12:11	17.33	C
GS-AP-MW-24H	TURB	Turbidity	3/15/2023 12:11	2.15	NTU
GS-AP-MW-24H	COND	Conductivity	3/15/2023 12:16	406.46	uS/cm
GS-AP-MW-24H	DO	DO	3/15/2023 12:16	0.3	mg/L
GS-AP-MW-24H	DTW	Depth to Water Detail	3/15/2023 12:16	6.89	ft
GS-AP-MW-24H	ORP	Oxidation Reduction Potention	3/15/2023 12:16	-79.4	mv
GS-AP-MW-24H	PH	pH	3/15/2023 12:16	6.9	SU
GS-AP-MW-24H	TEMP	Temperature	3/15/2023 12:16	17.3	C
GS-AP-MW-24H	TURB	Turbidity	3/15/2023 12:16	2.16	NTU
GS-AP-MW-24H	COND	Conductivity	3/15/2023 12:21	406.7	uS/cm
GS-AP-MW-24H	DO	DO	3/15/2023 12:21	0.32	mg/L
GS-AP-MW-24H	DTW	Depth to Water Detail	3/15/2023 12:21	6.89	ft
GS-AP-MW-24H	ORP	Oxidation Reduction Potention	3/15/2023 12:21	-79.96	mv
GS-AP-MW-24H	PH	pH	3/15/2023 12:21	6.92	SU
GS-AP-MW-24H	TEMP	Temperature	3/15/2023 12:21	17.32	C
GS-AP-MW-24H	TURB	Turbidity	3/15/2023 12:21	2.15	NTU
GS-AP-MW-24H	COND	Conductivity	3/15/2023 12:26	405.33	uS/cm
GS-AP-MW-24H	DO	DO	3/15/2023 12:26	0.33	mg/L
GS-AP-MW-24H	DTW	Depth to Water Detail	3/15/2023 12:26	6.89	ft
GS-AP-MW-24H	ORP	Oxidation Reduction Potention	3/15/2023 12:26	-80.09	mv
GS-AP-MW-24H	PH	pH	3/15/2023 12:26	6.93	SU
GS-AP-MW-24H	SULFIDE	Sulfide	3/15/2023 12:26	0	mg/L
GS-AP-MW-24H	TEMP	Temperature	3/15/2023 12:26	17.2	C
GS-AP-MW-24H	TURB	Turbidity	3/15/2023 12:26	1.86	NTU

Field Parameters Summary
Plant Gorgas Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GS-AP-MW-6V	COND	Conductivity	3/8/2023 11:49	1209.82	uS/cm
GS-AP-MW-6V	DO	DO	3/8/2023 11:49	0.37	mg/L
GS-AP-MW-6V	DTW	Depth to Water Detail	3/8/2023 11:49	86.91	ft
GS-AP-MW-6V	ORP	Oxidation Reduction Potention	3/8/2023 11:49	-121.27	mv
GS-AP-MW-6V	PH	pH	3/8/2023 11:49	8.48	SU
GS-AP-MW-6V	TEMP	Temperature	3/8/2023 11:49	19.34	C
GS-AP-MW-6V	TURB	Turbidity	3/8/2023 11:49	6.95	NTU
GS-AP-MW-6V	COND	Conductivity	3/8/2023 11:54	1091.8	uS/cm
GS-AP-MW-6V	DO	DO	3/8/2023 11:54	0.34	mg/L
GS-AP-MW-6V	DTW	Depth to Water Detail	3/8/2023 11:54	86.96	ft
GS-AP-MW-6V	ORP	Oxidation Reduction Potention	3/8/2023 11:54	-128.37	mv
GS-AP-MW-6V	PH	pH	3/8/2023 11:54	8.5	SU
GS-AP-MW-6V	TEMP	Temperature	3/8/2023 11:54	19.31	C
GS-AP-MW-6V	TURB	Turbidity	3/8/2023 11:54	6.94	NTU
GS-AP-MW-6V	COND	Conductivity	3/8/2023 11:59	834.67	uS/cm
GS-AP-MW-6V	DO	DO	3/8/2023 11:59	0.33	mg/L
GS-AP-MW-6V	DTW	Depth to Water Detail	3/8/2023 11:59	87.09	ft
GS-AP-MW-6V	ORP	Oxidation Reduction Potention	3/8/2023 11:59	-131.19	mv
GS-AP-MW-6V	PH	pH	3/8/2023 11:59	8.51	SU
GS-AP-MW-6V	TEMP	Temperature	3/8/2023 11:59	19.35	C
GS-AP-MW-6V	TURB	Turbidity	3/8/2023 11:59	9.88	NTU
GS-AP-MW-6V	COND	Conductivity	3/8/2023 12:04	969.43	uS/cm
GS-AP-MW-6V	DO	DO	3/8/2023 12:04	0.35	mg/L
GS-AP-MW-6V	DTW	Depth to Water Detail	3/8/2023 12:04	87.21	ft
GS-AP-MW-6V	ORP	Oxidation Reduction Potention	3/8/2023 12:04	-133.84	mv
GS-AP-MW-6V	PH	pH	3/8/2023 12:04	8.51	SU
GS-AP-MW-6V	TEMP	Temperature	3/8/2023 12:04	18.99	C
GS-AP-MW-6V	TURB	Turbidity	3/8/2023 12:04	11.43	NTU
GS-AP-MW-6V	COND	Conductivity	3/8/2023 12:09	808.96	uS/cm
GS-AP-MW-6V	DO	DO	3/8/2023 12:09	0.34	mg/L
GS-AP-MW-6V	DTW	Depth to Water Detail	3/8/2023 12:09	87.31	ft
GS-AP-MW-6V	ORP	Oxidation Reduction Potention	3/8/2023 12:09	-134.52	mv
GS-AP-MW-6V	PH	pH	3/8/2023 12:09	8.52	SU
GS-AP-MW-6V	TEMP	Temperature	3/8/2023 12:09	19.01	C
GS-AP-MW-6V	TURB	Turbidity	3/8/2023 12:09	12.3	NTU
GS-AP-MW-6V	COND	Conductivity	3/8/2023 12:14	775.35	uS/cm
GS-AP-MW-6V	DO	DO	3/8/2023 12:14	0.36	mg/L
GS-AP-MW-6V	DTW	Depth to Water Detail	3/8/2023 12:14	87.41	ft
GS-AP-MW-6V	ORP	Oxidation Reduction Potention	3/8/2023 12:14	-135.93	mv
GS-AP-MW-6V	PH	pH	3/8/2023 12:14	8.52	SU
GS-AP-MW-6V	TEMP	Temperature	3/8/2023 12:14	18.97	C
GS-AP-MW-6V	TURB	Turbidity	3/8/2023 12:14	14.2	NTU
GS-AP-MW-6V	COND	Conductivity	3/8/2023 12:19	879.38	uS/cm
GS-AP-MW-6V	DO	DO	3/8/2023 12:19	0.37	mg/L
GS-AP-MW-6V	DTW	Depth to Water Detail	3/8/2023 12:19	87.49	ft
GS-AP-MW-6V	ORP	Oxidation Reduction Potention	3/8/2023 12:19	-136.75	mv
GS-AP-MW-6V	PH	pH	3/8/2023 12:19	8.54	SU

Field Parameters Summary
Plant Gorgas Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GS-AP-MW-6V	TEMP	Temperature	3/8/2023 12:19	18.99	C
GS-AP-MW-6V	TURB	Turbidity	3/8/2023 12:19	14.7	NTU
GS-AP-MW-6V	COND	Conductivity	3/8/2023 12:24	823.62	uS/cm
GS-AP-MW-6V	DO	DO	3/8/2023 12:24	0.37	mg/L
GS-AP-MW-6V	DTW	Depth to Water Detail	3/8/2023 12:24	87.58	ft
GS-AP-MW-6V	ORP	Oxidation Reduction Potention	3/8/2023 12:24	-138.68	mv
GS-AP-MW-6V	PH	pH	3/8/2023 12:24	8.56	SU
GS-AP-MW-6V	TEMP	Temperature	3/8/2023 12:24	18.93	C
GS-AP-MW-6V	TURB	Turbidity	3/8/2023 12:24	14.4	NTU
GS-AP-MW-6V	COND	Conductivity	3/8/2023 12:27	1347.75	uS/cm
GS-AP-MW-6V	DO	DO	3/8/2023 12:27	0.39	mg/L
GS-AP-MW-6V	DTW	Depth to Water Detail	3/8/2023 12:27	87.62	ft
GS-AP-MW-6V	ORP	Oxidation Reduction Potention	3/8/2023 12:27	-138.84	mv
GS-AP-MW-6V	PH	pH	3/8/2023 12:27	8.56	SU
GS-AP-MW-6V	TEMP	Temperature	3/8/2023 12:27	18.83	C
GS-AP-MW-6V	TURB	Turbidity	3/8/2023 12:27	13.9	NTU
GS-AP-MW-6V	COND	Conductivity	3/8/2023 12:32	1295.29	uS/cm
GS-AP-MW-6V	DO	DO	3/8/2023 12:32	0.39	mg/L
GS-AP-MW-6V	DTW	Depth to Water Detail	3/8/2023 12:32	87.79	ft
GS-AP-MW-6V	ORP	Oxidation Reduction Potention	3/8/2023 12:32	-138.93	mv
GS-AP-MW-6V	PH	pH	3/8/2023 12:32	8.57	SU
GS-AP-MW-6V	TEMP	Temperature	3/8/2023 12:32	19.09	C
GS-AP-MW-6V	TURB	Turbidity	3/8/2023 12:32	14.6	NTU
GS-AP-MW-6V	COND	Conductivity	3/8/2023 12:37	1222.37	uS/cm
GS-AP-MW-6V	DO	DO	3/8/2023 12:37	0.39	mg/L
GS-AP-MW-6V	DTW	Depth to Water Detail	3/8/2023 12:37	87.91	ft
GS-AP-MW-6V	ORP	Oxidation Reduction Potention	3/8/2023 12:37	-139.81	mv
GS-AP-MW-6V	PH	pH	3/8/2023 12:37	8.61	SU
GS-AP-MW-6V	TEMP	Temperature	3/8/2023 12:37	19.03	C
GS-AP-MW-6V	TURB	Turbidity	3/8/2023 12:37	14.3	NTU
GS-AP-MW-6V	COND	Conductivity	3/8/2023 12:42	1364.82	uS/cm
GS-AP-MW-6V	DO	DO	3/8/2023 12:42	0.64	mg/L
GS-AP-MW-6V	DTW	Depth to Water Detail	3/8/2023 12:42	88.03	ft
GS-AP-MW-6V	ORP	Oxidation Reduction Potention	3/8/2023 12:42	-128.63	mv
GS-AP-MW-6V	PH	pH	3/8/2023 12:42	8.64	SU
GS-AP-MW-6V	TEMP	Temperature	3/8/2023 12:42	18.58	C
GS-AP-MW-6V	TURB	Turbidity	3/8/2023 12:42	13.8	NTU
GS-AP-MW-6V	COND	Conductivity	3/8/2023 12:47	1360.56	uS/cm
GS-AP-MW-6V	DO	DO	3/8/2023 12:47	0.58	mg/L
GS-AP-MW-6V	DTW	Depth to Water Detail	3/8/2023 12:47	88.13	ft
GS-AP-MW-6V	ORP	Oxidation Reduction Potention	3/8/2023 12:47	-135.76	mv
GS-AP-MW-6V	PH	pH	3/8/2023 12:47	8.65	SU
GS-AP-MW-6V	TEMP	Temperature	3/8/2023 12:47	18.49	C
GS-AP-MW-6V	TURB	Turbidity	3/8/2023 12:47	14.9	NTU
GS-AP-MW-6V	COND	Conductivity	3/8/2023 12:52	1368.1	uS/cm
GS-AP-MW-6V	DO	DO	3/8/2023 12:52	0.58	mg/L
GS-AP-MW-6V	DTW	Depth to Water Detail	3/8/2023 12:52	88.23	ft

Field Parameters Summary
Plant Gorgas Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GS-AP-MW-6V	ORP	Oxidation Reduction Potention	3/8/2023 12:52	-137.28	mv
GS-AP-MW-6V	PH	pH	3/8/2023 12:52	8.65	SU
GS-AP-MW-6V	TEMP	Temperature	3/8/2023 12:52	18.38	C
GS-AP-MW-6V	TURB	Turbidity	3/8/2023 12:52	15.7	NTU
GS-AP-MW-6V	COND	Conductivity	3/8/2023 12:57	1364.42	uS/cm
GS-AP-MW-6V	DO	DO	3/8/2023 12:57	0.57	mg/L
GS-AP-MW-6V	DTW	Depth to Water Detail	3/8/2023 12:57	88.3	ft
GS-AP-MW-6V	ORP	Oxidation Reduction Potention	3/8/2023 12:57	-136.95	mv
GS-AP-MW-6V	PH	pH	3/8/2023 12:57	8.64	SU
GS-AP-MW-6V	TEMP	Temperature	3/8/2023 12:57	18.29	C
GS-AP-MW-6V	TURB	Turbidity	3/8/2023 12:57	16.1	NTU
GS-AP-MW-6V	COND	Conductivity	3/8/2023 13:02	1360.73	uS/cm
GS-AP-MW-6V	DO	DO	3/8/2023 13:02	0.61	mg/L
GS-AP-MW-6V	DTW	Depth to Water Detail	3/8/2023 13:02	88.3	ft
GS-AP-MW-6V	ORP	Oxidation Reduction Potention	3/8/2023 13:02	-137.48	mv
GS-AP-MW-6V	PH	pH	3/8/2023 13:02	8.64	SU
GS-AP-MW-6V	TEMP	Temperature	3/8/2023 13:02	18.36	C
GS-AP-MW-6V	TURB	Turbidity	3/8/2023 13:02	16.8	NTU
GS-AP-MW-6V	COND	Conductivity	3/8/2023 13:07	1369.01	uS/cm
GS-AP-MW-6V	DO	DO	3/8/2023 13:07	0.57	mg/L
GS-AP-MW-6V	DTW	Depth to Water Detail	3/8/2023 13:07	88.69	ft
GS-AP-MW-6V	ORP	Oxidation Reduction Potention	3/8/2023 13:07	-136.75	mv
GS-AP-MW-6V	PH	pH	3/8/2023 13:07	8.64	SU
GS-AP-MW-6V	TEMP	Temperature	3/8/2023 13:07	18.38	C
GS-AP-MW-6V	TURB	Turbidity	3/8/2023 13:07	15.8	NTU
GS-AP-MW-6V	COND	Conductivity	3/8/2023 13:12	1363.22	uS/cm
GS-AP-MW-6V	DO	DO	3/8/2023 13:12	0.61	mg/L
GS-AP-MW-6V	DTW	Depth to Water Detail	3/8/2023 13:12	88.82	ft
GS-AP-MW-6V	ORP	Oxidation Reduction Potention	3/8/2023 13:12	-136.87	mv
GS-AP-MW-6V	PH	pH	3/8/2023 13:12	8.64	SU
GS-AP-MW-6V	TEMP	Temperature	3/8/2023 13:12	18.43	C
GS-AP-MW-6V	TURB	Turbidity	3/8/2023 13:12	15.6	NTU
GS-AP-MW-6V	COND	Conductivity	3/8/2023 13:17	1363.11	uS/cm
GS-AP-MW-6V	DO	DO	3/8/2023 13:17	0.61	mg/L
GS-AP-MW-6V	DTW	Depth to Water Detail	3/8/2023 13:17	88.96	ft
GS-AP-MW-6V	ORP	Oxidation Reduction Potention	3/8/2023 13:17	-136.67	mv
GS-AP-MW-6V	PH	pH	3/8/2023 13:17	8.65	SU
GS-AP-MW-6V	TEMP	Temperature	3/8/2023 13:17	18.47	C
GS-AP-MW-6V	TURB	Turbidity	3/8/2023 13:17	17	NTU
GS-AP-MW-6V	COND	Conductivity	3/8/2023 13:22	1365.97	uS/cm
GS-AP-MW-6V	DO	DO	3/8/2023 13:22	0.64	mg/L
GS-AP-MW-6V	DTW	Depth to Water Detail	3/8/2023 13:22	89.07	ft
GS-AP-MW-6V	ORP	Oxidation Reduction Potention	3/8/2023 13:22	-136.78	mv
GS-AP-MW-6V	PH	pH	3/8/2023 13:22	8.65	SU
GS-AP-MW-6V	TEMP	Temperature	3/8/2023 13:22	18.51	C
GS-AP-MW-6V	TURB	Turbidity	3/8/2023 13:22	15.8	NTU
GS-AP-MW-6V	COND	Conductivity	3/8/2023 13:27	1372.18	uS/cm

Field Parameters Summary
Plant Gorgas Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GS-AP-MW-6V	DO	DO	3/8/2023 13:27	0.58	mg/L
GS-AP-MW-6V	DTW	Depth to Water Detail	3/8/2023 13:27	89.24	ft
GS-AP-MW-6V	ORP	Oxidation Reduction Potention	3/8/2023 13:27	-138.51	mv
GS-AP-MW-6V	PH	pH	3/8/2023 13:27	8.67	SU
GS-AP-MW-6V	TEMP	Temperature	3/8/2023 13:27	18.49	C
GS-AP-MW-6V	TURB	Turbidity	3/8/2023 13:27	15	NTU
GS-AP-MW-6V	COND	Conductivity	3/8/2023 13:32	1367.19	uS/cm
GS-AP-MW-6V	DO	DO	3/8/2023 13:32	0.64	mg/L
GS-AP-MW-6V	DTW	Depth to Water Detail	3/8/2023 13:32	89.46	ft
GS-AP-MW-6V	ORP	Oxidation Reduction Potention	3/8/2023 13:32	-138.63	mv
GS-AP-MW-6V	PH	pH	3/8/2023 13:32	8.67	SU
GS-AP-MW-6V	TEMP	Temperature	3/8/2023 13:32	18.61	C
GS-AP-MW-6V	TURB	Turbidity	3/8/2023 13:32	15.1	NTU
GS-AP-MW-6V	COND	Conductivity	3/8/2023 13:37	1372.96	uS/cm
GS-AP-MW-6V	DO	DO	3/8/2023 13:37	0.66	mg/L
GS-AP-MW-6V	DTW	Depth to Water Detail	3/8/2023 13:37	89.79	ft
GS-AP-MW-6V	ORP	Oxidation Reduction Potention	3/8/2023 13:37	-138.32	mv
GS-AP-MW-6V	PH	pH	3/8/2023 13:37	8.68	SU
GS-AP-MW-6V	TEMP	Temperature	3/8/2023 13:37	18.71	C
GS-AP-MW-6V	TURB	Turbidity	3/8/2023 13:37	15.6	NTU
GS-AP-MW-6V	COND	Conductivity	3/8/2023 13:42	1363.6	uS/cm
GS-AP-MW-6V	DO	DO	3/8/2023 13:42	0.63	mg/L
GS-AP-MW-6V	DTW	Depth to Water Detail	3/8/2023 13:42	89.9	ft
GS-AP-MW-6V	ORP	Oxidation Reduction Potention	3/8/2023 13:42	-139.21	mv
GS-AP-MW-6V	PH	pH	3/8/2023 13:42	8.7	SU
GS-AP-MW-6V	TEMP	Temperature	3/8/2023 13:42	18.54	C
GS-AP-MW-6V	TURB	Turbidity	3/8/2023 13:42	16.1	NTU
GS-AP-MW-6V	COND	Conductivity	3/8/2023 13:47	1359.41	uS/cm
GS-AP-MW-6V	DO	DO	3/8/2023 13:47	0.57	mg/L
GS-AP-MW-6V	DTW	Depth to Water Detail	3/8/2023 13:47	89.99	ft
GS-AP-MW-6V	ORP	Oxidation Reduction Potention	3/8/2023 13:47	-140.29	mv
GS-AP-MW-6V	PH	pH	3/8/2023 13:47	8.7	SU
GS-AP-MW-6V	SULFIDE	Sulfide	3/8/2023 13:47	0	mg/L
GS-AP-MW-6V	TEMP	Temperature	3/8/2023 13:47	18.49	C
GS-AP-MW-6V	TURB	Turbidity	3/8/2023 13:47	15.8	NTU

Field Parameters Summary
Plant Gorgas Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GS-AP-MW-01R	COND	Conductivity	3/27/2023 11:42	508.32	uS/cm
GS-AP-MW-01R	DO	DO	3/27/2023 11:42	0.02	mg/L
GS-AP-MW-01R	DTW	Depth to Water Detail	3/27/2023 11:42	189	ft
GS-AP-MW-01R	ORP	Oxidation Reduction Potention	3/27/2023 11:42	-236.92	mv
GS-AP-MW-01R	PH	pH	3/27/2023 11:42	8.54	SU
GS-AP-MW-01R	TEMP	Temperature	3/27/2023 11:42	17.53	C
GS-AP-MW-01R	TURB	Turbidity	3/27/2023 11:42	2.25	NTU
GS-AP-MW-01R	COND	Conductivity	3/27/2023 11:47	505.97	uS/cm
GS-AP-MW-01R	DO	DO	3/27/2023 11:47	0.06	mg/L
GS-AP-MW-01R	DTW	Depth to Water Detail	3/27/2023 11:47	190.9	ft
GS-AP-MW-01R	ORP	Oxidation Reduction Potention	3/27/2023 11:47	-237.38	mv
GS-AP-MW-01R	PH	pH	3/27/2023 11:47	8.56	SU
GS-AP-MW-01R	TEMP	Temperature	3/27/2023 11:47	18.3	C
GS-AP-MW-01R	TURB	Turbidity	3/27/2023 11:47	1.94	NTU
GS-AP-MW-01R	COND	Conductivity	3/27/2023 11:52	497.89	uS/cm
GS-AP-MW-01R	DO	DO	3/27/2023 11:52	0.03	mg/L
GS-AP-MW-01R	DTW	Depth to Water Detail	3/27/2023 11:52	194	ft
GS-AP-MW-01R	ORP	Oxidation Reduction Potention	3/27/2023 11:52	-243.11	mv
GS-AP-MW-01R	PH	pH	3/27/2023 11:52	8.66	SU
GS-AP-MW-01R	TEMP	Temperature	3/27/2023 11:52	18.14	C
GS-AP-MW-01R	TURB	Turbidity	3/27/2023 11:52	5.57	NTU
GS-AP-MW-01R	COND	Conductivity	3/27/2023 11:57	503.03	uS/cm
GS-AP-MW-01R	DO	DO	3/27/2023 11:57	0.04	mg/L
GS-AP-MW-01R	DTW	Depth to Water Detail	3/27/2023 11:57	196	ft
GS-AP-MW-01R	ORP	Oxidation Reduction Potention	3/27/2023 11:57	-242.07	mv
GS-AP-MW-01R	PH	pH	3/27/2023 11:57	8.61	SU
GS-AP-MW-01R	TEMP	Temperature	3/27/2023 11:57	17.97	C
GS-AP-MW-01R	TURB	Turbidity	3/27/2023 11:57	2.25	NTU
GS-AP-MW-01R	COND	Conductivity	3/27/2023 12:02	504	uS/cm
GS-AP-MW-01R	DO	DO	3/27/2023 12:02	0	mg/L
GS-AP-MW-01R	DTW	Depth to Water Detail	3/27/2023 12:02	200.7	ft
GS-AP-MW-01R	ORP	Oxidation Reduction Potention	3/27/2023 12:02	-245.63	mv
GS-AP-MW-01R	PH	pH	3/27/2023 12:02	8.63	SU
GS-AP-MW-01R	TEMP	Temperature	3/27/2023 12:02	17.8	C
GS-AP-MW-01R	TURB	Turbidity	3/27/2023 12:02	3.41	NTU
GS-AP-MW-01R	COND	Conductivity	3/27/2023 12:07	507.72	uS/cm
GS-AP-MW-01R	DO	DO	3/27/2023 12:07	0	mg/L
GS-AP-MW-01R	DTW	Depth to Water Detail	3/27/2023 12:07	203.3	ft
GS-AP-MW-01R	ORP	Oxidation Reduction Potention	3/27/2023 12:07	-248.15	mv
GS-AP-MW-01R	PH	pH	3/27/2023 12:07	8.66	SU
GS-AP-MW-01R	TEMP	Temperature	3/27/2023 12:07	17.96	C
GS-AP-MW-01R	TURB	Turbidity	3/27/2023 12:07	8.95	NTU
GS-AP-MW-01R	COND	Conductivity	3/27/2023 12:12	507.61	uS/cm
GS-AP-MW-01R	DO	DO	3/27/2023 12:12	0	mg/L
GS-AP-MW-01R	DTW	Depth to Water Detail	3/27/2023 12:12	206.6	ft
GS-AP-MW-01R	ORP	Oxidation Reduction Potention	3/27/2023 12:12	-253.33	mv
GS-AP-MW-01R	PH	pH	3/27/2023 12:12	8.74	SU

Field Parameters Summary
Plant Gorgas Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GS-AP-MW-01R	TEMP	Temperature	3/27/2023 12:12	18.03	C
GS-AP-MW-01R	TURB	Turbidity	3/27/2023 12:12	6.84	NTU
GS-AP-MW-01R	COND	Conductivity	3/27/2023 12:17	513.29	uS/cm
GS-AP-MW-01R	DO	DO	3/27/2023 12:17	0	mg/L
GS-AP-MW-01R	DTW	Depth to Water Detail	3/27/2023 12:17	209.45	ft
GS-AP-MW-01R	ORP	Oxidation Reduction Potention	3/27/2023 12:17	-252.61	mv
GS-AP-MW-01R	PH	pH	3/27/2023 12:17	8.71	SU
GS-AP-MW-01R	TEMP	Temperature	3/27/2023 12:17	17.68	C
GS-AP-MW-01R	TURB	Turbidity	3/27/2023 12:17	4.57	NTU
GS-AP-MW-01R	COND	Conductivity	3/27/2023 12:22	512.92	uS/cm
GS-AP-MW-01R	DO	DO	3/27/2023 12:22	0	mg/L
GS-AP-MW-01R	DTW	Depth to Water Detail	3/27/2023 12:22	212.1	ft
GS-AP-MW-01R	ORP	Oxidation Reduction Potention	3/27/2023 12:22	-254.68	mv
GS-AP-MW-01R	PH	pH	3/27/2023 12:22	8.75	SU
GS-AP-MW-01R	TEMP	Temperature	3/27/2023 12:22	17.92	C
GS-AP-MW-01R	TURB	Turbidity	3/27/2023 12:22	4.72	NTU
GS-AP-MW-01R	COND	Conductivity	3/27/2023 12:27	517.86	uS/cm
GS-AP-MW-01R	DO	DO	3/27/2023 12:27	0.01	mg/L
GS-AP-MW-01R	DTW	Depth to Water Detail	3/27/2023 12:27	214.2	ft
GS-AP-MW-01R	ORP	Oxidation Reduction Potention	3/27/2023 12:27	-249.9	mv
GS-AP-MW-01R	PH	pH	3/27/2023 12:27	8.76	SU
GS-AP-MW-01R	TEMP	Temperature	3/27/2023 12:27	18.04	C
GS-AP-MW-01R	TURB	Turbidity	3/27/2023 12:27	5.2	NTU
GS-AP-MW-01R	COND	Conductivity	3/27/2023 12:32	530.2	uS/cm
GS-AP-MW-01R	DO	DO	3/27/2023 12:32	0.02	mg/L
GS-AP-MW-01R	DTW	Depth to Water Detail	3/27/2023 12:32	216.45	ft
GS-AP-MW-01R	ORP	Oxidation Reduction Potention	3/27/2023 12:32	-247.79	mv
GS-AP-MW-01R	PH	pH	3/27/2023 12:32	8.76	SU
GS-AP-MW-01R	TEMP	Temperature	3/27/2023 12:32	18.14	C
GS-AP-MW-01R	TURB	Turbidity	3/27/2023 12:32	6.66	NTU
GS-AP-MW-01R	COND	Conductivity	3/27/2023 12:37	526.16	uS/cm
GS-AP-MW-01R	DO	DO	3/27/2023 12:37	0.03	mg/L
GS-AP-MW-01R	DTW	Depth to Water Detail	3/27/2023 12:37	219.45	ft
GS-AP-MW-01R	ORP	Oxidation Reduction Potention	3/27/2023 12:37	-246.02	mv
GS-AP-MW-01R	PH	pH	3/27/2023 12:37	8.77	SU
GS-AP-MW-01R	TEMP	Temperature	3/27/2023 12:37	17.78	C
GS-AP-MW-01R	TURB	Turbidity	3/27/2023 12:37	5.47	NTU
GS-AP-MW-01R	COND	Conductivity	3/27/2023 12:42	526.96	uS/cm
GS-AP-MW-01R	DO	DO	3/27/2023 12:42	0.06	mg/L
GS-AP-MW-01R	DTW	Depth to Water Detail	3/27/2023 12:42	220.5	ft
GS-AP-MW-01R	ORP	Oxidation Reduction Potention	3/27/2023 12:42	-243.21	mv
GS-AP-MW-01R	PH	pH	3/27/2023 12:42	8.79	SU
GS-AP-MW-01R	TEMP	Temperature	3/27/2023 12:42	18.42	C
GS-AP-MW-01R	TURB	Turbidity	3/27/2023 12:42	7.54	NTU
GS-AP-MW-01R	COND	Conductivity	3/27/2023 12:47	507.13	uS/cm
GS-AP-MW-01R	DO	DO	3/27/2023 12:47	0.02	mg/L
GS-AP-MW-01R	DTW	Depth to Water Detail	3/27/2023 12:47	220.5	ft

Field Parameters Summary
Plant Gorgas Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GS-AP-MW-01R	ORP	Oxidation Reduction Potention	3/27/2023 12:47	-247.44	mv
GS-AP-MW-01R	PH	pH	3/27/2023 12:47	8.83	SU
GS-AP-MW-01R	TEMP	Temperature	3/27/2023 12:47	17.75	C
GS-AP-MW-01R	TURB	Turbidity	3/27/2023 12:47	7.54	NTU
GS-AP-MW-01R	COND	Conductivity	3/27/2023 12:50	502.91	uS/cm
GS-AP-MW-01R	DO	DO	3/27/2023 12:50	0.04	mg/L
GS-AP-MW-01R	DTW	Depth to Water Detail	3/27/2023 12:50	220.8	ft
GS-AP-MW-01R	ORP	Oxidation Reduction Potention	3/27/2023 12:50	-250.75	mv
GS-AP-MW-01R	PH	pH	3/27/2023 12:50	8.87	SU
GS-AP-MW-01R	TEMP	Temperature	3/27/2023 12:50	18.66	C
GS-AP-MW-01R	TURB	Turbidity	3/27/2023 12:50	7.54	NTU
GS-AP-MW-01R	COND	Conductivity	3/27/2023 12:55	507.66	uS/cm
GS-AP-MW-01R	DO	DO	3/27/2023 12:55	0.05	mg/L
GS-AP-MW-01R	DTW	Depth to Water Detail	3/27/2023 12:55	219.8	ft
GS-AP-MW-01R	ORP	Oxidation Reduction Potention	3/27/2023 12:55	-249.65	mv
GS-AP-MW-01R	PH	pH	3/27/2023 12:55	8.85	SU
GS-AP-MW-01R	TEMP	Temperature	3/27/2023 12:55	19.49	C
GS-AP-MW-01R	TURB	Turbidity	3/27/2023 12:55	8.04	NTU
GS-AP-MW-01R	COND	Conductivity	3/27/2023 13:00	510.66	uS/cm
GS-AP-MW-01R	DO	DO	3/27/2023 13:00	0.06	mg/L
GS-AP-MW-01R	DTW	Depth to Water Detail	3/27/2023 13:00	218.85	ft
GS-AP-MW-01R	ORP	Oxidation Reduction Potention	3/27/2023 13:00	-245.17	mv
GS-AP-MW-01R	PH	pH	3/27/2023 13:00	8.84	SU
GS-AP-MW-01R	SULFIDE	Sulfide	3/27/2023 13:00	0	mg/L
GS-AP-MW-01R	TEMP	Temperature	3/27/2023 13:00	19.2	C
GS-AP-MW-01R	TURB	Turbidity	3/27/2023 13:00	7.14	NTU

Field Parameters Summary
Plant Gorgas Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GS-AP-MW-46	COND	Conductivity	3/27/2023 10:26	864.98	uS/cm
GS-AP-MW-46	DO	DO	3/27/2023 10:26	0.13	mg/L
GS-AP-MW-46	DTW	Depth to Water Detail	3/27/2023 10:26	132.48	ft
GS-AP-MW-46	ORP	Oxidation Reduction Potention	3/27/2023 10:26	-303.27	mv
GS-AP-MW-46	PH	pH	3/27/2023 10:26	8.77	SU
GS-AP-MW-46	TEMP	Temperature	3/27/2023 10:26	17.92	C
GS-AP-MW-46	TURB	Turbidity	3/27/2023 10:26	1.93	NTU
GS-AP-MW-46	COND	Conductivity	3/27/2023 10:31	859.37	uS/cm
GS-AP-MW-46	DO	DO	3/27/2023 10:31	0.08	mg/L
GS-AP-MW-46	DTW	Depth to Water Detail	3/27/2023 10:31	132.48	ft
GS-AP-MW-46	ORP	Oxidation Reduction Potention	3/27/2023 10:31	-313.5	mv
GS-AP-MW-46	PH	pH	3/27/2023 10:31	8.79	SU
GS-AP-MW-46	TEMP	Temperature	3/27/2023 10:31	17.81	C
GS-AP-MW-46	TURB	Turbidity	3/27/2023 10:31	1.9	NTU
GS-AP-MW-46	COND	Conductivity	3/27/2023 10:36	861.28	uS/cm
GS-AP-MW-46	DO	DO	3/27/2023 10:36	0.07	mg/L
GS-AP-MW-46	DTW	Depth to Water Detail	3/27/2023 10:36	132.65	ft
GS-AP-MW-46	ORP	Oxidation Reduction Potention	3/27/2023 10:36	-317.72	mv
GS-AP-MW-46	PH	pH	3/27/2023 10:36	8.81	SU
GS-AP-MW-46	TEMP	Temperature	3/27/2023 10:36	17.81	C
GS-AP-MW-46	TURB	Turbidity	3/27/2023 10:36	1.49	NTU
GS-AP-MW-46	COND	Conductivity	3/27/2023 10:41	862.06	uS/cm
GS-AP-MW-46	DO	DO	3/27/2023 10:41	0.05	mg/L
GS-AP-MW-46	DTW	Depth to Water Detail	3/27/2023 10:41	132.75	ft
GS-AP-MW-46	ORP	Oxidation Reduction Potention	3/27/2023 10:41	-323.09	mv
GS-AP-MW-46	PH	pH	3/27/2023 10:41	8.81	SU
GS-AP-MW-46	SULFIDE	Sulfide	3/27/2023 10:41	3	mg/L
GS-AP-MW-46	TEMP	Temperature	3/27/2023 10:41	17.93	C
GS-AP-MW-46	TURB	Turbidity	3/27/2023 10:41	1.4	NTU

Field Parameters Summary
Plant Gorgas Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GS-AP-MW-31H	COND	Conductivity	3/27/2023 13:53	951.01	uS/cm
GS-AP-MW-31H	DO	DO	3/27/2023 13:53	0.09	mg/L
GS-AP-MW-31H	DTW	Depth to Water Detail	3/27/2023 13:53	240.15	ft
GS-AP-MW-31H	ORP	Oxidation Reduction Potention	3/27/2023 13:53	-240.54	mv
GS-AP-MW-31H	PH	pH	3/27/2023 13:53	8.26	SU
GS-AP-MW-31H	TEMP	Temperature	3/27/2023 13:53	18.72	C
GS-AP-MW-31H	TURB	Turbidity	3/27/2023 13:53	2.72	NTU
GS-AP-MW-31H	COND	Conductivity	3/27/2023 13:58	928.72	uS/cm
GS-AP-MW-31H	DO	DO	3/27/2023 13:58	0.06	mg/L
GS-AP-MW-31H	DTW	Depth to Water Detail	3/27/2023 13:58	242.2	ft
GS-AP-MW-31H	ORP	Oxidation Reduction Potention	3/27/2023 13:58	-256.04	mv
GS-AP-MW-31H	PH	pH	3/27/2023 13:58	8.34	SU
GS-AP-MW-31H	TEMP	Temperature	3/27/2023 13:58	18.34	C
GS-AP-MW-31H	TURB	Turbidity	3/27/2023 13:58	2.25	NTU
GS-AP-MW-31H	COND	Conductivity	3/27/2023 14:03	882.29	uS/cm
GS-AP-MW-31H	DO	DO	3/27/2023 14:03	0.05	mg/L
GS-AP-MW-31H	DTW	Depth to Water Detail	3/27/2023 14:03	242.8	ft
GS-AP-MW-31H	ORP	Oxidation Reduction Potention	3/27/2023 14:03	-268.87	mv
GS-AP-MW-31H	PH	pH	3/27/2023 14:03	8.44	SU
GS-AP-MW-31H	TEMP	Temperature	3/27/2023 14:03	18.62	C
GS-AP-MW-31H	TURB	Turbidity	3/27/2023 14:03	2.21	NTU
GS-AP-MW-31H	COND	Conductivity	3/27/2023 14:08	831.5	uS/cm
GS-AP-MW-31H	DO	DO	3/27/2023 14:08	0.03	mg/L
GS-AP-MW-31H	DTW	Depth to Water Detail	3/27/2023 14:08	244.02	ft
GS-AP-MW-31H	ORP	Oxidation Reduction Potention	3/27/2023 14:08	-276.5	mv
GS-AP-MW-31H	PH	pH	3/27/2023 14:08	8.5	SU
GS-AP-MW-31H	TEMP	Temperature	3/27/2023 14:08	18.46	C
GS-AP-MW-31H	TURB	Turbidity	3/27/2023 14:08	2.14	NTU
GS-AP-MW-31H	COND	Conductivity	3/27/2023 14:13	792.22	uS/cm
GS-AP-MW-31H	DO	DO	3/27/2023 14:13	0.03	mg/L
GS-AP-MW-31H	DTW	Depth to Water Detail	3/27/2023 14:13	244.8	ft
GS-AP-MW-31H	ORP	Oxidation Reduction Potention	3/27/2023 14:13	-283.23	mv
GS-AP-MW-31H	PH	pH	3/27/2023 14:13	8.56	SU
GS-AP-MW-31H	TEMP	Temperature	3/27/2023 14:13	18.81	C
GS-AP-MW-31H	TURB	Turbidity	3/27/2023 14:13	1.75	NTU
GS-AP-MW-31H	COND	Conductivity	3/27/2023 14:18	754.74	uS/cm
GS-AP-MW-31H	DO	DO	3/27/2023 14:18	0.02	mg/L
GS-AP-MW-31H	DTW	Depth to Water Detail	3/27/2023 14:18	245.4	ft
GS-AP-MW-31H	ORP	Oxidation Reduction Potention	3/27/2023 14:18	-286.69	mv
GS-AP-MW-31H	PH	pH	3/27/2023 14:18	8.57	SU
GS-AP-MW-31H	TEMP	Temperature	3/27/2023 14:18	18.59	C
GS-AP-MW-31H	TURB	Turbidity	3/27/2023 14:18	1.68	NTU
GS-AP-MW-31H	COND	Conductivity	3/27/2023 14:23	730.05	uS/cm
GS-AP-MW-31H	DO	DO	3/27/2023 14:23	0.03	mg/L
GS-AP-MW-31H	DTW	Depth to Water Detail	3/27/2023 14:23	245.4	ft
GS-AP-MW-31H	ORP	Oxidation Reduction Potention	3/27/2023 14:23	-289.79	mv
GS-AP-MW-31H	PH	pH	3/27/2023 14:23	8.6	SU

Field Parameters Summary
Plant Gorgas Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GS-AP-MW-31H	TEMP	Temperature	3/27/2023 14:23	19.18	C
GS-AP-MW-31H	TURB	Turbidity	3/27/2023 14:23	2.01	NTU
GS-AP-MW-31H	COND	Conductivity	3/27/2023 14:28	711.96	uS/cm
GS-AP-MW-31H	DO	DO	3/27/2023 14:28	0.06	mg/L
GS-AP-MW-31H	DTW	Depth to Water Detail	3/27/2023 14:28	245.4	ft
GS-AP-MW-31H	ORP	Oxidation Reduction Potention	3/27/2023 14:28	-289.63	mv
GS-AP-MW-31H	PH	pH	3/27/2023 14:28	8.63	SU
GS-AP-MW-31H	TEMP	Temperature	3/27/2023 14:28	20.34	C
GS-AP-MW-31H	TURB	Turbidity	3/27/2023 14:28	2.19	NTU
GS-AP-MW-31H	COND	Conductivity	3/27/2023 14:33	639.35	uS/cm
GS-AP-MW-31H	DO	DO	3/27/2023 14:33	0.02	mg/L
GS-AP-MW-31H	DTW	Depth to Water Detail	3/27/2023 14:33	245.4	ft
GS-AP-MW-31H	ORP	Oxidation Reduction Potention	3/27/2023 14:33	-298.04	mv
GS-AP-MW-31H	PH	pH	3/27/2023 14:33	8.74	SU
GS-AP-MW-31H	TEMP	Temperature	3/27/2023 14:33	18.82	C
GS-AP-MW-31H	TURB	Turbidity	3/27/2023 14:33	1.84	NTU
GS-AP-MW-31H	COND	Conductivity	3/27/2023 14:38	671.07	uS/cm
GS-AP-MW-31H	DO	DO	3/27/2023 14:38	0.01	mg/L
GS-AP-MW-31H	DTW	Depth to Water Detail	3/27/2023 14:38	245.4	ft
GS-AP-MW-31H	ORP	Oxidation Reduction Potention	3/27/2023 14:38	-304.93	mv
GS-AP-MW-31H	PH	pH	3/27/2023 14:38	8.8	SU
GS-AP-MW-31H	TEMP	Temperature	3/27/2023 14:38	18.79	C
GS-AP-MW-31H	TURB	Turbidity	3/27/2023 14:38	2.02	NTU
GS-AP-MW-31H	COND	Conductivity	3/27/2023 14:43	671.99	uS/cm
GS-AP-MW-31H	DO	DO	3/27/2023 14:43	0.01	mg/L
GS-AP-MW-31H	DTW	Depth to Water Detail	3/27/2023 14:43	245.65	ft
GS-AP-MW-31H	ORP	Oxidation Reduction Potention	3/27/2023 14:43	-307.75	mv
GS-AP-MW-31H	PH	pH	3/27/2023 14:43	8.83	SU
GS-AP-MW-31H	TEMP	Temperature	3/27/2023 14:43	18.55	C
GS-AP-MW-31H	TURB	Turbidity	3/27/2023 14:43	1.82	NTU
GS-AP-MW-31H	COND	Conductivity	3/27/2023 14:48	666.33	uS/cm
GS-AP-MW-31H	DO	DO	3/27/2023 14:48	0.01	mg/L
GS-AP-MW-31H	DTW	Depth to Water Detail	3/27/2023 14:48	246.1	ft
GS-AP-MW-31H	ORP	Oxidation Reduction Potention	3/27/2023 14:48	-310.96	mv
GS-AP-MW-31H	PH	pH	3/27/2023 14:48	8.85	SU
GS-AP-MW-31H	TEMP	Temperature	3/27/2023 14:48	19	C
GS-AP-MW-31H	TURB	Turbidity	3/27/2023 14:48	2.35	NTU
GS-AP-MW-31H	COND	Conductivity	3/27/2023 14:53	665.52	uS/cm
GS-AP-MW-31H	DO	DO	3/27/2023 14:53	0.03	mg/L
GS-AP-MW-31H	DTW	Depth to Water Detail	3/27/2023 14:53	245.85	ft
GS-AP-MW-31H	ORP	Oxidation Reduction Potention	3/27/2023 14:53	-309.57	mv
GS-AP-MW-31H	PH	pH	3/27/2023 14:53	8.85	SU
GS-AP-MW-31H	TEMP	Temperature	3/27/2023 14:53	19.73	C
GS-AP-MW-31H	TURB	Turbidity	3/27/2023 14:53	1.74	NTU
GS-AP-MW-31H	COND	Conductivity	3/27/2023 14:58	641.31	uS/cm
GS-AP-MW-31H	DO	DO	3/27/2023 14:58	0.03	mg/L
GS-AP-MW-31H	DTW	Depth to Water Detail	3/27/2023 14:58	245.15	ft

Field Parameters Summary
Plant Gorgas Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GS-AP-MW-31H	ORP	Oxidation Reduction Potention	3/27/2023 14:58	-308.74	mv
GS-AP-MW-31H	PH	pH	3/27/2023 14:58	8.86	SU
GS-AP-MW-31H	SULFIDE	Sulfide	3/27/2023 14:58	2	mg/L
GS-AP-MW-31H	TEMP	Temperature	3/27/2023 14:58	19.58	C
GS-AP-MW-31H	TURB	Turbidity	3/27/2023 14:58	2.13	NTU

Field Parameters Summary
Plant Gorgas Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GS-AP-MW-31V	COND	Conductivity	3/27/2023 15:43	2659.98	uS/cm
GS-AP-MW-31V	DO	DO	3/27/2023 15:43	0.13	mg/L
GS-AP-MW-31V	DTW	Depth to Water Detail	3/27/2023 15:43	294.2	ft
GS-AP-MW-31V	ORP	Oxidation Reduction Potention	3/27/2023 15:43	-159.44	mv
GS-AP-MW-31V	PH	pH	3/27/2023 15:43	7.61	SU
GS-AP-MW-31V	TEMP	Temperature	3/27/2023 15:43	17.88	C
GS-AP-MW-31V	TURB	Turbidity	3/27/2023 15:43	1.65	NTU
GS-AP-MW-31V	COND	Conductivity	3/27/2023 15:48	2670.79	uS/cm
GS-AP-MW-31V	DO	DO	3/27/2023 15:48	0.06	mg/L
GS-AP-MW-31V	DTW	Depth to Water Detail	3/27/2023 15:48	294.2	ft
GS-AP-MW-31V	ORP	Oxidation Reduction Potention	3/27/2023 15:48	-148.86	mv
GS-AP-MW-31V	PH	pH	3/27/2023 15:48	7.66	SU
GS-AP-MW-31V	TEMP	Temperature	3/27/2023 15:48	18.01	C
GS-AP-MW-31V	TURB	Turbidity	3/27/2023 15:48	1.5	NTU
GS-AP-MW-31V	COND	Conductivity	3/27/2023 15:53	2582.83	uS/cm
GS-AP-MW-31V	DO	DO	3/27/2023 15:53	0.04	mg/L
GS-AP-MW-31V	DTW	Depth to Water Detail	3/27/2023 15:53	298.15	ft
GS-AP-MW-31V	ORP	Oxidation Reduction Potention	3/27/2023 15:53	-151.27	mv
GS-AP-MW-31V	PH	pH	3/27/2023 15:53	7.68	SU
GS-AP-MW-31V	TEMP	Temperature	3/27/2023 15:53	17.81	C
GS-AP-MW-31V	TURB	Turbidity	3/27/2023 15:53	2.15	NTU
GS-AP-MW-31V	COND	Conductivity	3/27/2023 15:58	2501.93	uS/cm
GS-AP-MW-31V	DO	DO	3/27/2023 15:58	0.03	mg/L
GS-AP-MW-31V	DTW	Depth to Water Detail	3/27/2023 15:58	300.75	ft
GS-AP-MW-31V	ORP	Oxidation Reduction Potention	3/27/2023 15:58	-159.78	mv
GS-AP-MW-31V	PH	pH	3/27/2023 15:58	7.73	SU
GS-AP-MW-31V	TEMP	Temperature	3/27/2023 15:58	18.03	C
GS-AP-MW-31V	TURB	Turbidity	3/27/2023 15:58	2.31	NTU
GS-AP-MW-31V	COND	Conductivity	3/27/2023 16:03	2419.08	uS/cm
GS-AP-MW-31V	DO	DO	3/27/2023 16:03	0.02	mg/L
GS-AP-MW-31V	DTW	Depth to Water Detail	3/27/2023 16:03	303.45	ft
GS-AP-MW-31V	ORP	Oxidation Reduction Potention	3/27/2023 16:03	-165.17	mv
GS-AP-MW-31V	PH	pH	3/27/2023 16:03	7.72	SU
GS-AP-MW-31V	TEMP	Temperature	3/27/2023 16:03	17.78	C
GS-AP-MW-31V	TURB	Turbidity	3/27/2023 16:03	2.25	NTU
GS-AP-MW-31V	COND	Conductivity	3/27/2023 16:08	2336.13	uS/cm
GS-AP-MW-31V	DO	DO	3/27/2023 16:08	0.02	mg/L
GS-AP-MW-31V	DTW	Depth to Water Detail	3/27/2023 16:08	305.4	ft
GS-AP-MW-31V	ORP	Oxidation Reduction Potention	3/27/2023 16:08	-171.38	mv
GS-AP-MW-31V	PH	pH	3/27/2023 16:08	7.73	SU
GS-AP-MW-31V	TEMP	Temperature	3/27/2023 16:08	17.9	C
GS-AP-MW-31V	TURB	Turbidity	3/27/2023 16:08	2.24	NTU
GS-AP-MW-31V	COND	Conductivity	3/27/2023 16:13	2266.8	uS/cm
GS-AP-MW-31V	DO	DO	3/27/2023 16:13	0.02	mg/L
GS-AP-MW-31V	DTW	Depth to Water Detail	3/27/2023 16:13	306.98	ft
GS-AP-MW-31V	ORP	Oxidation Reduction Potention	3/27/2023 16:13	-175.15	mv
GS-AP-MW-31V	PH	pH	3/27/2023 16:13	7.74	SU

Field Parameters Summary
Plant Gorgas Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GS-AP-MW-31V	TEMP	Temperature	3/27/2023 16:13	17.76	C
GS-AP-MW-31V	TURB	Turbidity	3/27/2023 16:13	2.1	NTU
GS-AP-MW-31V	COND	Conductivity	3/27/2023 16:18	2097.39	uS/cm
GS-AP-MW-31V	DO	DO	3/27/2023 16:18	0.04	mg/L
GS-AP-MW-31V	DTW	Depth to Water Detail	3/27/2023 16:18	307.98	ft
GS-AP-MW-31V	ORP	Oxidation Reduction Potention	3/27/2023 16:18	-181.36	mv
GS-AP-MW-31V	PH	pH	3/27/2023 16:18	7.77	SU
GS-AP-MW-31V	TEMP	Temperature	3/27/2023 16:18	17.89	C
GS-AP-MW-31V	TURB	Turbidity	3/27/2023 16:18	4.89	NTU
GS-AP-MW-31V	COND	Conductivity	3/27/2023 16:23	2057.78	uS/cm
GS-AP-MW-31V	DO	DO	3/27/2023 16:23	0.07	mg/L
GS-AP-MW-31V	DTW	Depth to Water Detail	3/27/2023 16:23	307.6	ft
GS-AP-MW-31V	ORP	Oxidation Reduction Potention	3/27/2023 16:23	-185.74	mv
GS-AP-MW-31V	PH	pH	3/27/2023 16:23	7.78	SU
GS-AP-MW-31V	TEMP	Temperature	3/27/2023 16:23	19.04	C
GS-AP-MW-31V	TURB	Turbidity	3/27/2023 16:23	2.47	NTU
GS-AP-MW-31V	COND	Conductivity	3/27/2023 16:28	2050.52	uS/cm
GS-AP-MW-31V	DO	DO	3/27/2023 16:28	0.1	mg/L
GS-AP-MW-31V	DTW	Depth to Water Detail	3/27/2023 16:28	307	ft
GS-AP-MW-31V	ORP	Oxidation Reduction Potention	3/27/2023 16:28	-185.89	mv
GS-AP-MW-31V	PH	pH	3/27/2023 16:28	7.79	SU
GS-AP-MW-31V	TEMP	Temperature	3/27/2023 16:28	19.01	C
GS-AP-MW-31V	TURB	Turbidity	3/27/2023 16:28	2.07	NTU
GS-AP-MW-31V	COND	Conductivity	3/27/2023 16:33	2054.74	uS/cm
GS-AP-MW-31V	DO	DO	3/27/2023 16:33	0.12	mg/L
GS-AP-MW-31V	DTW	Depth to Water Detail	3/27/2023 16:33	306.3	ft
GS-AP-MW-31V	ORP	Oxidation Reduction Potention	3/27/2023 16:33	-185.43	mv
GS-AP-MW-31V	PH	pH	3/27/2023 16:33	7.8	SU
GS-AP-MW-31V	SULFIDE	Sulfide	3/27/2023 16:33	0	mg/L
GS-AP-MW-31V	TEMP	Temperature	3/27/2023 16:33	19.2	C
GS-AP-MW-31V	TURB	Turbidity	3/27/2023 16:33	3.45	NTU

Field Parameters Summary
Plant Gorgas Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GS-AP-MW-29H	COND	Conductivity	3/28/2023 9:01	712.7	uS/cm
GS-AP-MW-29H	DO	DO	3/28/2023 9:01	0.16	mg/L
GS-AP-MW-29H	DTW	Depth to Water Detail	3/28/2023 9:01	81.55	ft
GS-AP-MW-29H	ORP	Oxidation Reduction Potention	3/28/2023 9:01	-60.27	mv
GS-AP-MW-29H	PH	pH	3/28/2023 9:01	7.64	SU
GS-AP-MW-29H	TEMP	Temperature	3/28/2023 9:01	16.95	C
GS-AP-MW-29H	TURB	Turbidity	3/28/2023 9:01	2	NTU
GS-AP-MW-29H	COND	Conductivity	3/28/2023 9:06	679.88	uS/cm
GS-AP-MW-29H	DO	DO	3/28/2023 9:06	0.11	mg/L
GS-AP-MW-29H	DTW	Depth to Water Detail	3/28/2023 9:06	81.75	ft
GS-AP-MW-29H	ORP	Oxidation Reduction Potention	3/28/2023 9:06	-108.06	mv
GS-AP-MW-29H	PH	pH	3/28/2023 9:06	7.7	SU
GS-AP-MW-29H	TEMP	Temperature	3/28/2023 9:06	16.96	C
GS-AP-MW-29H	TURB	Turbidity	3/28/2023 9:06	2.08	NTU
GS-AP-MW-29H	COND	Conductivity	3/28/2023 9:11	654.2	uS/cm
GS-AP-MW-29H	DO	DO	3/28/2023 9:11	0.09	mg/L
GS-AP-MW-29H	DTW	Depth to Water Detail	3/28/2023 9:11	81.95	ft
GS-AP-MW-29H	ORP	Oxidation Reduction Potention	3/28/2023 9:11	-127.83	mv
GS-AP-MW-29H	PH	pH	3/28/2023 9:11	7.74	SU
GS-AP-MW-29H	TEMP	Temperature	3/28/2023 9:11	16.97	C
GS-AP-MW-29H	TURB	Turbidity	3/28/2023 9:11	2.15	NTU
GS-AP-MW-29H	COND	Conductivity	3/28/2023 9:16	633.16	uS/cm
GS-AP-MW-29H	DO	DO	3/28/2023 9:16	0.07	mg/L
GS-AP-MW-29H	DTW	Depth to Water Detail	3/28/2023 9:16	82.2	ft
GS-AP-MW-29H	ORP	Oxidation Reduction Potention	3/28/2023 9:16	-143.09	mv
GS-AP-MW-29H	PH	pH	3/28/2023 9:16	7.78	SU
GS-AP-MW-29H	TEMP	Temperature	3/28/2023 9:16	16.95	C
GS-AP-MW-29H	TURB	Turbidity	3/28/2023 9:16	1.93	NTU
GS-AP-MW-29H	COND	Conductivity	3/28/2023 9:21	620.95	uS/cm
GS-AP-MW-29H	DO	DO	3/28/2023 9:21	0.06	mg/L
GS-AP-MW-29H	DTW	Depth to Water Detail	3/28/2023 9:21	82.38	ft
GS-AP-MW-29H	ORP	Oxidation Reduction Potention	3/28/2023 9:21	-153.09	mv
GS-AP-MW-29H	PH	pH	3/28/2023 9:21	7.82	SU
GS-AP-MW-29H	TEMP	Temperature	3/28/2023 9:21	16.93	C
GS-AP-MW-29H	TURB	Turbidity	3/28/2023 9:21	1.9	NTU
GS-AP-MW-29H	COND	Conductivity	3/28/2023 9:26	610	uS/cm
GS-AP-MW-29H	DO	DO	3/28/2023 9:26	0.05	mg/L
GS-AP-MW-29H	DTW	Depth to Water Detail	3/28/2023 9:26	82.43	ft
GS-AP-MW-29H	ORP	Oxidation Reduction Potention	3/28/2023 9:26	-159.04	mv
GS-AP-MW-29H	PH	pH	3/28/2023 9:26	7.82	SU
GS-AP-MW-29H	SULFIDE	Sulfide	3/28/2023 9:26	0	mg/L
GS-AP-MW-29H	TEMP	Temperature	3/28/2023 9:26	16.94	C
GS-AP-MW-29H	TURB	Turbidity	3/28/2023 9:26	1.99	NTU

Field Parameters Summary
Plant Gorgas Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GS-AP-MW-10R	COND	Conductivity	3/27/2023 12:59	1069.47	uS/cm
GS-AP-MW-10R	DO	DO	3/27/2023 12:59	0.37	mg/L
GS-AP-MW-10R	DTW	Depth to Water Detail	3/27/2023 12:59	151.24	ft
GS-AP-MW-10R	ORP	Oxidation Reduction Potention	3/27/2023 12:59	-23.02	mv
GS-AP-MW-10R	PH	pH	3/27/2023 12:59	6.8	SU
GS-AP-MW-10R	TEMP	Temperature	3/27/2023 12:59	18.09	C
GS-AP-MW-10R	TURB	Turbidity	3/27/2023 12:59	12.7	NTU
GS-AP-MW-10R	COND	Conductivity	3/27/2023 13:04	1048.54	uS/cm
GS-AP-MW-10R	DO	DO	3/27/2023 13:04	0.26	mg/L
GS-AP-MW-10R	DTW	Depth to Water Detail	3/27/2023 13:04	154.8	ft
GS-AP-MW-10R	ORP	Oxidation Reduction Potention	3/27/2023 13:04	-38.34	mv
GS-AP-MW-10R	PH	pH	3/27/2023 13:04	6.72	SU
GS-AP-MW-10R	TEMP	Temperature	3/27/2023 13:04	18.17	C
GS-AP-MW-10R	TURB	Turbidity	3/27/2023 13:04	4.2	NTU
GS-AP-MW-10R	COND	Conductivity	3/27/2023 13:09	999.57	uS/cm
GS-AP-MW-10R	DO	DO	3/27/2023 13:09	0.21	mg/L
GS-AP-MW-10R	DTW	Depth to Water Detail	3/27/2023 13:09	157.72	ft
GS-AP-MW-10R	ORP	Oxidation Reduction Potention	3/27/2023 13:09	-94.05	mv
GS-AP-MW-10R	PH	pH	3/27/2023 13:09	6.72	SU
GS-AP-MW-10R	TEMP	Temperature	3/27/2023 13:09	18.12	C
GS-AP-MW-10R	TURB	Turbidity	3/27/2023 13:09	4.13	NTU
GS-AP-MW-10R	COND	Conductivity	3/27/2023 13:14	932.35	uS/cm
GS-AP-MW-10R	DO	DO	3/27/2023 13:14	0.18	mg/L
GS-AP-MW-10R	DTW	Depth to Water Detail	3/27/2023 13:14	160.38	ft
GS-AP-MW-10R	ORP	Oxidation Reduction Potention	3/27/2023 13:14	-114.09	mv
GS-AP-MW-10R	PH	pH	3/27/2023 13:14	6.73	SU
GS-AP-MW-10R	TEMP	Temperature	3/27/2023 13:14	18.14	C
GS-AP-MW-10R	TURB	Turbidity	3/27/2023 13:14	4.22	NTU
GS-AP-MW-10R	COND	Conductivity	3/27/2023 13:19	896.66	uS/cm
GS-AP-MW-10R	DO	DO	3/27/2023 13:19	0.41	mg/L
GS-AP-MW-10R	DTW	Depth to Water Detail	3/27/2023 13:19	159.92	ft
GS-AP-MW-10R	ORP	Oxidation Reduction Potention	3/27/2023 13:19	-118.29	mv
GS-AP-MW-10R	PH	pH	3/27/2023 13:19	6.76	SU
GS-AP-MW-10R	TEMP	Temperature	3/27/2023 13:19	19.5	C
GS-AP-MW-10R	TURB	Turbidity	3/27/2023 13:19	4.43	NTU
GS-AP-MW-10R	COND	Conductivity	3/27/2023 13:24	771.65	uS/cm
GS-AP-MW-10R	DO	DO	3/27/2023 13:24	0.41	mg/L
GS-AP-MW-10R	DTW	Depth to Water Detail	3/27/2023 13:24	159.48	ft
GS-AP-MW-10R	ORP	Oxidation Reduction Potention	3/27/2023 13:24	-124.95	mv
GS-AP-MW-10R	PH	pH	3/27/2023 13:24	6.71	SU
GS-AP-MW-10R	TEMP	Temperature	3/27/2023 13:24	19.28	C
GS-AP-MW-10R	TURB	Turbidity	3/27/2023 13:24	3.96	NTU
GS-AP-MW-10R	COND	Conductivity	3/27/2023 13:29	649.18	uS/cm
GS-AP-MW-10R	DO	DO	3/27/2023 13:29	0.39	mg/L
GS-AP-MW-10R	DTW	Depth to Water Detail	3/27/2023 13:29	159.11	ft
GS-AP-MW-10R	ORP	Oxidation Reduction Potention	3/27/2023 13:29	-130.32	mv
GS-AP-MW-10R	PH	pH	3/27/2023 13:29	6.68	SU

Field Parameters Summary
Plant Gorgas Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GS-AP-MW-10R	TEMP	Temperature	3/27/2023 13:29	19.22	C
GS-AP-MW-10R	TURB	Turbidity	3/27/2023 13:29	3.89	NTU
GS-AP-MW-10R	COND	Conductivity	3/27/2023 13:34	597.41	uS/cm
GS-AP-MW-10R	DO	DO	3/27/2023 13:34	0.38	mg/L
GS-AP-MW-10R	DTW	Depth to Water Detail	3/27/2023 13:34	158.91	ft
GS-AP-MW-10R	ORP	Oxidation Reduction Potention	3/27/2023 13:34	-129.15	mv
GS-AP-MW-10R	PH	pH	3/27/2023 13:34	6.66	SU
GS-AP-MW-10R	TEMP	Temperature	3/27/2023 13:34	19.26	C
GS-AP-MW-10R	TURB	Turbidity	3/27/2023 13:34	3.81	NTU
GS-AP-MW-10R	COND	Conductivity	3/27/2023 13:39	547.86	uS/cm
GS-AP-MW-10R	DO	DO	3/27/2023 13:39	0.38	mg/L
GS-AP-MW-10R	DTW	Depth to Water Detail	3/27/2023 13:39	158.76	ft
GS-AP-MW-10R	ORP	Oxidation Reduction Potention	3/27/2023 13:39	-128.43	mv
GS-AP-MW-10R	PH	pH	3/27/2023 13:39	6.65	SU
GS-AP-MW-10R	TEMP	Temperature	3/27/2023 13:39	19.34	C
GS-AP-MW-10R	TURB	Turbidity	3/27/2023 13:39	3.75	NTU
GS-AP-MW-10R	COND	Conductivity	3/27/2023 13:44	517.5	uS/cm
GS-AP-MW-10R	DO	DO	3/27/2023 13:44	0.51	mg/L
GS-AP-MW-10R	DTW	Depth to Water Detail	3/27/2023 13:44	158.62	ft
GS-AP-MW-10R	ORP	Oxidation Reduction Potention	3/27/2023 13:44	-124.18	mv
GS-AP-MW-10R	PH	pH	3/27/2023 13:44	6.67	SU
GS-AP-MW-10R	TEMP	Temperature	3/27/2023 13:44	19.41	C
GS-AP-MW-10R	TURB	Turbidity	3/27/2023 13:44	3.7	NTU
GS-AP-MW-10R	COND	Conductivity	3/27/2023 13:49	496.08	uS/cm
GS-AP-MW-10R	DO	DO	3/27/2023 13:49	0.43	mg/L
GS-AP-MW-10R	DTW	Depth to Water Detail	3/27/2023 13:49	158.62	ft
GS-AP-MW-10R	ORP	Oxidation Reduction Potention	3/27/2023 13:49	-123.32	mv
GS-AP-MW-10R	PH	pH	3/27/2023 13:49	6.65	SU
GS-AP-MW-10R	TEMP	Temperature	3/27/2023 13:49	19.15	C
GS-AP-MW-10R	TURB	Turbidity	3/27/2023 13:49	3.74	NTU
GS-AP-MW-10R	COND	Conductivity	3/27/2023 13:54	479.7	uS/cm
GS-AP-MW-10R	DO	DO	3/27/2023 13:54	0.39	mg/L
GS-AP-MW-10R	DTW	Depth to Water Detail	3/27/2023 13:54	158.62	ft
GS-AP-MW-10R	ORP	Oxidation Reduction Potention	3/27/2023 13:54	-125	mv
GS-AP-MW-10R	PH	pH	3/27/2023 13:54	6.65	SU
GS-AP-MW-10R	TEMP	Temperature	3/27/2023 13:54	19.36	C
GS-AP-MW-10R	TURB	Turbidity	3/27/2023 13:54	3.59	NTU
GS-AP-MW-10R	COND	Conductivity	3/27/2023 13:59	467.14	uS/cm
GS-AP-MW-10R	DO	DO	3/27/2023 13:59	0.37	mg/L
GS-AP-MW-10R	DTW	Depth to Water Detail	3/27/2023 13:59	158.62	ft
GS-AP-MW-10R	ORP	Oxidation Reduction Potention	3/27/2023 13:59	-125.82	mv
GS-AP-MW-10R	PH	pH	3/27/2023 13:59	6.66	SU
GS-AP-MW-10R	TEMP	Temperature	3/27/2023 13:59	19.3	C
GS-AP-MW-10R	TURB	Turbidity	3/27/2023 13:59	3.58	NTU
GS-AP-MW-10R	COND	Conductivity	3/27/2023 14:04	459.61	uS/cm
GS-AP-MW-10R	DO	DO	3/27/2023 14:04	0.34	mg/L
GS-AP-MW-10R	DTW	Depth to Water Detail	3/27/2023 14:04	158.62	ft

Field Parameters Summary
Plant Gorgas Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GS-AP-MW-10R	ORP	Oxidation Reduction Potention	3/27/2023 14:04	-126.86	mv
GS-AP-MW-10R	PH	pH	3/27/2023 14:04	6.68	SU
GS-AP-MW-10R	SULFIDE	Sulfide	3/27/2023 14:04	0	mg/L
GS-AP-MW-10R	TEMP	Temperature	3/27/2023 14:04	19.48	C
GS-AP-MW-10R	TURB	Turbidity	3/27/2023 14:04	3.52	NTU

Field Parameters Summary
Plant Gorgas Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GS-AP-MW-13R	COND	Conductivity	3/27/2023 11:27	327.47	uS/cm
GS-AP-MW-13R	DO	DO	3/27/2023 11:27	1.45	mg/L
GS-AP-MW-13R	DTW	Depth to Water Detail	3/27/2023 11:27	104.43	ft
GS-AP-MW-13R	ORP	Oxidation Reduction Potention	3/27/2023 11:27	-45.4	mv
GS-AP-MW-13R	PH	pH	3/27/2023 11:27	6.42	SU
GS-AP-MW-13R	TEMP	Temperature	3/27/2023 11:27	18.63	C
GS-AP-MW-13R	TURB	Turbidity	3/27/2023 11:27	99.8	NTU
GS-AP-MW-13R	COND	Conductivity	3/27/2023 11:32	342.07	uS/cm
GS-AP-MW-13R	DO	DO	3/27/2023 11:32	0.38	mg/L
GS-AP-MW-13R	DTW	Depth to Water Detail	3/27/2023 11:32	106.88	ft
GS-AP-MW-13R	ORP	Oxidation Reduction Potention	3/27/2023 11:32	-43.84	mv
GS-AP-MW-13R	PH	pH	3/27/2023 11:32	6.35	SU
GS-AP-MW-13R	TEMP	Temperature	3/27/2023 11:32	18.17	C
GS-AP-MW-13R	TURB	Turbidity	3/27/2023 11:32	36.6	NTU
GS-AP-MW-13R	COND	Conductivity	3/27/2023 11:37	338.49	uS/cm
GS-AP-MW-13R	DO	DO	3/27/2023 11:37	0.26	mg/L
GS-AP-MW-13R	DTW	Depth to Water Detail	3/27/2023 11:37	109.5	ft
GS-AP-MW-13R	ORP	Oxidation Reduction Potention	3/27/2023 11:37	-51.05	mv
GS-AP-MW-13R	PH	pH	3/27/2023 11:37	6.38	SU
GS-AP-MW-13R	TEMP	Temperature	3/27/2023 11:37	18.06	C
GS-AP-MW-13R	TURB	Turbidity	3/27/2023 11:37	16.6	NTU
GS-AP-MW-13R	COND	Conductivity	3/27/2023 11:42	338.65	uS/cm
GS-AP-MW-13R	DO	DO	3/27/2023 11:42	0.84	mg/L
GS-AP-MW-13R	DTW	Depth to Water Detail	3/27/2023 11:42	109.32	ft
GS-AP-MW-13R	ORP	Oxidation Reduction Potention	3/27/2023 11:42	-49.77	mv
GS-AP-MW-13R	PH	pH	3/27/2023 11:42	6.46	SU
GS-AP-MW-13R	TEMP	Temperature	3/27/2023 11:42	19.73	C
GS-AP-MW-13R	TURB	Turbidity	3/27/2023 11:42	14.9	NTU
GS-AP-MW-13R	COND	Conductivity	3/27/2023 11:47	336.63	uS/cm
GS-AP-MW-13R	DO	DO	3/27/2023 11:47	0.73	mg/L
GS-AP-MW-13R	DTW	Depth to Water Detail	3/27/2023 11:47	109.34	ft
GS-AP-MW-13R	ORP	Oxidation Reduction Potention	3/27/2023 11:47	-49.89	mv
GS-AP-MW-13R	PH	pH	3/27/2023 11:47	6.47	SU
GS-AP-MW-13R	TEMP	Temperature	3/27/2023 11:47	19.9	C
GS-AP-MW-13R	TURB	Turbidity	3/27/2023 11:47	17.1	NTU
GS-AP-MW-13R	COND	Conductivity	3/27/2023 11:52	315.88	uS/cm
GS-AP-MW-13R	DO	DO	3/27/2023 11:52	0.8	mg/L
GS-AP-MW-13R	DTW	Depth to Water Detail	3/27/2023 11:52	109.38	ft
GS-AP-MW-13R	ORP	Oxidation Reduction Potention	3/27/2023 11:52	-63.72	mv
GS-AP-MW-13R	PH	pH	3/27/2023 11:52	6.47	SU
GS-AP-MW-13R	TEMP	Temperature	3/27/2023 11:52	19.85	C
GS-AP-MW-13R	TURB	Turbidity	3/27/2023 11:52	7.3	NTU
GS-AP-MW-13R	COND	Conductivity	3/27/2023 11:57	310.04	uS/cm
GS-AP-MW-13R	DO	DO	3/27/2023 11:57	0.82	mg/L
GS-AP-MW-13R	DTW	Depth to Water Detail	3/27/2023 11:57	109.43	ft
GS-AP-MW-13R	ORP	Oxidation Reduction Potention	3/27/2023 11:57	-72.59	mv
GS-AP-MW-13R	PH	pH	3/27/2023 11:57	6.48	SU

Field Parameters Summary
Plant Gorgas Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GS-AP-MW-13R	TEMP	Temperature	3/27/2023 11:57	19.8	C
GS-AP-MW-13R	TURB	Turbidity	3/27/2023 11:57	8.26	NTU
GS-AP-MW-13R	COND	Conductivity	3/27/2023 12:02	311.29	uS/cm
GS-AP-MW-13R	DO	DO	3/27/2023 12:02	0.8	mg/L
GS-AP-MW-13R	DTW	Depth to Water Detail	3/27/2023 12:02	109.47	ft
GS-AP-MW-13R	ORP	Oxidation Reduction Potention	3/27/2023 12:02	-75.07	mv
GS-AP-MW-13R	PH	pH	3/27/2023 12:02	6.47	SU
GS-AP-MW-13R	SULFIDE	Sulfide	3/27/2023 12:02	0	mg/L
GS-AP-MW-13R	TEMP	Temperature	3/27/2023 12:02	20.13	C
GS-AP-MW-13R	TURB	Turbidity	3/27/2023 12:02	7.66	NTU

Field Parameters Summary
Plant Gorgas Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GS-AP-MW-18VR	COND	Conductivity	3/27/2023 15:13	419.52	uS/cm
GS-AP-MW-18VR	DO	DO	3/27/2023 15:13	0.37	mg/L
GS-AP-MW-18VR	DTW	Depth to Water Detail	3/27/2023 15:13	199.73	ft
GS-AP-MW-18VR	ORP	Oxidation Reduction Potention	3/27/2023 15:13	-169.13	mv
GS-AP-MW-18VR	PH	pH	3/27/2023 15:13	8.02	SU
GS-AP-MW-18VR	TEMP	Temperature	3/27/2023 15:13	18.12	C
GS-AP-MW-18VR	TURB	Turbidity	3/27/2023 15:13	2.78	NTU
GS-AP-MW-18VR	COND	Conductivity	3/27/2023 15:18	410.33	uS/cm
GS-AP-MW-18VR	DO	DO	3/27/2023 15:18	0.33	mg/L
GS-AP-MW-18VR	DTW	Depth to Water Detail	3/27/2023 15:18	199.73	ft
GS-AP-MW-18VR	ORP	Oxidation Reduction Potention	3/27/2023 15:18	-162.85	mv
GS-AP-MW-18VR	PH	pH	3/27/2023 15:18	8.05	SU
GS-AP-MW-18VR	TEMP	Temperature	3/27/2023 15:18	18.07	C
GS-AP-MW-18VR	TURB	Turbidity	3/27/2023 15:18	2.49	NTU
GS-AP-MW-18VR	COND	Conductivity	3/27/2023 15:23	408.97	uS/cm
GS-AP-MW-18VR	DO	DO	3/27/2023 15:23	0.31	mg/L
GS-AP-MW-18VR	DTW	Depth to Water Detail	3/27/2023 15:23	199.73	ft
GS-AP-MW-18VR	ORP	Oxidation Reduction Potention	3/27/2023 15:23	-159.94	mv
GS-AP-MW-18VR	PH	pH	3/27/2023 15:23	8.05	SU
GS-AP-MW-18VR	TEMP	Temperature	3/27/2023 15:23	18.05	C
GS-AP-MW-18VR	TURB	Turbidity	3/27/2023 15:23	2.31	NTU
GS-AP-MW-18VR	COND	Conductivity	3/27/2023 15:28	408.93	uS/cm
GS-AP-MW-18VR	DO	DO	3/27/2023 15:28	0.3	mg/L
GS-AP-MW-18VR	DTW	Depth to Water Detail	3/27/2023 15:28	199.73	ft
GS-AP-MW-18VR	ORP	Oxidation Reduction Potention	3/27/2023 15:28	-160.78	mv
GS-AP-MW-18VR	PH	pH	3/27/2023 15:28	8.03	SU
GS-AP-MW-18VR	SULFIDE	Sulfide	3/27/2023 15:28	0	mg/L
GS-AP-MW-18VR	TEMP	Temperature	3/27/2023 15:28	18.03	C
GS-AP-MW-18VR	TURB	Turbidity	3/27/2023 15:28	2.25	NTU

Field Parameters Summary
Plant Gorgas Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GS-AP-MW-43H	COND	Conductivity	3/28/2023 9:40	2063.44	uS/cm
GS-AP-MW-43H	DO	DO	3/28/2023 9:40	0.51	mg/L
GS-AP-MW-43H	DTW	Depth to Water Detail	3/28/2023 9:40	154.24	ft
GS-AP-MW-43H	ORP	Oxidation Reduction Potention	3/28/2023 9:40	-229.92	mv
GS-AP-MW-43H	PH	pH	3/28/2023 9:40	7.88	SU
GS-AP-MW-43H	TEMP	Temperature	3/28/2023 9:40	17.23	C
GS-AP-MW-43H	TURB	Turbidity	3/28/2023 9:40	8.63	NTU
GS-AP-MW-43H	COND	Conductivity	3/28/2023 9:45	2160.11	uS/cm
GS-AP-MW-43H	DO	DO	3/28/2023 9:45	0.48	mg/L
GS-AP-MW-43H	DTW	Depth to Water Detail	3/28/2023 9:45	155.56	ft
GS-AP-MW-43H	ORP	Oxidation Reduction Potention	3/28/2023 9:45	-225.17	mv
GS-AP-MW-43H	PH	pH	3/28/2023 9:45	7.87	SU
GS-AP-MW-43H	TEMP	Temperature	3/28/2023 9:45	17.3	C
GS-AP-MW-43H	TURB	Turbidity	3/28/2023 9:45	8.38	NTU
GS-AP-MW-43H	COND	Conductivity	3/28/2023 9:50	2166.92	uS/cm
GS-AP-MW-43H	DO	DO	3/28/2023 9:50	0.8	mg/L
GS-AP-MW-43H	DTW	Depth to Water Detail	3/28/2023 9:50	155.72	ft
GS-AP-MW-43H	ORP	Oxidation Reduction Potention	3/28/2023 9:50	-219.28	mv
GS-AP-MW-43H	PH	pH	3/28/2023 9:50	7.88	SU
GS-AP-MW-43H	TEMP	Temperature	3/28/2023 9:50	17.23	C
GS-AP-MW-43H	TURB	Turbidity	3/28/2023 9:50	6.09	NTU
GS-AP-MW-43H	COND	Conductivity	3/28/2023 9:55	2168.44	uS/cm
GS-AP-MW-43H	DO	DO	3/28/2023 9:55	0.95	mg/L
GS-AP-MW-43H	DTW	Depth to Water Detail	3/28/2023 9:55	155.78	ft
GS-AP-MW-43H	ORP	Oxidation Reduction Potention	3/28/2023 9:55	-218.3	mv
GS-AP-MW-43H	PH	pH	3/28/2023 9:55	7.91	SU
GS-AP-MW-43H	TEMP	Temperature	3/28/2023 9:55	17.33	C
GS-AP-MW-43H	TURB	Turbidity	3/28/2023 9:55	5.68	NTU
GS-AP-MW-43H	COND	Conductivity	3/28/2023 10:00	2166.36	uS/cm
GS-AP-MW-43H	DO	DO	3/28/2023 10:00	0.98	mg/L
GS-AP-MW-43H	DTW	Depth to Water Detail	3/28/2023 10:00	155.8	ft
GS-AP-MW-43H	ORP	Oxidation Reduction Potention	3/28/2023 10:00	-218.07	mv
GS-AP-MW-43H	PH	pH	3/28/2023 10:00	7.92	SU
GS-AP-MW-43H	SULFIDE	Sulfide	3/28/2023 10:00	9	mg/L
GS-AP-MW-43H	TEMP	Temperature	3/28/2023 10:00	17.27	C
GS-AP-MW-43H	TURB	Turbidity	3/28/2023 10:00	5.98	NTU

Field Parameters Summary
Plant Gorgas Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GS-AP-MW-45V	COND	Conductivity	3/28/2023 8:02	2928.96	uS/cm
GS-AP-MW-45V	DO	DO	3/28/2023 8:02	0.53	mg/L
GS-AP-MW-45V	DTW	Depth to Water Detail	3/28/2023 8:02	207.11	ft
GS-AP-MW-45V	ORP	Oxidation Reduction Potention	3/28/2023 8:02	-16.98	mv
GS-AP-MW-45V	PH	pH	3/28/2023 8:02	7.32	SU
GS-AP-MW-45V	TEMP	Temperature	3/28/2023 8:02	16.83	C
GS-AP-MW-45V	TURB	Turbidity	3/28/2023 8:02	2.71	NTU
GS-AP-MW-45V	COND	Conductivity	3/28/2023 8:07	3058.48	uS/cm
GS-AP-MW-45V	DO	DO	3/28/2023 8:07	0.32	mg/L
GS-AP-MW-45V	DTW	Depth to Water Detail	3/28/2023 8:07	211.56	ft
GS-AP-MW-45V	ORP	Oxidation Reduction Potention	3/28/2023 8:07	-26.01	mv
GS-AP-MW-45V	PH	pH	3/28/2023 8:07	7.37	SU
GS-AP-MW-45V	TEMP	Temperature	3/28/2023 8:07	16.9	C
GS-AP-MW-45V	TURB	Turbidity	3/28/2023 8:07	2.6	NTU
GS-AP-MW-45V	COND	Conductivity	3/28/2023 8:12	3037.9	uS/cm
GS-AP-MW-45V	DO	DO	3/28/2023 8:12	0.24	mg/L
GS-AP-MW-45V	DTW	Depth to Water Detail	3/28/2023 8:12	215.35	ft
GS-AP-MW-45V	ORP	Oxidation Reduction Potention	3/28/2023 8:12	-83.51	mv
GS-AP-MW-45V	PH	pH	3/28/2023 8:12	7.38	SU
GS-AP-MW-45V	TEMP	Temperature	3/28/2023 8:12	16.99	C
GS-AP-MW-45V	TURB	Turbidity	3/28/2023 8:12	1.87	NTU
GS-AP-MW-45V	COND	Conductivity	3/28/2023 8:17	2997.03	uS/cm
GS-AP-MW-45V	DO	DO	3/28/2023 8:17	0.22	mg/L
GS-AP-MW-45V	DTW	Depth to Water Detail	3/28/2023 8:17	218.98	ft
GS-AP-MW-45V	ORP	Oxidation Reduction Potention	3/28/2023 8:17	-110.75	mv
GS-AP-MW-45V	PH	pH	3/28/2023 8:17	7.39	SU
GS-AP-MW-45V	TEMP	Temperature	3/28/2023 8:17	16.93	C
GS-AP-MW-45V	TURB	Turbidity	3/28/2023 8:17	1.68	NTU
GS-AP-MW-45V	COND	Conductivity	3/28/2023 8:22	2940.85	uS/cm
GS-AP-MW-45V	DO	DO	3/28/2023 8:22	0.15	mg/L
GS-AP-MW-45V	DTW	Depth to Water Detail	3/28/2023 8:22	223.12	ft
GS-AP-MW-45V	ORP	Oxidation Reduction Potention	3/28/2023 8:22	-125.13	mv
GS-AP-MW-45V	PH	pH	3/28/2023 8:22	7.4	SU
GS-AP-MW-45V	TEMP	Temperature	3/28/2023 8:22	17.04	C
GS-AP-MW-45V	TURB	Turbidity	3/28/2023 8:22	1.7	NTU
GS-AP-MW-45V	COND	Conductivity	3/28/2023 8:27	2902.09	uS/cm
GS-AP-MW-45V	DO	DO	3/28/2023 8:27	0.15	mg/L
GS-AP-MW-45V	DTW	Depth to Water Detail	3/28/2023 8:27	226.8	ft
GS-AP-MW-45V	ORP	Oxidation Reduction Potention	3/28/2023 8:27	-130.81	mv
GS-AP-MW-45V	PH	pH	3/28/2023 8:27	7.41	SU
GS-AP-MW-45V	TEMP	Temperature	3/28/2023 8:27	16.97	C
GS-AP-MW-45V	TURB	Turbidity	3/28/2023 8:27	1.76	NTU
GS-AP-MW-45V	COND	Conductivity	3/28/2023 8:32	2854.92	uS/cm
GS-AP-MW-45V	DO	DO	3/28/2023 8:32	0.14	mg/L
GS-AP-MW-45V	DTW	Depth to Water Detail	3/28/2023 8:32	229.72	ft
GS-AP-MW-45V	ORP	Oxidation Reduction Potention	3/28/2023 8:32	-135.05	mv
GS-AP-MW-45V	PH	pH	3/28/2023 8:32	7.42	SU

Field Parameters Summary
Plant Gorgas Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GS-AP-MW-45V	TEMP	Temperature	3/28/2023 8:32	17.01	C
GS-AP-MW-45V	TURB	Turbidity	3/28/2023 8:32	1.54	NTU
GS-AP-MW-45V	COND	Conductivity	3/28/2023 8:37	2807.74	uS/cm
GS-AP-MW-45V	DO	DO	3/28/2023 8:37	0.19	mg/L
GS-AP-MW-45V	DTW	Depth to Water Detail	3/28/2023 8:37	232.96	ft
GS-AP-MW-45V	ORP	Oxidation Reduction Potention	3/28/2023 8:37	-137.66	mv
GS-AP-MW-45V	PH	pH	3/28/2023 8:37	7.44	SU
GS-AP-MW-45V	TEMP	Temperature	3/28/2023 8:37	16.9	C
GS-AP-MW-45V	TURB	Turbidity	3/28/2023 8:37	1.44	NTU
GS-AP-MW-45V	COND	Conductivity	3/28/2023 8:42	2770.82	uS/cm
GS-AP-MW-45V	DO	DO	3/28/2023 8:42	0.44	mg/L
GS-AP-MW-45V	DTW	Depth to Water Detail	3/28/2023 8:42	233.36	ft
GS-AP-MW-45V	ORP	Oxidation Reduction Potention	3/28/2023 8:42	-133.75	mv
GS-AP-MW-45V	PH	pH	3/28/2023 8:42	7.46	SU
GS-AP-MW-45V	TEMP	Temperature	3/28/2023 8:42	16.66	C
GS-AP-MW-45V	TURB	Turbidity	3/28/2023 8:42	1.35	NTU
GS-AP-MW-45V	COND	Conductivity	3/28/2023 8:47	2718.78	uS/cm
GS-AP-MW-45V	DO	DO	3/28/2023 8:47	0.47	mg/L
GS-AP-MW-45V	DTW	Depth to Water Detail	3/28/2023 8:47	233.45	ft
GS-AP-MW-45V	ORP	Oxidation Reduction Potention	3/28/2023 8:47	-133.46	mv
GS-AP-MW-45V	PH	pH	3/28/2023 8:47	7.45	SU
GS-AP-MW-45V	TEMP	Temperature	3/28/2023 8:47	16.72	C
GS-AP-MW-45V	TURB	Turbidity	3/28/2023 8:47	1.3	NTU
GS-AP-MW-45V	COND	Conductivity	3/28/2023 8:52	2649.8	uS/cm
GS-AP-MW-45V	DO	DO	3/28/2023 8:52	0.45	mg/L
GS-AP-MW-45V	DTW	Depth to Water Detail	3/28/2023 8:52	233.45	ft
GS-AP-MW-45V	ORP	Oxidation Reduction Potention	3/28/2023 8:52	-137.23	mv
GS-AP-MW-45V	PH	pH	3/28/2023 8:52	7.47	SU
GS-AP-MW-45V	SULFIDE	Sulfide	3/28/2023 8:52	4	mg/L
GS-AP-MW-45V	TEMP	Temperature	3/28/2023 8:52	16.77	C
GS-AP-MW-45V	TURB	Turbidity	3/28/2023 8:52	1.21	NTU

Field Parameters Summary
Plant Gorgas Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GS-AP-MW-8	COND	Conductivity	3/27/2023 12:08	140.7	uS/cm
GS-AP-MW-8	DO	DO	3/27/2023 12:08	1.7	mg/L
GS-AP-MW-8	DTW	Depth to Water Detail	3/27/2023 12:08	43.52	ft
GS-AP-MW-8	ORP	Oxidation Reduction Potention	3/27/2023 12:08	222.49	mv
GS-AP-MW-8	PH	pH	3/27/2023 12:08	5.42	SU
GS-AP-MW-8	TEMP	Temperature	3/27/2023 12:08	22.24	C
GS-AP-MW-8	TURB	Turbidity	3/27/2023 12:08	4.59	NTU
GS-AP-MW-8	COND	Conductivity	3/27/2023 12:13	134.23	uS/cm
GS-AP-MW-8	DO	DO	3/27/2023 12:13	1.69	mg/L
GS-AP-MW-8	DTW	Depth to Water Detail	3/27/2023 12:13	43.62	ft
GS-AP-MW-8	ORP	Oxidation Reduction Potention	3/27/2023 12:13	211.2	mv
GS-AP-MW-8	PH	pH	3/27/2023 12:13	5.58	SU
GS-AP-MW-8	TEMP	Temperature	3/27/2023 12:13	22.31	C
GS-AP-MW-8	TURB	Turbidity	3/27/2023 12:13	2.85	NTU
GS-AP-MW-8	COND	Conductivity	3/27/2023 12:18	131.09	uS/cm
GS-AP-MW-8	DO	DO	3/27/2023 12:18	1.7	mg/L
GS-AP-MW-8	DTW	Depth to Water Detail	3/27/2023 12:18	43.7	ft
GS-AP-MW-8	ORP	Oxidation Reduction Potention	3/27/2023 12:18	199.31	mv
GS-AP-MW-8	PH	pH	3/27/2023 12:18	5.71	SU
GS-AP-MW-8	TEMP	Temperature	3/27/2023 12:18	22.43	C
GS-AP-MW-8	TURB	Turbidity	3/27/2023 12:18	1.81	NTU
GS-AP-MW-8	COND	Conductivity	3/27/2023 12:23	130.54	uS/cm
GS-AP-MW-8	DO	DO	3/27/2023 12:23	1.66	mg/L
GS-AP-MW-8	DTW	Depth to Water Detail	3/27/2023 12:23	43.74	ft
GS-AP-MW-8	ORP	Oxidation Reduction Potention	3/27/2023 12:23	193.95	mv
GS-AP-MW-8	PH	pH	3/27/2023 12:23	5.79	SU
GS-AP-MW-8	TEMP	Temperature	3/27/2023 12:23	22.52	C
GS-AP-MW-8	TURB	Turbidity	3/27/2023 12:23	2.07	NTU
GS-AP-MW-8	COND	Conductivity	3/27/2023 12:28	130.02	uS/cm
GS-AP-MW-8	DO	DO	3/27/2023 12:28	1.63	mg/L
GS-AP-MW-8	DTW	Depth to Water Detail	3/27/2023 12:28	43.82	ft
GS-AP-MW-8	ORP	Oxidation Reduction Potention	3/27/2023 12:28	189.13	mv
GS-AP-MW-8	PH	pH	3/27/2023 12:28	5.82	SU
GS-AP-MW-8	SULFIDE	Sulfide	3/27/2023 12:28	0	mg/L
GS-AP-MW-8	TEMP	Temperature	3/27/2023 12:28	22.43	C
GS-AP-MW-8	TURB	Turbidity	3/27/2023 12:28	1.1	NTU

Field Parameters Summary
Plant Gorgas Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GS-AP-MW-09R	COND	Conductivity	3/27/2023 13:46	743.92	uS/cm
GS-AP-MW-09R	DO	DO	3/27/2023 13:46	0.24	mg/L
GS-AP-MW-09R	DTW	Depth to Water Detail	3/27/2023 13:46	64.46	ft
GS-AP-MW-09R	ORP	Oxidation Reduction Potention	3/27/2023 13:46	-64.11	mv
GS-AP-MW-09R	PH	pH	3/27/2023 13:46	6.03	SU
GS-AP-MW-09R	TEMP	Temperature	3/27/2023 13:46	18.64	C
GS-AP-MW-09R	TURB	Turbidity	3/27/2023 13:46	2.81	NTU
GS-AP-MW-09R	COND	Conductivity	3/27/2023 13:51	678.34	uS/cm
GS-AP-MW-09R	DO	DO	3/27/2023 13:51	0.33	mg/L
GS-AP-MW-09R	DTW	Depth to Water Detail	3/27/2023 13:51	64.7	ft
GS-AP-MW-09R	ORP	Oxidation Reduction Potention	3/27/2023 13:51	-64.91	mv
GS-AP-MW-09R	PH	pH	3/27/2023 13:51	6.03	SU
GS-AP-MW-09R	TEMP	Temperature	3/27/2023 13:51	18.42	C
GS-AP-MW-09R	TURB	Turbidity	3/27/2023 13:51	1.59	NTU
GS-AP-MW-09R	COND	Conductivity	3/27/2023 13:56	608.31	uS/cm
GS-AP-MW-09R	DO	DO	3/27/2023 13:56	0.28	mg/L
GS-AP-MW-09R	DTW	Depth to Water Detail	3/27/2023 13:56	64.8	ft
GS-AP-MW-09R	ORP	Oxidation Reduction Potention	3/27/2023 13:56	-64.47	mv
GS-AP-MW-09R	PH	pH	3/27/2023 13:56	6.02	SU
GS-AP-MW-09R	TEMP	Temperature	3/27/2023 13:56	18.44	C
GS-AP-MW-09R	TURB	Turbidity	3/27/2023 13:56	4.41	NTU
GS-AP-MW-09R	COND	Conductivity	3/27/2023 14:01	558.76	uS/cm
GS-AP-MW-09R	DO	DO	3/27/2023 14:01	0.25	mg/L
GS-AP-MW-09R	DTW	Depth to Water Detail	3/27/2023 14:01	64.86	ft
GS-AP-MW-09R	ORP	Oxidation Reduction Potention	3/27/2023 14:01	-64.03	mv
GS-AP-MW-09R	PH	pH	3/27/2023 14:01	6.02	SU
GS-AP-MW-09R	TEMP	Temperature	3/27/2023 14:01	18.41	C
GS-AP-MW-09R	TURB	Turbidity	3/27/2023 14:01	8.19	NTU
GS-AP-MW-09R	COND	Conductivity	3/27/2023 14:06	508.89	uS/cm
GS-AP-MW-09R	DO	DO	3/27/2023 14:06	0.23	mg/L
GS-AP-MW-09R	DTW	Depth to Water Detail	3/27/2023 14:06	64.86	ft
GS-AP-MW-09R	ORP	Oxidation Reduction Potention	3/27/2023 14:06	-62.28	mv
GS-AP-MW-09R	PH	pH	3/27/2023 14:06	6.02	SU
GS-AP-MW-09R	TEMP	Temperature	3/27/2023 14:06	18.38	C
GS-AP-MW-09R	TURB	Turbidity	3/27/2023 14:06	7.1	NTU
GS-AP-MW-09R	COND	Conductivity	3/27/2023 14:11	506.57	uS/cm
GS-AP-MW-09R	DO	DO	3/27/2023 14:11	0.23	mg/L
GS-AP-MW-09R	DTW	Depth to Water Detail	3/27/2023 14:11	64.86	ft
GS-AP-MW-09R	ORP	Oxidation Reduction Potention	3/27/2023 14:11	-60.32	mv
GS-AP-MW-09R	PH	pH	3/27/2023 14:11	6.01	SU
GS-AP-MW-09R	TEMP	Temperature	3/27/2023 14:11	18.31	C
GS-AP-MW-09R	TURB	Turbidity	3/27/2023 14:11	8.76	NTU
GS-AP-MW-09R	COND	Conductivity	3/27/2023 14:16	487.84	uS/cm
GS-AP-MW-09R	DO	DO	3/27/2023 14:16	0.22	mg/L
GS-AP-MW-09R	DTW	Depth to Water Detail	3/27/2023 14:16	64.86	ft
GS-AP-MW-09R	ORP	Oxidation Reduction Potention	3/27/2023 14:16	-58.7	mv
GS-AP-MW-09R	PH	pH	3/27/2023 14:16	6	SU

Field Parameters Summary
Plant Gorgas Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GS-AP-MW-09R	TEMP	Temperature	3/27/2023 14:16	18.38	C
GS-AP-MW-09R	TURB	Turbidity	3/27/2023 14:16	5.98	NTU
GS-AP-MW-09R	COND	Conductivity	3/27/2023 14:21	464.72	uS/cm
GS-AP-MW-09R	DO	DO	3/27/2023 14:21	0.23	mg/L
GS-AP-MW-09R	DTW	Depth to Water Detail	3/27/2023 14:21	64.86	ft
GS-AP-MW-09R	ORP	Oxidation Reduction Potention	3/27/2023 14:21	-57.47	mv
GS-AP-MW-09R	PH	pH	3/27/2023 14:21	6	SU
GS-AP-MW-09R	TEMP	Temperature	3/27/2023 14:21	18.23	C
GS-AP-MW-09R	TURB	Turbidity	3/27/2023 14:21	6.77	NTU
GS-AP-MW-09R	COND	Conductivity	3/27/2023 14:26	456.59	uS/cm
GS-AP-MW-09R	DO	DO	3/27/2023 14:26	0.22	mg/L
GS-AP-MW-09R	DTW	Depth to Water Detail	3/27/2023 14:26	64.86	ft
GS-AP-MW-09R	ORP	Oxidation Reduction Potention	3/27/2023 14:26	-57.03	mv
GS-AP-MW-09R	PH	pH	3/27/2023 14:26	6	SU
GS-AP-MW-09R	TEMP	Temperature	3/27/2023 14:26	18.16	C
GS-AP-MW-09R	TURB	Turbidity	3/27/2023 14:26	3.9	NTU
GS-AP-MW-09R	COND	Conductivity	3/27/2023 14:31	447.6	uS/cm
GS-AP-MW-09R	DO	DO	3/27/2023 14:31	0.22	mg/L
GS-AP-MW-09R	DTW	Depth to Water Detail	3/27/2023 14:31	64.86	ft
GS-AP-MW-09R	ORP	Oxidation Reduction Potention	3/27/2023 14:31	-55.69	mv
GS-AP-MW-09R	PH	pH	3/27/2023 14:31	6	SU
GS-AP-MW-09R	TEMP	Temperature	3/27/2023 14:31	18.23	C
GS-AP-MW-09R	TURB	Turbidity	3/27/2023 14:31	3.88	NTU
GS-AP-MW-09R	COND	Conductivity	3/27/2023 14:36	442.64	uS/cm
GS-AP-MW-09R	DO	DO	3/27/2023 14:36	0.22	mg/L
GS-AP-MW-09R	DTW	Depth to Water Detail	3/27/2023 14:36	64.86	ft
GS-AP-MW-09R	ORP	Oxidation Reduction Potention	3/27/2023 14:36	-55.2	mv
GS-AP-MW-09R	PH	pH	3/27/2023 14:36	6.01	SU
GS-AP-MW-09R	SULFIDE	Sulfide	3/27/2023 14:36	0	mg/L
GS-AP-MW-09R	TEMP	Temperature	3/27/2023 14:36	18.27	C
GS-AP-MW-09R	TURB	Turbidity	3/27/2023 14:36	3.52	NTU

Field Parameters Summary
Plant Gorgas Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GS-AP-MW-9V	COND	Conductivity	3/27/2023 15:29	1372.69	uS/cm
GS-AP-MW-9V	DO	DO	3/27/2023 15:29	1.08	mg/L
GS-AP-MW-9V	DTW	Depth to Water Detail	3/27/2023 15:29	65.04	ft
GS-AP-MW-9V	ORP	Oxidation Reduction Potention	3/27/2023 15:29	-160.41	mv
GS-AP-MW-9V	PH	pH	3/27/2023 15:29	7.1	SU
GS-AP-MW-9V	TEMP	Temperature	3/27/2023 15:29	19.12	C
GS-AP-MW-9V	TURB	Turbidity	3/27/2023 15:29	1.6	NTU
GS-AP-MW-9V	COND	Conductivity	3/27/2023 15:34	1147.4	uS/cm
GS-AP-MW-9V	DO	DO	3/27/2023 15:34	1.12	mg/L
GS-AP-MW-9V	DTW	Depth to Water Detail	3/27/2023 15:34	65.71	ft
GS-AP-MW-9V	ORP	Oxidation Reduction Potention	3/27/2023 15:34	-157.14	mv
GS-AP-MW-9V	PH	pH	3/27/2023 15:34	7.08	SU
GS-AP-MW-9V	TEMP	Temperature	3/27/2023 15:34	18.84	C
GS-AP-MW-9V	TURB	Turbidity	3/27/2023 15:34	1.26	NTU
GS-AP-MW-9V	COND	Conductivity	3/27/2023 15:39	998.55	uS/cm
GS-AP-MW-9V	DO	DO	3/27/2023 15:39	1.04	mg/L
GS-AP-MW-9V	DTW	Depth to Water Detail	3/27/2023 15:39	66.23	ft
GS-AP-MW-9V	ORP	Oxidation Reduction Potention	3/27/2023 15:39	-155.69	mv
GS-AP-MW-9V	PH	pH	3/27/2023 15:39	7.05	SU
GS-AP-MW-9V	TEMP	Temperature	3/27/2023 15:39	18.95	C
GS-AP-MW-9V	TURB	Turbidity	3/27/2023 15:39	1.03	NTU
GS-AP-MW-9V	COND	Conductivity	3/27/2023 15:44	879.92	uS/cm
GS-AP-MW-9V	DO	DO	3/27/2023 15:44	1.15	mg/L
GS-AP-MW-9V	DTW	Depth to Water Detail	3/27/2023 15:44	66.7	ft
GS-AP-MW-9V	ORP	Oxidation Reduction Potention	3/27/2023 15:44	-153.74	mv
GS-AP-MW-9V	PH	pH	3/27/2023 15:44	7.05	SU
GS-AP-MW-9V	TEMP	Temperature	3/27/2023 15:44	18.85	C
GS-AP-MW-9V	TURB	Turbidity	3/27/2023 15:44	0.98	NTU
GS-AP-MW-9V	COND	Conductivity	3/27/2023 15:49	795.81	uS/cm
GS-AP-MW-9V	DO	DO	3/27/2023 15:49	1.22	mg/L
GS-AP-MW-9V	DTW	Depth to Water Detail	3/27/2023 15:49	66.75	ft
GS-AP-MW-9V	ORP	Oxidation Reduction Potention	3/27/2023 15:49	-148.6	mv
GS-AP-MW-9V	PH	pH	3/27/2023 15:49	7.05	SU
GS-AP-MW-9V	TEMP	Temperature	3/27/2023 15:49	18.95	C
GS-AP-MW-9V	TURB	Turbidity	3/27/2023 15:49	0.91	NTU
GS-AP-MW-9V	COND	Conductivity	3/27/2023 15:54	726.33	uS/cm
GS-AP-MW-9V	DO	DO	3/27/2023 15:54	1.31	mg/L
GS-AP-MW-9V	DTW	Depth to Water Detail	3/27/2023 15:54	66.79	ft
GS-AP-MW-9V	ORP	Oxidation Reduction Potention	3/27/2023 15:54	-147.51	mv
GS-AP-MW-9V	PH	pH	3/27/2023 15:54	7.04	SU
GS-AP-MW-9V	TEMP	Temperature	3/27/2023 15:54	19.2	C
GS-AP-MW-9V	TURB	Turbidity	3/27/2023 15:54	0.91	NTU
GS-AP-MW-9V	COND	Conductivity	3/27/2023 15:59	669.39	uS/cm
GS-AP-MW-9V	DO	DO	3/27/2023 15:59	1.23	mg/L
GS-AP-MW-9V	DTW	Depth to Water Detail	3/27/2023 15:59	66.81	ft
GS-AP-MW-9V	ORP	Oxidation Reduction Potention	3/27/2023 15:59	-134.71	mv
GS-AP-MW-9V	PH	pH	3/27/2023 15:59	7.04	SU

Field Parameters Summary
Plant Gorgas Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GS-AP-MW-9V	TEMP	Temperature	3/27/2023 15:59	19.16	C
GS-AP-MW-9V	TURB	Turbidity	3/27/2023 15:59	0.65	NTU
GS-AP-MW-9V	COND	Conductivity	3/27/2023 16:04	630.91	uS/cm
GS-AP-MW-9V	DO	DO	3/27/2023 16:04	1.18	mg/L
GS-AP-MW-9V	DTW	Depth to Water Detail	3/27/2023 16:04	66.84	ft
GS-AP-MW-9V	ORP	Oxidation Reduction Potention	3/27/2023 16:04	-143.47	mv
GS-AP-MW-9V	PH	pH	3/27/2023 16:04	7.03	SU
GS-AP-MW-9V	TEMP	Temperature	3/27/2023 16:04	19.14	C
GS-AP-MW-9V	TURB	Turbidity	3/27/2023 16:04	0.64	NTU
GS-AP-MW-9V	COND	Conductivity	3/27/2023 16:09	606.94	uS/cm
GS-AP-MW-9V	DO	DO	3/27/2023 16:09	1.18	mg/L
GS-AP-MW-9V	DTW	Depth to Water Detail	3/27/2023 16:09	66.88	ft
GS-AP-MW-9V	ORP	Oxidation Reduction Potention	3/27/2023 16:09	-144.36	mv
GS-AP-MW-9V	PH	pH	3/27/2023 16:09	7.04	SU
GS-AP-MW-9V	TEMP	Temperature	3/27/2023 16:09	19.04	C
GS-AP-MW-9V	TURB	Turbidity	3/27/2023 16:09	0.66	NTU
GS-AP-MW-9V	COND	Conductivity	3/27/2023 16:14	571.68	uS/cm
GS-AP-MW-9V	DO	DO	3/27/2023 16:14	1.21	mg/L
GS-AP-MW-9V	DTW	Depth to Water Detail	3/27/2023 16:14	66.98	ft
GS-AP-MW-9V	ORP	Oxidation Reduction Potention	3/27/2023 16:14	-143.72	mv
GS-AP-MW-9V	PH	pH	3/27/2023 16:14	7.04	SU
GS-AP-MW-9V	TEMP	Temperature	3/27/2023 16:14	19.02	C
GS-AP-MW-9V	TURB	Turbidity	3/27/2023 16:14	0.86	NTU
GS-AP-MW-9V	COND	Conductivity	3/27/2023 16:19	566.87	uS/cm
GS-AP-MW-9V	DO	DO	3/27/2023 16:19	1.24	mg/L
GS-AP-MW-9V	DTW	Depth to Water Detail	3/27/2023 16:19	67.04	ft
GS-AP-MW-9V	ORP	Oxidation Reduction Potention	3/27/2023 16:19	-139.84	mv
GS-AP-MW-9V	PH	pH	3/27/2023 16:19	7.03	SU
GS-AP-MW-9V	TEMP	Temperature	3/27/2023 16:19	18.95	C
GS-AP-MW-9V	TURB	Turbidity	3/27/2023 16:19	0.79	NTU
GS-AP-MW-9V	COND	Conductivity	3/27/2023 16:24	543.3	uS/cm
GS-AP-MW-9V	DO	DO	3/27/2023 16:24	1.22	mg/L
GS-AP-MW-9V	DTW	Depth to Water Detail	3/27/2023 16:24	67.07	ft
GS-AP-MW-9V	ORP	Oxidation Reduction Potention	3/27/2023 16:24	-136.84	mv
GS-AP-MW-9V	PH	pH	3/27/2023 16:24	7.02	SU
GS-AP-MW-9V	TEMP	Temperature	3/27/2023 16:24	18.95	C
GS-AP-MW-9V	TURB	Turbidity	3/27/2023 16:24	0.8	NTU
GS-AP-MW-9V	COND	Conductivity	3/27/2023 16:29	540.47	uS/cm
GS-AP-MW-9V	DO	DO	3/27/2023 16:29	1.22	mg/L
GS-AP-MW-9V	DTW	Depth to Water Detail	3/27/2023 16:29	67.1	ft
GS-AP-MW-9V	ORP	Oxidation Reduction Potention	3/27/2023 16:29	-137.39	mv
GS-AP-MW-9V	PH	pH	3/27/2023 16:29	7	SU
GS-AP-MW-9V	SULFIDE	Sulfide	3/27/2023 16:29	2	mg/L
GS-AP-MW-9V	TEMP	Temperature	3/27/2023 16:29	18.86	C
GS-AP-MW-9V	TURB	Turbidity	3/27/2023 16:29	0.72	NTU

Field Parameters Summary
Plant Gorgas Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GS-AP-MW-38H	COND	Conductivity	3/28/2023 12:17	1159.3	uS/cm
GS-AP-MW-38H	DO	DO	3/28/2023 12:17	0.64	mg/L
GS-AP-MW-38H	DTW	Depth to Water Detail	3/28/2023 12:17	47.74	ft
GS-AP-MW-38H	ORP	Oxidation Reduction Potention	3/28/2023 12:17	-170.92	mv
GS-AP-MW-38H	PH	pH	3/28/2023 12:17	7.68	SU
GS-AP-MW-38H	TEMP	Temperature	3/28/2023 12:17	18.24	C
GS-AP-MW-38H	TURB	Turbidity	3/28/2023 12:17	5.34	NTU
GS-AP-MW-38H	COND	Conductivity	3/28/2023 12:22	1140.3	uS/cm
GS-AP-MW-38H	DO	DO	3/28/2023 12:22	0.56	mg/L
GS-AP-MW-38H	DTW	Depth to Water Detail	3/28/2023 12:22	47.76	ft
GS-AP-MW-38H	ORP	Oxidation Reduction Potention	3/28/2023 12:22	-176.76	mv
GS-AP-MW-38H	PH	pH	3/28/2023 12:22	7.69	SU
GS-AP-MW-38H	TEMP	Temperature	3/28/2023 12:22	18.45	C
GS-AP-MW-38H	TURB	Turbidity	3/28/2023 12:22	4.65	NTU
GS-AP-MW-38H	COND	Conductivity	3/28/2023 12:27	1000.42	uS/cm
GS-AP-MW-38H	DO	DO	3/28/2023 12:27	0.53	mg/L
GS-AP-MW-38H	DTW	Depth to Water Detail	3/28/2023 12:27	47.78	ft
GS-AP-MW-38H	ORP	Oxidation Reduction Potention	3/28/2023 12:27	-178.7	mv
GS-AP-MW-38H	PH	pH	3/28/2023 12:27	7.72	SU
GS-AP-MW-38H	TEMP	Temperature	3/28/2023 12:27	18.53	C
GS-AP-MW-38H	TURB	Turbidity	3/28/2023 12:27	3.88	NTU
GS-AP-MW-38H	COND	Conductivity	3/28/2023 12:32	905.02	uS/cm
GS-AP-MW-38H	DO	DO	3/28/2023 12:32	0.53	mg/L
GS-AP-MW-38H	DTW	Depth to Water Detail	3/28/2023 12:32	47.78	ft
GS-AP-MW-38H	ORP	Oxidation Reduction Potention	3/28/2023 12:32	-179.6	mv
GS-AP-MW-38H	PH	pH	3/28/2023 12:32	7.76	SU
GS-AP-MW-38H	TEMP	Temperature	3/28/2023 12:32	18.4	C
GS-AP-MW-38H	TURB	Turbidity	3/28/2023 12:32	3.35	NTU
GS-AP-MW-38H	COND	Conductivity	3/28/2023 12:37	831.92	uS/cm
GS-AP-MW-38H	DO	DO	3/28/2023 12:37	0.54	mg/L
GS-AP-MW-38H	DTW	Depth to Water Detail	3/28/2023 12:37	47.78	ft
GS-AP-MW-38H	ORP	Oxidation Reduction Potention	3/28/2023 12:37	-179.53	mv
GS-AP-MW-38H	PH	pH	3/28/2023 12:37	7.79	SU
GS-AP-MW-38H	TEMP	Temperature	3/28/2023 12:37	18.61	C
GS-AP-MW-38H	TURB	Turbidity	3/28/2023 12:37	2.98	NTU
GS-AP-MW-38H	COND	Conductivity	3/28/2023 12:42	781.7	uS/cm
GS-AP-MW-38H	DO	DO	3/28/2023 12:42	0.59	mg/L
GS-AP-MW-38H	DTW	Depth to Water Detail	3/28/2023 12:42	47.78	ft
GS-AP-MW-38H	ORP	Oxidation Reduction Potention	3/28/2023 12:42	-178.31	mv
GS-AP-MW-38H	PH	pH	3/28/2023 12:42	7.81	SU
GS-AP-MW-38H	TEMP	Temperature	3/28/2023 12:42	18.87	C
GS-AP-MW-38H	TURB	Turbidity	3/28/2023 12:42	2.98	NTU
GS-AP-MW-38H	COND	Conductivity	3/28/2023 12:47	750.57	uS/cm
GS-AP-MW-38H	DO	DO	3/28/2023 12:47	0.55	mg/L
GS-AP-MW-38H	DTW	Depth to Water Detail	3/28/2023 12:47	47.78	ft
GS-AP-MW-38H	ORP	Oxidation Reduction Potention	3/28/2023 12:47	-177.04	mv
GS-AP-MW-38H	PH	pH	3/28/2023 12:47	7.82	SU

Field Parameters Summary
Plant Gorgas Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GS-AP-MW-38H	TEMP	Temperature	3/28/2023 12:47	18.8	C
GS-AP-MW-38H	TURB	Turbidity	3/28/2023 12:47	2.42	NTU
GS-AP-MW-38H	COND	Conductivity	3/28/2023 12:52	700.87	uS/cm
GS-AP-MW-38H	DO	DO	3/28/2023 12:52	0.54	mg/L
GS-AP-MW-38H	DTW	Depth to Water Detail	3/28/2023 12:52	47.78	ft
GS-AP-MW-38H	ORP	Oxidation Reduction Potention	3/28/2023 12:52	-175.88	mv
GS-AP-MW-38H	PH	pH	3/28/2023 12:52	7.83	SU
GS-AP-MW-38H	TEMP	Temperature	3/28/2023 12:52	19.11	C
GS-AP-MW-38H	TURB	Turbidity	3/28/2023 12:52	2.41	NTU
GS-AP-MW-38H	COND	Conductivity	3/28/2023 12:57	645.83	uS/cm
GS-AP-MW-38H	DO	DO	3/28/2023 12:57	0.56	mg/L
GS-AP-MW-38H	DTW	Depth to Water Detail	3/28/2023 12:57	47.78	ft
GS-AP-MW-38H	ORP	Oxidation Reduction Potention	3/28/2023 12:57	-173.21	mv
GS-AP-MW-38H	PH	pH	3/28/2023 12:57	7.81	SU
GS-AP-MW-38H	TEMP	Temperature	3/28/2023 12:57	19.02	C
GS-AP-MW-38H	TURB	Turbidity	3/28/2023 12:57	2.54	NTU
GS-AP-MW-38H	COND	Conductivity	3/28/2023 13:02	611.96	uS/cm
GS-AP-MW-38H	DO	DO	3/28/2023 13:02	0.55	mg/L
GS-AP-MW-38H	DTW	Depth to Water Detail	3/28/2023 13:02	47.78	ft
GS-AP-MW-38H	ORP	Oxidation Reduction Potention	3/28/2023 13:02	-172.16	mv
GS-AP-MW-38H	PH	pH	3/28/2023 13:02	7.82	SU
GS-AP-MW-38H	TEMP	Temperature	3/28/2023 13:02	18.87	C
GS-AP-MW-38H	TURB	Turbidity	3/28/2023 13:02	2.07	NTU
GS-AP-MW-38H	COND	Conductivity	3/28/2023 13:07	596.7	uS/cm
GS-AP-MW-38H	DO	DO	3/28/2023 13:07	0.56	mg/L
GS-AP-MW-38H	DTW	Depth to Water Detail	3/28/2023 13:07	47.78	ft
GS-AP-MW-38H	ORP	Oxidation Reduction Potention	3/28/2023 13:07	-171.78	mv
GS-AP-MW-38H	PH	pH	3/28/2023 13:07	7.83	SU
GS-AP-MW-38H	TEMP	Temperature	3/28/2023 13:07	19.11	C
GS-AP-MW-38H	TURB	Turbidity	3/28/2023 13:07	2.47	NTU
GS-AP-MW-38H	COND	Conductivity	3/28/2023 13:12	588.55	uS/cm
GS-AP-MW-38H	DO	DO	3/28/2023 13:12	0.57	mg/L
GS-AP-MW-38H	DTW	Depth to Water Detail	3/28/2023 13:12	47.78	ft
GS-AP-MW-38H	ORP	Oxidation Reduction Potention	3/28/2023 13:12	-170.4	mv
GS-AP-MW-38H	PH	pH	3/28/2023 13:12	7.85	SU
GS-AP-MW-38H	SULFIDE	Sulfide	3/28/2023 13:12	0	mg/L
GS-AP-MW-38H	TEMP	Temperature	3/28/2023 13:12	19.28	C
GS-AP-MW-38H	TURB	Turbidity	3/28/2023 13:12	2.29	NTU

Field Parameters Summary
Plant Gorgas Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GS-AP-MW-18R	COND	Conductivity	3/28/2023 10:52	238.08	uS/cm
GS-AP-MW-18R	DO	DO	3/28/2023 10:52	0.21	mg/L
GS-AP-MW-18R	DTW	Depth to Water Detail	3/28/2023 10:52	40.31	ft
GS-AP-MW-18R	ORP	Oxidation Reduction Potention	3/28/2023 10:52	-7.67	mv
GS-AP-MW-18R	PH	pH	3/28/2023 10:52	6.54	SU
GS-AP-MW-18R	TEMP	Temperature	3/28/2023 10:52	17.12	C
GS-AP-MW-18R	TURB	Turbidity	3/28/2023 10:52	4.88	NTU
GS-AP-MW-18R	COND	Conductivity	3/28/2023 10:57	228.61	uS/cm
GS-AP-MW-18R	DO	DO	3/28/2023 10:57	0.2	mg/L
GS-AP-MW-18R	DTW	Depth to Water Detail	3/28/2023 10:57	40.31	ft
GS-AP-MW-18R	ORP	Oxidation Reduction Potention	3/28/2023 10:57	-15.92	mv
GS-AP-MW-18R	PH	pH	3/28/2023 10:57	6.53	SU
GS-AP-MW-18R	TEMP	Temperature	3/28/2023 10:57	17.15	C
GS-AP-MW-18R	TURB	Turbidity	3/28/2023 10:57	2.28	NTU
GS-AP-MW-18R	COND	Conductivity	3/28/2023 11:02	223.78	uS/cm
GS-AP-MW-18R	DO	DO	3/28/2023 11:02	0.21	mg/L
GS-AP-MW-18R	DTW	Depth to Water Detail	3/28/2023 11:02	40.31	ft
GS-AP-MW-18R	ORP	Oxidation Reduction Potention	3/28/2023 11:02	-18.73	mv
GS-AP-MW-18R	PH	pH	3/28/2023 11:02	6.53	SU
GS-AP-MW-18R	TEMP	Temperature	3/28/2023 11:02	17.15	C
GS-AP-MW-18R	TURB	Turbidity	3/28/2023 11:02	1.75	NTU
GS-AP-MW-18R	COND	Conductivity	3/28/2023 11:07	220.04	uS/cm
GS-AP-MW-18R	DO	DO	3/28/2023 11:07	0.21	mg/L
GS-AP-MW-18R	DTW	Depth to Water Detail	3/28/2023 11:07	40.31	ft
GS-AP-MW-18R	ORP	Oxidation Reduction Potention	3/28/2023 11:07	-17.38	mv
GS-AP-MW-18R	PH	pH	3/28/2023 11:07	6.48	SU
GS-AP-MW-18R	SULFIDE	Sulfide	3/28/2023 11:07	0	mg/L
GS-AP-MW-18R	TEMP	Temperature	3/28/2023 11:07	17.16	C
GS-AP-MW-18R	TURB	Turbidity	3/28/2023 11:07	1.74	NTU

Field Parameters Summary
Plant Gorgas Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GS-AP-PZ-18R	COND	Conductivity	3/28/2023 9:47	409.44	uS/cm
GS-AP-PZ-18R	DO	DO	3/28/2023 9:47	0.58	mg/L
GS-AP-PZ-18R	DTW	Depth to Water Detail	3/28/2023 9:47	95.73	ft
GS-AP-PZ-18R	ORP	Oxidation Reduction Potention	3/28/2023 9:47	-65.52	mv
GS-AP-PZ-18R	PH	pH	3/28/2023 9:47	7.21	SU
GS-AP-PZ-18R	TEMP	Temperature	3/28/2023 9:47	16.89	C
GS-AP-PZ-18R	TURB	Turbidity	3/28/2023 9:47	1.94	NTU
GS-AP-PZ-18R	COND	Conductivity	3/28/2023 9:52	446.5	uS/cm
GS-AP-PZ-18R	DO	DO	3/28/2023 9:52	0.43	mg/L
GS-AP-PZ-18R	DTW	Depth to Water Detail	3/28/2023 9:52	95.73	ft
GS-AP-PZ-18R	ORP	Oxidation Reduction Potention	3/28/2023 9:52	-71.88	mv
GS-AP-PZ-18R	PH	pH	3/28/2023 9:52	7.17	SU
GS-AP-PZ-18R	TEMP	Temperature	3/28/2023 9:52	16.85	C
GS-AP-PZ-18R	TURB	Turbidity	3/28/2023 9:52	1.24	NTU
GS-AP-PZ-18R	COND	Conductivity	3/28/2023 9:57	451.24	uS/cm
GS-AP-PZ-18R	DO	DO	3/28/2023 9:57	0.4	mg/L
GS-AP-PZ-18R	DTW	Depth to Water Detail	3/28/2023 9:57	95.73	ft
GS-AP-PZ-18R	ORP	Oxidation Reduction Potention	3/28/2023 9:57	-73.99	mv
GS-AP-PZ-18R	PH	pH	3/28/2023 9:57	7.2	SU
GS-AP-PZ-18R	TEMP	Temperature	3/28/2023 9:57	16.81	C
GS-AP-PZ-18R	TURB	Turbidity	3/28/2023 9:57	0.82	NTU
GS-AP-PZ-18R	COND	Conductivity	3/28/2023 10:02	450.65	uS/cm
GS-AP-PZ-18R	DO	DO	3/28/2023 10:02	0.3	mg/L
GS-AP-PZ-18R	DTW	Depth to Water Detail	3/28/2023 10:02	95.73	ft
GS-AP-PZ-18R	ORP	Oxidation Reduction Potention	3/28/2023 10:02	-78.62	mv
GS-AP-PZ-18R	PH	pH	3/28/2023 10:02	7.22	SU
GS-AP-PZ-18R	SULFIDE	Sulfide	3/28/2023 10:02	0	mg/L
GS-AP-PZ-18R	TEMP	Temperature	3/28/2023 10:02	16.79	C
GS-AP-PZ-18R	TURB	Turbidity	3/28/2023 10:02	0.75	NTU

Field Parameters Summary
Plant Gorgas Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GS-AP-MW-41HD	COND	Conductivity	3/15/2023 10:30	489.35	uS/cm
GS-AP-MW-41HD	DO	DO	3/15/2023 10:30	0.27	mg/L
GS-AP-MW-41HD	DTW	Depth to Water Detail	3/15/2023 10:30	4.68	ft
GS-AP-MW-41HD	ORP	Oxidation Reduction Potention	3/15/2023 10:30	-50.1	mv
GS-AP-MW-41HD	PH	pH	3/15/2023 10:30	7.47	SU
GS-AP-MW-41HD	TEMP	Temperature	3/15/2023 10:30	15.11	C
GS-AP-MW-41HD	TURB	Turbidity	3/15/2023 10:30	0.47	NTU
GS-AP-MW-41HD	COND	Conductivity	3/15/2023 10:35	488.58	uS/cm
GS-AP-MW-41HD	DO	DO	3/15/2023 10:35	0.25	mg/L
GS-AP-MW-41HD	DTW	Depth to Water Detail	3/15/2023 10:35	5.28	ft
GS-AP-MW-41HD	ORP	Oxidation Reduction Potention	3/15/2023 10:35	-44.96	mv
GS-AP-MW-41HD	PH	pH	3/15/2023 10:35	7.47	SU
GS-AP-MW-41HD	TEMP	Temperature	3/15/2023 10:35	15.34	C
GS-AP-MW-41HD	TURB	Turbidity	3/15/2023 10:35	0.26	NTU
GS-AP-MW-41HD	COND	Conductivity	3/15/2023 10:40	487.85	uS/cm
GS-AP-MW-41HD	DO	DO	3/15/2023 10:40	0.25	mg/L
GS-AP-MW-41HD	DTW	Depth to Water Detail	3/15/2023 10:40	5.68	ft
GS-AP-MW-41HD	ORP	Oxidation Reduction Potention	3/15/2023 10:40	-40.84	mv
GS-AP-MW-41HD	PH	pH	3/15/2023 10:40	7.48	SU
GS-AP-MW-41HD	TEMP	Temperature	3/15/2023 10:40	15.44	C
GS-AP-MW-41HD	TURB	Turbidity	3/15/2023 10:40	0.23	NTU
GS-AP-MW-41HD	COND	Conductivity	3/15/2023 10:45	487.78	uS/cm
GS-AP-MW-41HD	DO	DO	3/15/2023 10:45	0.25	mg/L
GS-AP-MW-41HD	DTW	Depth to Water Detail	3/15/2023 10:45	5.73	ft
GS-AP-MW-41HD	ORP	Oxidation Reduction Potention	3/15/2023 10:45	-37.71	mv
GS-AP-MW-41HD	PH	pH	3/15/2023 10:45	7.48	SU
GS-AP-MW-41HD	TEMP	Temperature	3/15/2023 10:45	15.68	C
GS-AP-MW-41HD	TURB	Turbidity	3/15/2023 10:45	0.2	NTU
GS-AP-MW-41HD	COND	Conductivity	3/15/2023 10:50	487.34	uS/cm
GS-AP-MW-41HD	DO	DO	3/15/2023 10:50	0.25	mg/L
GS-AP-MW-41HD	DTW	Depth to Water Detail	3/15/2023 10:50	5.85	ft
GS-AP-MW-41HD	ORP	Oxidation Reduction Potention	3/15/2023 10:50	-33.02	mv
GS-AP-MW-41HD	PH	pH	3/15/2023 10:50	7.43	SU
GS-AP-MW-41HD	SULFIDE	Sulfide	3/15/2023 10:50	0	mg/L
GS-AP-MW-41HD	TEMP	Temperature	3/15/2023 10:50	15.72	C
GS-AP-MW-41HD	TURB	Turbidity	3/15/2023 10:50	0.28	NTU

Field Parameters Summary
Plant Gorgas Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GS-AP-MW-42H	COND	Conductivity	3/15/2023 13:36	1016.94	uS/cm
GS-AP-MW-42H	DO	DO	3/15/2023 13:36	0.25	mg/L
GS-AP-MW-42H	DTW	Depth to Water Detail	3/15/2023 13:36	52.8	ft
GS-AP-MW-42H	ORP	Oxidation Reduction Potention	3/15/2023 13:36	-39.11	mv
GS-AP-MW-42H	PH	pH	3/15/2023 13:36	6.58	SU
GS-AP-MW-42H	TEMP	Temperature	3/15/2023 13:36	17.69	C
GS-AP-MW-42H	TURB	Turbidity	3/15/2023 13:36	125	NTU
GS-AP-MW-42H	COND	Conductivity	3/15/2023 13:41	1013.44	uS/cm
GS-AP-MW-42H	DO	DO	3/15/2023 13:41	0.22	mg/L
GS-AP-MW-42H	DTW	Depth to Water Detail	3/15/2023 13:41	52.86	ft
GS-AP-MW-42H	ORP	Oxidation Reduction Potention	3/15/2023 13:41	-35.07	mv
GS-AP-MW-42H	PH	pH	3/15/2023 13:41	6.61	SU
GS-AP-MW-42H	TEMP	Temperature	3/15/2023 13:41	17.61	C
GS-AP-MW-42H	TURB	Turbidity	3/15/2023 13:41	90.4	NTU
GS-AP-MW-42H	COND	Conductivity	3/15/2023 13:46	1016.52	uS/cm
GS-AP-MW-42H	DO	DO	3/15/2023 13:46	0.2	mg/L
GS-AP-MW-42H	DTW	Depth to Water Detail	3/15/2023 13:46	52.91	ft
GS-AP-MW-42H	ORP	Oxidation Reduction Potention	3/15/2023 13:46	-27.28	mv
GS-AP-MW-42H	PH	pH	3/15/2023 13:46	6.61	SU
GS-AP-MW-42H	TEMP	Temperature	3/15/2023 13:46	17.57	C
GS-AP-MW-42H	TURB	Turbidity	3/15/2023 13:46	54	NTU
GS-AP-MW-42H	COND	Conductivity	3/15/2023 13:51	1020.62	uS/cm
GS-AP-MW-42H	DO	DO	3/15/2023 13:51	0.2	mg/L
GS-AP-MW-42H	DTW	Depth to Water Detail	3/15/2023 13:51	52.91	ft
GS-AP-MW-42H	ORP	Oxidation Reduction Potention	3/15/2023 13:51	-28.23	mv
GS-AP-MW-42H	PH	pH	3/15/2023 13:51	6.63	SU
GS-AP-MW-42H	TEMP	Temperature	3/15/2023 13:51	17.7	C
GS-AP-MW-42H	TURB	Turbidity	3/15/2023 13:51	31.3	NTU
GS-AP-MW-42H	COND	Conductivity	3/15/2023 13:56	1018.86	uS/cm
GS-AP-MW-42H	DO	DO	3/15/2023 13:56	0.19	mg/L
GS-AP-MW-42H	DTW	Depth to Water Detail	3/15/2023 13:56	52.91	ft
GS-AP-MW-42H	ORP	Oxidation Reduction Potention	3/15/2023 13:56	-28.15	mv
GS-AP-MW-42H	PH	pH	3/15/2023 13:56	6.63	SU
GS-AP-MW-42H	TEMP	Temperature	3/15/2023 13:56	17.72	C
GS-AP-MW-42H	TURB	Turbidity	3/15/2023 13:56	28.3	NTU
GS-AP-MW-42H	COND	Conductivity	3/15/2023 14:01	1021.2	uS/cm
GS-AP-MW-42H	DO	DO	3/15/2023 14:01	0.19	mg/L
GS-AP-MW-42H	DTW	Depth to Water Detail	3/15/2023 14:01	52.91	ft
GS-AP-MW-42H	ORP	Oxidation Reduction Potention	3/15/2023 14:01	-27.3	mv
GS-AP-MW-42H	PH	pH	3/15/2023 14:01	6.62	SU
GS-AP-MW-42H	TEMP	Temperature	3/15/2023 14:01	17.8	C
GS-AP-MW-42H	TURB	Turbidity	3/15/2023 14:01	14.9	NTU
GS-AP-MW-42H	COND	Conductivity	3/15/2023 14:06	1018.7	uS/cm
GS-AP-MW-42H	DO	DO	3/15/2023 14:06	0.2	mg/L
GS-AP-MW-42H	DTW	Depth to Water Detail	3/15/2023 14:06	52.91	ft
GS-AP-MW-42H	ORP	Oxidation Reduction Potention	3/15/2023 14:06	-27.34	mv
GS-AP-MW-42H	PH	pH	3/15/2023 14:06	6.63	SU

Field Parameters Summary
Plant Gorgas Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GS-AP-MW-42H	TEMP	Temperature	3/15/2023 14:06	17.8	C
GS-AP-MW-42H	TURB	Turbidity	3/15/2023 14:06	11.5	NTU
GS-AP-MW-42H	COND	Conductivity	3/15/2023 14:11	1023.91	uS/cm
GS-AP-MW-42H	DO	DO	3/15/2023 14:11	0.2	mg/L
GS-AP-MW-42H	DTW	Depth to Water Detail	3/15/2023 14:11	52.91	ft
GS-AP-MW-42H	ORP	Oxidation Reduction Potention	3/15/2023 14:11	-27.09	mv
GS-AP-MW-42H	PH	pH	3/15/2023 14:11	6.63	SU
GS-AP-MW-42H	TEMP	Temperature	3/15/2023 14:11	17.75	C
GS-AP-MW-42H	TURB	Turbidity	3/15/2023 14:11	11.2	NTU
GS-AP-MW-42H	COND	Conductivity	3/15/2023 14:16	1015.21	uS/cm
GS-AP-MW-42H	DO	DO	3/15/2023 14:16	0.19	mg/L
GS-AP-MW-42H	DTW	Depth to Water Detail	3/15/2023 14:16	52.91	ft
GS-AP-MW-42H	ORP	Oxidation Reduction Potention	3/15/2023 14:16	-26.83	mv
GS-AP-MW-42H	PH	pH	3/15/2023 14:16	6.63	SU
GS-AP-MW-42H	SULFIDE	Sulfide	3/15/2023 14:16	0	mg/L
GS-AP-MW-42H	TEMP	Temperature	3/15/2023 14:16	17.77	C
GS-AP-MW-42H	TURB	Turbidity	3/15/2023 14:16	9.37	NTU

Field Parameters Summary
Plant Gorgas Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE
GS-AP-MW-34HO	COND	Conductivity	3/8/2023 12:06	4196.7
GS-AP-MW-34HO	DO	DO	3/8/2023 12:06	2.88
GS-AP-MW-34HO	DTW	Depth to Water Detail	3/8/2023 12:06	260.54
GS-AP-MW-34HO	ORP	Oxidation Reduction Potention	3/8/2023 12:06	-67.31
GS-AP-MW-34HO	PH	pH	3/8/2023 12:06	6.73
GS-AP-MW-34HO	TEMP	Temperature	3/8/2023 12:06	19.74
GS-AP-MW-34HO	TURB	Turbidity	3/8/2023 12:06	4.52
GS-AP-MW-34HO	COND	Conductivity	3/8/2023 12:11	4192.48
GS-AP-MW-34HO	DO	DO	3/8/2023 12:11	4.77
GS-AP-MW-34HO	DTW	Depth to Water Detail	3/8/2023 12:11	261.14
GS-AP-MW-34HO	ORP	Oxidation Reduction Potention	3/8/2023 12:11	-159.57
GS-AP-MW-34HO	PH	pH	3/8/2023 12:11	7.18
GS-AP-MW-34HO	TEMP	Temperature	3/8/2023 12:11	19.72
GS-AP-MW-34HO	TURB	Turbidity	3/8/2023 12:11	3.91
GS-AP-MW-34HO	COND	Conductivity	3/8/2023 12:16	4359.86
GS-AP-MW-34HO	DO	DO	3/8/2023 12:16	8.92
GS-AP-MW-34HO	DTW	Depth to Water Detail	3/8/2023 12:16	262.05
GS-AP-MW-34HO	ORP	Oxidation Reduction Potention	3/8/2023 12:16	-163.54
GS-AP-MW-34HO	PH	pH	3/8/2023 12:16	7.37
GS-AP-MW-34HO	TEMP	Temperature	3/8/2023 12:16	19.88
GS-AP-MW-34HO	TURB	Turbidity	3/8/2023 12:16	31.3
GS-AP-MW-34HO	COND	Conductivity	3/8/2023 12:21	4434.49
GS-AP-MW-34HO	DO	DO	3/8/2023 12:21	11.26
GS-AP-MW-34HO	DTW	Depth to Water Detail	3/8/2023 12:21	262.42
GS-AP-MW-34HO	ORP	Oxidation Reduction Potention	3/8/2023 12:21	-124.12
GS-AP-MW-34HO	PH	pH	3/8/2023 12:21	7.29
GS-AP-MW-34HO	TEMP	Temperature	3/8/2023 12:21	19.46
GS-AP-MW-34HO	TURB	Turbidity	3/8/2023 12:21	19.2
GS-AP-MW-34HO	COND	Conductivity	3/8/2023 12:26	4371.71
GS-AP-MW-34HO	DO	DO	3/8/2023 12:26	10.1
GS-AP-MW-34HO	DTW	Depth to Water Detail	3/8/2023 12:26	262.24
GS-AP-MW-34HO	ORP	Oxidation Reduction Potention	3/8/2023 12:26	-102.94
GS-AP-MW-34HO	PH	pH	3/8/2023 12:26	7.25
GS-AP-MW-34HO	TEMP	Temperature	3/8/2023 12:26	20.25
GS-AP-MW-34HO	TURB	Turbidity	3/8/2023 12:26	13.3
GS-AP-MW-34HO	COND	Conductivity	3/8/2023 12:31	4322.09
GS-AP-MW-34HO	DO	DO	3/8/2023 12:31	8.69
GS-AP-MW-34HO	DTW	Depth to Water Detail	3/8/2023 12:31	262.24
GS-AP-MW-34HO	ORP	Oxidation Reduction Potention	3/8/2023 12:31	-95.55
GS-AP-MW-34HO	PH	pH	3/8/2023 12:31	7.24
GS-AP-MW-34HO	TEMP	Temperature	3/8/2023 12:31	21.28
GS-AP-MW-34HO	TURB	Turbidity	3/8/2023 12:31	10.55
GS-AP-MW-34HO	COND	Conductivity	3/8/2023 12:36	4305.47
GS-AP-MW-34HO	DO	DO	3/8/2023 12:36	7.68
GS-AP-MW-34HO	DTW	Depth to Water Detail	3/8/2023 12:36	262.24
GS-AP-MW-34HO	ORP	Oxidation Reduction Potention	3/8/2023 12:36	-90.6
GS-AP-MW-34HO	PH	pH	3/8/2023 12:36	7.25

Field Parameters Summary
Plant Gorgas Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE
GS-AP-MW-34HO	TEMP	Temperature	3/8/2023 12:36	22.3
GS-AP-MW-34HO	TURB	Turbidity	3/8/2023 12:36	10.21
GS-AP-MW-34HO	COND	Conductivity	3/8/2023 12:41	4275.74
GS-AP-MW-34HO	DO	DO	3/8/2023 12:41	6.69
GS-AP-MW-34HO	DTW	Depth to Water Detail	3/8/2023 12:41	262.24
GS-AP-MW-34HO	ORP	Oxidation Reduction Potention	3/8/2023 12:41	-89.95
GS-AP-MW-34HO	PH	pH	3/8/2023 12:41	7.26
GS-AP-MW-34HO	TEMP	Temperature	3/8/2023 12:41	22.17
GS-AP-MW-34HO	TURB	Turbidity	3/8/2023 12:41	9.26
GS-AP-MW-34HO	COND	Conductivity	3/8/2023 12:46	4183.36
GS-AP-MW-34HO	DO	DO	3/8/2023 12:46	2.98
GS-AP-MW-34HO	DTW	Depth to Water Detail	3/8/2023 12:46	262.24
GS-AP-MW-34HO	ORP	Oxidation Reduction Potention	3/8/2023 12:46	-96.4
GS-AP-MW-34HO	PH	pH	3/8/2023 12:46	7.26
GS-AP-MW-34HO	TEMP	Temperature	3/8/2023 12:46	19.53
GS-AP-MW-34HO	TURB	Turbidity	3/8/2023 12:46	9.05
GS-AP-MW-34HO	COND	Conductivity	3/8/2023 12:51	4130.69
GS-AP-MW-34HO	DO	DO	3/8/2023 12:51	1.78
GS-AP-MW-34HO	DTW	Depth to Water Detail	3/8/2023 12:51	262.24
GS-AP-MW-34HO	ORP	Oxidation Reduction Potention	3/8/2023 12:51	-103.85
GS-AP-MW-34HO	PH	pH	3/8/2023 12:51	7.26
GS-AP-MW-34HO	TEMP	Temperature	3/8/2023 12:51	18.86
GS-AP-MW-34HO	TURB	Turbidity	3/8/2023 12:51	10.5
GS-AP-MW-34HO	COND	Conductivity	3/8/2023 12:56	4089.98
GS-AP-MW-34HO	DO	DO	3/8/2023 12:56	1.77
GS-AP-MW-34HO	DTW	Depth to Water Detail	3/8/2023 12:56	262.24
GS-AP-MW-34HO	ORP	Oxidation Reduction Potention	3/8/2023 12:56	-105.96
GS-AP-MW-34HO	PH	pH	3/8/2023 12:56	7.26
GS-AP-MW-34HO	TEMP	Temperature	3/8/2023 12:56	19.06
GS-AP-MW-34HO	TURB	Turbidity	3/8/2023 12:56	10.33
GS-AP-MW-34HO	COND	Conductivity	3/8/2023 13:01	4065.94
GS-AP-MW-34HO	DO	DO	3/8/2023 13:01	1.81
GS-AP-MW-34HO	DTW	Depth to Water Detail	3/8/2023 13:01	262.24
GS-AP-MW-34HO	ORP	Oxidation Reduction Potention	3/8/2023 13:01	-106.29
GS-AP-MW-34HO	PH	pH	3/8/2023 13:01	7.26
GS-AP-MW-34HO	SULFIDE	Sulfide	3/8/2023 13:01	2
GS-AP-MW-34HO	TEMP	Temperature	3/8/2023 13:01	19.39
GS-AP-MW-34HO	TURB	Turbidity	3/8/2023 13:01	9.58
GS-AP-MW-35HO	COND	Conductivity	3/8/2023 9:20	437.21
GS-AP-MW-35HO	DO	DO	3/8/2023 9:20	2.21
GS-AP-MW-35HO	DTW	Depth to Water Detail	3/8/2023 9:20	267.69
GS-AP-MW-35HO	ORP	Oxidation Reduction Potention	3/8/2023 9:20	-59.59
GS-AP-MW-35HO	PH	pH	3/8/2023 9:20	7.25
GS-AP-MW-35HO	TEMP	Temperature	3/8/2023 9:20	16.99
GS-AP-MW-35HO	TURB	Turbidity	3/8/2023 9:20	1.99
GS-AP-MW-35HO	COND	Conductivity	3/8/2023 9:25	440.63
GS-AP-MW-35HO	DO	DO	3/8/2023 9:25	1.07

Field Parameters Summary
Plant Gorgas Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE
GS-AP-MW-35HO	DTW	Depth to Water Detail	3/8/2023 9:25	268.26
GS-AP-MW-35HO	ORP	Oxidation Reduction Potention	3/8/2023 9:25	-113.09
GS-AP-MW-35HO	PH	pH	3/8/2023 9:25	7.81
GS-AP-MW-35HO	TEMP	Temperature	3/8/2023 9:25	17.17
GS-AP-MW-35HO	TURB	Turbidity	3/8/2023 9:25	1.91
GS-AP-MW-35HO	COND	Conductivity	3/8/2023 9:30	451.77
GS-AP-MW-35HO	DO	DO	3/8/2023 9:30	0.71
GS-AP-MW-35HO	DTW	Depth to Water Detail	3/8/2023 9:30	268.79
GS-AP-MW-35HO	ORP	Oxidation Reduction Potention	3/8/2023 9:30	-131.8
GS-AP-MW-35HO	PH	pH	3/8/2023 9:30	8.24
GS-AP-MW-35HO	TEMP	Temperature	3/8/2023 9:30	17.14
GS-AP-MW-35HO	TURB	Turbidity	3/8/2023 9:30	1.85
GS-AP-MW-35HO	COND	Conductivity	3/8/2023 9:35	456.54
GS-AP-MW-35HO	DO	DO	3/8/2023 9:35	0.64
GS-AP-MW-35HO	DTW	Depth to Water Detail	3/8/2023 9:35	269.25
GS-AP-MW-35HO	ORP	Oxidation Reduction Potention	3/8/2023 9:35	-135.43
GS-AP-MW-35HO	PH	pH	3/8/2023 9:35	8.34
GS-AP-MW-35HO	TEMP	Temperature	3/8/2023 9:35	17.27
GS-AP-MW-35HO	TURB	Turbidity	3/8/2023 9:35	1.82
GS-AP-MW-35HO	COND	Conductivity	3/8/2023 9:40	457.29
GS-AP-MW-35HO	DO	DO	3/8/2023 9:40	0.46
GS-AP-MW-35HO	DTW	Depth to Water Detail	3/8/2023 9:40	269.81
GS-AP-MW-35HO	ORP	Oxidation Reduction Potention	3/8/2023 9:40	-140.43
GS-AP-MW-35HO	PH	pH	3/8/2023 9:40	8.39
GS-AP-MW-35HO	TEMP	Temperature	3/8/2023 9:40	17.21
GS-AP-MW-35HO	TURB	Turbidity	3/8/2023 9:40	1.86
GS-AP-MW-35HO	COND	Conductivity	3/8/2023 9:45	457.31
GS-AP-MW-35HO	DO	DO	3/8/2023 9:45	0.42
GS-AP-MW-35HO	DTW	Depth to Water Detail	3/8/2023 9:45	270.16
GS-AP-MW-35HO	ORP	Oxidation Reduction Potention	3/8/2023 9:45	-143.07
GS-AP-MW-35HO	PH	pH	3/8/2023 9:45	8.38
GS-AP-MW-35HO	TEMP	Temperature	3/8/2023 9:45	17.23
GS-AP-MW-35HO	TURB	Turbidity	3/8/2023 9:45	1.86
GS-AP-MW-35HO	COND	Conductivity	3/8/2023 9:50	457.54
GS-AP-MW-35HO	DO	DO	3/8/2023 9:50	0.36
GS-AP-MW-35HO	DTW	Depth to Water Detail	3/8/2023 9:50	270.4
GS-AP-MW-35HO	ORP	Oxidation Reduction Potention	3/8/2023 9:50	-147.56
GS-AP-MW-35HO	PH	pH	3/8/2023 9:50	8.41
GS-AP-MW-35HO	TEMP	Temperature	3/8/2023 9:50	17.42
GS-AP-MW-35HO	TURB	Turbidity	3/8/2023 9:50	1.65
GS-AP-MW-35HO	COND	Conductivity	3/8/2023 9:55	456.36
GS-AP-MW-35HO	DO	DO	3/8/2023 9:55	0.32
GS-AP-MW-35HO	DTW	Depth to Water Detail	3/8/2023 9:55	270.71
GS-AP-MW-35HO	ORP	Oxidation Reduction Potention	3/8/2023 9:55	-151.87
GS-AP-MW-35HO	PH	pH	3/8/2023 9:55	8.42
GS-AP-MW-35HO	TEMP	Temperature	3/8/2023 9:55	17.52
GS-AP-MW-35HO	TURB	Turbidity	3/8/2023 9:55	1.72

Field Parameters Summary
Plant Gorgas Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE
GS-AP-MW-35HO	COND	Conductivity	3/8/2023 10:00	454.76
GS-AP-MW-35HO	DO	DO	3/8/2023 10:00	0.3
GS-AP-MW-35HO	DTW	Depth to Water Detail	3/8/2023 10:00	271.06
GS-AP-MW-35HO	ORP	Oxidation Reduction Potention	3/8/2023 10:00	-154.65
GS-AP-MW-35HO	PH	pH	3/8/2023 10:00	8.43
GS-AP-MW-35HO	TEMP	Temperature	3/8/2023 10:00	17.4
GS-AP-MW-35HO	TURB	Turbidity	3/8/2023 10:00	1.7
GS-AP-MW-35HO	COND	Conductivity	3/8/2023 10:05	454.09
GS-AP-MW-35HO	DO	DO	3/8/2023 10:05	0.36
GS-AP-MW-35HO	DTW	Depth to Water Detail	3/8/2023 10:05	271.14
GS-AP-MW-35HO	ORP	Oxidation Reduction Potention	3/8/2023 10:05	-154.95
GS-AP-MW-35HO	PH	pH	3/8/2023 10:05	8.41
GS-AP-MW-35HO	TEMP	Temperature	3/8/2023 10:05	17.25
GS-AP-MW-35HO	TURB	Turbidity	3/8/2023 10:05	1.48
GS-AP-MW-35HO	COND	Conductivity	3/8/2023 10:10	454.15
GS-AP-MW-35HO	DO	DO	3/8/2023 10:10	0.33
GS-AP-MW-35HO	DTW	Depth to Water Detail	3/8/2023 10:10	271.3
GS-AP-MW-35HO	ORP	Oxidation Reduction Potention	3/8/2023 10:10	-157.86
GS-AP-MW-35HO	PH	pH	3/8/2023 10:10	8.42
GS-AP-MW-35HO	SULFIDE	Sulfide	3/8/2023 10:10	0
GS-AP-MW-35HO	TEMP	Temperature	3/8/2023 10:10	17.66
GS-AP-MW-35HO	TURB	Turbidity	3/8/2023 10:10	1.44
GS-AP-MW-33HO	COND	Conductivity	3/14/2023 11:28	534.58
GS-AP-MW-33HO	DO	DO	3/14/2023 11:28	4.19
GS-AP-MW-33HO	DTW	Depth to Water Detail	3/14/2023 11:28	249.75
GS-AP-MW-33HO	ORP	Oxidation Reduction Potention	3/14/2023 11:28	-55.75
GS-AP-MW-33HO	PH	pH	3/14/2023 11:28	7.52
GS-AP-MW-33HO	TEMP	Temperature	3/14/2023 11:28	15
GS-AP-MW-33HO	TURB	Turbidity	3/14/2023 11:28	16.9
GS-AP-MW-33HO	COND	Conductivity	3/14/2023 11:33	518.43
GS-AP-MW-33HO	DO	DO	3/14/2023 11:33	1.95
GS-AP-MW-33HO	DTW	Depth to Water Detail	3/14/2023 11:33	250.35
GS-AP-MW-33HO	ORP	Oxidation Reduction Potention	3/14/2023 11:33	-99.94
GS-AP-MW-33HO	PH	pH	3/14/2023 11:33	7.56
GS-AP-MW-33HO	TEMP	Temperature	3/14/2023 11:33	15.7
GS-AP-MW-33HO	TURB	Turbidity	3/14/2023 11:33	18.2
GS-AP-MW-33HO	COND	Conductivity	3/14/2023 11:38	488.44
GS-AP-MW-33HO	DO	DO	3/14/2023 11:38	0.93
GS-AP-MW-33HO	DTW	Depth to Water Detail	3/14/2023 11:38	250.9
GS-AP-MW-33HO	ORP	Oxidation Reduction Potention	3/14/2023 11:38	-117.37
GS-AP-MW-33HO	PH	pH	3/14/2023 11:38	7.57
GS-AP-MW-33HO	TEMP	Temperature	3/14/2023 11:38	15.84
GS-AP-MW-33HO	TURB	Turbidity	3/14/2023 11:38	19.8
GS-AP-MW-33HO	COND	Conductivity	3/14/2023 11:43	486.72
GS-AP-MW-33HO	DO	DO	3/14/2023 11:43	0.59
GS-AP-MW-33HO	DTW	Depth to Water Detail	3/14/2023 11:43	251.4
GS-AP-MW-33HO	ORP	Oxidation Reduction Potention	3/14/2023 11:43	-125.5

Field Parameters Summary
Plant Gorgas Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE
GS-AP-MW-33HO	PH	pH	3/14/2023 11:43	7.56
GS-AP-MW-33HO	TEMP	Temperature	3/14/2023 11:43	15.67
GS-AP-MW-33HO	TURB	Turbidity	3/14/2023 11:43	17.6
GS-AP-MW-33HO	COND	Conductivity	3/14/2023 11:48	473.48
GS-AP-MW-33HO	DO	DO	3/14/2023 11:48	0.39
GS-AP-MW-33HO	DTW	Depth to Water Detail	3/14/2023 11:48	251.85
GS-AP-MW-33HO	ORP	Oxidation Reduction Potention	3/14/2023 11:48	-134.15
GS-AP-MW-33HO	PH	pH	3/14/2023 11:48	7.6
GS-AP-MW-33HO	TEMP	Temperature	3/14/2023 11:48	16.34
GS-AP-MW-33HO	TURB	Turbidity	3/14/2023 11:48	17.9
GS-AP-MW-33HO	COND	Conductivity	3/14/2023 11:53	494.53
GS-AP-MW-33HO	DO	DO	3/14/2023 11:53	0.31
GS-AP-MW-33HO	DTW	Depth to Water Detail	3/14/2023 11:53	252.23
GS-AP-MW-33HO	ORP	Oxidation Reduction Potention	3/14/2023 11:53	-139.99
GS-AP-MW-33HO	PH	pH	3/14/2023 11:53	7.61
GS-AP-MW-33HO	TEMP	Temperature	3/14/2023 11:53	16.51
GS-AP-MW-33HO	TURB	Turbidity	3/14/2023 11:53	17.1
GS-AP-MW-33HO	COND	Conductivity	3/14/2023 11:58	465.79
GS-AP-MW-33HO	DO	DO	3/14/2023 11:58	0.27
GS-AP-MW-33HO	DTW	Depth to Water Detail	3/14/2023 11:58	253.1
GS-AP-MW-33HO	ORP	Oxidation Reduction Potention	3/14/2023 11:58	-144.91
GS-AP-MW-33HO	PH	pH	3/14/2023 11:58	7.62
GS-AP-MW-33HO	TEMP	Temperature	3/14/2023 11:58	16.15
GS-AP-MW-33HO	TURB	Turbidity	3/14/2023 11:58	16.4
GS-AP-MW-33HO	COND	Conductivity	3/14/2023 12:03	461.38
GS-AP-MW-33HO	DO	DO	3/14/2023 12:03	0.24
GS-AP-MW-33HO	DTW	Depth to Water Detail	3/14/2023 12:03	253
GS-AP-MW-33HO	ORP	Oxidation Reduction Potention	3/14/2023 12:03	-148.79
GS-AP-MW-33HO	PH	pH	3/14/2023 12:03	7.62
GS-AP-MW-33HO	TEMP	Temperature	3/14/2023 12:03	16.21
GS-AP-MW-33HO	TURB	Turbidity	3/14/2023 12:03	16.7
GS-AP-MW-33HO	COND	Conductivity	3/14/2023 12:08	458.12
GS-AP-MW-33HO	DO	DO	3/14/2023 12:08	0.21
GS-AP-MW-33HO	DTW	Depth to Water Detail	3/14/2023 12:08	253.38
GS-AP-MW-33HO	ORP	Oxidation Reduction Potention	3/14/2023 12:08	-153.8
GS-AP-MW-33HO	PH	pH	3/14/2023 12:08	7.64
GS-AP-MW-33HO	TEMP	Temperature	3/14/2023 12:08	16.62
GS-AP-MW-33HO	TURB	Turbidity	3/14/2023 12:08	16.2
GS-AP-MW-33HO	COND	Conductivity	3/14/2023 12:13	486.82
GS-AP-MW-33HO	DO	DO	3/14/2023 12:13	0.2
GS-AP-MW-33HO	DTW	Depth to Water Detail	3/14/2023 12:13	253.75
GS-AP-MW-33HO	ORP	Oxidation Reduction Potention	3/14/2023 12:13	-158.83
GS-AP-MW-33HO	PH	pH	3/14/2023 12:13	7.65
GS-AP-MW-33HO	TEMP	Temperature	3/14/2023 12:13	16.72
GS-AP-MW-33HO	TURB	Turbidity	3/14/2023 12:13	14.1
GS-AP-MW-33HO	COND	Conductivity	3/14/2023 12:18	478.95
GS-AP-MW-33HO	DO	DO	3/14/2023 12:18	0.19

Field Parameters Summary
Plant Gorgas Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE
GS-AP-MW-33HO	DTW	Depth to Water Detail	3/14/2023 12:18	254.49
GS-AP-MW-33HO	ORP	Oxidation Reduction Potention	3/14/2023 12:18	-162.57
GS-AP-MW-33HO	PH	pH	3/14/2023 12:18	7.66
GS-AP-MW-33HO	TEMP	Temperature	3/14/2023 12:18	16.36
GS-AP-MW-33HO	TURB	Turbidity	3/14/2023 12:18	13
GS-AP-MW-33HO	COND	Conductivity	3/14/2023 12:23	471.11
GS-AP-MW-33HO	DO	DO	3/14/2023 12:23	0.19
GS-AP-MW-33HO	DTW	Depth to Water Detail	3/14/2023 12:23	254.4
GS-AP-MW-33HO	ORP	Oxidation Reduction Potention	3/14/2023 12:23	-166.51
GS-AP-MW-33HO	PH	pH	3/14/2023 12:23	7.66
GS-AP-MW-33HO	TEMP	Temperature	3/14/2023 12:23	16.55
GS-AP-MW-33HO	TURB	Turbidity	3/14/2023 12:23	13.2
GS-AP-MW-33HO	COND	Conductivity	3/14/2023 12:28	451.77
GS-AP-MW-33HO	DO	DO	3/14/2023 12:28	0.18
GS-AP-MW-33HO	DTW	Depth to Water Detail	3/14/2023 12:28	254.55
GS-AP-MW-33HO	ORP	Oxidation Reduction Potention	3/14/2023 12:28	-167.53
GS-AP-MW-33HO	PH	pH	3/14/2023 12:28	7.63
GS-AP-MW-33HO	TEMP	Temperature	3/14/2023 12:28	16.81
GS-AP-MW-33HO	TURB	Turbidity	3/14/2023 12:28	11.71
GS-AP-MW-33HO	COND	Conductivity	3/14/2023 12:33	446.54
GS-AP-MW-33HO	DO	DO	3/14/2023 12:33	0.18
GS-AP-MW-33HO	DTW	Depth to Water Detail	3/14/2023 12:33	254.77
GS-AP-MW-33HO	ORP	Oxidation Reduction Potention	3/14/2023 12:33	-173.93
GS-AP-MW-33HO	PH	pH	3/14/2023 12:33	7.68
GS-AP-MW-33HO	TEMP	Temperature	3/14/2023 12:33	16.92
GS-AP-MW-33HO	TURB	Turbidity	3/14/2023 12:33	12.03
GS-AP-MW-33HO	COND	Conductivity	3/14/2023 12:38	432.9
GS-AP-MW-33HO	DO	DO	3/14/2023 12:38	0.17
GS-AP-MW-33HO	DTW	Depth to Water Detail	3/14/2023 12:38	255
GS-AP-MW-33HO	ORP	Oxidation Reduction Potention	3/14/2023 12:38	-177.45
GS-AP-MW-33HO	PH	pH	3/14/2023 12:38	7.69
GS-AP-MW-33HO	TEMP	Temperature	3/14/2023 12:38	16.96
GS-AP-MW-33HO	TURB	Turbidity	3/14/2023 12:38	10.56
GS-AP-MW-33HO	COND	Conductivity	3/14/2023 12:43	461.08
GS-AP-MW-33HO	DO	DO	3/14/2023 12:43	0.18
GS-AP-MW-33HO	DTW	Depth to Water Detail	3/14/2023 12:43	255.65
GS-AP-MW-33HO	ORP	Oxidation Reduction Potention	3/14/2023 12:43	-179.8
GS-AP-MW-33HO	PH	pH	3/14/2023 12:43	7.7
GS-AP-MW-33HO	TEMP	Temperature	3/14/2023 12:43	16.53
GS-AP-MW-33HO	TURB	Turbidity	3/14/2023 12:43	11.07
GS-AP-MW-33HO	COND	Conductivity	3/14/2023 12:48	458.06
GS-AP-MW-33HO	DO	DO	3/14/2023 12:48	0.17
GS-AP-MW-33HO	DTW	Depth to Water Detail	3/14/2023 12:48	255.75
GS-AP-MW-33HO	ORP	Oxidation Reduction Potention	3/14/2023 12:48	-181.5
GS-AP-MW-33HO	PH	pH	3/14/2023 12:48	7.7
GS-AP-MW-33HO	TEMP	Temperature	3/14/2023 12:48	16.61
GS-AP-MW-33HO	TURB	Turbidity	3/14/2023 12:48	8.78

Field Parameters Summary
Plant Gorgas Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE
GS-AP-MW-33HO	COND	Conductivity	3/14/2023 12:53	453.03
GS-AP-MW-33HO	DO	DO	3/14/2023 12:53	0.15
GS-AP-MW-33HO	DTW	Depth to Water Detail	3/14/2023 12:53	255.85
GS-AP-MW-33HO	ORP	Oxidation Reduction Potention	3/14/2023 12:53	-184.76
GS-AP-MW-33HO	PH	pH	3/14/2023 12:53	7.71
GS-AP-MW-33HO	SULFIDE	Sulfide	3/14/2023 12:53	0
GS-AP-MW-33HO	TEMP	Temperature	3/14/2023 12:53	17.36
GS-AP-MW-33HO	TURB	Turbidity	3/14/2023 12:53	8.41

Field Parameters Summary
Plant Gorgas Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GS-AP-MW-44HO	COND	Conductivity	3/6/2023 13:28	875.71	uS/cm
GS-AP-MW-44HO	DO	DO	3/6/2023 13:28	0.09	mg/L
GS-AP-MW-44HO	DTW	Depth to Water Detail	3/6/2023 13:28	156.7	ft
GS-AP-MW-44HO	ORP	Oxidation Reduction Potention	3/6/2023 13:28	-287.5	mv
GS-AP-MW-44HO	PH	pH	3/6/2023 13:28	8.8	SU
GS-AP-MW-44HO	TEMP	Temperature	3/6/2023 13:28	18.14	C
GS-AP-MW-44HO	TURB	Turbidity	3/6/2023 13:28	3	NTU
GS-AP-MW-44HO	COND	Conductivity	3/6/2023 13:33	865.08	uS/cm
GS-AP-MW-44HO	DO	DO	3/6/2023 13:33	0.07	mg/L
GS-AP-MW-44HO	DTW	Depth to Water Detail	3/6/2023 13:33	159.5	ft
GS-AP-MW-44HO	ORP	Oxidation Reduction Potention	3/6/2023 13:33	-305.2	mv
GS-AP-MW-44HO	PH	pH	3/6/2023 13:33	8.8	SU
GS-AP-MW-44HO	TEMP	Temperature	3/6/2023 13:33	18.01	C
GS-AP-MW-44HO	TURB	Turbidity	3/6/2023 13:33	4.03	NTU
GS-AP-MW-44HO	COND	Conductivity	3/6/2023 13:38	852.78	uS/cm
GS-AP-MW-44HO	DO	DO	3/6/2023 13:38	0.05	mg/L
GS-AP-MW-44HO	DTW	Depth to Water Detail	3/6/2023 13:38	163.75	ft
GS-AP-MW-44HO	ORP	Oxidation Reduction Potention	3/6/2023 13:38	-317.6	mv
GS-AP-MW-44HO	PH	pH	3/6/2023 13:38	8.82	SU
GS-AP-MW-44HO	TEMP	Temperature	3/6/2023 13:38	18.08	C
GS-AP-MW-44HO	TURB	Turbidity	3/6/2023 13:38	3.45	NTU
GS-AP-MW-44HO	COND	Conductivity	3/6/2023 13:43	852.82	uS/cm
GS-AP-MW-44HO	DO	DO	3/6/2023 13:43	0.05	mg/L
GS-AP-MW-44HO	DTW	Depth to Water Detail	3/6/2023 13:43	168.3	ft
GS-AP-MW-44HO	ORP	Oxidation Reduction Potention	3/6/2023 13:43	-319.52	mv
GS-AP-MW-44HO	PH	pH	3/6/2023 13:43	8.78	SU
GS-AP-MW-44HO	TEMP	Temperature	3/6/2023 13:43	17.94	C
GS-AP-MW-44HO	TURB	Turbidity	3/6/2023 13:43	2.91	NTU
GS-AP-MW-44HO	COND	Conductivity	3/6/2023 13:48	857.35	uS/cm
GS-AP-MW-44HO	DO	DO	3/6/2023 13:48	0.04	mg/L
GS-AP-MW-44HO	DTW	Depth to Water Detail	3/6/2023 13:48	168.75	ft
GS-AP-MW-44HO	ORP	Oxidation Reduction Potention	3/6/2023 13:48	-314.73	mv
GS-AP-MW-44HO	PH	pH	3/6/2023 13:48	8.57	SU
GS-AP-MW-44HO	TEMP	Temperature	3/6/2023 13:48	18.18	C
GS-AP-MW-44HO	TURB	Turbidity	3/6/2023 13:48	2.88	NTU
GS-AP-MW-44HO	COND	Conductivity	3/6/2023 13:53	863.34	uS/cm
GS-AP-MW-44HO	DO	DO	3/6/2023 13:53	0.24	mg/L
GS-AP-MW-44HO	DTW	Depth to Water Detail	3/6/2023 13:53	168.75	ft
GS-AP-MW-44HO	ORP	Oxidation Reduction Potention	3/6/2023 13:53	-301.97	mv
GS-AP-MW-44HO	PH	pH	3/6/2023 13:53	8.5	SU
GS-AP-MW-44HO	TEMP	Temperature	3/6/2023 13:53	20.59	C
GS-AP-MW-44HO	TURB	Turbidity	3/6/2023 13:53	2.56	NTU
GS-AP-MW-44HO	COND	Conductivity	3/6/2023 13:58	868.52	uS/cm
GS-AP-MW-44HO	DO	DO	3/6/2023 13:58	0.28	mg/L
GS-AP-MW-44HO	DTW	Depth to Water Detail	3/6/2023 13:58	167.6	ft
GS-AP-MW-44HO	ORP	Oxidation Reduction Potention	3/6/2023 13:58	-306.46	mv

Field Parameters Summary
Plant Gorgas Ash Pond

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
GS-AP-MW-44HO	PH	pH	3/6/2023 13:58	8.69	SU
GS-AP-MW-44HO	TEMP	Temperature	3/6/2023 13:58	20.74	C
GS-AP-MW-44HO	TURB	Turbidity	3/6/2023 13:58	2.89	NTU
GS-AP-MW-44HO	COND	Conductivity	3/6/2023 14:03	880.95	uS/cm
GS-AP-MW-44HO	DO	DO	3/6/2023 14:03	0.28	mg/L
GS-AP-MW-44HO	DTW	Depth to Water Detail	3/6/2023 14:03	166.2	ft
GS-AP-MW-44HO	ORP	Oxidation Reduction Potention	3/6/2023 14:03	-316.97	mv
GS-AP-MW-44HO	PH	pH	3/6/2023 14:03	9	SU
GS-AP-MW-44HO	TEMP	Temperature	3/6/2023 14:03	20.56	C
GS-AP-MW-44HO	TURB	Turbidity	3/6/2023 14:03	2.37	NTU
GS-AP-MW-44HO	COND	Conductivity	3/6/2023 14:08	869.43	uS/cm
GS-AP-MW-44HO	DO	DO	3/6/2023 14:08	0.27	mg/L
GS-AP-MW-44HO	DTW	Depth to Water Detail	3/6/2023 14:08	164.9	ft
GS-AP-MW-44HO	ORP	Oxidation Reduction Potention	3/6/2023 14:08	-317.75	mv
GS-AP-MW-44HO	PH	pH	3/6/2023 14:08	9.03	SU
GS-AP-MW-44HO	TEMP	Temperature	3/6/2023 14:08	20.61	C
GS-AP-MW-44HO	TURB	Turbidity	3/6/2023 14:08	2.09	NTU
GS-AP-MW-44HO	COND	Conductivity	3/6/2023 14:13	858	uS/cm
GS-AP-MW-44HO	DO	DO	3/6/2023 14:13	0.26	mg/L
GS-AP-MW-44HO	DTW	Depth to Water Detail	3/6/2023 14:13	164.9	ft
GS-AP-MW-44HO	ORP	Oxidation Reduction Potention	3/6/2023 14:13	-321	mv
GS-AP-MW-44HO	PH	pH	3/6/2023 14:13	9.06	SU
GS-AP-MW-44HO	SULFIDE	Sulfide	3/6/2023 14:13	5	mg/L
GS-AP-MW-44HO	TEMP	Temperature	3/6/2023 14:13	20.86	C
GS-AP-MW-44HO	TURB	Turbidity	3/6/2023 14:13	3.94	NTU

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

Analytical Report

Sample Group : WMWGORAP_1400

Project/Site : Gorgas Ash Pond
Parrish, AL 35580

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

Attention : Dustin Brooks & Greg Dyer

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

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

May 03, 2023

Dear Dustin Brooks,

Enclosed are the analytical results for sample(s) received by the laboratory between March 09, 2023 and March 29, 2023. All results reported herein conform to the laboratory's most current Quality Assurance Manual. Results marked with an asterisk conform to the most current applicable TNI/NELAC requirements. Exceptions will be noted in the body of the report.

Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2023

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

Sincerely,

Quality Control: Brooke Caton

Digitally signed by Brooke Caton
Date: 2023.05.04
08:19:38 -05'00'

Supervision: T Durant Maske

Digitally signed by T Durant Maske
DN: cn=T Durant Maske gn=T Durant Maske c=US
United States l=US United States
e=tdmaske@southernco.com
Reason: I am the author of this document
Location:
Date: 2023-05-04 15:45-05:00

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

Case Narrative

Total Metals ICP

Gorgas Ash Pond

WMWGORAP_1400

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

Sample ID	**Batch ID**	**Project ID**
BD04999	749828	WMWGORAP_1400
BD05364	750116	WMWGORAP_1400
BD05365	750116, 753215	WMWGORAP_1400
BD05366	750116	WMWGORAP_1400
BD05367	750116	WMWGORAP_1400
BD05368	750116	WMWGORAP_1400
BD05369	750116	WMWGORAP_1400
BD05370	750116	WMWGORAP_1400
BD05371	750116	WMWGORAP_1400
BD05372	750116	WMWGORAP_1400
BD05373	750116	WMWGORAP_1400
BD05374	750117	WMWGORAP_1400
BD05375	750117	WMWGORAP_1400
BD05376	750117	WMWGORAP_1400
BD05377	750117	WMWGORAP_1400
BD05378	750117	WMWGORAP_1400
BD05379	750117	WMWGORAP_1400
BD05380	750117	WMWGORAP_1400
BD05381	750117	WMWGORAP_1400
BD05382	750117	WMWGORAP_1400
BD05383	750117	WMWGORAP_1400
BD05850	750807	WMWGORAP_1400
BD05851	750807	WMWGORAP_1400
BD05852	750807	WMWGORAP_1400
BD05853	750807	WMWGORAP_1400
BD05854	750807	WMWGORAP_1400
BD05855	750807	WMWGORAP_1400
BD05856	750807	WMWGORAP_1400
BD05857	750807	WMWGORAP_1400
BD05858	750807	WMWGORAP_1400
BD05859	750807	WMWGORAP_1400

BD05860	750808	WMWGORAP_1400
BD05861	750808	WMWGORAP_1400
BD05862	750808	WMWGORAP_1400
BD05863	750808	WMWGORAP_1400
BD05864	750808	WMWGORAP_1400
BD05865	750808	WMWGORAP_1400
BD05866	750808	WMWGORAP_1400
BD05867	750808	WMWGORAP_1400
BD05868	750808	WMWGORAP_1400
BD05869	750808	WMWGORAP_1400
BD05870	750809	WMWGORAP_1400
BD05871	750809	WMWGORAP_1400
BD05872	750809	WMWGORAP_1400
BD05873	750809	WMWGORAP_1400
BD05874	750809	WMWGORAP_1400
BD05875	750809	WMWGORAP_1400
BD05876	750809	WMWGORAP_1400
BD06130	751225	WMWGORAP_1400
BD06131	751225	WMWGORAP_1400
BD06132	751225	WMWGORAP_1400
BD06133	751225	WMWGORAP_1400
BD06134	751225	WMWGORAP_1400
BD06135	751225	WMWGORAP_1400
BD06136	751225	WMWGORAP_1400
BD06137	751225	WMWGORAP_1400
BD06138	751225	WMWGORAP_1400
BD06139	751225	WMWGORAP_1400
BD06140	751226	WMWGORAP_1400
BD06141	751226	WMWGORAP_1400
BD06142	751226	WMWGORAP_1400
BD06143	751226	WMWGORAP_1400
BD06144	751226	WMWGORAP_1400
BD06145	751226	WMWGORAP_1400
BD06146	751226	WMWGORAP_1400
BD06147	751226	WMWGORAP_1400
BD06148	751226	WMWGORAP_1400
BD06149	751226	WMWGORAP_1400
BD06150	751227	WMWGORAP_1400

4. All of the above samples were analyzed by EPA 200.7 and prepared by EPA 1638.
5. All samples were prepared and analyzed within the established hold times.

6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

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

Matrix Specific Quality Control Procedures:

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

- A matrix spike and matrix spike duplicate were digested and analyzed with each ICP batch. All acceptance criteria for accuracy were met, except for the following:
    - BD04999, BD05859, BD06139, & BD06149 Sodium MS/MSD spike levels were less than 30% of the sample concentrations.
    - BD05373 Iron, Sodium, and Silicon MS/MSD spike levels were less than 30% of the sample concentrations.
- A matrix spike and matrix spike duplicate were digested and analyzed with each ICP batch. All acceptance criteria for precision were met.

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

Sample ID	**Analyte**	**Dilution Factor**
BD04999	Sodium	10.15

BD05364	Calcium, Sodium	10.15
BD05365	Calcium	10.15
BD05365	Sodium	101.5
BD05366	Calcium, Sodium	101.5
BD05367	Sodium	10.15
BD05368	Sodium	10.15
BD05371	Sodium	10.15
BD05373	Sodium	10.15
BD05374	Calcium, Iron	10.15
BD05375	Calcium, Iron	10.15
BD05376	Calcium	10.15
BD05377	Calcium, Sodium	10.15
BD05378	Calcium, Iron	101.5
BD05379	Calcium	10.15
BD05380	Calcium	10.15
BD05381	Calcium	10.15
BD05382	Calcium, Iron, Magnesium	10.15
BD05850	Sodium	10.15
BD05852	Sodium, Silicon	10.15
BD05853	Sodium	10.15
BD05855	Calcium, Sodium	10.15
BD05856	Sodium	10.15
BD05857	Calcium, Sodium	101.5
BD05858	Sodium	10.15
BD05859	Sodium	10.15
BD05860	Calcium, Magnesium, Sodium	10.15
BD05861	Sodium	10.15
BD05862	Calcium, Sodium	10.15
BD05864	Sodium	10.15
BD05865	Sodium	10.15
BD05866	Sodium	10.15
BD05867	Sodium	10.15
BD05869	Sodium	10.15
BD05870	Calcium, Sodium	10.15
BD05871	Sodium	10.15
BD05872	Sodium	10.15
BD05875	Calcium	10.15
BD06131	Calcium	10.15
BD06132	Sodium	10.15
BD06134	Sodium	101.5
BD06135	Sodium	101.5

BD06136	Sodium	10.15
BD06137	Sodium	10.15
BD06138	Sodium	10.15
BD06139	Sodium	10.15
BD06140	Sodium	101.5
BD06141	Sodium	10.15
BD06143	Calcium	10.15
BD06144	Calcium, Sodium	10.15
BD06145	Calcium	10.15
BD06146	Calcium	10.15
BD06149	Sodium	10.15

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

Case Narrative

Dissolved Metals ICP

Gorgas Ash Pond

WMWGORAP_1400

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

Sample ID	Batch ID	Project ID
BD04999	749355	WMWGORAP_1400
BD05364	750073	WMWGORAP_1400
BD05365	750073	WMWGORAP_1400
BD05366	750073	WMWGORAP_1400
BD05367	750073	WMWGORAP_1400
BD05368	750073	WMWGORAP_1400
BD05369	750073	WMWGORAP_1400
BD05370	750073	WMWGORAP_1400
BD05371	750073	WMWGORAP_1400
BD05372	750073	WMWGORAP_1400
BD05373	750073	WMWGORAP_1400
BD05374	750074	WMWGORAP_1400
BD05375	750074	WMWGORAP_1400
BD05376	750074	WMWGORAP_1400
BD05377	750074	WMWGORAP_1400
BD05378	750074	WMWGORAP_1400
BD05379	750074	WMWGORAP_1400
BD05380	750074	WMWGORAP_1400
BD05381	750074	WMWGORAP_1400
BD05382	750074	WMWGORAP_1400
BD05850	750756	WMWGORAP_1400
BD05852	750756	WMWGORAP_1400
BD05853	750756	WMWGORAP_1400
BD05854	750756	WMWGORAP_1400
BD05855	750756	WMWGORAP_1400
BD05856	750756	WMWGORAP_1400
BD05857	750756, 753207	WMWGORAP_1400
BD05858	750756	WMWGORAP_1400
BD05859	750756	WMWGORAP_1400
BD05860	750756	WMWGORAP_1400
BD05861	750757	WMWGORAP_1400

BD05862	750757	WMWGORAP_1400
BD05864	750757	WMWGORAP_1400
BD05865	750757	WMWGORAP_1400
BD05866	750757	WMWGORAP_1400
BD05867	750757	WMWGORAP_1400
BD05869	750757	WMWGORAP_1400
BD05870	750757	WMWGORAP_1400
BD05871	750757	WMWGORAP_1400
BD05872	750757	WMWGORAP_1400
BD05873	750758	WMWGORAP_1400
BD05874	750758	WMWGORAP_1400
BD05875	750758	WMWGORAP_1400
BD06130	751237	WMWGORAP_1400
BD06131	751237	WMWGORAP_1400
BD06132	751237	WMWGORAP_1400
BD06134	751237	WMWGORAP_1400
BD06135	751237	WMWGORAP_1400
BD06136	751237	WMWGORAP_1400
BD06137	751237	WMWGORAP_1400
BD06138	751237	WMWGORAP_1400
BD06139	751237	WMWGORAP_1400
BD06140	751237	WMWGORAP_1400
BD06141	751238	WMWGORAP_1400
BD06142	751238	WMWGORAP_1400
BD06143	751238	WMWGORAP_1400
BD06144	751238	WMWGORAP_1400
BD06145	751238	WMWGORAP_1400
BD06146	751238	WMWGORAP_1400
BD06147	751238	WMWGORAP_1400
BD06148	751238	WMWGORAP_1400
BD06149	751238	WMWGORAP_1400

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

General Quality Control Procedures:

- Prior to sample analysis, an initial calibration verification (ICV) was analyzed, and all criteria were met.
- Following the ICV, an initial calibration blank (ICB) was analyzed, and all criteria were met.
- All continued calibration verification (CCV) were within the acceptance criteria for the requested analytes.

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

Matrix Specific Quality Control Procedures:

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

- A matrix spike and matrix spike duplicate were analyzed with each ICP batch. All acceptance criteria for accuracy were met except for the following:
    - BD04999, BD05373, BD05872, BD06140, & BD06149 Sodium MS/MSD spike levels were less than 30% of the sample concentrations.
    - BD05382 Calcium and Magnesium MS/MSD spike levels were less than 30% of the sample concentrations.
    - BD05860 Calcium, Magnesium and Sodium MS/MSD spike levels were less than 30% of the sample concentrations.
    - BD05857, & BD05872 Calcium MS/MSD spike levels were less than 30% of the sample concentrations.
- A matrix spike and matrix spike duplicate were analyzed with each ICP batch. All acceptance criteria for precision were met.

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

Sample ID	Analyte	Dilution Factor
BD04999	Sodium	10.15
BD05364	Calcium, Sodium	10.15
BD05365	Sodium	101.5
BD05366	Calcium, Sodium	101.5
BD05367	Sodium	10.15
BD05368	Sodium	10.15
BD05371	Sodium	10.15

BD05373	Sodium	10.15
BD05374	Calcium, Iron	10.15
BD05375	Calcium, Iron	10.15
BD05376	Calcium	10.15
BD05377	Calcium, Sodium	10.15
BD05378	Calcium, Iron	101.5
BD05379	Calcium	10.15
BD05380	Calcium	10.15
BD05381	Calcium	10.15
BD05382	Calcium, Magnesium	10.15
BD05850	Sodium	10.15
BD05852	Sodium, Silicon	10.15
BD05853	Sodium	10.15
BD05855	Calcium, Sodium	10.15
BD05856	Sodium	10.15
BD05857	Calcium	10.15
BD05857	Sodium	101.5
BD05858	Sodium	10.15
BD05859	Sodium	10.15
BD05860	Ca, Mg, Na	10.15
BD05861	Sodium	10.15
BD05862	Calcium, Sodium	10.15
BD05864	Sodium	10.15
BD05865	Sodium	10.15
BD05866	Sodium	10.15
BD05867	Sodium	10.15
BD05869	Sodium	10.15
BD05870	Calcium, Sodium	10.15
BD05871	Sodium	10.15
BD05872	Sodium	10.15
BD05875	Calcium	10.15
BD06131	Calcium	10.15
BD06132	Sodium	10.15
BD06134	Sodium	101.5
BD06135	Sodium	101.5
BD06136	Sodium	10.15
BD06137	Sodium	10.15
BD06138	Sodium	10.15
BD06139	Sodium	10.15
BD06140	Sodium	10.15
BD06141	Sodium	10.15

BD06143	Calcium	10.15
BD06144	Calcium, Sodium	10.15
BD06145	Calcium	10.15
BD06146	Calcium	10.15
BD06149	Sodium	10.15

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

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

Case Narrative

Alabama Power

Total Metals ICPMS

Gorgas Ash Pond

WMWGORAP_1400

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

Sample ID	**Batch ID**	**Project ID**
BD04999	749978	WMWGORAP_1400
BD05364	750691	WMWGORAP_1400
BD05365	750691	WMWGORAP_1400
BD05366	750691	WMWGORAP_1400
BD05367	750691	WMWGORAP_1400
BD05368	750691	WMWGORAP_1400
BD05369	750691	WMWGORAP_1400
BD05370	750691	WMWGORAP_1400
BD05371	750691	WMWGORAP_1400
BD05372	750691	WMWGORAP_1400
BD05373	750691	WMWGORAP_1400
BD05374	750692	WMWGORAP_1400
BD05375	750692	WMWGORAP_1400
BD05376	750692	WMWGORAP_1400
BD05377	750692	WMWGORAP_1400
BD05378	750692	WMWGORAP_1400
BD05379	750692	WMWGORAP_1400
BD05380	750692	WMWGORAP_1400
BD05381	750692	WMWGORAP_1400
BD05382	750692	WMWGORAP_1400
BD05383	750692	WMWGORAP_1400
BD05850	751371	WMWGORAP_1400
BD05851	751371	WMWGORAP_1400
BD05852	751371	WMWGORAP_1400
BD05853	751371	WMWGORAP_1400
BD05854	751371	WMWGORAP_1400
BD05855	751371	WMWGORAP_1400
BD05856	751371	WMWGORAP_1400
BD05857	751371	WMWGORAP_1400
BD05858	751371	WMWGORAP_1400
BD05859	751371	WMWGORAP_1400

BD05860	751372	WMWGORAP_1400
BD05861	751372	WMWGORAP_1400
BD05862	751372	WMWGORAP_1400
BD05863	751372	WMWGORAP_1400
BD05864	751372	WMWGORAP_1400
BD05865	751372	WMWGORAP_1400
BD05866	751372	WMWGORAP_1400
BD05867	751372	WMWGORAP_1400
BD05868	751372	WMWGORAP_1400
BD05869	751372	WMWGORAP_1400
BD05870	751373	WMWGORAP_1400
BD05871	751373	WMWGORAP_1400
BD05872	751373	WMWGORAP_1400
BD05873	751373	WMWGORAP_1400
BD05874	751373	WMWGORAP_1400
BD05875	751373	WMWGORAP_1400
BD05876	751373	WMWGORAP_1400
BD06130	752038	WMWGORAP_1400
BD06131	752038	WMWGORAP_1400
BD06132	752038	WMWGORAP_1400
BD06133	752038	WMWGORAP_1400
BD06134	752038	WMWGORAP_1400
BD06135	752038	WMWGORAP_1400
BD06136	752038	WMWGORAP_1400
BD06137	752038	WMWGORAP_1400
BD06138	752038	WMWGORAP_1400
BD06139	752038	WMWGORAP_1400
BD06140	752039	WMWGORAP_1400
BD06141	752039	WMWGORAP_1400
BD06142	752039	WMWGORAP_1400
BD06143	752039	WMWGORAP_1400
BD06144	752039	WMWGORAP_1400
BD06145	752039	WMWGORAP_1400
BD06146	752039	WMWGORAP_1400
BD06147	752039	WMWGORAP_1400
BD06148	752039	WMWGORAP_1400
BD06149	752039	WMWGORAP_1400
BD06150	752040	WMWGORAP_1400

4. All of the above samples were analyzed by EPA 200.8 and prepared by EPA 1638.
5. All samples were prepared and analyzed within the established hold times.

6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

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

Matrix Specific Quality Control Procedures:

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

- A matrix spike and matrix spike duplicate were digested and analyzed with each ICPMS batch. All acceptance criteria for accuracy were met, except for the following:
    - BD04999 Aluminum MS/MSD spike levels were less than 30% of the sample concentrations.
    - BD05373 Aluminum MS and/or MSD recovery is outside of specification limit.
    - BD05859 Barium MS/MSD spike levels were less than 30% of the sample concentrations.
    - BD06139 Selenium MS and/or MSD recovery is outside of specification limit.
- A matrix spike and matrix spike duplicate were digested and analyzed with each ICPMS batch. All acceptance criteria for precision were met.

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

Sample ID	Analyte	Dilution Factor
BD05374	Manganese	5.075

Case Narrative

BD05375	Manganese	5.075
BD05378	Manganese	5.075
BD05855	Aluminum	5.075

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

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

Case Narrative

Alabama Power

Dissolved Metals ICPMS

Gorgas Ash Pond

WMWGORAP_1400

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

Sample ID	Batch ID	Project ID
BD04999	749580	WMWGORAP_1400
BD05364	750631	WMWGORAP_1400
BD05365	750631, 753235	WMWGORAP_1400
BD05366	750631, 753235	WMWGORAP_1400
BD05367	750631	WMWGORAP_1400
BD05368	750631, 753235	WMWGORAP_1400
BD05369	750631	WMWGORAP_1400
BD05370	750631, 753235	WMWGORAP_1400
BD05371	750631	WMWGORAP_1400
BD05372	750631	WMWGORAP_1400
BD05373	750631	WMWGORAP_1400
BD05374	750632	WMWGORAP_1400
BD05375	750632	WMWGORAP_1400
BD05376	750632, 753235	WMWGORAP_1400
BD05377	750632	WMWGORAP_1400
BD05378	750632	WMWGORAP_1400
BD05379	750632	WMWGORAP_1400
BD05380	750632	WMWGORAP_1400
BD05381	750632	WMWGORAP_1400
BD05382	750632	WMWGORAP_1400
BD05850	751001	WMWGORAP_1400
BD05852	751001, 753235	WMWGORAP_1400
BD05853	751001, 753235	WMWGORAP_1400
BD05854	751001	WMWGORAP_1400
BD05855	751001	WMWGORAP_1400
BD05856	751001, 753235	WMWGORAP_1400
BD05857	751001, 753235	WMWGORAP_1400
BD05858	751001, 753235	WMWGORAP_1400
BD05859	751001	WMWGORAP_1400
BD05860	751001	WMWGORAP_1400
BD05861	751002	WMWGORAP_1400

BD05862	751002	WMWGORAP_1400
BD05864	751002	WMWGORAP_1400
BD05865	751002	WMWGORAP_1400
BD05866	751002	WMWGORAP_1400
BD05867	751002	WMWGORAP_1400
BD05869	751002	WMWGORAP_1400
BD05870	751002	WMWGORAP_1400
BD05871	751002	WMWGORAP_1400
BD05872	751002	WMWGORAP_1400
BD05873	751003	WMWGORAP_1400
BD05874	751003	WMWGORAP_1400
BD05875	751003	WMWGORAP_1400
BD06130	751971	WMWGORAP_1400
BD06131	751971	WMWGORAP_1400
BD06132	751971	WMWGORAP_1400
BD06134	751971	WMWGORAP_1400
BD06135	751971	WMWGORAP_1400
BD06136	751971	WMWGORAP_1400
BD06137	751971	WMWGORAP_1400
BD06138	751971	WMWGORAP_1400
BD06139	751971	WMWGORAP_1400
BD06140	751971	WMWGORAP_1400
BD06141	751972	WMWGORAP_1400
BD06142	751972	WMWGORAP_1400
BD06143	751972	WMWGORAP_1400
BD06144	751972	WMWGORAP_1400
BD06145	751972	WMWGORAP_1400
BD06146	751972	WMWGORAP_1400
BD06147	751972	WMWGORAP_1400
BD06148	751972	WMWGORAP_1400
BD06149	751972	WMWGORAP_1400

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

General Quality Control Procedures:

- All tune and calibration met criteria for all requested analytes.
- Prior to sample analysis, an initial calibration verification (ICV) was analyzed, and all criteria were met.

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

Matrix Specific Quality Control Procedures:

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

- A matrix spike and matrix spike duplicate were analyzed with each ICPMS batch. All acceptance criteria for accuracy were met, except for the following:
  - BD05382 Manganese MS/MSD spike levels were less than 30% of the sample concentrations.
- A matrix spike and matrix spike duplicate were analyzed with each ICPMS batch. All acceptance criteria for precision were met.

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

Sample ID	Analyte	Dilution Factor
BD05374	Manganese	5.075
BD05375	Manganese	5.075
BD05378	Manganese	5.075
BD05855	Aluminum	5.075

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

Mercury

Gorgas Ash Pond

WMWGORAP_1400

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

Sample ID	Batch ID	Project ID
BD04999	749460	WMWGORAP_1400
BD05364	750180	WMWGORAP_1400
BD05365	750180	WMWGORAP_1400
BD05366	750180	WMWGORAP_1400
BD05367	750180	WMWGORAP_1400
BD05368	750180	WMWGORAP_1400
BD05369	750180	WMWGORAP_1400
BD05370	750180	WMWGORAP_1400
BD05371	750180	WMWGORAP_1400
BD05372	750180	WMWGORAP_1400
BD05373	750180	WMWGORAP_1400
BD05374	750181	WMWGORAP_1400
BD05375	750181	WMWGORAP_1400
BD05376	750181	WMWGORAP_1400
BD05377	750181	WMWGORAP_1400
BD05378	750181	WMWGORAP_1400
BD05379	750181	WMWGORAP_1400
BD05380	750181	WMWGORAP_1400
BD05381	750181	WMWGORAP_1400
BD05382	750181	WMWGORAP_1400
BD05383	750181	WMWGORAP_1400
BD05850	750913	WMWGORAP_1400
BD05851	750913	WMWGORAP_1400
BD05852	750913	WMWGORAP_1400
BD05853	750913	WMWGORAP_1400
BD05854	750913	WMWGORAP_1400
BD05855	750913	WMWGORAP_1400
BD05856	750913	WMWGORAP_1400
BD05857	750913	WMWGORAP_1400
BD05858	750913	WMWGORAP_1400
BD05859	750913	WMWGORAP_1400

BD05860	750914	WMWGORAP_1400
BD05861	750914	WMWGORAP_1400
BD05862	750914	WMWGORAP_1400
BD05863	750914	WMWGORAP_1400
BD05864	750914	WMWGORAP_1400
BD05865	750914	WMWGORAP_1400
BD05866	750914	WMWGORAP_1400
BD05867	750914	WMWGORAP_1400
BD05868	750914	WMWGORAP_1400
BD05869	750914	WMWGORAP_1400
BD05870	750915	WMWGORAP_1400
BD05871	750915	WMWGORAP_1400
BD05872	750915	WMWGORAP_1400
BD05873	750915	WMWGORAP_1400
BD05874	750915	WMWGORAP_1400
BD05875	750915	WMWGORAP_1400
BD05876	750915	WMWGORAP_1400
BD06130	751437	WMWGORAP_1400
BD06131	751437	WMWGORAP_1400
BD06132	751437	WMWGORAP_1400
BD06133	751437	WMWGORAP_1400
BD06134	751437	WMWGORAP_1400
BD06135	751437	WMWGORAP_1400
BD06136	751437	WMWGORAP_1400
BD06137	751437	WMWGORAP_1400
BD06138	751437	WMWGORAP_1400
BD06139	751437	WMWGORAP_1400
BD06140	751438	WMWGORAP_1400
BD06141	751438	WMWGORAP_1400
BD06142	751438	WMWGORAP_1400
BD06143	751438	WMWGORAP_1400
BD06144	751438	WMWGORAP_1400
BD06145	751438	WMWGORAP_1400
BD06146	751438	WMWGORAP_1400
BD06147	751438	WMWGORAP_1400
BD06148	751438	WMWGORAP_1400
BD06149	751438	WMWGORAP_1400
BD06150	751439	WMWGORAP_1400

4. All of the above samples were analyzed and prepared by EPA 245.1.
5. All samples were prepared and analyzed within the established hold times.

6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

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

Matrix Specific Quality Control Procedures:

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

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

7. All samples were analyzed without a dilution factor.

Case Narrative

Total Dissolved Solids

Gorgas Ash Pond

WMWGORAP_1400

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

Sample ID	Batch ID	Project ID
BD04999	749572	WMWGORAP_1400
BD05000	749572	WMWGORAP_1400
BD05364	750124	WMWGORAP_1400
BD05365	750124	WMWGORAP_1400
BD05366	750124	WMWGORAP_1400
BD05367	750124	WMWGORAP_1400
BD05368	750124	WMWGORAP_1400
BD05369	750124	WMWGORAP_1400
BD05370	750124	WMWGORAP_1400
BD05371	750124	WMWGORAP_1400
BD05372	750124	WMWGORAP_1400
BD05373	750124	WMWGORAP_1400
BD05374	750125	WMWGORAP_1400
BD05375	750125	WMWGORAP_1400
BD05376	750125	WMWGORAP_1400
BD05377	750125	WMWGORAP_1400
BD05378	750125	WMWGORAP_1400
BD05379	750125	WMWGORAP_1400
BD05380	750125	WMWGORAP_1400
BD05381	750125	WMWGORAP_1400
BD05382	750125	WMWGORAP_1400
BD05383	750125	WMWGORAP_1400
BD05850	750748	WMWGORAP_1400
BD05851	750748	WMWGORAP_1400
BD05852	750748	WMWGORAP_1400
BD05853	750749	WMWGORAP_1400
BD05854	750749	WMWGORAP_1400
BD05855	750749	WMWGORAP_1400
BD05856	750749	WMWGORAP_1400
BD05857	750749	WMWGORAP_1400
BD05858	750749	WMWGORAP_1400

BD05859	750749	WMWGORAP_1400
BD05860	750749	WMWGORAP_1400
BD05861	750749	WMWGORAP_1400
BD05862	750749	WMWGORAP_1400
BD05863	750850	WMWGORAP_1400
BD05864	750850	WMWGORAP_1400
BD05865	750850	WMWGORAP_1400
BD05866	750850	WMWGORAP_1400
BD05867	750850	WMWGORAP_1400
BD05868	750850	WMWGORAP_1400
BD05869	750850	WMWGORAP_1400
BD05870	750850	WMWGORAP_1400
BD05871	750850	WMWGORAP_1400
BD05872	750850	WMWGORAP_1400
BD05873	750851	WMWGORAP_1400
BD05874	750851	WMWGORAP_1400
BD05875	750851	WMWGORAP_1400
BD05876	750851	WMWGORAP_1400
BD06130	751151	WMWGORAP_1400
BD06131	751151	WMWGORAP_1400
BD06132	751151	WMWGORAP_1400
BD06133	751151	WMWGORAP_1400
BD06134	751151	WMWGORAP_1400
BD06135	751151	WMWGORAP_1400
BD06136	751151	WMWGORAP_1400
BD06137	751152	WMWGORAP_1400
BD06138	751152	WMWGORAP_1400
BD06139	751152	WMWGORAP_1400
BD06140	751152	WMWGORAP_1400
BD06141	751152	WMWGORAP_1400
BD06142	751152	WMWGORAP_1400
BD06143	751152	WMWGORAP_1400
BD06144	751152	WMWGORAP_1400
BD06145	751152	WMWGORAP_1400
BD06146	751152	WMWGORAP_1400
BD06147	751296	WMWGORAP_1400
BD06148	751296	WMWGORAP_1400
BD06149	751296	WMWGORAP_1400
BD06150	751296	WMWGORAP_1400

4. All of the above samples were prepared and analyzed by Standard Method 2540C.

Revision 5

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

General Quality Control Procedures:

- A Method Blank was analyzed with each batch. All criteria were met.
- All final weights of samples, standards, and blanks agreed within 0.5mg of the previous weight.
- A sample duplicate was analyzed with each batch, and RPD was ≤ 10%.
- A laboratory control sample was analyzed with each batch. All criteria were met.
- Samples were between 2.5mg and 200mg residue.
- All samples with residue <2.5mg had the maximum volume of 150mL filtered. Affected samples are as follows:
    - BD05383
    - BD05851
    - BD05863
    - BD05868
    - BD05876
    - BD06133
    - BD06150

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

Case Narrative

Alkalinity

Gorgas Ash Pond

WMWGORAP_1400

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

Sample ID	Batch ID	Project ID
BD04999	750339, 750340, 750341	WMWGORAP_1400
BD05000	750339, 750340, 750341	WMWGORAP_1400
BD05364	750339, 750340, 750341	WMWGORAP_1400
BD05365	750876, 750877, 750878	WMWGORAP_1400
BD05366	750876, 750877, 750878	WMWGORAP_1400
BD05367	750876, 750877, 750878	WMWGORAP_1400
BD05368	750876, 750877, 750878	WMWGORAP_1400
BD05369	750876, 750877, 750878	WMWGORAP_1400
BD05370	750876, 750877, 750878	WMWGORAP_1400
BD05371	750876, 750877, 750878	WMWGORAP_1400
BD05372	750339, 750340, 750341	WMWGORAP_1400
BD05373	750876, 750877, 750878	WMWGORAP_1400
BD05374	750876, 750877, 750878	WMWGORAP_1400
BD05375	750876, 750877, 750878	WMWGORAP_1400
BD05376	750876, 750877, 750878	WMWGORAP_1400
BD05377	750876, 750877, 750878	WMWGORAP_1400
BD05378	750876, 750877, 750878	WMWGORAP_1400
BD05379	751143, 751144, 751145	WMWGORAP_1400
BD05380	751143, 751144, 751145	WMWGORAP_1400
BD05381	751143, 751144, 751145	WMWGORAP_1400
BD05382	751143, 751144, 751145	WMWGORAP_1400
BD05850	751143, 751144, 751145	WMWGORAP_1400
BD05852	751143, 751144, 751145	WMWGORAP_1400
BD05853	751143, 751144, 751145	WMWGORAP_1400
BD05854	751143, 751144, 751145	WMWGORAP_1400
BD05855	751143, 751144, 751145	WMWGORAP_1400
BD05856	751143, 751144, 751145	WMWGORAP_1400
BD05857	751143, 751144, 751145	WMWGORAP_1400
BD05858	751584, 751585, 751586	WMWGORAP_1400
BD05859	751584, 751585, 751586	WMWGORAP_1400
BD05860	751584, 751585, 751586	WMWGORAP_1400

Revision 5

BD05861	751392, 751393, 751394	WMWGORAP_1400
BD05862	751392, 751393, 751394	WMWGORAP_1400
BD05864	751392, 751393, 751394	WMWGORAP_1400
BD05865	751584, 751585, 751586	WMWGORAP_1400
BD05866	751584, 751585, 751586	WMWGORAP_1400
BD05867	751584, 751585, 751586	WMWGORAP_1400
BD05869	751584, 751585, 751586	WMWGORAP_1400
BD05870	751143, 751144, 751145	WMWGORAP_1400
BD05871	751392, 751393, 751394	WMWGORAP_1400
BD05872	751392, 751393, 751394	WMWGORAP_1400
BD05873	751584, 751585, 751586	WMWGORAP_1400
BD05874	751584, 751585, 751586	WMWGORAP_1400
BD05875	751584, 751585, 751586	WMWGORAP_1400
BD06130	751968, 751969, 751970	WMWGORAP_1400
BD06131	751968, 751969, 751970	WMWGORAP_1400
BD06132	751968, 751969, 751970	WMWGORAP_1400
BD06134	751968, 751969, 751970	WMWGORAP_1400
BD06135	751968, 751969, 751970	WMWGORAP_1400
BD06136	751968, 751969, 751970	WMWGORAP_1400
BD06137	751968, 751969, 751970	WMWGORAP_1400
BD06138	751968, 751969, 751970	WMWGORAP_1400
BD06139	751968, 751969, 751970	WMWGORAP_1400
BD06140	751968, 751969, 751970	WMWGORAP_1400
BD06141	751968, 751969, 751970	WMWGORAP_1400
BD06142	751968, 751969, 751970	WMWGORAP_1400
BD06143	751968, 751969, 751970	WMWGORAP_1400
BD06144	751968, 751969, 751970	WMWGORAP_1400
BD06145	752110, 752111, 751112	WMWGORAP_1400
BD06146	752110, 752111, 751112	WMWGORAP_1400
BD06147	752110, 752111, 751112	WMWGORAP_1400
BD06148	752110, 752111, 751112	WMWGORAP_1400
BD06149	752110, 752111, 751112	WMWGORAP_1400

4. All of the above samples were prepared and analyzed by Standard Method 2320B.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- An initial pH check was analyzed with each batch. The acceptance criteria were met.
- A final pH check was analyzed with each batch. The acceptance criteria were met.

- An alkalinity laboratory control sample was analyzed with each batch. Range criteria of within 10% of true value was met.
- An alkalinity sample duplicate was analyzed with each batch. Precision criteria less than 10 RPD was met.

7. The following samples had pH>10 and/or TDS>500mg/L. Therefore, the calculations for carbonate and bicarbonate are estimates:
    - BD04999
    - BD05000
    - BD05364
    - BD05365
    - BD05366
    - BD05378
    - BD05382
    - BD05850
    - BD05852
    - BD05856
    - BD05857
    - BD05858
    - BD05860
    - BD05872
    - BD06134
    - BD06135
    - BD06136
    - BD06137
8. The following samples had pH>12. Therefore, the calculations for carbonate and bicarbonate are invalid and not reported:
    - BD05855

Case Narrative

Anions

Gorgas Ash Pond

WMWGORAP_1400

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

Sample ID	Batch ID	Project ID
BD04999	749891, 749894, 750397	WMWGORAP_1400
BD05000	749891, 749894, 750397	WMWGORAP_1400
BD05364	750852, 750990, 750397	WMWGORAP_1400
BD05365	750852, 750990, 750397	WMWGORAP_1400
BD05366	750852, 750990, 750397	WMWGORAP_1400
BD05367	750852, 750990, 750397	WMWGORAP_1400
BD05368	750852, 750990, 750397	WMWGORAP_1400
BD05369	750852, 750990, 750397	WMWGORAP_1400
BD05370	750852, 750990, 750397	WMWGORAP_1400
BD05371	750852, 750990, 750397	WMWGORAP_1400
BD05372	750852, 750990, 750398	WMWGORAP_1400
BD05373	750853, 750991, 750398	WMWGORAP_1400
BD05374	750853, 750991, 750398	WMWGORAP_1400
BD05375	750853, 750991, 750398	WMWGORAP_1400
BD05376	750853, 750991, 750398	WMWGORAP_1400
BD05377	750853, 750991, 750398	WMWGORAP_1400
BD05378	750853, 750991, 750398	WMWGORAP_1400
BD05379	750853, 750991, 750398	WMWGORAP_1400
BD05380	750853, 750991, 750398	WMWGORAP_1400
BD05381	750853, 750991, 750398	WMWGORAP_1400
BD05382	750853, 750991, 750399	WMWGORAP_1400
BD05383	750854, 750992, 750399	WMWGORAP_1400
BD05850	750854, 750992, 751564	WMWGORAP_1400
BD05851	750854, 750992, 751564	WMWGORAP_1400
BD05852	750854, 750992, 751564	WMWGORAP_1400
BD05853	750854, 750992, 751564	WMWGORAP_1400
BD05854	750854, 750992, 751564	WMWGORAP_1400
BD05855	750854, 750992, 751564	WMWGORAP_1400
BD05856	750854, 750992, 751564	WMWGORAP_1400
BD05857	750854, 750992, 751564	WMWGORAP_1400
BD05858	750854, 750992, 751564	WMWGORAP_1400

BD05859	750855, 750993, 751565	WMWGORAP_1400
BD05860	750855, 750993, 751565	WMWGORAP_1400
BD05861	750855, 750993, 751565	WMWGORAP_1400
BD05862	750855, 750993, 751565	WMWGORAP_1400
BD05863	750855, 750993, 751565	WMWGORAP_1400
BD05864	750855, 750993, 751565	WMWGORAP_1400
BD05865	750855, 750993, 751565	WMWGORAP_1400
BD05866	750855, 750993, 751565	WMWGORAP_1400
BD05867	750855, 750993, 751565	WMWGORAP_1400
BD05868	750855, 751140, 751565	WMWGORAP_1400
BD05869	750856, 750994, 751566	WMWGORAP_1400
BD05870	750856, 750994, 751566	WMWGORAP_1400
BD05871	750856, 750994, 751566	WMWGORAP_1400
BD05872	750856, 750994, 751566	WMWGORAP_1400
BD05873	750856, 750994, 751566	WMWGORAP_1400
BD05874	750856, 750994, 751566	WMWGORAP_1400
BD05875	750856, 750994, 751566	WMWGORAP_1400
BD05876	750856, 750994, 751566	WMWGORAP_1400
BD06130	751291, 751317, 751566	WMWGORAP_1400
BD06131	751291, 751317, 751566	WMWGORAP_1400
BD06132	751291, 751317, 751567	WMWGORAP_1400
BD06133	751291, 751317, 751567	WMWGORAP_1400
BD06134	751291, 751317, 751567	WMWGORAP_1400
BD06135	751291, 751317, 751567	WMWGORAP_1400
BD06136	751291, 751317, 751567	WMWGORAP_1400
BD06137	751291, 751317, 751567	WMWGORAP_1400
BD06138	751291, 751317, 751567	WMWGORAP_1400
BD06139	751291, 751317, 751567	WMWGORAP_1400
BD06140	751292, 751318, 751567	WMWGORAP_1400
BD06141	751292, 751318, 751567	WMWGORAP_1400
BD06142	751292, 751318, 751568	WMWGORAP_1400
BD06143	751292, 751318, 751568	WMWGORAP_1400
BD06144	751292, 751318, 751568	WMWGORAP_1400
BD06145	751292, 751318, 751568	WMWGORAP_1400
BD06146	751292, 751318, 751568	WMWGORAP_1400
BD06147	751292, 751318, 751568	WMWGORAP_1400
BD06148	751292, 751318, 751568	WMWGORAP_1400
BD06149	751292, 751318, 751568	WMWGORAP_1400
BD06150	751293, 751319, 751568	WMWGORAP_1400

4. All of the above samples were analyzed and prepared by SM4500 Cl E, SM4500 F G, and SM4500 SO4 E.

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

General Quality Control Procedures:

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

Matrix Specific Quality Control Procedures:

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

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

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

Sample ID	Analyte	Dilution Factor
BD04999	Chloride	4
BD05000	Chloride	5
BD05364	Sulfate	16
BD05365	Chloride, Sulfate	32, 25
BD05366	Chloride, Sulfate	100, 40
BD05368	Chloride, Sulfate	4, 2
BD05371	Chloride, Sulfate	8, 5
BD05372	Sulfate	4
BD05373	Sulfate	8
BD05374	Sulfate	4
BD05375	Sulfate	4
BD05376	Sulfate	2

BD05377	Sulfate	5
BD05378	Sulfate	20
BD05379	Sulfate	5
BD05382	Sulfate	20
BD05850	Chloride, Sulfate	50, 8
BD05856	Chloride, Sulfate	32, 16
BD05857	Chloride, Sulfate	100, 32
BD05858	Chloride, Sulfate	16, 4
BD05860	Sulfate	32
BD05861	Chloride	2
BD05864	Sulfate	3
BD05870	Chloride, Sulfate	8, 16
BD05871	Sulfate	3
BD05872	Chloride, Sulfate	8, 20
BD05875	Sulfate	2
BD06134	Chloride, Sulfate	32, 25
BD06135	Chloride, Sulfate	32, 16
BD06136	Chloride, Sulfate	8, 8
BD06137	Chloride, Sulfate	8, 8
BD06140	Chloride, Sulfate	25, 10
BD06143	Sulfate	4
BD06144	Chloride, Sulfate	2, 2
BD06145	Sulfate	2
BD06146	Sulfate	2
BD06149	Chloride	8

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

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

Case Narrative

Nitrate-Nitrite

Gorgas Ash Pond

WMWGORAP_1400

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

Sample ID	**Batch ID**	**Project ID**
BD04999	749701	WMWGORAP_1400
BD05000	749701	WMWGORAP_1400
BD05364	750389	WMWGORAP_1400
BD05365	750389	WMWGORAP_1400
BD05366	750389	WMWGORAP_1400
BD05367	750389	WMWGORAP_1400
BD05368	750389	WMWGORAP_1400
BD05369	750389	WMWGORAP_1400
BD05370	750389	WMWGORAP_1400
BD05371	750389	WMWGORAP_1400
BD05372	750389	WMWGORAP_1400
BD05373	750389	WMWGORAP_1400
BD05374	750390	WMWGORAP_1400
BD05375	750390	WMWGORAP_1400
BD05376	750390	WMWGORAP_1400
BD05377	750390	WMWGORAP_1400
BD05378	750390	WMWGORAP_1400
BD05379	750390	WMWGORAP_1400
BD05380	750390	WMWGORAP_1400
BD05381	750390	WMWGORAP_1400
BD05382	750390	WMWGORAP_1400
BD05383	750390	WMWGORAP_1400
BD05850	750917	WMWGORAP_1400
BD05851	750917	WMWGORAP_1400
BD05852	750917	WMWGORAP_1400
BD05853	750917	WMWGORAP_1400
BD05854	750917	WMWGORAP_1400
BD05855	750917	WMWGORAP_1400
BD05856	750917	WMWGORAP_1400
BD05857	750917	WMWGORAP_1400
BD05858	750917	WMWGORAP_1400

BD05859	750917	WMWGORAP_1400
BD05860	750918	WMWGORAP_1400
BD05861	750918	WMWGORAP_1400
BD05862	750918	WMWGORAP_1400
BD05863	750918	WMWGORAP_1400
BD05864	750918	WMWGORAP_1400
BD05865	750918	WMWGORAP_1400
BD05866	750918	WMWGORAP_1400
BD05867	750918	WMWGORAP_1400
BD05868	750918	WMWGORAP_1400
BD05869	750918	WMWGORAP_1400
BD05870	750919	WMWGORAP_1400
BD05871	750919	WMWGORAP_1400
BD05872	750919	WMWGORAP_1400
BD05873	750919	WMWGORAP_1400
BD05874	750919	WMWGORAP_1400
BD05875	750919	WMWGORAP_1400
BD05876	750919	WMWGORAP_1400
BD06130	751304	WMWGORAP_1400
BD06131	751304	WMWGORAP_1400
BD06132	751304	WMWGORAP_1400
BD06133	751304	WMWGORAP_1400
BD06134	751304	WMWGORAP_1400
BD06135	751304	WMWGORAP_1400
BD06136	751304	WMWGORAP_1400
BD06137	751304	WMWGORAP_1400
BD06138	751304	WMWGORAP_1400
BD06139	751304	WMWGORAP_1400
BD06140	751305	WMWGORAP_1400
BD06141	751305	WMWGORAP_1400
BD06142	751305	WMWGORAP_1400
BD06143	751305	WMWGORAP_1400
BD06144	751305	WMWGORAP_1400
BD06145	751305	WMWGORAP_1400
BD06146	751305	WMWGORAP_1400
BD06147	751305	WMWGORAP_1400
BD06148	751305	WMWGORAP_1400
BD06149	751305	WMWGORAP_1400
BD06150	751306	WMWGORAP_1400

4. All of the above samples were prepared and analyzed for NO_x by EPA 353.2.

Revision 5

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

General Quality Control Procedures:

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

EPA 353.2 Specific QC:

- Prior to sample analysis, Cadmium coil reduction efficiency check met criteria.
- Matrix Specific QC:
  - A sample duplicate was run and criteria for precision was met.
  - A matrix spike was run and criteria for accuracy was met, except for the following:
    - BD05000 MS and/or MSD recovery passes using values below the detection limit.

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

Case Narrative

Total Organic Carbon

Gorgas Ash Pond

WMWGORAP_1400

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

Sample ID	Batch ID	Project ID
BD04999	749366	WMWGORAP_1400
BD05000	749366	WMWGORAP_1400
BD05364	750037	WMWGORAP_1400
BD05365	750037	WMWGORAP_1400
BD05366	750037	WMWGORAP_1400
BD05367	750037	WMWGORAP_1400
BD05368	750037	WMWGORAP_1400
BD05369	750037	WMWGORAP_1400
BD05370	750037	WMWGORAP_1400
BD05371	750037	WMWGORAP_1400
BD05372	750037	WMWGORAP_1400
BD05373	750037	WMWGORAP_1400
BD05374	750038	WMWGORAP_1400
BD05375	750038	WMWGORAP_1400
BD05376	750038	WMWGORAP_1400
BD05377	750038	WMWGORAP_1400
BD05378	750038	WMWGORAP_1400
BD05379	750038	WMWGORAP_1400
BD05380	750038	WMWGORAP_1400
BD05381	750038	WMWGORAP_1400
BD05382	750038	WMWGORAP_1400
BD05383	750038	WMWGORAP_1400
BD05850	750740	WMWGORAP_1400
BD05851	750740	WMWGORAP_1400
BD05852	750740	WMWGORAP_1400
BD05853	750740	WMWGORAP_1400
BD05854	750740	WMWGORAP_1400
BD05855	750740	WMWGORAP_1400
BD05856	750740	WMWGORAP_1400
BD05857	750740	WMWGORAP_1400
BD05858	750740	WMWGORAP_1400

BD05859	750740	WMWGORAP_1400
BD05860	750741	WMWGORAP_1400
BD05861	750741	WMWGORAP_1400
BD05862	750741	WMWGORAP_1400
BD05863	750741	WMWGORAP_1400
BD05864	750741	WMWGORAP_1400
BD05865	750741	WMWGORAP_1400
BD05866	750741	WMWGORAP_1400
BD05867	750741	WMWGORAP_1400
BD05868	750741	WMWGORAP_1400
BD05869	750741	WMWGORAP_1400
BD05870	750742	WMWGORAP_1400
BD05871	750742	WMWGORAP_1400
BD05872	750742	WMWGORAP_1400
BD05873	750742	WMWGORAP_1400
BD05874	750742	WMWGORAP_1400
BD05875	750742	WMWGORAP_1400
BD05876	750742	WMWGORAP_1400
BD06130	751190	WMWGORAP_1400
BD06131	751190	WMWGORAP_1400
BD06132	751190	WMWGORAP_1400
BD06133	751190	WMWGORAP_1400
BD06134	751190	WMWGORAP_1400
BD06135	751190	WMWGORAP_1400
BD06136	751190	WMWGORAP_1400
BD06137	751190	WMWGORAP_1400
BD06138	751190	WMWGORAP_1400
BD06139	751190	WMWGORAP_1400
BD06140	751191	WMWGORAP_1400
BD06141	751191	WMWGORAP_1400
BD06142	751191	WMWGORAP_1400
BD06143	751191	WMWGORAP_1400
BD06144	751191	WMWGORAP_1400
BD06145	751191	WMWGORAP_1400
BD06146	751191	WMWGORAP_1400
BD06147	751191	WMWGORAP_1400
BD06148	751191	WMWGORAP_1400
BD06149	751191	WMWGORAP_1400
BD06150	751192	WMWGORAP_1400

4. All of the above samples were prepared and analyzed by Standard Method 5310B.

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

General Quality Control Procedures:

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

Matrix Specific Quality Control Procedures:

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

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

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-6V

Location Code: WMWGORAP
Collected: 3/8/23 13:50
Customer ID:
Submittal Date: 3/9/23 11:45

Laboratory ID Number: BD04999

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	3/14/23 13:20	3/20/23 15:21		1.015	0.101	mg/L	0.030000	0.1015	J
* Calcium, Total	3/14/23 13:20	3/20/23 15:21		1.015	1.46	mg/L	0.070035	0.406	
* Iron, Total	3/14/23 13:20	3/20/23 15:21		1.015	0.321	mg/L	0.008120	0.0406	
* Lithium, Total	3/14/23 13:20	3/20/23 15:21		1.015	0.126	mg/L	0.007105	0.01999956	
* Magnesium, Total	3/14/23 13:20	3/20/23 15:21		1.015	0.490	mg/L	0.021315	0.406	
* Molybdenum, Total	3/14/23 13:20	3/20/23 15:21		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Total (calc.)	3/14/23 13:20	3/20/23 15:21		1	9.69	mg/L			
* Silicon, Total	3/14/23 13:20	3/20/23 15:21		1.015	4.53	mg/L	0.02030	0.25375	
* Sodium, Total	3/14/23 13:20	3/21/23 10:49		10.15	375	mg/L	0.4060	4.06	RA
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	3/9/23 14:21	3/21/23 13:59		1.015	0.0979	mg/L	0.030000	0.1015	J
* Calcium, Dissolved	3/9/23 14:21	3/21/23 13:59		1.015	1.69	mg/L	0.070035	0.406	
* Iron, Dissolved	3/9/23 14:21	3/21/23 13:59		1.015	0.0234	mg/L	0.008120	0.0406	J
* Lithium, Dissolved	3/9/23 14:21	3/21/23 13:59		1.015	0.115	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	3/9/23 14:21	3/21/23 13:59		1.015	0.510	mg/L	0.021315	0.406	
* Molybdenum, Dissolved	3/9/23 14:21	3/21/23 13:59		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Dissolved (calc.)	3/9/23 14:21	3/21/23 13:59		1	8.90	mg/L			
* Silicon, Dissolved	3/9/23 14:21	3/21/23 13:59		1.015	4.16	mg/L	0.02030	0.25375	
* Sodium, Dissolved	3/9/23 14:21	3/21/23 14:20		10.15	354	mg/L	0.4060	4.06	RA
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/14/23 13:20	3/14/23 16:42		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	3/14/23 13:20	3/14/23 16:42		1.015	0.416	mg/L	0.006090	0.05075	RA
* Arsenic, Total	3/14/23 13:20	3/14/23 16:42		1.015	0.00113	mg/L	0.000081	0.000203	
* Barium, Total	3/14/23 13:20	3/14/23 16:42		1.015	0.183	mg/L	0.000508	0.001015	
* Beryllium, Total	3/14/23 13:20	3/14/23 16:42		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	3/14/23 13:20	3/14/23 16:42		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	3/14/23 13:20	3/14/23 16:42		1.015	0.00361	mg/L	0.000203	0.001015	
* Cobalt, Total	3/14/23 13:20	3/14/23 16:42		1.015	0.000224	mg/L	0.000068	0.000203	
* Lead, Total	3/14/23 13:20	3/14/23 16:42		1.015	0.000370	mg/L	0.000068	0.000203	
* Manganese, Total	3/14/23 13:20	3/14/23 16:42		1.015	0.0104	mg/L	0.000152	0.001015	

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

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

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

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-6V

Location Code: WMWGORAP
Collected: 3/8/23 13:50
Customer ID:
Submittal Date: 3/9/23 11:45

Laboratory ID Number: BD04999

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	3/14/23 13:20	3/14/23 16:42		1.015	1.28	mg/L	0.169505	0.5075	
* Selenium, Total	3/14/23 13:20	3/14/23 16:42		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	3/14/23 13:20	3/14/23 16:42		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	3/9/23 14:21	3/9/23 14:51		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	3/9/23 14:21	3/9/23 14:51		1.015	0.0204	mg/L	0.006090	0.05075	J
* Arsenic, Dissolved	3/9/23 14:21	3/9/23 14:51		1.015	0.00208	mg/L	0.000081	0.000203	
* Barium, Dissolved	3/9/23 14:21	3/9/23 14:51		1.015	0.159	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	3/9/23 14:21	3/9/23 14:51		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	3/9/23 14:21	3/9/23 14:51		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	3/9/23 14:21	3/9/23 14:51		1.015	0.000268	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	3/9/23 14:21	3/9/23 14:51		1.015	0.0000681	mg/L	0.000068	0.000203	J
* Lead, Dissolved	3/9/23 14:21	3/9/23 14:51		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	3/9/23 14:21	3/9/23 14:51		1.015	0.0107	mg/L	0.000152	0.001015	
* Potassium, Dissolved	3/9/23 14:21	3/9/23 14:51		1.015	1.28	mg/L	0.169505	0.5075	
* Selenium, Dissolved	3/9/23 14:21	3/9/23 14:51		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	3/9/23 14:21	3/9/23 14:51		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ELH***								
* Mercury, Total by CVAA	3/10/23 11:42	3/10/23 16:50		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	3/9/23 15:13	3/9/23 15:13		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
* Alkalinity to pH 4.5	3/17/23 13:58	3/17/23 14:40		1	686	mg CaCO3/L		0.10	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	3/10/23 11:03	3/14/23 13:50		1	861	mg/L		75.8	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
* Bicarbonate Alkalinity, (calc.)	3/17/23 13:58	3/17/23 14:40		1	664	mg CaCO3/L		1	A
* Carbonate Alkalinity, (calc.)	3/17/23 13:58	3/17/23 14:40		1	21.6	mg CaCO3/L		0.5	A
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	3/9/23 18:59	3/9/23 18:59		1	9.28	mg/L	1.00	2	

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

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

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

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-6V

Location Code: WMWGORAP
Collected: 3/8/23 13:50
Customer ID:
Submittal Date: 3/9/23 11:45

Laboratory ID Number: BD04999

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	3/14/23 11:21	3/14/23 11:21		4	49.3	mg/L	2.00	4	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	3/14/23 14:25	3/14/23 14:25		1	4.58	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	3/21/23 13:13	3/21/23 13:13		1	15.2	mg/L	0.6	2	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	3/8/23 13:47	3/8/23 13:47			1359.41	uS/cm			FA
pH	3/8/23 13:47	3/8/23 13:47			8.70	SU			FA
Temperature	3/8/23 13:47	3/8/23 13:47			18.49	C			FA
Turbidity	3/8/23 13:47	3/8/23 13:47			15.8	NTU			FA
Sulfide	3/8/23 13:47	3/8/23 13:47			0	mg/L			FA

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

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

Reported: 5/3/2023
Version: 3.5
COA_CCR

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/8/23 13:50
Customer ID:
Delivery Date: 3/9/23 11:45

Description: Gorgas Ash Pond - MW-6V

Laboratory ID Number: BD04999

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04999	Aluminum, Dissolved	mg/L	-0.000183	0.0198	0.100	0.118	0.120	0.0998	0.0850 to 0.115	97.6	70.0 to 130	1.68	20.0
BD04999	Aluminum, Total	mg/L	0.000827	0.0198	0.100	0.533	0.565	0.101	0.0850 to 0.115	117	70.0 to 130	5.83	20.0
BD04999	Antimony, Dissolved	mg/L	0.000245	0.00100	0.100	0.0874	0.0879	0.0873	0.0850 to 0.115	87.4	70.0 to 130	0.570	20.0
BD04999	Antimony, Total	mg/L	0.000351	0.00100	0.100	0.0993	0.0971	0.0980	0.0850 to 0.115	99.3	70.0 to 130	2.24	20.0
BD04999	Arsenic, Dissolved	mg/L	0.0000034	0.000200	0.100	0.104	0.104	0.102	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BD04999	Arsenic, Total	mg/L	0.0000064	0.000200	0.100	0.0969	0.0973	0.0971	0.0850 to 0.115	95.8	70.0 to 130	0.412	20.0
BD04999	Barium, Dissolved	mg/L	0.0000133	0.00100	0.100	0.259	0.252	0.0964	0.0850 to 0.115	100	70.0 to 130	2.74	20.0
BD04999	Barium, Total	mg/L	0.0000250	0.00100	0.100	0.297	0.290	0.106	0.0850 to 0.115	114	70.0 to 130	2.39	20.0
BD04999	Beryllium, Dissolved	mg/L	0.0000087	0.000880	0.100	0.101	0.102	0.101	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BD04999	Beryllium, Total	mg/L	0.0000158	0.000880	0.100	0.112	0.110	0.114	0.0850 to 0.115	112	70.0 to 130	1.80	20.0
BD04999	Boron, Dissolved	mg/L	-0.000133	0.0650	1.00	1.08	1.08	0.971	0.850 to 1.15	98.2	70.0 to 130	0.00	20.0
BD04999	Boron, Total	mg/L	-0.000509	0.0650	1.00	1.12	1.13	1.01	0.850 to 1.15	102	70.0 to 130	0.889	20.0
BD04999	Cadmium, Dissolved	mg/L	0.0000024	0.000147	0.100	0.0988	0.0996	0.0969	0.0850 to 0.115	98.8	70.0 to 130	0.806	20.0
BD04999	Cadmium, Total	mg/L	0.0000132	0.000147	0.100	0.0995	0.0983	0.0981	0.0850 to 0.115	99.5	70.0 to 130	1.21	20.0
BD04999	Calcium, Dissolved	mg/L	-0.00946	0.152	5.00	6.25	6.27	4.71	4.25 to 5.75	91.2	70.0 to 130	0.319	20.0
BD04999	Calcium, Total	mg/L	-0.0121	0.152	5.00	6.26	6.40	4.88	4.25 to 5.75	96.0	70.0 to 130	2.21	20.0
BD05000	Chloride	mg/L	0.0622	1.00	50.0	97.2	96.3	9.82	9.00 to 11.0	93.6	80.0 to 120	0.930	20.0
BD04999	Chromium, Dissolved	mg/L	-0.0000176	0.000440	0.100	0.0953	0.0962	0.0967	0.0850 to 0.115	95.0	70.0 to 130	0.940	20.0
BD04999	Chromium, Total	mg/L	-0.0000193	0.000440	0.100	0.101	0.101	0.0974	0.0850 to 0.115	97.4	70.0 to 130	0.00	20.0
BD04999	Cobalt, Dissolved	mg/L	-0.0000019	0.000147	0.100	0.0974	0.0995	0.0980	0.0850 to 0.115	97.3	70.0 to 130	2.13	20.0
BD04999	Cobalt, Total	mg/L	-0.0000011	0.000147	0.100	0.0988	0.0993	0.0992	0.0850 to 0.115	98.6	70.0 to 130	0.505	20.0
BD05000	Fluoride	mg/L	0.0103	0.125	2.50	6.92	6.89	2.64	2.25 to 2.75	98.0	80.0 to 120	0.434	20.0
BD04999	Iron, Dissolved	mg/L	-0.00264	0.0176	0.2	0.218	0.218	0.194	0.170 to 0.230	97.3	70.0 to 130	0.00	20.0
BD04999	Iron, Total	mg/L	0.000665	0.0176	0.2	0.519	0.518	0.203	0.170 to 0.230	99.0	70.0 to 130	0.193	20.0

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/8/23 13:50
Customer ID:
Delivery Date: 3/9/23 11:45

Description: Gorgas Ash Pond - MW-6V

Laboratory ID Number: BD04999

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04999	Lead, Dissolved	mg/L	0.0000069	0.000147	0.100	0.102	0.103	0.104	0.0850 to 0.115	102	70.0 to 130	0.976	20.0
BD04999	Lead, Total	mg/L	0.0000456	0.000147	0.100	0.108	0.105	0.103	0.0850 to 0.115	108	70.0 to 130	2.82	20.0
BD04999	Lithium, Dissolved	mg/L	0.000223	0.0154	0.200	0.312	0.314	0.193	0.170 to 0.230	98.5	70.0 to 130	0.639	20.0
BD04999	Lithium, Total	mg/L	0.000317	0.0154	0.200	0.331	0.335	0.198	0.170 to 0.230	102	70.0 to 130	1.20	20.0
BD04999	Magnesium, Dissolved	mg/L	-0.0122	0.0462	5.00	5.19	5.22	4.77	4.25 to 5.75	93.6	70.0 to 130	0.576	20.0
BD04999	Magnesium, Total	mg/L	0.00186	0.0462	5.00	5.31	5.41	4.89	4.25 to 5.75	96.4	70.0 to 130	1.87	20.0
BD04999	Manganese, Dissolved	mg/L	0.000295	0.00033	0.100	0.106	0.108	0.0975	0.0850 to 0.115	95.3	70.0 to 130	1.87	20.0
BD04999	Manganese, Total	mg/L	0.0000336	0.00033	0.100	0.109	0.110	0.100	0.0850 to 0.115	98.6	70.0 to 130	0.913	20.0
BD04999	Mercury, Total by CVAA	mg/L	1.000E-05	0.000500	0.004	0.004	0.00398	0.00395	0.00340 to 0.00460	100	70.0 to 130	0.501	20.0
BD04999	Molybdenum, Dissolved	mg/L	-0.000362	0.0100	0.2	0.199	0.197	0.197	0.170 to 0.230	99.5	70.0 to 130	1.01	20.0
BD04999	Molybdenum, Total	mg/L	0.000	0.0100	0.2	0.204	0.205	0.202	0.170 to 0.230	102	70.0 to 130	0.489	20.0
BD04999	Potassium, Dissolved	mg/L	0.00500	0.367	10.0	10.6	10.9	9.60	8.50 to 11.5	93.2	70.0 to 130	2.79	20.0
BD04999	Potassium, Total	mg/L	0.0341	0.367	10.0	11.0	11.2	9.97	8.50 to 11.5	97.2	70.0 to 130	1.80	20.0
BD04999	Selenium, Dissolved	mg/L	0.0000350	0.00100	0.100	0.107	0.107	0.103	0.0850 to 0.115	107	70.0 to 130	0.00	20.0
BD04999	Selenium, Total	mg/L	0.0000197	0.00100	0.100	0.102	0.101	0.0993	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BD04999	Silicon, Dissolved	mg/L	-0.000843	0.0440	1.00	5.13	5.13	0.977	0.850 to 1.15	97.0	70.0 to 130	0.00	20.0
BD04999	Silicon, Total	mg/L	-0.000541	0.0440	1.00	5.66	5.64	1.00	0.850 to 1.15	113	70.0 to 130	0.354	20.0
BD04999	Sodium, Dissolved	mg/L	0.000113	0.0880	5.00	395	390	4.65	4.25 to 5.75	820	70.0 to 130	1.27	20.0
BD04999	Sodium, Total	mg/L	0.00909	0.0880	5.00	399	384	4.71	4.25 to 5.75	480	70.0 to 130	3.83	20.0
BD05371	Sulfate	mg/L	-0.180	2.0	100	177	180	19.8	18.0 to 22.0	100	80.0 to 120	1.68	20.0
BD04999	Thallium, Dissolved	mg/L	-0.0000049	0.000147	0.100	0.102	0.100	0.104	0.0850 to 0.115	102	70.0 to 130	1.98	20.0
BD04999	Thallium, Total	mg/L	0.0000045	0.000147	0.100	0.107	0.102	0.101	0.0850 to 0.115	107	70.0 to 130	4.78	20.0
BD05000	Total Organic Carbon	mg/L	0.0736	1.00	10.0	20.9	22.0	10.8		101	80.0 to 120	5.13	20.0

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

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/8/23 13:50
Customer ID:
Delivery Date: 3/9/23 11:45

Description: Gorgas Ash Pond - MW-6V

Laboratory ID Number: BD04999

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD05372	Alkalinity to pH 4.5	mg CaCO3/L					101	50.3	45.0 to 55.0			1.20	10.0
BD05000	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.05	0.200	2.00	2.23	0.123	2.09	1.80 to 2.20	112	90.0 to 110	0.00	15.0
BD05000	Solids, Dissolved	mg/L	0.0000	25.0			894	47.0	40.0 to 60.0			1.01	10.0

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

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

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-6V Dis

Location Code: WMWGORAP
Collected: 3/8/23 13:50
Customer ID:
Submittal Date: 3/9/23 11:45

Laboratory ID Number: BD05000

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 245.1	***Analyst: ELH***								
* Mercury, Dissolved by CVAA	3/10/23 11:42	3/10/23 17:02		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	3/9/23 15:13	3/9/23 15:13		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
* Alkalinity to pH 4.5	3/17/23 13:58	3/17/23 14:40		1	706	mg CaCO3/L		0.10	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	3/10/23 11:03	3/14/23 13:50		1	885	mg/L		75.8	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
* Bicarbonate Alkalinity, (calc.)	3/17/23 13:58	3/17/23 14:40		1	686	mg CaCO3/L		1	A
* Carbonate Alkalinity, (calc.)	3/17/23 13:58	3/17/23 14:40		1	19.9	mg CaCO3/L		0.5	A
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	3/9/23 19:15	3/9/23 19:15		1	10.8	mg/L	1.00	2	
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	3/14/23 11:23	3/14/23 11:23		5	50.4	mg/L	2.50	5	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	3/14/23 14:26	3/14/23 14:26		1	4.47	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	3/21/23 13:14	3/21/23 13:14		1	7.27	mg/L	0.6	2	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	3/8/23 13:47	3/8/23 13:47			1359.41	uS/cm			FA
pH	3/8/23 13:47	3/8/23 13:47			8.70	SU			FA
Temperature	3/8/23 13:47	3/8/23 13:47			18.49	C			FA
Turbidity	3/8/23 13:47	3/8/23 13:47			15.8	NTU			FA
Sulfide	3/8/23 13:47	3/8/23 13:47			0	mg/L			FA

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

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
Nitrate/Nitrite matrix spike recovery and/or matrix spike duplicate recovery passes using values below the detection limit.

Reported: 5/3/2023
Version: 3.5
COA_CCR

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/8/23 13:50
Customer ID:
Delivery Date: 3/9/23 11:45

Description: Gorgas Ash Pond - MW-6V Dis

Laboratory ID Number: BD05000

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD05000	Chloride	mg/L	0.0622	1.00	50.0	97.2	96.3	9.82	9.00 to 11.0	93.6	80.0 to 120	0.930	20.0
BD05000	Fluoride	mg/L	0.0103	0.125	2.50	6.92	6.89	2.64	2.25 to 2.75	98.0	80.0 to 120	0.434	20.0
BD05000	Mercury, Dissolved by	mg/L	1.000E-05	0.000500	0.004	0.004	0.004	0.00395	0.00340 to 0.00460	100	70.0 to 130	0.00	20.0
BD05371	Sulfate	mg/L	-0.180	2.0	100	177	180	19.8	18.0 to 22.0	100	80.0 to 120	1.68	20.0
BD05000	Total Organic Carbon	mg/L	0.0736	1.00	10.0	20.9	22.0	10.8		101	80.0 to 120	5.13	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
Nitrate/Nitrite matrix spike recovery and/or matrix spike duplicate recovery passes using values below the detection limit.

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/8/23 13:50
Customer ID:
Delivery Date: 3/9/23 11:45

Description: Gorgas Ash Pond - MW-6V Dis

Laboratory ID Number: BD05000

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD05372	Alkalinity to pH 4.5	mg CaCO3/L					101	50.3	45.0 to 55.0			1.20	10.0
BD05000	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.05	0.200	2.00	2.23	0.123	2.09	1.80 to 2.20	112	90.0 to 110	0.00	15.0
BD05000	Solids, Dissolved	mg/L	0.0000	25.0			894	47.0	40.0 to 60.0			1.01	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
Nitrate/Nitrite matrix spike recovery and/or matrix spike duplicate recovery passes using values below the detection limit.

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-30HA

Location Code: WMWGORAP
Collected: 3/13/23 13:20
Customer ID:
Submittal Date: 3/16/23 09:23

Laboratory ID Number: BD05364

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	3/17/23 06:40	3/21/23 11:11		1.015	0.0605	mg/L	0.030000	0.1015	J
* Calcium, Total	3/17/23 06:40	3/21/23 12:43		10.15	56.0	mg/L	0.70035	4.06	
* Iron, Total	3/17/23 06:40	3/21/23 11:11		1.015	2.95	mg/L	0.008120	0.0406	
* Lithium, Total	3/17/23 06:40	3/21/23 11:11		1.015	0.0516	mg/L	0.007105	0.01999956	
* Magnesium, Total	3/17/23 06:40	3/21/23 11:11		1.015	7.80	mg/L	0.021315	0.406	
* Molybdenum, Total	3/17/23 06:40	3/21/23 11:11		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Total (calc.)	3/17/23 06:40	3/21/23 11:11		1	22.3	mg/L			
* Silicon, Total	3/17/23 06:40	3/21/23 11:11		1.015	10.4	mg/L	0.02030	0.25375	
* Sodium, Total	3/17/23 06:40	3/21/23 12:43		10.15	210	mg/L	0.4060	4.06	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	3/16/23 13:31	3/22/23 10:39		1.015	0.0626	mg/L	0.030000	0.1015	J
* Calcium, Dissolved	3/16/23 13:31	3/22/23 12:30		10.15	54.6	mg/L	0.70035	4.06	
* Iron, Dissolved	3/16/23 13:31	3/22/23 10:39		1.015	3.08	mg/L	0.008120	0.0406	
* Lithium, Dissolved	3/16/23 13:31	3/22/23 10:39		1.015	0.0553	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	3/16/23 13:31	3/22/23 10:39		1.015	8.12	mg/L	0.021315	0.406	
* Molybdenum, Dissolved	3/16/23 13:31	3/22/23 10:39		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Dissolved (calc.)	3/16/23 13:31	3/22/23 10:39		1	22.5	mg/L			
* Silicon, Dissolved	3/16/23 13:31	3/22/23 10:39		1.015	10.5	mg/L	0.02030	0.25375	
* Sodium, Dissolved	3/16/23 13:31	3/22/23 12:30		10.15	201	mg/L	0.4060	4.06	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/17/23 06:40	3/20/23 11:35		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Total	3/17/23 06:40	3/20/23 11:35		1.015	0.0562	mg/L	0.009135	0.05075	
* Arsenic, Total	3/17/23 06:40	3/20/23 11:35		1.015	0.00298	mg/L	0.000112	0.000203	
* Barium, Total	3/17/23 06:40	3/20/23 11:35		1.015	0.115	mg/L	0.000508	0.001015	
* Beryllium, Total	3/17/23 06:40	3/20/23 11:35		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	3/17/23 06:40	3/20/23 11:35		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	3/17/23 06:40	3/20/23 11:35		1.015	0.000264	mg/L	0.000203	0.001015	J
* Cobalt, Total	3/17/23 06:40	3/20/23 11:35		1.015	0.000168	mg/L	0.000068	0.000203	J
* Lead, Total	3/17/23 06:40	3/20/23 11:35		1.015	0.000162	mg/L	0.000068	0.000203	J
* Manganese, Total	3/17/23 06:40	3/20/23 11:35		1.015	0.201	mg/L	0.000152	0.001015	

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

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

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

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-30HA

Location Code: WMWGORAP
Collected: 3/13/23 13:20
Customer ID:
Submittal Date: 3/16/23 09:23

Laboratory ID Number: BD05364

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	3/17/23 06:40	3/20/23 11:35		1.015	4.31	mg/L	0.169505	0.5075	
* Selenium, Total	3/17/23 06:40	3/20/23 11:35		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	3/17/23 06:40	3/20/23 11:35		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	3/16/23 13:31	3/16/23 15:34		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	3/16/23 13:31	3/16/23 15:34		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Dissolved	3/16/23 13:31	3/16/23 15:34		1.015	0.00352	mg/L	0.000112	0.000203	
* Barium, Dissolved	3/16/23 13:31	3/16/23 15:34		1.015	0.103	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	3/16/23 13:31	3/16/23 15:34		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	3/16/23 13:31	3/16/23 15:34		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	3/16/23 13:31	3/16/23 15:34		1.015	0.000222	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	3/16/23 13:31	3/16/23 15:34		1.015	0.000126	mg/L	0.000068	0.000203	J
* Lead, Dissolved	3/16/23 13:31	3/16/23 15:34		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	3/16/23 13:31	3/16/23 15:34		1.015	0.178	mg/L	0.000152	0.001015	
* Potassium, Dissolved	3/16/23 13:31	3/16/23 15:34		1.015	4.09	mg/L	0.169505	0.5075	
* Selenium, Dissolved	3/16/23 13:31	3/16/23 15:34		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	3/16/23 13:31	3/16/23 15:34		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	3/17/23 17:55	3/17/23 21:53		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	3/21/23 11:56	3/21/23 11:56		1	0.225	mg/L as N	0.20	0.3	J
Analytical Method: SM 2320 B	***Analyst: ALH***								
* Alkalinity to pH 4.5	3/17/23 13:58	3/17/23 14:40		1	301	mg CaCO3/L		0.10	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	3/16/23 11:25	3/17/23 13:50		1	680	mg/L		50	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
* Bicarbonate Alkalinity, (calc.)	3/17/23 13:58	3/17/23 14:40		1	300	mg CaCO3/L		1	A
* Carbonate Alkalinity, (calc.)	3/17/23 13:58	3/17/23 14:40		1	0.795	mg CaCO3/L		0.5	A
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	3/16/23 16:29	3/16/23 16:29		1	5.01	mg/L	1.00	2	

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

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

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

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-30HA

Location Code: WMWGORAP
Collected: 3/13/23 13:20
Customer ID:
Submittal Date: 3/16/23 09:23

Laboratory ID Number: BD05364

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: CES***								
* Chloride	3/24/23 09:49	3/24/23 09:49		1	4.77	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: CES***								
* Fluoride	3/28/23 09:31	3/28/23 09:31		1	1.61	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	3/21/23 13:27	3/21/23 13:27		16	228	mg/L	9.6	32	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	3/13/23 13:17	3/13/23 13:17			1013.84	uS/cm			FA
pH	3/13/23 13:17	3/13/23 13:17			7.22	SU			FA
Temperature	3/13/23 13:17	3/13/23 13:17			18.09	C			FA
Turbidity	3/13/23 13:17	3/13/23 13:17			7.03	NTU			FA
Sulfide	3/13/23 13:17	3/13/23 13:17			0	mg/L			FA

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

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/13/23 13:20
Customer ID:
Delivery Date: 3/16/23 09:23

Description: Gorgas Ash Pond - MW-30HA

Laboratory ID Number: BD05364

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD05373	Aluminum, Dissolved	mg/L	0.0000168	0.0198	0.100	0.105	0.106	0.105	0.0850 to 0.115	105	70.0 to 130	0.948	20.0
BD05373	Aluminum, Total	mg/L	0.000212	0.0198	0.100	0.349	0.416	0.0988	0.0850 to 0.115	214	70.0 to 130	17.5	20.0
BD05373	Antimony, Dissolved	mg/L	0.000232	0.00100	0.100	0.0966	0.0963	0.0947	0.0850 to 0.115	96.6	70.0 to 130	0.311	20.0
BD05373	Antimony, Total	mg/L	0.000202	0.00100	0.100	0.105	0.106	0.101	0.0850 to 0.115	105	70.0 to 130	0.948	20.0
BD05373	Arsenic, Dissolved	mg/L	-0.0000026	0.000200	0.100	0.356	0.357	0.103	0.0850 to 0.115	100	70.0 to 130	0.281	20.0
BD05373	Arsenic, Total	mg/L	0.0000159	0.000200	0.100	0.366	0.368	0.101	0.0850 to 0.115	117	70.0 to 130	0.545	20.0
BD05373	Barium, Dissolved	mg/L	-0.0000285	0.00100	0.100	0.155	0.153	0.0969	0.0850 to 0.115	98.0	70.0 to 130	1.30	20.0
BD05373	Barium, Total	mg/L	-0.0000008	0.00100	0.100	0.165	0.170	0.0993	0.0850 to 0.115	102	70.0 to 130	2.99	20.0
BD05373	Beryllium, Dissolved	mg/L	0.0000237	0.000880	0.100	0.104	0.104	0.102	0.0850 to 0.115	104	70.0 to 130	0.00	20.0
BD05373	Beryllium, Total	mg/L	0.0000126	0.000880	0.100	0.0915	0.0905	0.0944	0.0850 to 0.115	91.5	70.0 to 130	1.10	20.0
BD05373	Boron, Dissolved	mg/L	0.000171	0.0650	1.00	2.77	2.77	1.04	0.850 to 1.15	104	70.0 to 130	0.00	20.0
BD05373	Boron, Total	mg/L	0.000173	0.0650	1.00	2.63	2.63	0.982	0.850 to 1.15	99.0	70.0 to 130	0.00	20.0
BD05373	Cadmium, Dissolved	mg/L	0.0000031	0.000147	0.100	0.106	0.107	0.107	0.0850 to 0.115	106	70.0 to 130	0.939	20.0
BD05373	Cadmium, Total	mg/L	-0.0000034	0.000147	0.100	0.101	0.102	0.102	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BD05373	Calcium, Dissolved	mg/L	-0.00749	0.152	5.00	15.9	15.4	5.04	4.25 to 5.75	102	70.0 to 130	3.19	20.0
BD05373	Calcium, Total	mg/L	-0.00687	0.152	5.00	16.0	16.0	4.87	4.25 to 5.75	100	70.0 to 130	0.00	20.0
BD05372	Chloride	mg/L	0.157	1.00	10.0	17.1	17.2	9.90	9.00 to 11.0	103	80.0 to 120	0.583	20.0
BD05373	Chromium, Dissolved	mg/L	0.0000269	0.000440	0.100	0.100	0.101	0.103	0.0850 to 0.115	99.8	70.0 to 130	0.995	20.0
BD05373	Chromium, Total	mg/L	-0.0000126	0.000440	0.100	0.101	0.101	0.104	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BD05373	Cobalt, Dissolved	mg/L	0.0000062	0.000147	0.100	0.105	0.105	0.106	0.0850 to 0.115	105	70.0 to 130	0.00	20.0
BD05373	Cobalt, Total	mg/L	-0.0000089	0.000147	0.100	0.103	0.102	0.104	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BD05372	Fluoride	mg/L	0.00990	0.125	2.50	2.63	2.66	2.61	2.25 to 2.75	101	80.0 to 120	1.13	20.0
BD05373	Iron, Dissolved	mg/L	-0.000052	0.0176	0.2	0.425	0.425	0.202	0.170 to 0.230	99.0	70.0 to 130	0.00	20.0
BD05373	Iron, Total	mg/L	-0.00265	0.0176	0.2	1.10	1.11	0.199	0.170 to 0.230	235	70.0 to 130	0.905	20.0

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/13/23 13:20
Customer ID:
Delivery Date: 3/16/23 09:23

Description: Gorgas Ash Pond - MW-30HA

Laboratory ID Number: BD05364

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD05373	Lead, Dissolved	mg/L	0.0000058	0.000147	0.100	0.106	0.101	0.104	0.0850 to 0.115	106	70.0 to 130	4.83	20.0
BD05373	Lead, Total	mg/L	0.0000039	0.000147	0.100	0.106	0.107	0.107	0.0850 to 0.115	106	70.0 to 130	0.939	20.0
BD05373	Lithium, Dissolved	mg/L	0.000469	0.0154	0.200	0.415	0.410	0.199	0.170 to 0.230	100	70.0 to 130	1.21	20.0
BD05373	Lithium, Total	mg/L	0.00103	0.0154	0.200	0.406	0.404	0.194	0.170 to 0.230	99.5	70.0 to 130	0.494	20.0
BD05373	Magnesium, Dissolved	mg/L	0.00419	0.0462	5.00	8.60	8.44	4.95	4.25 to 5.75	97.6	70.0 to 130	1.88	20.0
BD05373	Magnesium, Total	mg/L	-0.00905	0.0462	5.00	8.77	8.74	4.80	4.25 to 5.75	99.6	70.0 to 130	0.343	20.0
BD05373	Manganese, Dissolved	mg/L	0.0000061	0.00033	0.100	0.143	0.144	0.107	0.0850 to 0.115	104	70.0 to 130	0.697	20.0
BD05373	Manganese, Total	mg/L	-0.0000009	0.00033	0.100	0.144	0.143	0.101	0.0850 to 0.115	99.8	70.0 to 130	0.697	20.0
BD05373	Mercury, Total by CVAA	mg/L	0.000	0.000500	0.004	0.00384	0.00384	0.00408	0.00340 to 0.00460	96.0	70.0 to 130	0.00	20.0
BD05373	Molybdenum, Dissolved	mg/L	0.000437	0.0100	0.2	0.413	0.415	0.202	0.170 to 0.230	99.0	70.0 to 130	0.483	20.0
BD05373	Molybdenum, Total	mg/L	0.000	0.0100	0.2	0.412	0.410	0.197	0.170 to 0.230	98.5	70.0 to 130	0.487	20.0
BD05373	Potassium, Dissolved	mg/L	0.0178	0.367	10.0	11.1	11.1	10.1	8.50 to 11.5	98.0	70.0 to 130	0.00	20.0
BD05373	Potassium, Total	mg/L	-0.000205	0.367	10.0	11.0	10.9	9.91	8.50 to 11.5	97.1	70.0 to 130	0.913	20.0
BD05373	Selenium, Dissolved	mg/L	0.0000061	0.00100	0.100	0.108	0.107	0.107	0.0850 to 0.115	105	70.0 to 130	0.930	20.0
BD05373	Selenium, Total	mg/L	0.0000487	0.00100	0.100	0.103	0.104	0.108	0.0850 to 0.115	103	70.0 to 130	0.966	20.0
BD05373	Silicon, Dissolved	mg/L	0.00139	0.0440	1.00	6.34	6.33	1.02	0.850 to 1.15	96.0	70.0 to 130	0.158	20.0
BD05373	Silicon, Total	mg/L	0.000118	0.0440	1.00	7.03	7.03	0.997	0.850 to 1.15	163	70.0 to 130	0.00	20.0
BD05373	Sodium, Dissolved	mg/L	-0.000881	0.0880	5.00	106	109	4.84	4.25 to 5.75	-40.0	70.0 to 130	2.79	20.0
BD05373	Sodium, Total	mg/L	0.00401	0.0880	5.00	107	104	4.75	4.25 to 5.75	170	70.0 to 130	2.84	20.0
BD05371	Sulfate	mg/L	-0.180	2.0	100	177	180	19.8	18.0 to 22.0	100	80.0 to 120	1.68	20.0
BD05373	Thallium, Dissolved	mg/L	0.0000086	0.000147	0.100	0.103	0.101	0.106	0.0850 to 0.115	103	70.0 to 130	1.96	20.0
BD05373	Thallium, Total	mg/L	0.000	0.000147	0.100	0.101	0.101	0.103	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BD05373	Total Organic Carbon	mg/L	0.0176	1.00	10.0	11.3	11.6	10.1		93.3	80.0 to 120	2.62	20.0

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

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/13/23 13:20
Customer ID:
Delivery Date: 3/16/23 09:23

Description: Gorgas Ash Pond - MW-30HA

Laboratory ID Number: BD05364

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD05372	Alkalinity to pH 4.5	mg CaCO3/L					101	50.3	45.0 to 55.0			1.20	10.0
BD05373	Nitrogen, Nitrate/Nitrite	mg/L as N	0.09	0.200	2.00	1.98	0.073	2.08	1.80 to 2.20	99.0	90.0 to 110	0.00	15.0
BD05373	Solids, Dissolved	mg/L	0.0000	25.0			341	52.0	40.0 to 60.0			0.294	10.0

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

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

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-36V

Location Code: WMWGORAP
Collected: 3/14/23 11:10
Customer ID:
Submittal Date: 3/16/23 09:24

Laboratory ID Number: BD05365

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	3/17/23 06:40	3/21/23 11:14		1.015	0.0771	mg/L	0.030000	0.1015	J
* Calcium, Total	4/24/23 14:45	4/25/23 12:10		10.15	43.0	mg/L	0.70035	4.06	
* Iron, Total	3/17/23 06:40	3/21/23 11:14		1.015	0.488	mg/L	0.008120	0.0406	
* Lithium, Total	3/17/23 06:40	3/21/23 11:14		1.015	0.0402	mg/L	0.007105	0.01999956	
* Magnesium, Total	3/17/23 06:40	3/21/23 11:14		1.015	13.4	mg/L	0.021315	0.406	
* Molybdenum, Total	3/17/23 06:40	3/21/23 11:14		1.015	0.00789	mg/L	0.005075	0.01015	J
* Silica, Total (calc.)	3/17/23 06:40	3/21/23 11:14		1	15.2	mg/L			
* Silicon, Total	3/17/23 06:40	3/21/23 11:14		1.015	7.08	mg/L	0.02030	0.25375	
* Sodium, Total	3/17/23 06:40	3/21/23 12:47		101.5	443	mg/L	4.060	40.6	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	3/16/23 13:31	3/22/23 10:42		1.015	0.0696	mg/L	0.030000	0.1015	J
* Calcium, Dissolved	3/16/23 13:31	3/22/23 10:42		1.015	32.2	mg/L	0.070035	0.406	
* Iron, Dissolved	3/16/23 13:31	3/22/23 10:42		1.015	0.346	mg/L	0.008120	0.0406	
* Lithium, Dissolved	3/16/23 13:31	3/22/23 10:42		1.015	0.0367	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	3/16/23 13:31	3/22/23 10:42		1.015	10.2	mg/L	0.021315	0.406	
* Molybdenum, Dissolved	3/16/23 13:31	3/22/23 10:42		1.015	0.00538	mg/L	0.005075	0.01015	J
* Silica, Dissolved (calc.)	3/16/23 13:31	3/22/23 10:42		1	15.0	mg/L			
* Silicon, Dissolved	3/16/23 13:31	3/22/23 10:42		1.015	7.03	mg/L	0.02030	0.25375	
* Sodium, Dissolved	3/16/23 13:31	3/22/23 12:33		101.5	354	mg/L	4.060	40.6	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/17/23 06:40	3/20/23 11:38		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Total	3/17/23 06:40	3/20/23 11:38		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Total	3/17/23 06:40	3/20/23 11:38		1.015	0.00337	mg/L	0.000112	0.000203	
* Barium, Total	3/17/23 06:40	3/20/23 11:38		1.015	0.0858	mg/L	0.000508	0.001015	
* Beryllium, Total	3/17/23 06:40	3/20/23 11:38		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	3/17/23 06:40	3/20/23 11:38		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	3/17/23 06:40	3/20/23 11:38		1.015	0.000257	mg/L	0.000203	0.001015	J
* Cobalt, Total	3/17/23 06:40	3/20/23 11:38		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	3/17/23 06:40	3/20/23 11:38		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	3/17/23 06:40	3/20/23 11:38		1.015	0.0673	mg/L	0.000152	0.001015	

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

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

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

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-36V

Location Code: WMWGORAP
Collected: 3/14/23 11:10
Customer ID:
Submittal Date: 3/16/23 09:24

Laboratory ID Number: BD05365

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	3/17/23 06:40	3/20/23 11:38		1.015	46.3	mg/L	0.169505	0.5075	
* Selenium, Total	3/17/23 06:40	3/20/23 11:38		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	3/17/23 06:40	3/20/23 11:38		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	3/16/23 13:31	3/16/23 15:38		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	3/16/23 13:31	3/16/23 15:38		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Dissolved	3/16/23 13:31	3/16/23 15:38		1.015	0.00218	mg/L	0.000112	0.000203	
* Barium, Dissolved	3/16/23 13:31	3/16/23 15:38		1.015	0.0682	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	3/16/23 13:31	3/16/23 15:38		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	3/16/23 13:31	3/16/23 15:38		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	3/16/23 13:31	3/16/23 15:38		1.015	0.000207	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	3/16/23 13:31	3/16/23 15:38		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Dissolved	3/16/23 13:31	3/16/23 15:38		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	3/16/23 13:31	3/16/23 15:38		1.015	0.0566	mg/L	0.000152	0.001015	
* Potassium, Dissolved	3/16/23 13:31	3/16/23 15:38		1.015	37.6	mg/L	0.169505	0.5075	
* Selenium, Dissolved	4/21/23 09:03	4/21/23 09:25		1.015	0.00205	mg/L	0.000508	0.001015	
* Thallium, Dissolved	3/16/23 13:31	3/16/23 15:38		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	3/17/23 17:55	3/17/23 21:57		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	3/21/23 11:58	3/21/23 11:58		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
* Alkalinity to pH 4.5	3/24/23 13:02	3/24/23 15:33		1	319	mg CaCO3/L		0.10	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	3/16/23 11:25	3/17/23 13:50		1	1540	mg/L		178.6	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
* Bicarbonate Alkalinity, (calc.)	3/24/23 13:02	3/24/23 15:33		1	317	mg CaCO3/L		1	A
* Carbonate Alkalinity, (calc.)	3/24/23 13:02	3/24/23 15:33		1	1.80	mg CaCO3/L		0.5	A
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	3/16/23 16:43	3/16/23 16:43		1	13.0	mg/L	1.00	2	

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

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

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

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-36V

Location Code: WMWGORAP
Collected: 3/14/23 11:10
Customer ID:
Submittal Date: 3/16/23 09:24

Laboratory ID Number: BD05365

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: CES***								
* Chloride	3/24/23 10:08	3/24/23 10:08		32	428	mg/L	16.00	32	
Analytical Method: SM4500F G 2017	***Analyst: CES***								
* Fluoride	3/28/23 09:32	3/28/23 09:32		1	0.344	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	3/21/23 13:28	3/21/23 13:28		25	346	mg/L	15.0	50	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	3/14/23 11:07	3/14/23 11:07			3138.49	uS/cm			FA
pH	3/14/23 11:07	3/14/23 11:07			7.27	SU			FA
Temperature	3/14/23 11:07	3/14/23 11:07			16.94	C			FA
Turbidity	3/14/23 11:07	3/14/23 11:07			8.27	NTU			FA
Sulfide	3/14/23 11:07	3/14/23 11:07			2.0	mg/L			FA

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

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

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/14/23 11:10
Customer ID:
Delivery Date: 3/16/23 09:24

Description: Gorgas Ash Pond - MW-36V

Laboratory ID Number: BD05365

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD05373	Aluminum, Dissolved	mg/L	0.0000168	0.0198	0.100	0.105	0.106	0.105	0.0850 to 0.115	105	70.0 to 130	0.948	20.0
BD05373	Aluminum, Total	mg/L	0.000212	0.0198	0.100	0.349	0.416	0.0988	0.0850 to 0.115	214	70.0 to 130	17.5	20.0
BD05373	Antimony, Dissolved	mg/L	0.000232	0.00100	0.100	0.0966	0.0963	0.0947	0.0850 to 0.115	96.6	70.0 to 130	0.311	20.0
BD05373	Antimony, Total	mg/L	0.000202	0.00100	0.100	0.105	0.106	0.101	0.0850 to 0.115	105	70.0 to 130	0.948	20.0
BD05373	Arsenic, Dissolved	mg/L	-0.0000026	0.000200	0.100	0.356	0.357	0.103	0.0850 to 0.115	100	70.0 to 130	0.281	20.0
BD05373	Arsenic, Total	mg/L	0.0000159	0.000200	0.100	0.366	0.368	0.101	0.0850 to 0.115	117	70.0 to 130	0.545	20.0
BD05373	Barium, Dissolved	mg/L	-0.0000285	0.00100	0.100	0.155	0.153	0.0969	0.0850 to 0.115	98.0	70.0 to 130	1.30	20.0
BD05373	Barium, Total	mg/L	-0.0000008	0.00100	0.100	0.165	0.170	0.0993	0.0850 to 0.115	102	70.0 to 130	2.99	20.0
BD05373	Beryllium, Dissolved	mg/L	0.0000237	0.000880	0.100	0.104	0.104	0.102	0.0850 to 0.115	104	70.0 to 130	0.00	20.0
BD05373	Beryllium, Total	mg/L	0.0000126	0.000880	0.100	0.0915	0.0905	0.0944	0.0850 to 0.115	91.5	70.0 to 130	1.10	20.0
BD05373	Boron, Dissolved	mg/L	0.000171	0.0650	1.00	2.77	2.77	1.04	0.850 to 1.15	104	70.0 to 130	0.00	20.0
BD05373	Boron, Total	mg/L	0.000173	0.0650	1.00	2.63	2.63	0.982	0.850 to 1.15	99.0	70.0 to 130	0.00	20.0
BD05373	Cadmium, Dissolved	mg/L	0.0000031	0.000147	0.100	0.106	0.107	0.107	0.0850 to 0.115	106	70.0 to 130	0.939	20.0
BD05373	Cadmium, Total	mg/L	-0.0000034	0.000147	0.100	0.101	0.102	0.102	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BD05373	Calcium, Dissolved	mg/L	-0.00749	0.152	5.00	15.9	15.4	5.04	4.25 to 5.75	102	70.0 to 130	3.19	20.0
BD05365	Calcium, Total	mg/L	0.00505	0.152	5.00	47.8	48.8	5.06	4.25 to 5.75	96.0	70.0 to 130	2.07	20.0
BD05372	Chloride	mg/L	0.157	1.00	10.0	17.1	17.2	9.90	9.00 to 11.0	103	80.0 to 120	0.583	20.0
BD05373	Chromium, Dissolved	mg/L	0.0000269	0.000440	0.100	0.100	0.101	0.103	0.0850 to 0.115	99.8	70.0 to 130	0.995	20.0
BD05373	Chromium, Total	mg/L	-0.0000126	0.000440	0.100	0.101	0.101	0.104	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BD05373	Cobalt, Dissolved	mg/L	0.0000062	0.000147	0.100	0.105	0.105	0.106	0.0850 to 0.115	105	70.0 to 130	0.00	20.0
BD05373	Cobalt, Total	mg/L	-0.0000089	0.000147	0.100	0.103	0.102	0.104	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BD05372	Fluoride	mg/L	0.00990	0.125	2.50	2.63	2.66	2.61	2.25 to 2.75	101	80.0 to 120	1.13	20.0
BD05373	Iron, Dissolved	mg/L	-0.000052	0.0176	0.2	0.425	0.425	0.202	0.170 to 0.230	99.0	70.0 to 130	0.00	20.0
BD05373	Iron, Total	mg/L	-0.00265	0.0176	0.2	1.10	1.11	0.199	0.170 to 0.230	235	70.0 to 130	0.905	20.0

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/14/23 11:10
Customer ID:
Delivery Date: 3/16/23 09:24

Description: Gorgas Ash Pond - MW-36V

Laboratory ID Number: BD05365

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD05373	Lead, Dissolved	mg/L	0.0000058	0.000147	0.100	0.106	0.101	0.104	0.0850 to 0.115	106	70.0 to 130	4.83	20.0
BD05373	Lead, Total	mg/L	0.0000039	0.000147	0.100	0.106	0.107	0.107	0.0850 to 0.115	106	70.0 to 130	0.939	20.0
BD05373	Lithium, Dissolved	mg/L	0.000469	0.0154	0.200	0.415	0.410	0.199	0.170 to 0.230	100	70.0 to 130	1.21	20.0
BD05373	Lithium, Total	mg/L	0.00103	0.0154	0.200	0.406	0.404	0.194	0.170 to 0.230	99.5	70.0 to 130	0.494	20.0
BD05373	Magnesium, Dissolved	mg/L	0.00419	0.0462	5.00	8.60	8.44	4.95	4.25 to 5.75	97.6	70.0 to 130	1.88	20.0
BD05373	Magnesium, Total	mg/L	-0.00905	0.0462	5.00	8.77	8.74	4.80	4.25 to 5.75	99.6	70.0 to 130	0.343	20.0
BD05373	Manganese, Dissolved	mg/L	0.0000061	0.00033	0.100	0.143	0.144	0.107	0.0850 to 0.115	104	70.0 to 130	0.697	20.0
BD05373	Manganese, Total	mg/L	-0.0000009	0.00033	0.100	0.144	0.143	0.101	0.0850 to 0.115	99.8	70.0 to 130	0.697	20.0
BD05373	Mercury, Total by CVAA	mg/L	0.000	0.000500	0.004	0.00384	0.00384	0.00408	0.00340 to 0.00460	96.0	70.0 to 130	0.00	20.0
BD05373	Molybdenum, Dissolved	mg/L	0.000437	0.0100	0.2	0.413	0.415	0.202	0.170 to 0.230	99.0	70.0 to 130	0.483	20.0
BD05373	Molybdenum, Total	mg/L	0.000	0.0100	0.2	0.412	0.410	0.197	0.170 to 0.230	98.5	70.0 to 130	0.487	20.0
BD05373	Potassium, Dissolved	mg/L	0.0178	0.367	10.0	11.1	11.1	10.1	8.50 to 11.5	98.0	70.0 to 130	0.00	20.0
BD05373	Potassium, Total	mg/L	-0.000205	0.367	10.0	11.0	10.9	9.91	8.50 to 11.5	97.1	70.0 to 130	0.913	20.0
BD05858	Selenium, Dissolved	mg/L	0.0000599	0.00100	0.100	0.101	0.0964	0.105	0.0850 to 0.115	99.7	70.0 to 130	4.66	20.0
BD05373	Selenium, Total	mg/L	0.0000487	0.00100	0.100	0.103	0.104	0.108	0.0850 to 0.115	103	70.0 to 130	0.966	20.0
BD05373	Silicon, Dissolved	mg/L	0.00139	0.0440	1.00	6.34	6.33	1.02	0.850 to 1.15	96.0	70.0 to 130	0.158	20.0
BD05373	Silicon, Total	mg/L	0.000118	0.0440	1.00	7.03	7.03	0.997	0.850 to 1.15	163	70.0 to 130	0.00	20.0
BD05373	Sodium, Dissolved	mg/L	-0.000881	0.0880	5.00	106	109	4.84	4.25 to 5.75	-40.0	70.0 to 130	2.79	20.0
BD05373	Sodium, Total	mg/L	0.00401	0.0880	5.00	107	104	4.75	4.25 to 5.75	170	70.0 to 130	2.84	20.0
BD05371	Sulfate	mg/L	-0.180	2.0	100	177	180	19.8	18.0 to 22.0	100	80.0 to 120	1.68	20.0
BD05373	Thallium, Dissolved	mg/L	0.0000086	0.000147	0.100	0.103	0.101	0.106	0.0850 to 0.115	103	70.0 to 130	1.96	20.0
BD05373	Thallium, Total	mg/L	0.000	0.000147	0.100	0.101	0.101	0.103	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BD05373	Total Organic Carbon	mg/L	0.0176	1.00	10.0	11.3	11.6	10.1		93.3	80.0 to 120	2.62	20.0

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

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/14/23 11:10
Customer ID:
Delivery Date: 3/16/23 09:24

Description: Gorgas Ash Pond - MW-36V

Laboratory ID Number: BD05365

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD05378	Alkalinity to pH 4.5	mg CaCO3/L					43.6	50.5	45.0 to 55.0			0.460	10.0
BD05373	Nitrogen, Nitrate/Nitrite	mg/L as N	0.09	0.200	2.00	1.98	0.073	2.08	1.80 to 2.20	99.0	90.0 to 110	0.00	15.0
BD05373	Solids, Dissolved	mg/L	0.0000	25.0			341	52.0	40.0 to 60.0			0.294	10.0

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

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

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-27HR

Location Code: WMWGORAP
Collected: 3/14/23 13:04
Customer ID:
Submittal Date: 3/16/23 09:24

Laboratory ID Number: BD05366

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	3/17/23 06:40	3/21/23 11:17		1.015	0.107	mg/L	0.030000	0.1015	
* Calcium, Total	3/17/23 06:40	3/21/23 12:50		101.5	95.3	mg/L	7.0035	40.6	
* Iron, Total	3/17/23 06:40	3/21/23 11:17		1.015	0.166	mg/L	0.008120	0.0406	
* Lithium, Total	3/17/23 06:40	3/21/23 11:17		1.015	0.108	mg/L	0.007105	0.01999956	
* Magnesium, Total	3/17/23 06:40	3/21/23 11:17		1.015	20.8	mg/L	0.021315	0.406	
* Molybdenum, Total	3/17/23 06:40	3/21/23 11:17		1.015	0.00950	mg/L	0.005075	0.01015	J
* Silica, Total (calc.)	3/17/23 06:40	3/21/23 11:17		1	16.0	mg/L			
* Silicon, Total	3/17/23 06:40	3/21/23 11:17		1.015	7.49	mg/L	0.02030	0.25375	
* Sodium, Total	3/17/23 06:40	3/21/23 12:50		101.5	844	mg/L	4.060	40.6	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	3/16/23 13:31	3/22/23 10:45		1.015	0.0939	mg/L	0.030000	0.1015	J
* Calcium, Dissolved	3/16/23 13:31	3/22/23 12:36		101.5	73.4	mg/L	7.0035	40.6	
* Iron, Dissolved	3/16/23 13:31	3/22/23 10:45		1.015	0.117	mg/L	0.008120	0.0406	
* Lithium, Dissolved	3/16/23 13:31	3/22/23 10:45		1.015	0.0910	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	3/16/23 13:31	3/22/23 10:45		1.015	16.3	mg/L	0.021315	0.406	
* Molybdenum, Dissolved	3/16/23 13:31	3/22/23 10:45		1.015	0.00975	mg/L	0.005075	0.01015	J
* Silica, Dissolved (calc.)	3/16/23 13:31	3/22/23 10:45		1	15.6	mg/L			
* Silicon, Dissolved	3/16/23 13:31	3/22/23 10:45		1.015	7.27	mg/L	0.02030	0.25375	
* Sodium, Dissolved	3/16/23 13:31	3/22/23 12:36		101.5	672	mg/L	4.060	40.6	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/17/23 06:40	3/20/23 11:42		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Total	3/17/23 06:40	3/20/23 11:42		1.015	0.0160	mg/L	0.009135	0.05075	J
* Arsenic, Total	3/17/23 06:40	3/20/23 11:42		1.015	0.00105	mg/L	0.000112	0.000203	
* Barium, Total	3/17/23 06:40	3/20/23 11:42		1.015	0.0327	mg/L	0.000508	0.001015	
* Beryllium, Total	3/17/23 06:40	3/20/23 11:42		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	3/17/23 06:40	3/20/23 11:42		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	3/17/23 06:40	3/20/23 11:42		1.015	0.000255	mg/L	0.000203	0.001015	J
* Cobalt, Total	3/17/23 06:40	3/20/23 11:42		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	3/17/23 06:40	3/20/23 11:42		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	3/17/23 06:40	3/20/23 11:42		1.015	0.570	mg/L	0.000152	0.001015	

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

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

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

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-27HR

Location Code: WMWGORAP
Collected: 3/14/23 13:04
Customer ID:
Submittal Date: 3/16/23 09:24

Laboratory ID Number: BD05366

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	3/17/23 06:40	3/20/23 11:42		1.015	20.1	mg/L	0.169505	0.5075	
* Selenium, Total	3/17/23 06:40	3/20/23 11:42		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	3/17/23 06:40	3/20/23 11:42		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	3/16/23 13:31	3/16/23 15:41		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	3/16/23 13:31	3/16/23 15:41		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Dissolved	3/16/23 13:31	3/16/23 15:41		1.015	0.000825	mg/L	0.000112	0.000203	
* Barium, Dissolved	3/16/23 13:31	3/16/23 15:41		1.015	0.0290	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	3/16/23 13:31	3/16/23 15:41		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	3/16/23 13:31	3/16/23 15:41		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	3/16/23 13:31	3/16/23 15:41		1.015	0.000220	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	3/16/23 13:31	3/16/23 15:41		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Dissolved	3/16/23 13:31	3/16/23 15:41		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	3/16/23 13:31	3/16/23 15:41		1.015	0.445	mg/L	0.000152	0.001015	
* Potassium, Dissolved	3/16/23 13:31	3/16/23 15:41		1.015	18.9	mg/L	0.169505	0.5075	
* Selenium, Dissolved	4/21/23 09:03	4/21/23 09:29		1.015	0.00214	mg/L	0.000508	0.001015	
* Thallium, Dissolved	3/16/23 13:31	3/16/23 15:41		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	3/17/23 17:55	3/17/23 22:01		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	3/21/23 11:59	3/21/23 11:59		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
* Alkalinity to pH 4.5	3/24/23 13:02	3/24/23 15:33		1	267	mg CaCO3/L		0.10	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	3/16/23 11:25	3/17/23 13:50		1	2840	mg/L		312.5	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
* Bicarbonate Alkalinity, (calc.)	3/24/23 13:02	3/24/23 15:33		1	266	mg CaCO3/L		1	A
* Carbonate Alkalinity, (calc.)	3/24/23 13:02	3/24/23 15:33		1	1.17	mg CaCO3/L		0.5	A
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	3/16/23 17:04	3/16/23 17:04		1	18.2	mg/L	1.00	2	

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

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

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

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-27HR

Location Code: WMWGORAP
Collected: 3/14/23 13:04
Customer ID:
Submittal Date: 3/16/23 09:24

Laboratory ID Number: BD05366

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: CES***								
* Chloride	3/24/23 10:09	3/24/23 10:09		100	781	mg/L	50.00	100	
Analytical Method: SM4500F G 2017	***Analyst: CES***								
* Fluoride	3/28/23 09:33	3/28/23 09:33		1	0.335	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	3/21/23 13:30	3/21/23 13:30		40	864	mg/L	24.0	80	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	3/14/23 13:01	3/14/23 13:01			5249.37	uS/cm			FA
pH	3/14/23 13:01	3/14/23 13:01			7.28	SU			FA
Temperature	3/14/23 13:01	3/14/23 13:01			15.54	C			FA
Turbidity	3/14/23 13:01	3/14/23 13:01			2.27	NTU			FA
Sulfide	3/14/23 13:01	3/14/23 13:01			2.0	mg/L			FA

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

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/14/23 13:04
Customer ID:
Delivery Date: 3/16/23 09:24

Description: Gorgas Ash Pond - MW-27HR

Laboratory ID Number: BD05366

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD05373	Aluminum, Dissolved	mg/L	0.0000168	0.0198	0.100	0.105	0.106	0.105	0.0850 to 0.115	105	70.0 to 130	0.948	20.0
BD05373	Aluminum, Total	mg/L	0.000212	0.0198	0.100	0.349	0.416	0.0988	0.0850 to 0.115	214	70.0 to 130	17.5	20.0
BD05373	Antimony, Dissolved	mg/L	0.000232	0.00100	0.100	0.0966	0.0963	0.0947	0.0850 to 0.115	96.6	70.0 to 130	0.311	20.0
BD05373	Antimony, Total	mg/L	0.000202	0.00100	0.100	0.105	0.106	0.101	0.0850 to 0.115	105	70.0 to 130	0.948	20.0
BD05373	Arsenic, Dissolved	mg/L	-0.0000026	0.000200	0.100	0.356	0.357	0.103	0.0850 to 0.115	100	70.0 to 130	0.281	20.0
BD05373	Arsenic, Total	mg/L	0.0000159	0.000200	0.100	0.366	0.368	0.101	0.0850 to 0.115	117	70.0 to 130	0.545	20.0
BD05373	Barium, Dissolved	mg/L	-0.0000285	0.00100	0.100	0.155	0.153	0.0969	0.0850 to 0.115	98.0	70.0 to 130	1.30	20.0
BD05373	Barium, Total	mg/L	-0.0000008	0.00100	0.100	0.165	0.170	0.0993	0.0850 to 0.115	102	70.0 to 130	2.99	20.0
BD05373	Beryllium, Dissolved	mg/L	0.0000237	0.000880	0.100	0.104	0.104	0.102	0.0850 to 0.115	104	70.0 to 130	0.00	20.0
BD05373	Beryllium, Total	mg/L	0.0000126	0.000880	0.100	0.0915	0.0905	0.0944	0.0850 to 0.115	91.5	70.0 to 130	1.10	20.0
BD05373	Boron, Dissolved	mg/L	0.000171	0.0650	1.00	2.77	2.77	1.04	0.850 to 1.15	104	70.0 to 130	0.00	20.0
BD05373	Boron, Total	mg/L	0.000173	0.0650	1.00	2.63	2.63	0.982	0.850 to 1.15	99.0	70.0 to 130	0.00	20.0
BD05373	Cadmium, Dissolved	mg/L	0.0000031	0.000147	0.100	0.106	0.107	0.107	0.0850 to 0.115	106	70.0 to 130	0.939	20.0
BD05373	Cadmium, Total	mg/L	-0.0000034	0.000147	0.100	0.101	0.102	0.102	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BD05373	Calcium, Dissolved	mg/L	-0.00749	0.152	5.00	15.9	15.4	5.04	4.25 to 5.75	102	70.0 to 130	3.19	20.0
BD05373	Calcium, Total	mg/L	-0.00687	0.152	5.00	16.0	16.0	4.87	4.25 to 5.75	100	70.0 to 130	0.00	20.0
BD05372	Chloride	mg/L	0.157	1.00	10.0	17.1	17.2	9.90	9.00 to 11.0	103	80.0 to 120	0.583	20.0
BD05373	Chromium, Dissolved	mg/L	0.0000269	0.000440	0.100	0.100	0.101	0.103	0.0850 to 0.115	99.8	70.0 to 130	0.995	20.0
BD05373	Chromium, Total	mg/L	-0.0000126	0.000440	0.100	0.101	0.101	0.104	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BD05373	Cobalt, Dissolved	mg/L	0.0000062	0.000147	0.100	0.105	0.105	0.106	0.0850 to 0.115	105	70.0 to 130	0.00	20.0
BD05373	Cobalt, Total	mg/L	-0.0000089	0.000147	0.100	0.103	0.102	0.104	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BD05372	Fluoride	mg/L	0.00990	0.125	2.50	2.63	2.66	2.61	2.25 to 2.75	101	80.0 to 120	1.13	20.0
BD05373	Iron, Dissolved	mg/L	-0.000052	0.0176	0.2	0.425	0.425	0.202	0.170 to 0.230	99.0	70.0 to 130	0.00	20.0
BD05373	Iron, Total	mg/L	-0.00265	0.0176	0.2	1.10	1.11	0.199	0.170 to 0.230	235	70.0 to 130	0.905	20.0

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

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/14/23 13:04
Customer ID:
Delivery Date: 3/16/23 09:24

Description: Gorgas Ash Pond - MW-27HR

Laboratory ID Number: BD05366

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD05373	Lead, Dissolved	mg/L	0.0000058	0.000147	0.100	0.106	0.101	0.104	0.0850 to 0.115	106	70.0 to 130	4.83	20.0
BD05373	Lead, Total	mg/L	0.0000039	0.000147	0.100	0.106	0.107	0.107	0.0850 to 0.115	106	70.0 to 130	0.939	20.0
BD05373	Lithium, Dissolved	mg/L	0.000469	0.0154	0.200	0.415	0.410	0.199	0.170 to 0.230	100	70.0 to 130	1.21	20.0
BD05373	Lithium, Total	mg/L	0.00103	0.0154	0.200	0.406	0.404	0.194	0.170 to 0.230	99.5	70.0 to 130	0.494	20.0
BD05373	Magnesium, Dissolved	mg/L	0.00419	0.0462	5.00	8.60	8.44	4.95	4.25 to 5.75	97.6	70.0 to 130	1.88	20.0
BD05373	Magnesium, Total	mg/L	-0.00905	0.0462	5.00	8.77	8.74	4.80	4.25 to 5.75	99.6	70.0 to 130	0.343	20.0
BD05373	Manganese, Dissolved	mg/L	0.0000061	0.00033	0.100	0.143	0.144	0.107	0.0850 to 0.115	104	70.0 to 130	0.697	20.0
BD05373	Manganese, Total	mg/L	-0.0000009	0.00033	0.100	0.144	0.143	0.101	0.0850 to 0.115	99.8	70.0 to 130	0.697	20.0
BD05373	Mercury, Total by CVAA	mg/L	0.000	0.000500	0.004	0.00384	0.00384	0.00408	0.00340 to 0.00460	96.0	70.0 to 130	0.00	20.0
BD05373	Molybdenum, Dissolved	mg/L	0.000437	0.0100	0.2	0.413	0.415	0.202	0.170 to 0.230	99.0	70.0 to 130	0.483	20.0
BD05373	Molybdenum, Total	mg/L	0.000	0.0100	0.2	0.412	0.410	0.197	0.170 to 0.230	98.5	70.0 to 130	0.487	20.0
BD05373	Potassium, Dissolved	mg/L	0.0178	0.367	10.0	11.1	11.1	10.1	8.50 to 11.5	98.0	70.0 to 130	0.00	20.0
BD05373	Potassium, Total	mg/L	-0.000205	0.367	10.0	11.0	10.9	9.91	8.50 to 11.5	97.1	70.0 to 130	0.913	20.0
BD05858	Selenium, Dissolved	mg/L	0.0000599	0.00100	0.100	0.101	0.0964	0.105	0.0850 to 0.115	99.7	70.0 to 130	4.66	20.0
BD05373	Selenium, Total	mg/L	0.0000487	0.00100	0.100	0.103	0.104	0.108	0.0850 to 0.115	103	70.0 to 130	0.966	20.0
BD05373	Silicon, Dissolved	mg/L	0.00139	0.0440	1.00	6.34	6.33	1.02	0.850 to 1.15	96.0	70.0 to 130	0.158	20.0
BD05373	Silicon, Total	mg/L	0.000118	0.0440	1.00	7.03	7.03	0.997	0.850 to 1.15	163	70.0 to 130	0.00	20.0
BD05373	Sodium, Dissolved	mg/L	-0.000881	0.0880	5.00	106	109	4.84	4.25 to 5.75	-40.0	70.0 to 130	2.79	20.0
BD05373	Sodium, Total	mg/L	0.00401	0.0880	5.00	107	104	4.75	4.25 to 5.75	170	70.0 to 130	2.84	20.0
BD05371	Sulfate	mg/L	-0.180	2.0	100	177	180	19.8	18.0 to 22.0	100	80.0 to 120	1.68	20.0
BD05373	Thallium, Dissolved	mg/L	0.0000086	0.000147	0.100	0.103	0.101	0.106	0.0850 to 0.115	103	70.0 to 130	1.96	20.0
BD05373	Thallium, Total	mg/L	0.000	0.000147	0.100	0.101	0.101	0.103	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BD05373	Total Organic Carbon	mg/L	0.0176	1.00	10.0	11.3	11.6	10.1		93.3	80.0 to 120	2.62	20.0

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/14/23 13:04
Customer ID:
Delivery Date: 3/16/23 09:24

Description: Gorgas Ash Pond - MW-27HR

Laboratory ID Number: BD05366

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD05378	Alkalinity to pH 4.5	mg CaCO3/L					43.6	50.5	45.0 to 55.0			0.460	10.0
BD05373	Nitrogen, Nitrate/Nitrite	mg/L as N	0.09	0.200	2.00	1.98	0.073	2.08	1.80 to 2.20	99.0	90.0 to 110	0.00	15.0
BD05373	Solids, Dissolved	mg/L	0.0000	25.0			341	52.0	40.0 to 60.0			0.294	10.0

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

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

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-28H

Location Code: WMWGORAP
Collected: 3/14/23 14:57
Customer ID:
Submittal Date: 3/16/23 09:24

Laboratory ID Number: BD05367

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	3/17/23 06:40	3/21/23 11:21		1.015	0.0699	mg/L	0.030000	0.1015	J
* Calcium, Total	3/17/23 06:40	3/21/23 11:21		1.015	1.99	mg/L	0.070035	0.406	
* Iron, Total	3/17/23 06:40	3/21/23 11:21		1.015	0.0942	mg/L	0.008120	0.0406	
* Lithium, Total	3/17/23 06:40	3/21/23 11:21		1.015	0.0561	mg/L	0.007105	0.01999956	
* Magnesium, Total	3/17/23 06:40	3/21/23 11:21		1.015	0.584	mg/L	0.021315	0.406	
* Molybdenum, Total	3/17/23 06:40	3/21/23 11:21		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Total (calc.)	3/17/23 06:40	3/21/23 11:21		1	17.1	mg/L			
* Silicon, Total	3/17/23 06:40	3/21/23 11:21		1.015	8.00	mg/L	0.02030	0.25375	
* Sodium, Total	3/17/23 06:40	3/21/23 12:53		10.15	186	mg/L	0.4060	4.06	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	3/16/23 13:31	3/22/23 10:49		1.015	0.0729	mg/L	0.030000	0.1015	J
* Calcium, Dissolved	3/16/23 13:31	3/22/23 10:49		1.015	1.79	mg/L	0.070035	0.406	
* Iron, Dissolved	3/16/23 13:31	3/22/23 10:49		1.015	0.0854	mg/L	0.008120	0.0406	
* Lithium, Dissolved	3/16/23 13:31	3/22/23 10:49		1.015	0.0566	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	3/16/23 13:31	3/22/23 10:49		1.015	0.538	mg/L	0.021315	0.406	
* Molybdenum, Dissolved	3/16/23 13:31	3/22/23 10:49		1.015	0.00515	mg/L	0.005075	0.01015	J
* Silica, Dissolved (calc.)	3/16/23 13:31	3/22/23 10:49		1	17.1	mg/L			
* Silicon, Dissolved	3/16/23 13:31	3/22/23 10:49		1.015	8.00	mg/L	0.02030	0.25375	
* Sodium, Dissolved	3/16/23 13:31	3/22/23 12:39		10.15	186	mg/L	0.4060	4.06	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/17/23 06:40	3/20/23 11:45		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Total	3/17/23 06:40	3/20/23 11:45		1.015	0.0189	mg/L	0.009135	0.05075	J
* Arsenic, Total	3/17/23 06:40	3/20/23 11:45		1.015	0.000553	mg/L	0.000112	0.000203	
* Barium, Total	3/17/23 06:40	3/20/23 11:45		1.015	0.0520	mg/L	0.000508	0.001015	
* Beryllium, Total	3/17/23 06:40	3/20/23 11:45		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	3/17/23 06:40	3/20/23 11:45		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	3/17/23 06:40	3/20/23 11:45		1.015	0.000248	mg/L	0.000203	0.001015	J
* Cobalt, Total	3/17/23 06:40	3/20/23 11:45		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	3/17/23 06:40	3/20/23 11:45		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	3/17/23 06:40	3/20/23 11:45		1.015	0.00556	mg/L	0.000152	0.001015	

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

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

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

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-28H

Location Code: WMWGORAP
Collected: 3/14/23 14:57
Customer ID:
Submittal Date: 3/16/23 09:24

Laboratory ID Number: BD05367

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	3/17/23 06:40	3/20/23 11:45		1.015	0.988	mg/L	0.169505	0.5075	
* Selenium, Total	3/17/23 06:40	3/20/23 11:45		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	3/17/23 06:40	3/20/23 11:45		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	3/16/23 13:31	3/16/23 15:45		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	3/16/23 13:31	3/16/23 15:45		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Dissolved	3/16/23 13:31	3/16/23 15:45		1.015	0.000604	mg/L	0.000112	0.000203	
* Barium, Dissolved	3/16/23 13:31	3/16/23 15:45		1.015	0.0484	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	3/16/23 13:31	3/16/23 15:45		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	3/16/23 13:31	3/16/23 15:45		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	3/16/23 13:31	3/16/23 15:45		1.015	0.000212	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	3/16/23 13:31	3/16/23 15:45		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Dissolved	3/16/23 13:31	3/16/23 15:45		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	3/16/23 13:31	3/16/23 15:45		1.015	0.00598	mg/L	0.000152	0.001015	
* Potassium, Dissolved	3/16/23 13:31	3/16/23 15:45		1.015	1.05	mg/L	0.169505	0.5075	
* Selenium, Dissolved	3/16/23 13:31	3/16/23 15:45		1.015	0.00240	mg/L	0.000508	0.001015	
* Thallium, Dissolved	3/16/23 13:31	3/16/23 15:45		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	3/17/23 17:55	3/17/23 22:05		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	3/21/23 12:01	3/21/23 12:01		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
* Alkalinity to pH 4.5	3/24/23 13:02	3/24/23 15:33		1	387	mg CaCO3/L		0.10	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	3/16/23 11:25	3/17/23 13:50		1	445	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
* Bicarbonate Alkalinity, (calc.)	3/24/23 13:02	3/24/23 15:33		1	374	mg CaCO3/L		1	
* Carbonate Alkalinity, (calc.)	3/24/23 13:02	3/24/23 15:33		1	12.8	mg CaCO3/L		0.5	
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	3/16/23 17:21	3/16/23 17:21		1	4.66	mg/L	1.00	2	

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

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

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

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-28H

Location Code: WMWGORAP
Collected: 3/14/23 14:57
Customer ID:
Submittal Date: 3/16/23 09:24

Laboratory ID Number: BD05367

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: CES***								
* Chloride	3/24/23 09:53	3/24/23 09:53		1	8.63	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: CES***								
* Fluoride	3/28/23 09:35	3/28/23 09:35		1	0.187	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	3/21/23 13:19	3/21/23 13:19		1	5.24	mg/L	0.6	2	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	3/14/23 14:54	3/14/23 14:54			725.54	uS/cm			FA
pH	3/14/23 14:54	3/14/23 14:54			8.31	SU			FA
Temperature	3/14/23 14:54	3/14/23 14:54			17.39	C			FA
Turbidity	3/14/23 14:54	3/14/23 14:54			1.98	NTU			FA
Sulfide	3/14/23 14:54	3/14/23 14:54			0	mg/L			FA

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

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/14/23 14:57
Customer ID:
Delivery Date: 3/16/23 09:24

Description: Gorgas Ash Pond - MW-28H

Laboratory ID Number: BD05367

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD05373	Aluminum, Dissolved	mg/L	0.0000168	0.0198	0.100	0.105	0.106	0.105	0.0850 to 0.115	105	70.0 to 130	0.948	20.0
BD05373	Aluminum, Total	mg/L	0.000212	0.0198	0.100	0.349	0.416	0.0988	0.0850 to 0.115	214	70.0 to 130	17.5	20.0
BD05373	Antimony, Dissolved	mg/L	0.000232	0.00100	0.100	0.0966	0.0963	0.0947	0.0850 to 0.115	96.6	70.0 to 130	0.311	20.0
BD05373	Antimony, Total	mg/L	0.000202	0.00100	0.100	0.105	0.106	0.101	0.0850 to 0.115	105	70.0 to 130	0.948	20.0
BD05373	Arsenic, Dissolved	mg/L	-0.0000026	0.000200	0.100	0.356	0.357	0.103	0.0850 to 0.115	100	70.0 to 130	0.281	20.0
BD05373	Arsenic, Total	mg/L	0.0000159	0.000200	0.100	0.366	0.368	0.101	0.0850 to 0.115	117	70.0 to 130	0.545	20.0
BD05373	Barium, Dissolved	mg/L	-0.0000285	0.00100	0.100	0.155	0.153	0.0969	0.0850 to 0.115	98.0	70.0 to 130	1.30	20.0
BD05373	Barium, Total	mg/L	-0.0000008	0.00100	0.100	0.165	0.170	0.0993	0.0850 to 0.115	102	70.0 to 130	2.99	20.0
BD05373	Beryllium, Dissolved	mg/L	0.0000237	0.000880	0.100	0.104	0.104	0.102	0.0850 to 0.115	104	70.0 to 130	0.00	20.0
BD05373	Beryllium, Total	mg/L	0.0000126	0.000880	0.100	0.0915	0.0905	0.0944	0.0850 to 0.115	91.5	70.0 to 130	1.10	20.0
BD05373	Boron, Dissolved	mg/L	0.000171	0.0650	1.00	2.77	2.77	1.04	0.850 to 1.15	104	70.0 to 130	0.00	20.0
BD05373	Boron, Total	mg/L	0.000173	0.0650	1.00	2.63	2.63	0.982	0.850 to 1.15	99.0	70.0 to 130	0.00	20.0
BD05373	Cadmium, Dissolved	mg/L	0.0000031	0.000147	0.100	0.106	0.107	0.107	0.0850 to 0.115	106	70.0 to 130	0.939	20.0
BD05373	Cadmium, Total	mg/L	-0.0000034	0.000147	0.100	0.101	0.102	0.102	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BD05373	Calcium, Dissolved	mg/L	-0.00749	0.152	5.00	15.9	15.4	5.04	4.25 to 5.75	102	70.0 to 130	3.19	20.0
BD05373	Calcium, Total	mg/L	-0.00687	0.152	5.00	16.0	16.0	4.87	4.25 to 5.75	100	70.0 to 130	0.00	20.0
BD05372	Chloride	mg/L	0.157	1.00	10.0	17.1	17.2	9.90	9.00 to 11.0	103	80.0 to 120	0.583	20.0
BD05373	Chromium, Dissolved	mg/L	0.0000269	0.000440	0.100	0.100	0.101	0.103	0.0850 to 0.115	99.8	70.0 to 130	0.995	20.0
BD05373	Chromium, Total	mg/L	-0.0000126	0.000440	0.100	0.101	0.101	0.104	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BD05373	Cobalt, Dissolved	mg/L	0.0000062	0.000147	0.100	0.105	0.105	0.106	0.0850 to 0.115	105	70.0 to 130	0.00	20.0
BD05373	Cobalt, Total	mg/L	-0.0000089	0.000147	0.100	0.103	0.102	0.104	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BD05372	Fluoride	mg/L	0.00990	0.125	2.50	2.63	2.66	2.61	2.25 to 2.75	101	80.0 to 120	1.13	20.0
BD05373	Iron, Dissolved	mg/L	-0.000052	0.0176	0.2	0.425	0.425	0.202	0.170 to 0.230	99.0	70.0 to 130	0.00	20.0
BD05373	Iron, Total	mg/L	-0.00265	0.0176	0.2	1.10	1.11	0.199	0.170 to 0.230	235	70.0 to 130	0.905	20.0

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

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/14/23 14:57
Customer ID:
Delivery Date: 3/16/23 09:24

Description: Gorgas Ash Pond - MW-28H

Laboratory ID Number: BD05367

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD05373	Lead, Dissolved	mg/L	0.0000058	0.000147	0.100	0.106	0.101	0.104	0.0850 to 0.115	106	70.0 to 130	4.83	20.0
BD05373	Lead, Total	mg/L	0.0000039	0.000147	0.100	0.106	0.107	0.107	0.0850 to 0.115	106	70.0 to 130	0.939	20.0
BD05373	Lithium, Dissolved	mg/L	0.000469	0.0154	0.200	0.415	0.410	0.199	0.170 to 0.230	100	70.0 to 130	1.21	20.0
BD05373	Lithium, Total	mg/L	0.00103	0.0154	0.200	0.406	0.404	0.194	0.170 to 0.230	99.5	70.0 to 130	0.494	20.0
BD05373	Magnesium, Dissolved	mg/L	0.00419	0.0462	5.00	8.60	8.44	4.95	4.25 to 5.75	97.6	70.0 to 130	1.88	20.0
BD05373	Magnesium, Total	mg/L	-0.00905	0.0462	5.00	8.77	8.74	4.80	4.25 to 5.75	99.6	70.0 to 130	0.343	20.0
BD05373	Manganese, Dissolved	mg/L	0.0000061	0.00033	0.100	0.143	0.144	0.107	0.0850 to 0.115	104	70.0 to 130	0.697	20.0
BD05373	Manganese, Total	mg/L	-0.0000009	0.00033	0.100	0.144	0.143	0.101	0.0850 to 0.115	99.8	70.0 to 130	0.697	20.0
BD05373	Mercury, Total by CVAA	mg/L	0.000	0.000500	0.004	0.00384	0.00384	0.00408	0.00340 to 0.00460	96.0	70.0 to 130	0.00	20.0
BD05373	Molybdenum, Dissolved	mg/L	0.000437	0.0100	0.2	0.413	0.415	0.202	0.170 to 0.230	99.0	70.0 to 130	0.483	20.0
BD05373	Molybdenum, Total	mg/L	0.000	0.0100	0.2	0.412	0.410	0.197	0.170 to 0.230	98.5	70.0 to 130	0.487	20.0
BD05373	Potassium, Dissolved	mg/L	0.0178	0.367	10.0	11.1	11.1	10.1	8.50 to 11.5	98.0	70.0 to 130	0.00	20.0
BD05373	Potassium, Total	mg/L	-0.000205	0.367	10.0	11.0	10.9	9.91	8.50 to 11.5	97.1	70.0 to 130	0.913	20.0
BD05373	Selenium, Dissolved	mg/L	0.0000061	0.00100	0.100	0.108	0.107	0.107	0.0850 to 0.115	105	70.0 to 130	0.930	20.0
BD05373	Selenium, Total	mg/L	0.0000487	0.00100	0.100	0.103	0.104	0.108	0.0850 to 0.115	103	70.0 to 130	0.966	20.0
BD05373	Silicon, Dissolved	mg/L	0.00139	0.0440	1.00	6.34	6.33	1.02	0.850 to 1.15	96.0	70.0 to 130	0.158	20.0
BD05373	Silicon, Total	mg/L	0.000118	0.0440	1.00	7.03	7.03	0.997	0.850 to 1.15	163	70.0 to 130	0.00	20.0
BD05373	Sodium, Dissolved	mg/L	-0.000881	0.0880	5.00	106	109	4.84	4.25 to 5.75	-40.0	70.0 to 130	2.79	20.0
BD05373	Sodium, Total	mg/L	0.00401	0.0880	5.00	107	104	4.75	4.25 to 5.75	170	70.0 to 130	2.84	20.0
BD05371	Sulfate	mg/L	-0.180	2.0	100	177	180	19.8	18.0 to 22.0	100	80.0 to 120	1.68	20.0
BD05373	Thallium, Dissolved	mg/L	0.0000086	0.000147	0.100	0.103	0.101	0.106	0.0850 to 0.115	103	70.0 to 130	1.96	20.0
BD05373	Thallium, Total	mg/L	0.000	0.000147	0.100	0.101	0.101	0.103	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BD05373	Total Organic Carbon	mg/L	0.0176	1.00	10.0	11.3	11.6	10.1		93.3	80.0 to 120	2.62	20.0

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/14/23 14:57
Customer ID:
Delivery Date: 3/16/23 09:24

Description: Gorgas Ash Pond - MW-28H

Laboratory ID Number: BD05367

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD05378	Alkalinity to pH 4.5	mg CaCO3/L					43.6	50.5	45.0 to 55.0			0.460	10.0
BD05373	Nitrogen, Nitrate/Nitrite	mg/L as N	0.09	0.200	2.00	1.98	0.073	2.08	1.80 to 2.20	99.0	90.0 to 110	0.00	15.0
BD05373	Solids, Dissolved	mg/L	0.0000	25.0			341	52.0	40.0 to 60.0			0.294	10.0

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

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-37HR

Location Code: WMWGORAP
Collected: 3/15/23 12:08
Customer ID:
Submittal Date: 3/16/23 09:24

Laboratory ID Number: BD05368

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	3/17/23 06:40	3/21/23 11:24		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	3/17/23 06:40	3/21/23 11:24		1.015	3.16	mg/L	0.070035	0.406	
* Iron, Total	3/17/23 06:40	3/21/23 11:24		1.015	0.0518	mg/L	0.008120	0.0406	
* Lithium, Total	3/17/23 06:40	3/21/23 11:24		1.015	0.0345	mg/L	0.007105	0.01999956	
* Magnesium, Total	3/17/23 06:40	3/21/23 11:24		1.015	1.08	mg/L	0.021315	0.406	
* Molybdenum, Total	3/17/23 06:40	3/21/23 11:24		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Total (calc.)	3/17/23 06:40	3/21/23 11:24		1	18.5	mg/L			
* Silicon, Total	3/17/23 06:40	3/21/23 11:24		1.015	8.63	mg/L	0.02030	0.25375	
* Sodium, Total	3/17/23 06:40	3/21/23 12:56		10.15	135	mg/L	0.4060	4.06	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	3/16/23 13:31	3/22/23 10:52		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Dissolved	3/16/23 13:31	3/22/23 10:52		1.015	3.08	mg/L	0.070035	0.406	
* Iron, Dissolved	3/16/23 13:31	3/22/23 10:52		1.015	0.0282	mg/L	0.008120	0.0406	J
* Lithium, Dissolved	3/16/23 13:31	3/22/23 10:52		1.015	0.0355	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	3/16/23 13:31	3/22/23 10:52		1.015	1.02	mg/L	0.021315	0.406	
* Molybdenum, Dissolved	3/16/23 13:31	3/22/23 10:52		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Dissolved (calc.)	3/16/23 13:31	3/22/23 10:52		1	18.7	mg/L			
* Silicon, Dissolved	3/16/23 13:31	3/22/23 10:52		1.015	8.75	mg/L	0.02030	0.25375	
* Sodium, Dissolved	3/16/23 13:31	3/22/23 12:42		10.15	144	mg/L	0.4060	4.06	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/17/23 06:40	3/20/23 11:49		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Total	3/17/23 06:40	3/20/23 11:49		1.015	0.0338	mg/L	0.009135	0.05075	J
* Arsenic, Total	3/17/23 06:40	3/20/23 11:49		1.015	0.000822	mg/L	0.000112	0.000203	
* Barium, Total	3/17/23 06:40	3/20/23 11:49		1.015	0.0314	mg/L	0.000508	0.001015	
* Beryllium, Total	3/17/23 06:40	3/20/23 11:49		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	3/17/23 06:40	3/20/23 11:49		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	3/17/23 06:40	3/20/23 11:49		1.015	0.000240	mg/L	0.000203	0.001015	J
* Cobalt, Total	3/17/23 06:40	3/20/23 11:49		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	3/17/23 06:40	3/20/23 11:49		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	3/17/23 06:40	3/20/23 11:49		1.015	0.0138	mg/L	0.000152	0.001015	

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

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

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

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-37HR

Location Code: WMWGORAP
Collected: 3/15/23 12:08
Customer ID:
Submittal Date: 3/16/23 09:24

Laboratory ID Number: BD05368

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	3/17/23 06:40	3/20/23 11:49		1.015	7.13	mg/L	0.169505	0.5075	
* Selenium, Total	3/17/23 06:40	3/20/23 11:49		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	3/17/23 06:40	3/20/23 11:49		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	3/16/23 13:31	3/16/23 15:48		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	3/16/23 13:31	3/16/23 15:48		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Dissolved	3/16/23 13:31	3/16/23 15:48		1.015	0.000689	mg/L	0.000112	0.000203	
* Barium, Dissolved	3/16/23 13:31	3/16/23 15:48		1.015	0.0300	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	3/16/23 13:31	3/16/23 15:48		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	3/16/23 13:31	3/16/23 15:48		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	3/16/23 13:31	3/16/23 15:48		1.015	0.000212	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	3/16/23 13:31	3/16/23 15:48		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Dissolved	3/16/23 13:31	3/16/23 15:48		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	3/16/23 13:31	3/16/23 15:48		1.015	0.0117	mg/L	0.000152	0.001015	
* Potassium, Dissolved	3/16/23 13:31	3/16/23 15:48		1.015	6.59	mg/L	0.169505	0.5075	
* Selenium, Dissolved	4/21/23 09:03	4/21/23 09:33		1.015	0.000512	mg/L	0.000508	0.001015	J
* Thallium, Dissolved	3/16/23 13:31	3/16/23 15:48		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	3/17/23 17:55	3/17/23 22:09		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	3/21/23 12:03	3/21/23 12:03		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
* Alkalinity to pH 4.5	3/24/23 13:02	3/24/23 15:33		1	207	mg CaCO3/L		0.10	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	3/16/23 11:25	3/17/23 13:50		1	367	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
* Bicarbonate Alkalinity, (calc.)	3/24/23 13:02	3/24/23 15:33		1	204	mg CaCO3/L		1	
* Carbonate Alkalinity, (calc.)	3/24/23 13:02	3/24/23 15:33		1	2.84	mg CaCO3/L		0.5	
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	3/16/23 17:39	3/16/23 17:39		1	2.95	mg/L	1.00	2	

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

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

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

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-37HR

Location Code: WMWGORAP
Collected: 3/15/23 12:08
Customer ID:
Submittal Date: 3/16/23 09:24

Laboratory ID Number: BD05368

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: CES***								
* Chloride	3/24/23 10:04	3/24/23 10:04		4	44.4	mg/L	2.00	4	
Analytical Method: SM4500F G 2017	***Analyst: CES***								
* Fluoride	3/28/23 09:36	3/28/23 09:36		1	0.116	mg/L	0.06	0.125	J
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	3/21/23 13:31	3/21/23 13:31		2	40.9	mg/L	1.2	4	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	3/15/23 12:05	3/15/23 12:05			625.16	uS/cm			FA
pH	3/15/23 12:05	3/15/23 12:05			7.81	SU			FA
Temperature	3/15/23 12:05	3/15/23 12:05			17.13	C			FA
Turbidity	3/15/23 12:05	3/15/23 12:05			1.9	NTU			FA
Sulfide	3/15/23 12:05	3/15/23 12:05			0	mg/L			FA

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

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

Reported: 5/3/2023
Version: 3.5
COA_CCR

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/15/23 12:08
Customer ID:
Delivery Date: 3/16/23 09:24

Description: Gorgas Ash Pond - MW-37HR

Laboratory ID Number: BD05368

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD05373	Aluminum, Dissolved	mg/L	0.0000168	0.0198	0.100	0.105	0.106	0.105	0.0850 to 0.115	105	70.0 to 130	0.948	20.0
BD05373	Aluminum, Total	mg/L	0.000212	0.0198	0.100	0.349	0.416	0.0988	0.0850 to 0.115	214	70.0 to 130	17.5	20.0
BD05373	Antimony, Dissolved	mg/L	0.000232	0.00100	0.100	0.0966	0.0963	0.0947	0.0850 to 0.115	96.6	70.0 to 130	0.311	20.0
BD05373	Antimony, Total	mg/L	0.000202	0.00100	0.100	0.105	0.106	0.101	0.0850 to 0.115	105	70.0 to 130	0.948	20.0
BD05373	Arsenic, Dissolved	mg/L	-0.0000026	0.000200	0.100	0.356	0.357	0.103	0.0850 to 0.115	100	70.0 to 130	0.281	20.0
BD05373	Arsenic, Total	mg/L	0.0000159	0.000200	0.100	0.366	0.368	0.101	0.0850 to 0.115	117	70.0 to 130	0.545	20.0
BD05373	Barium, Dissolved	mg/L	-0.0000285	0.00100	0.100	0.155	0.153	0.0969	0.0850 to 0.115	98.0	70.0 to 130	1.30	20.0
BD05373	Barium, Total	mg/L	-0.0000008	0.00100	0.100	0.165	0.170	0.0993	0.0850 to 0.115	102	70.0 to 130	2.99	20.0
BD05373	Beryllium, Dissolved	mg/L	0.0000237	0.000880	0.100	0.104	0.104	0.102	0.0850 to 0.115	104	70.0 to 130	0.00	20.0
BD05373	Beryllium, Total	mg/L	0.0000126	0.000880	0.100	0.0915	0.0905	0.0944	0.0850 to 0.115	91.5	70.0 to 130	1.10	20.0
BD05373	Boron, Dissolved	mg/L	0.000171	0.0650	1.00	2.77	2.77	1.04	0.850 to 1.15	104	70.0 to 130	0.00	20.0
BD05373	Boron, Total	mg/L	0.000173	0.0650	1.00	2.63	2.63	0.982	0.850 to 1.15	99.0	70.0 to 130	0.00	20.0
BD05373	Cadmium, Dissolved	mg/L	0.0000031	0.000147	0.100	0.106	0.107	0.107	0.0850 to 0.115	106	70.0 to 130	0.939	20.0
BD05373	Cadmium, Total	mg/L	-0.0000034	0.000147	0.100	0.101	0.102	0.102	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BD05373	Calcium, Dissolved	mg/L	-0.00749	0.152	5.00	15.9	15.4	5.04	4.25 to 5.75	102	70.0 to 130	3.19	20.0
BD05373	Calcium, Total	mg/L	-0.00687	0.152	5.00	16.0	16.0	4.87	4.25 to 5.75	100	70.0 to 130	0.00	20.0
BD05372	Chloride	mg/L	0.157	1.00	10.0	17.1	17.2	9.90	9.00 to 11.0	103	80.0 to 120	0.583	20.0
BD05373	Chromium, Dissolved	mg/L	0.0000269	0.000440	0.100	0.100	0.101	0.103	0.0850 to 0.115	99.8	70.0 to 130	0.995	20.0
BD05373	Chromium, Total	mg/L	-0.0000126	0.000440	0.100	0.101	0.101	0.104	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BD05373	Cobalt, Dissolved	mg/L	0.0000062	0.000147	0.100	0.105	0.105	0.106	0.0850 to 0.115	105	70.0 to 130	0.00	20.0
BD05373	Cobalt, Total	mg/L	-0.0000089	0.000147	0.100	0.103	0.102	0.104	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BD05372	Fluoride	mg/L	0.00990	0.125	2.50	2.63	2.66	2.61	2.25 to 2.75	101	80.0 to 120	1.13	20.0
BD05373	Iron, Dissolved	mg/L	-0.000052	0.0176	0.2	0.425	0.425	0.202	0.170 to 0.230	99.0	70.0 to 130	0.00	20.0
BD05373	Iron, Total	mg/L	-0.00265	0.0176	0.2	1.10	1.11	0.199	0.170 to 0.230	235	70.0 to 130	0.905	20.0

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/15/23 12:08
Customer ID:
Delivery Date: 3/16/23 09:24

Description: Gorgas Ash Pond - MW-37HR

Laboratory ID Number: BD05368

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD05373	Lead, Dissolved	mg/L	0.0000058	0.000147	0.100	0.106	0.101	0.104	0.0850 to 0.115	106	70.0 to 130	4.83	20.0
BD05373	Lead, Total	mg/L	0.0000039	0.000147	0.100	0.106	0.107	0.107	0.0850 to 0.115	106	70.0 to 130	0.939	20.0
BD05373	Lithium, Dissolved	mg/L	0.000469	0.0154	0.200	0.415	0.410	0.199	0.170 to 0.230	100	70.0 to 130	1.21	20.0
BD05373	Lithium, Total	mg/L	0.00103	0.0154	0.200	0.406	0.404	0.194	0.170 to 0.230	99.5	70.0 to 130	0.494	20.0
BD05373	Magnesium, Dissolved	mg/L	0.00419	0.0462	5.00	8.60	8.44	4.95	4.25 to 5.75	97.6	70.0 to 130	1.88	20.0
BD05373	Magnesium, Total	mg/L	-0.00905	0.0462	5.00	8.77	8.74	4.80	4.25 to 5.75	99.6	70.0 to 130	0.343	20.0
BD05373	Manganese, Dissolved	mg/L	0.0000061	0.00033	0.100	0.143	0.144	0.107	0.0850 to 0.115	104	70.0 to 130	0.697	20.0
BD05373	Manganese, Total	mg/L	-0.0000009	0.00033	0.100	0.144	0.143	0.101	0.0850 to 0.115	99.8	70.0 to 130	0.697	20.0
BD05373	Mercury, Total by CVAA	mg/L	0.000	0.000500	0.004	0.00384	0.00384	0.00408	0.00340 to 0.00460	96.0	70.0 to 130	0.00	20.0
BD05373	Molybdenum, Dissolved	mg/L	0.000437	0.0100	0.2	0.413	0.415	0.202	0.170 to 0.230	99.0	70.0 to 130	0.483	20.0
BD05373	Molybdenum, Total	mg/L	0.000	0.0100	0.2	0.412	0.410	0.197	0.170 to 0.230	98.5	70.0 to 130	0.487	20.0
BD05373	Potassium, Dissolved	mg/L	0.0178	0.367	10.0	11.1	11.1	10.1	8.50 to 11.5	98.0	70.0 to 130	0.00	20.0
BD05373	Potassium, Total	mg/L	-0.000205	0.367	10.0	11.0	10.9	9.91	8.50 to 11.5	97.1	70.0 to 130	0.913	20.0
BD05858	Selenium, Dissolved	mg/L	0.0000599	0.00100	0.100	0.101	0.0964	0.105	0.0850 to 0.115	99.7	70.0 to 130	4.66	20.0
BD05373	Selenium, Total	mg/L	0.0000487	0.00100	0.100	0.103	0.104	0.108	0.0850 to 0.115	103	70.0 to 130	0.966	20.0
BD05373	Silicon, Dissolved	mg/L	0.00139	0.0440	1.00	6.34	6.33	1.02	0.850 to 1.15	96.0	70.0 to 130	0.158	20.0
BD05373	Silicon, Total	mg/L	0.000118	0.0440	1.00	7.03	7.03	0.997	0.850 to 1.15	163	70.0 to 130	0.00	20.0
BD05373	Sodium, Dissolved	mg/L	-0.000881	0.0880	5.00	106	109	4.84	4.25 to 5.75	-40.0	70.0 to 130	2.79	20.0
BD05373	Sodium, Total	mg/L	0.00401	0.0880	5.00	107	104	4.75	4.25 to 5.75	170	70.0 to 130	2.84	20.0
BD05371	Sulfate	mg/L	-0.180	2.0	100	177	180	19.8	18.0 to 22.0	100	80.0 to 120	1.68	20.0
BD05373	Thallium, Dissolved	mg/L	0.0000086	0.000147	0.100	0.103	0.101	0.106	0.0850 to 0.115	103	70.0 to 130	1.96	20.0
BD05373	Thallium, Total	mg/L	0.000	0.000147	0.100	0.101	0.101	0.103	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BD05373	Total Organic Carbon	mg/L	0.0176	1.00	10.0	11.3	11.6	10.1		93.3	80.0 to 120	2.62	20.0

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/15/23 12:08
Customer ID:
Delivery Date: 3/16/23 09:24

Description: Gorgas Ash Pond - MW-37HR

Laboratory ID Number: BD05368

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD05378	Alkalinity to pH 4.5	mg CaCO3/L					43.6	50.5	45.0 to 55.0			0.460	10.0
BD05373	Nitrogen, Nitrate/Nitrite	mg/L as N	0.09	0.200	2.00	1.98	0.073	2.08	1.80 to 2.20	99.0	90.0 to 110	0.00	15.0
BD05373	Solids, Dissolved	mg/L	0.0000	25.0			341	52.0	40.0 to 60.0			0.294	10.0

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

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

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-47

Location Code: WMWGORAP
Collected: 3/15/23 13:51
Customer ID:
Submittal Date: 3/16/23 09:24

Laboratory ID Number: BD05369

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	3/17/23 06:40	3/21/23 11:27		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	3/17/23 06:40	3/21/23 11:27		1.015	30.2	mg/L	0.070035	0.406	
* Iron, Total	3/17/23 06:40	3/21/23 11:27		1.015	0.606	mg/L	0.008120	0.0406	
* Lithium, Total	3/17/23 06:40	3/21/23 11:27		1.015	0.0394	mg/L	0.007105	0.01999956	
* Magnesium, Total	3/17/23 06:40	3/21/23 11:27		1.015	10.3	mg/L	0.021315	0.406	
* Molybdenum, Total	3/17/23 06:40	3/21/23 11:27		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Total (calc.)	3/17/23 06:40	3/21/23 11:27		1	23.3	mg/L			
* Silicon, Total	3/17/23 06:40	3/21/23 11:27		1.015	10.9	mg/L	0.02030	0.25375	
* Sodium, Total	3/17/23 06:40	3/21/23 11:27		1.015	32.4	mg/L	0.04060	0.406	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	3/16/23 13:31	3/22/23 10:55		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Dissolved	3/16/23 13:31	3/22/23 10:55		1.015	30.4	mg/L	0.070035	0.406	
* Iron, Dissolved	3/16/23 13:31	3/22/23 10:55		1.015	0.224	mg/L	0.008120	0.0406	
* Lithium, Dissolved	3/16/23 13:31	3/22/23 10:55		1.015	0.0408	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	3/16/23 13:31	3/22/23 10:55		1.015	10.4	mg/L	0.021315	0.406	
* Molybdenum, Dissolved	3/16/23 13:31	3/22/23 10:55		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Dissolved (calc.)	3/16/23 13:31	3/22/23 10:55		1	23.5	mg/L			
* Silicon, Dissolved	3/16/23 13:31	3/22/23 10:55		1.015	11.0	mg/L	0.02030	0.25375	
* Sodium, Dissolved	3/16/23 13:31	3/22/23 10:55		1.015	31.9	mg/L	0.04060	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/17/23 06:40	3/20/23 11:52		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Total	3/17/23 06:40	3/20/23 11:52		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Total	3/17/23 06:40	3/20/23 11:52		1.015	0.00102	mg/L	0.000112	0.000203	
* Barium, Total	3/17/23 06:40	3/20/23 11:52		1.015	0.638	mg/L	0.000508	0.001015	
* Beryllium, Total	3/17/23 06:40	3/20/23 11:52		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	3/17/23 06:40	3/20/23 11:52		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	3/17/23 06:40	3/20/23 11:52		1.015	0.000359	mg/L	0.000203	0.001015	J
* Cobalt, Total	3/17/23 06:40	3/20/23 11:52		1.015	0.000135	mg/L	0.000068	0.000203	J
* Lead, Total	3/17/23 06:40	3/20/23 11:52		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	3/17/23 06:40	3/20/23 11:52		1.015	0.0326	mg/L	0.000152	0.001015	

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

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

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

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-47

Location Code: WMWGORAP
Collected: 3/15/23 13:51
Customer ID:
Submittal Date: 3/16/23 09:24

Laboratory ID Number: BD05369

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	3/17/23 06:40	3/20/23 11:52		1.015	4.80	mg/L	0.169505	0.5075	
* Selenium, Total	3/17/23 06:40	3/20/23 11:52		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	3/17/23 06:40	3/20/23 11:52		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	3/16/23 13:31	3/16/23 15:52		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	3/16/23 13:31	3/16/23 15:52		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Dissolved	3/16/23 13:31	3/16/23 15:52		1.015	0.000282	mg/L	0.000112	0.000203	
* Barium, Dissolved	3/16/23 13:31	3/16/23 15:52		1.015	0.639	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	3/16/23 13:31	3/16/23 15:52		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	3/16/23 13:31	3/16/23 15:52		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	3/16/23 13:31	3/16/23 15:52		1.015	0.000212	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	3/16/23 13:31	3/16/23 15:52		1.015	0.000155	mg/L	0.000068	0.000203	J
* Lead, Dissolved	3/16/23 13:31	3/16/23 15:52		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	3/16/23 13:31	3/16/23 15:52		1.015	0.0332	mg/L	0.000152	0.001015	
* Potassium, Dissolved	3/16/23 13:31	3/16/23 15:52		1.015	4.70	mg/L	0.169505	0.5075	
* Selenium, Dissolved	3/16/23 13:31	3/16/23 15:52		1.015	0.00164	mg/L	0.000508	0.001015	
* Thallium, Dissolved	3/16/23 13:31	3/16/23 15:52		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	3/17/23 17:55	3/17/23 22:13		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	3/21/23 12:05	3/21/23 12:05		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
* Alkalinity to pH 4.5	3/24/23 13:02	3/24/23 15:33		1	151	mg CaCO3/L		0.10	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	3/16/23 11:25	3/17/23 13:50		1	234	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
* Bicarbonate Alkalinity, (calc.)	3/24/23 13:02	3/24/23 15:33		1	150	mg CaCO3/L		1	
* Carbonate Alkalinity, (calc.)	3/24/23 13:02	3/24/23 15:33		1	1.37	mg CaCO3/L		0.5	
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	3/16/23 17:52	3/16/23 17:52		1	2.92	mg/L	1.00	2	

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

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

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

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-47

Location Code: WMWGORAP
Collected: 3/15/23 13:51
Customer ID:
Submittal Date: 3/16/23 09:24

Laboratory ID Number: BD05369

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: CES***								
* Chloride	3/24/23 09:55	3/24/23 09:55		1	19.8	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: CES***								
* Fluoride	3/28/23 09:44	3/28/23 09:44		1	0.107	mg/L	0.06	0.125	J
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	3/21/23 13:21	3/21/23 13:21		1	24.3	mg/L	0.6	2	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	3/15/23 13:48	3/15/23 13:48			394.20	uS/cm			FA
pH	3/15/23 13:48	3/15/23 13:48			7.44	SU			FA
Temperature	3/15/23 13:48	3/15/23 13:48			17.53	C			FA
Turbidity	3/15/23 13:48	3/15/23 13:48			2.18	NTU			FA
Sulfide	3/15/23 13:48	3/15/23 13:48			0	mg/L			FA

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

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/15/23 13:51
Customer ID:
Delivery Date: 3/16/23 09:24

Description: Gorgas Ash Pond - MW-47

Laboratory ID Number: BD05369

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD05373	Aluminum, Dissolved	mg/L	0.0000168	0.0198	0.100	0.105	0.106	0.105	0.0850 to 0.115	105	70.0 to 130	0.948	20.0
BD05373	Aluminum, Total	mg/L	0.000212	0.0198	0.100	0.349	0.416	0.0988	0.0850 to 0.115	214	70.0 to 130	17.5	20.0
BD05373	Antimony, Dissolved	mg/L	0.000232	0.00100	0.100	0.0966	0.0963	0.0947	0.0850 to 0.115	96.6	70.0 to 130	0.311	20.0
BD05373	Antimony, Total	mg/L	0.000202	0.00100	0.100	0.105	0.106	0.101	0.0850 to 0.115	105	70.0 to 130	0.948	20.0
BD05373	Arsenic, Dissolved	mg/L	-0.0000026	0.000200	0.100	0.356	0.357	0.103	0.0850 to 0.115	100	70.0 to 130	0.281	20.0
BD05373	Arsenic, Total	mg/L	0.0000159	0.000200	0.100	0.366	0.368	0.101	0.0850 to 0.115	117	70.0 to 130	0.545	20.0
BD05373	Barium, Dissolved	mg/L	-0.0000285	0.00100	0.100	0.155	0.153	0.0969	0.0850 to 0.115	98.0	70.0 to 130	1.30	20.0
BD05373	Barium, Total	mg/L	-0.0000008	0.00100	0.100	0.165	0.170	0.0993	0.0850 to 0.115	102	70.0 to 130	2.99	20.0
BD05373	Beryllium, Dissolved	mg/L	0.0000237	0.000880	0.100	0.104	0.104	0.102	0.0850 to 0.115	104	70.0 to 130	0.00	20.0
BD05373	Beryllium, Total	mg/L	0.0000126	0.000880	0.100	0.0915	0.0905	0.0944	0.0850 to 0.115	91.5	70.0 to 130	1.10	20.0
BD05373	Boron, Dissolved	mg/L	0.000171	0.0650	1.00	2.77	2.77	1.04	0.850 to 1.15	104	70.0 to 130	0.00	20.0
BD05373	Boron, Total	mg/L	0.000173	0.0650	1.00	2.63	2.63	0.982	0.850 to 1.15	99.0	70.0 to 130	0.00	20.0
BD05373	Cadmium, Dissolved	mg/L	0.0000031	0.000147	0.100	0.106	0.107	0.107	0.0850 to 0.115	106	70.0 to 130	0.939	20.0
BD05373	Cadmium, Total	mg/L	-0.0000034	0.000147	0.100	0.101	0.102	0.102	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BD05373	Calcium, Dissolved	mg/L	-0.00749	0.152	5.00	15.9	15.4	5.04	4.25 to 5.75	102	70.0 to 130	3.19	20.0
BD05373	Calcium, Total	mg/L	-0.00687	0.152	5.00	16.0	16.0	4.87	4.25 to 5.75	100	70.0 to 130	0.00	20.0
BD05372	Chloride	mg/L	0.157	1.00	10.0	17.1	17.2	9.90	9.00 to 11.0	103	80.0 to 120	0.583	20.0
BD05373	Chromium, Dissolved	mg/L	0.0000269	0.000440	0.100	0.100	0.101	0.103	0.0850 to 0.115	99.8	70.0 to 130	0.995	20.0
BD05373	Chromium, Total	mg/L	-0.0000126	0.000440	0.100	0.101	0.101	0.104	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BD05373	Cobalt, Dissolved	mg/L	0.0000062	0.000147	0.100	0.105	0.105	0.106	0.0850 to 0.115	105	70.0 to 130	0.00	20.0
BD05373	Cobalt, Total	mg/L	-0.0000089	0.000147	0.100	0.103	0.102	0.104	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BD05372	Fluoride	mg/L	0.00990	0.125	2.50	2.63	2.66	2.61	2.25 to 2.75	101	80.0 to 120	1.13	20.0
BD05373	Iron, Dissolved	mg/L	-0.000052	0.0176	0.2	0.425	0.425	0.202	0.170 to 0.230	99.0	70.0 to 130	0.00	20.0
BD05373	Iron, Total	mg/L	-0.00265	0.0176	0.2	1.10	1.11	0.199	0.170 to 0.230	235	70.0 to 130	0.905	20.0

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

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/15/23 13:51
Customer ID:
Delivery Date: 3/16/23 09:24

Description: Gorgas Ash Pond - MW-47

Laboratory ID Number: BD05369

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD05373	Lead, Dissolved	mg/L	0.0000058	0.000147	0.100	0.106	0.101	0.104	0.0850 to 0.115	106	70.0 to 130	4.83	20.0
BD05373	Lead, Total	mg/L	0.0000039	0.000147	0.100	0.106	0.107	0.107	0.0850 to 0.115	106	70.0 to 130	0.939	20.0
BD05373	Lithium, Dissolved	mg/L	0.000469	0.0154	0.200	0.415	0.410	0.199	0.170 to 0.230	100	70.0 to 130	1.21	20.0
BD05373	Lithium, Total	mg/L	0.00103	0.0154	0.200	0.406	0.404	0.194	0.170 to 0.230	99.5	70.0 to 130	0.494	20.0
BD05373	Magnesium, Dissolved	mg/L	0.00419	0.0462	5.00	8.60	8.44	4.95	4.25 to 5.75	97.6	70.0 to 130	1.88	20.0
BD05373	Magnesium, Total	mg/L	-0.00905	0.0462	5.00	8.77	8.74	4.80	4.25 to 5.75	99.6	70.0 to 130	0.343	20.0
BD05373	Manganese, Dissolved	mg/L	0.0000061	0.00033	0.100	0.143	0.144	0.107	0.0850 to 0.115	104	70.0 to 130	0.697	20.0
BD05373	Manganese, Total	mg/L	-0.0000009	0.00033	0.100	0.144	0.143	0.101	0.0850 to 0.115	99.8	70.0 to 130	0.697	20.0
BD05373	Mercury, Total by CVAA	mg/L	0.000	0.000500	0.004	0.00384	0.00384	0.00408	0.00340 to 0.00460	96.0	70.0 to 130	0.00	20.0
BD05373	Molybdenum, Dissolved	mg/L	0.000437	0.0100	0.2	0.413	0.415	0.202	0.170 to 0.230	99.0	70.0 to 130	0.483	20.0
BD05373	Molybdenum, Total	mg/L	0.000	0.0100	0.2	0.412	0.410	0.197	0.170 to 0.230	98.5	70.0 to 130	0.487	20.0
BD05373	Potassium, Dissolved	mg/L	0.0178	0.367	10.0	11.1	11.1	10.1	8.50 to 11.5	98.0	70.0 to 130	0.00	20.0
BD05373	Potassium, Total	mg/L	-0.000205	0.367	10.0	11.0	10.9	9.91	8.50 to 11.5	97.1	70.0 to 130	0.913	20.0
BD05373	Selenium, Dissolved	mg/L	0.0000061	0.00100	0.100	0.108	0.107	0.107	0.0850 to 0.115	105	70.0 to 130	0.930	20.0
BD05373	Selenium, Total	mg/L	0.0000487	0.00100	0.100	0.103	0.104	0.108	0.0850 to 0.115	103	70.0 to 130	0.966	20.0
BD05373	Silicon, Dissolved	mg/L	0.00139	0.0440	1.00	6.34	6.33	1.02	0.850 to 1.15	96.0	70.0 to 130	0.158	20.0
BD05373	Silicon, Total	mg/L	0.000118	0.0440	1.00	7.03	7.03	0.997	0.850 to 1.15	163	70.0 to 130	0.00	20.0
BD05373	Sodium, Dissolved	mg/L	-0.000881	0.0880	5.00	106	109	4.84	4.25 to 5.75	-40.0	70.0 to 130	2.79	20.0
BD05373	Sodium, Total	mg/L	0.00401	0.0880	5.00	107	104	4.75	4.25 to 5.75	170	70.0 to 130	2.84	20.0
BD05371	Sulfate	mg/L	-0.180	2.0	100	177	180	19.8	18.0 to 22.0	100	80.0 to 120	1.68	20.0
BD05373	Thallium, Dissolved	mg/L	0.0000086	0.000147	0.100	0.103	0.101	0.106	0.0850 to 0.115	103	70.0 to 130	1.96	20.0
BD05373	Thallium, Total	mg/L	0.000	0.000147	0.100	0.101	0.101	0.103	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BD05373	Total Organic Carbon	mg/L	0.0176	1.00	10.0	11.3	11.6	10.1		93.3	80.0 to 120	2.62	20.0

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

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/15/23 13:51
Customer ID:
Delivery Date: 3/16/23 09:24

Description: Gorgas Ash Pond - MW-47

Laboratory ID Number: BD05369

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD05378	Alkalinity to pH 4.5	mg CaCO3/L					43.6	50.5	45.0 to 55.0			0.460	10.0
BD05373	Nitrogen, Nitrate/Nitrite	mg/L as N	0.09	0.200	2.00	1.98	0.073	2.08	1.80 to 2.20	99.0	90.0 to 110	0.00	15.0
BD05373	Solids, Dissolved	mg/L	0.0000	25.0			341	52.0	40.0 to 60.0			0.294	10.0

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

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

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-14R

Location Code: WMWGORAP
Collected: 3/15/23 14:52
Customer ID:
Submittal Date: 3/16/23 09:24

Laboratory ID Number: BD05370

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	3/17/23 06:40	3/21/23 11:30		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	3/17/23 06:40	3/21/23 11:30		1.015	32.8	mg/L	0.070035	0.406	
* Iron, Total	3/17/23 06:40	3/21/23 11:30		1.015	0.614	mg/L	0.008120	0.0406	
* Lithium, Total	3/17/23 06:40	3/21/23 11:30		1.015	0.0248	mg/L	0.007105	0.01999956	
* Magnesium, Total	3/17/23 06:40	3/21/23 11:30		1.015	13.3	mg/L	0.021315	0.406	
* Molybdenum, Total	3/17/23 06:40	3/21/23 11:30		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Total (calc.)	3/17/23 06:40	3/21/23 11:30		1	26.3	mg/L			
* Silicon, Total	3/17/23 06:40	3/21/23 11:30		1.015	12.3	mg/L	0.02030	0.25375	
* Sodium, Total	3/17/23 06:40	3/21/23 11:30		1.015	27.4	mg/L	0.04060	0.406	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	3/16/23 13:31	3/22/23 10:58		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Dissolved	3/16/23 13:31	3/22/23 10:58		1.015	33.0	mg/L	0.070035	0.406	
* Iron, Dissolved	3/16/23 13:31	3/22/23 10:58		1.015	0.628	mg/L	0.008120	0.0406	
* Lithium, Dissolved	3/16/23 13:31	3/22/23 10:58		1.015	0.0250	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	3/16/23 13:31	3/22/23 10:58		1.015	13.4	mg/L	0.021315	0.406	
* Molybdenum, Dissolved	3/16/23 13:31	3/22/23 10:58		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Dissolved (calc.)	3/16/23 13:31	3/22/23 10:58		1	27.0	mg/L			
* Silicon, Dissolved	3/16/23 13:31	3/22/23 10:58		1.015	12.6	mg/L	0.02030	0.25375	
* Sodium, Dissolved	3/16/23 13:31	3/22/23 10:58		1.015	26.7	mg/L	0.04060	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/17/23 06:40	3/20/23 11:56		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Total	3/17/23 06:40	3/20/23 11:56		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Total	3/17/23 06:40	3/20/23 11:56		1.015	0.000553	mg/L	0.000112	0.000203	
* Barium, Total	3/17/23 06:40	3/20/23 11:56		1.015	0.229	mg/L	0.000508	0.001015	
* Beryllium, Total	3/17/23 06:40	3/20/23 11:56		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	3/17/23 06:40	3/20/23 11:56		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	3/17/23 06:40	3/20/23 11:56		1.015	0.000302	mg/L	0.000203	0.001015	J
* Cobalt, Total	3/17/23 06:40	3/20/23 11:56		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	3/17/23 06:40	3/20/23 11:56		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	3/17/23 06:40	3/20/23 11:56		1.015	0.0410	mg/L	0.000152	0.001015	

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

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

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-14R

Location Code: WMWGORAP
Collected: 3/15/23 14:52
Customer ID:
Submittal Date: 3/16/23 09:24

Laboratory ID Number: BD05370

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	3/17/23 06:40	3/20/23 11:56		1.015	1.96	mg/L	0.169505	0.5075	
* Selenium, Total	3/17/23 06:40	3/20/23 11:56		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	3/17/23 06:40	3/20/23 11:56		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	3/16/23 13:31	3/16/23 15:56		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	3/16/23 13:31	3/16/23 15:56		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Dissolved	3/16/23 13:31	3/16/23 15:56		1.015	0.000498	mg/L	0.000112	0.000203	
* Barium, Dissolved	3/16/23 13:31	3/16/23 15:56		1.015	0.221	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	3/16/23 13:31	3/16/23 15:56		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	3/16/23 13:31	3/16/23 15:56		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	3/16/23 13:31	3/16/23 15:56		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	3/16/23 13:31	3/16/23 15:56		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Dissolved	3/16/23 13:31	3/16/23 15:56		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	3/16/23 13:31	3/16/23 15:56		1.015	0.0424	mg/L	0.000152	0.001015	
* Potassium, Dissolved	3/16/23 13:31	3/16/23 15:56		1.015	1.93	mg/L	0.169505	0.5075	
* Selenium, Dissolved	4/21/23 09:03	4/21/23 09:36		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	3/16/23 13:31	3/16/23 15:56		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	3/17/23 17:55	3/17/23 22:16		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	3/21/23 12:07	3/21/23 12:07		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
* Alkalinity to pH 4.5	3/24/23 13:02	3/24/23 15:33		1	165	mg CaCO3/L		0.10	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	3/16/23 11:25	3/17/23 13:50		1	229	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
* Bicarbonate Alkalinity, (calc.)	3/24/23 13:02	3/24/23 15:33		1	164	mg CaCO3/L		1	
* Carbonate Alkalinity, (calc.)	3/24/23 13:02	3/24/23 15:33		1	0.706	mg CaCO3/L		0.5	
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	3/16/23 18:06	3/16/23 18:06		1	3.03	mg/L	1.00	2	

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

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

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

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-14R

Location Code: WMWGORAP
Collected: 3/15/23 14:52
Customer ID:
Submittal Date: 3/16/23 09:24

Laboratory ID Number: BD05370

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: CES***								
* Chloride	3/24/23 09:56	3/24/23 09:56		1	11.0	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: CES***								
* Fluoride	3/28/23 09:47	3/28/23 09:47		1	0.141	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	3/21/23 13:22	3/21/23 13:22		1	20.9	mg/L	0.6	2	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	3/15/23 14:49	3/15/23 14:49			386.48	uS/cm			FA
pH	3/15/23 14:49	3/15/23 14:49			6.63	SU			FA
Temperature	3/15/23 14:49	3/15/23 14:49			17.11	C			FA
Turbidity	3/15/23 14:49	3/15/23 14:49			1.82	NTU			FA
Sulfide	3/15/23 14:49	3/15/23 14:49			1.0	mg/L			FA

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

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

Reported: 5/3/2023
Version: 3.5
COA_CCR

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/15/23 14:52
Customer ID:
Delivery Date: 3/16/23 09:24

Description: Gorgas Ash Pond - MW-14R

Laboratory ID Number: BD05370

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD05373	Aluminum, Dissolved	mg/L	0.0000168	0.0198	0.100	0.105	0.106	0.105	0.0850 to 0.115	105	70.0 to 130	0.948	20.0
BD05373	Aluminum, Total	mg/L	0.000212	0.0198	0.100	0.349	0.416	0.0988	0.0850 to 0.115	214	70.0 to 130	17.5	20.0
BD05373	Antimony, Dissolved	mg/L	0.000232	0.00100	0.100	0.0966	0.0963	0.0947	0.0850 to 0.115	96.6	70.0 to 130	0.311	20.0
BD05373	Antimony, Total	mg/L	0.000202	0.00100	0.100	0.105	0.106	0.101	0.0850 to 0.115	105	70.0 to 130	0.948	20.0
BD05373	Arsenic, Dissolved	mg/L	-0.0000026	0.000200	0.100	0.356	0.357	0.103	0.0850 to 0.115	100	70.0 to 130	0.281	20.0
BD05373	Arsenic, Total	mg/L	0.0000159	0.000200	0.100	0.366	0.368	0.101	0.0850 to 0.115	117	70.0 to 130	0.545	20.0
BD05373	Barium, Dissolved	mg/L	-0.0000285	0.00100	0.100	0.155	0.153	0.0969	0.0850 to 0.115	98.0	70.0 to 130	1.30	20.0
BD05373	Barium, Total	mg/L	-0.0000008	0.00100	0.100	0.165	0.170	0.0993	0.0850 to 0.115	102	70.0 to 130	2.99	20.0
BD05373	Beryllium, Dissolved	mg/L	0.0000237	0.000880	0.100	0.104	0.104	0.102	0.0850 to 0.115	104	70.0 to 130	0.00	20.0
BD05373	Beryllium, Total	mg/L	0.0000126	0.000880	0.100	0.0915	0.0905	0.0944	0.0850 to 0.115	91.5	70.0 to 130	1.10	20.0
BD05373	Boron, Dissolved	mg/L	0.000171	0.0650	1.00	2.77	2.77	1.04	0.850 to 1.15	104	70.0 to 130	0.00	20.0
BD05373	Boron, Total	mg/L	0.000173	0.0650	1.00	2.63	2.63	0.982	0.850 to 1.15	99.0	70.0 to 130	0.00	20.0
BD05373	Cadmium, Dissolved	mg/L	0.0000031	0.000147	0.100	0.106	0.107	0.107	0.0850 to 0.115	106	70.0 to 130	0.939	20.0
BD05373	Cadmium, Total	mg/L	-0.0000034	0.000147	0.100	0.101	0.102	0.102	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BD05373	Calcium, Dissolved	mg/L	-0.00749	0.152	5.00	15.9	15.4	5.04	4.25 to 5.75	102	70.0 to 130	3.19	20.0
BD05373	Calcium, Total	mg/L	-0.00687	0.152	5.00	16.0	16.0	4.87	4.25 to 5.75	100	70.0 to 130	0.00	20.0
BD05372	Chloride	mg/L	0.157	1.00	10.0	17.1	17.2	9.90	9.00 to 11.0	103	80.0 to 120	0.583	20.0
BD05373	Chromium, Dissolved	mg/L	0.0000269	0.000440	0.100	0.100	0.101	0.103	0.0850 to 0.115	99.8	70.0 to 130	0.995	20.0
BD05373	Chromium, Total	mg/L	-0.0000126	0.000440	0.100	0.101	0.101	0.104	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BD05373	Cobalt, Dissolved	mg/L	0.0000062	0.000147	0.100	0.105	0.105	0.106	0.0850 to 0.115	105	70.0 to 130	0.00	20.0
BD05373	Cobalt, Total	mg/L	-0.0000089	0.000147	0.100	0.103	0.102	0.104	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BD05372	Fluoride	mg/L	0.00990	0.125	2.50	2.63	2.66	2.61	2.25 to 2.75	101	80.0 to 120	1.13	20.0
BD05373	Iron, Dissolved	mg/L	-0.000052	0.0176	0.2	0.425	0.425	0.202	0.170 to 0.230	99.0	70.0 to 130	0.00	20.0
BD05373	Iron, Total	mg/L	-0.00265	0.0176	0.2	1.10	1.11	0.199	0.170 to 0.230	235	70.0 to 130	0.905	20.0

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

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/15/23 14:52
Customer ID:
Delivery Date: 3/16/23 09:24

Description: Gorgas Ash Pond - MW-14R

Laboratory ID Number: BD05370

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD05373	Lead, Dissolved	mg/L	0.0000058	0.000147	0.100	0.106	0.101	0.104	0.0850 to 0.115	106	70.0 to 130	4.83	20.0
BD05373	Lead, Total	mg/L	0.0000039	0.000147	0.100	0.106	0.107	0.107	0.0850 to 0.115	106	70.0 to 130	0.939	20.0
BD05373	Lithium, Dissolved	mg/L	0.000469	0.0154	0.200	0.415	0.410	0.199	0.170 to 0.230	100	70.0 to 130	1.21	20.0
BD05373	Lithium, Total	mg/L	0.00103	0.0154	0.200	0.406	0.404	0.194	0.170 to 0.230	99.5	70.0 to 130	0.494	20.0
BD05373	Magnesium, Dissolved	mg/L	0.00419	0.0462	5.00	8.60	8.44	4.95	4.25 to 5.75	97.6	70.0 to 130	1.88	20.0
BD05373	Magnesium, Total	mg/L	-0.00905	0.0462	5.00	8.77	8.74	4.80	4.25 to 5.75	99.6	70.0 to 130	0.343	20.0
BD05373	Manganese, Dissolved	mg/L	0.0000061	0.00033	0.100	0.143	0.144	0.107	0.0850 to 0.115	104	70.0 to 130	0.697	20.0
BD05373	Manganese, Total	mg/L	-0.0000009	0.00033	0.100	0.144	0.143	0.101	0.0850 to 0.115	99.8	70.0 to 130	0.697	20.0
BD05373	Mercury, Total by CVAA	mg/L	0.000	0.000500	0.004	0.00384	0.00384	0.00408	0.00340 to 0.00460	96.0	70.0 to 130	0.00	20.0
BD05373	Molybdenum, Dissolved	mg/L	0.000437	0.0100	0.2	0.413	0.415	0.202	0.170 to 0.230	99.0	70.0 to 130	0.483	20.0
BD05373	Molybdenum, Total	mg/L	0.000	0.0100	0.2	0.412	0.410	0.197	0.170 to 0.230	98.5	70.0 to 130	0.487	20.0
BD05373	Potassium, Dissolved	mg/L	0.0178	0.367	10.0	11.1	11.1	10.1	8.50 to 11.5	98.0	70.0 to 130	0.00	20.0
BD05373	Potassium, Total	mg/L	-0.000205	0.367	10.0	11.0	10.9	9.91	8.50 to 11.5	97.1	70.0 to 130	0.913	20.0
BD05858	Selenium, Dissolved	mg/L	0.0000599	0.00100	0.100	0.101	0.0964	0.105	0.0850 to 0.115	99.7	70.0 to 130	4.66	20.0
BD05373	Selenium, Total	mg/L	0.0000487	0.00100	0.100	0.103	0.104	0.108	0.0850 to 0.115	103	70.0 to 130	0.966	20.0
BD05373	Silicon, Dissolved	mg/L	0.00139	0.0440	1.00	6.34	6.33	1.02	0.850 to 1.15	96.0	70.0 to 130	0.158	20.0
BD05373	Silicon, Total	mg/L	0.000118	0.0440	1.00	7.03	7.03	0.997	0.850 to 1.15	163	70.0 to 130	0.00	20.0
BD05373	Sodium, Dissolved	mg/L	-0.000881	0.0880	5.00	106	109	4.84	4.25 to 5.75	-40.0	70.0 to 130	2.79	20.0
BD05373	Sodium, Total	mg/L	0.00401	0.0880	5.00	107	104	4.75	4.25 to 5.75	170	70.0 to 130	2.84	20.0
BD05371	Sulfate	mg/L	-0.180	2.0	100	177	180	19.8	18.0 to 22.0	100	80.0 to 120	1.68	20.0
BD05373	Thallium, Dissolved	mg/L	0.0000086	0.000147	0.100	0.103	0.101	0.106	0.0850 to 0.115	103	70.0 to 130	1.96	20.0
BD05373	Thallium, Total	mg/L	0.000	0.000147	0.100	0.101	0.101	0.103	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BD05373	Total Organic Carbon	mg/L	0.0176	1.00	10.0	11.3	11.6	10.1		93.3	80.0 to 120	2.62	20.0

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

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/15/23 14:52
Customer ID:
Delivery Date: 3/16/23 09:24

Description: Gorgas Ash Pond - MW-14R

Laboratory ID Number: BD05370

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD05378	Alkalinity to pH 4.5	mg CaCO3/L					43.6	50.5	45.0 to 55.0			0.460	10.0
BD05373	Nitrogen, Nitrate/Nitrite	mg/L as N	0.09	0.200	2.00	1.98	0.073	2.08	1.80 to 2.20	99.0	90.0 to 110	0.00	15.0
BD05373	Solids, Dissolved	mg/L	0.0000	25.0			341	52.0	40.0 to 60.0			0.294	10.0

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

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

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-36H

Location Code: WMWGORAP
Collected: 3/15/23 11:17
Customer ID:
Submittal Date: 3/16/23 09:24

Laboratory ID Number: BD05371

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	3/17/23 06:40	3/21/23 11:33		1.015	0.0446	mg/L	0.030000	0.1015	J
* Calcium, Total	3/17/23 06:40	3/21/23 11:33		1.015	5.26	mg/L	0.070035	0.406	
* Iron, Total	3/17/23 06:40	3/21/23 11:33		1.015	0.148	mg/L	0.008120	0.0406	
* Lithium, Total	3/17/23 06:40	3/21/23 11:33		1.015	0.0449	mg/L	0.007105	0.01999956	
* Magnesium, Total	3/17/23 06:40	3/21/23 11:33		1.015	1.27	mg/L	0.021315	0.406	
* Molybdenum, Total	3/17/23 06:40	3/21/23 11:33		1.015	0.0183	mg/L	0.005075	0.01015	
* Silica, Total (calc.)	3/17/23 06:40	3/21/23 11:33		1	14.7	mg/L			
* Silicon, Total	3/17/23 06:40	3/21/23 11:33		1.015	6.88	mg/L	0.02030	0.25375	
* Sodium, Total	3/17/23 06:40	3/21/23 12:59		10.15	172	mg/L	0.4060	4.06	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	3/16/23 13:31	3/22/23 11:01		1.015	0.0449	mg/L	0.030000	0.1015	J
* Calcium, Dissolved	3/16/23 13:31	3/22/23 11:01		1.015	4.02	mg/L	0.070035	0.406	
* Iron, Dissolved	3/16/23 13:31	3/22/23 11:01		1.015	0.0176	mg/L	0.008120	0.0406	J
* Lithium, Dissolved	3/16/23 13:31	3/22/23 11:01		1.015	0.0415	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	3/16/23 13:31	3/22/23 11:01		1.015	0.951	mg/L	0.021315	0.406	
* Molybdenum, Dissolved	3/16/23 13:31	3/22/23 11:01		1.015	0.0149	mg/L	0.005075	0.01015	
* Silica, Dissolved (calc.)	3/16/23 13:31	3/22/23 11:01		1	14.7	mg/L			
* Silicon, Dissolved	3/16/23 13:31	3/22/23 11:01		1.015	6.86	mg/L	0.02030	0.25375	
* Sodium, Dissolved	3/16/23 13:31	3/22/23 12:45		10.15	162	mg/L	0.4060	4.06	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/17/23 06:40	3/20/23 11:59		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Total	3/17/23 06:40	3/20/23 11:59		1.015	0.0569	mg/L	0.009135	0.05075	
* Arsenic, Total	3/17/23 06:40	3/20/23 11:59		1.015	0.00235	mg/L	0.000112	0.000203	
* Barium, Total	3/17/23 06:40	3/20/23 11:59		1.015	0.142	mg/L	0.000508	0.001015	
* Beryllium, Total	3/17/23 06:40	3/20/23 11:59		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	3/17/23 06:40	3/20/23 11:59		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	3/17/23 06:40	3/20/23 11:59		1.015	0.000440	mg/L	0.000203	0.001015	J
* Cobalt, Total	3/17/23 06:40	3/20/23 11:59		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	3/17/23 06:40	3/20/23 11:59		1.015	0.000190	mg/L	0.000068	0.000203	J
* Manganese, Total	3/17/23 06:40	3/20/23 11:59		1.015	0.0105	mg/L	0.000152	0.001015	

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

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

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

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-36H

Location Code: WMWGORAP
Collected: 3/15/23 11:17
Customer ID:
Submittal Date: 3/16/23 09:24

Laboratory ID Number: BD05371

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	3/17/23 06:40	3/20/23 11:59		1.015	5.97	mg/L	0.169505	0.5075	
* Selenium, Total	3/17/23 06:40	3/20/23 11:59		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	3/17/23 06:40	3/20/23 11:59		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	3/16/23 13:31	3/16/23 15:59		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	3/16/23 13:31	3/16/23 15:59		1.015	0.0170	mg/L	0.009135	0.05075	J
* Arsenic, Dissolved	3/16/23 13:31	3/16/23 15:59		1.015	0.00185	mg/L	0.000112	0.000203	
* Barium, Dissolved	3/16/23 13:31	3/16/23 15:59		1.015	0.0999	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	3/16/23 13:31	3/16/23 15:59		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	3/16/23 13:31	3/16/23 15:59		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	3/16/23 13:31	3/16/23 15:59		1.015	0.000263	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	3/16/23 13:31	3/16/23 15:59		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Dissolved	3/16/23 13:31	3/16/23 15:59		1.015	0.0000710	mg/L	0.000068	0.000203	J
* Manganese, Dissolved	3/16/23 13:31	3/16/23 15:59		1.015	0.00814	mg/L	0.000152	0.001015	
* Potassium, Dissolved	3/16/23 13:31	3/16/23 15:59		1.015	5.14	mg/L	0.169505	0.5075	
* Selenium, Dissolved	3/16/23 13:31	3/16/23 15:59		1.015	0.00103	mg/L	0.000508	0.001015	
* Thallium, Dissolved	3/16/23 13:31	3/16/23 15:59		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	3/17/23 17:55	3/17/23 22:20		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	3/21/23 12:09	3/21/23 12:09		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
* Alkalinity to pH 4.5	3/24/23 13:02	3/24/23 15:33		1	202	mg CaCO3/L		0.10	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	3/16/23 11:25	3/17/23 13:50		1	452	mg/L		50	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
* Bicarbonate Alkalinity, (calc.)	3/24/23 13:02	3/24/23 15:33		1	198	mg CaCO3/L		1	
* Carbonate Alkalinity, (calc.)	3/24/23 13:02	3/24/23 15:33		1	3.63	mg CaCO3/L		0.5	
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	3/16/23 18:19	3/16/23 18:19		1	4.48	mg/L	1.00	2	

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

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

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

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-36H

Location Code: WMWGORAP
Collected: 3/15/23 11:17
Customer ID:
Submittal Date: 3/16/23 09:24

Laboratory ID Number: BD05371

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: CES***								
* Chloride	3/24/23 10:05	3/24/23 10:05		8	66.6	mg/L	4.00	8	
Analytical Method: SM4500F G 2017	***Analyst: CES***								
* Fluoride	3/28/23 09:49	3/28/23 09:49		1	0.212	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	3/21/23 13:44	3/21/23 13:44		5	77.0	mg/L	3.0	10	
Analytical Method: Field Measurements	***Analyst: AWG***								
Conductivity	3/15/23 11:13	3/15/23 11:13			858.23	uS/cm			FA
pH	3/15/23 11:13	3/15/23 11:13			8.06	SU			FA
Temperature	3/15/23 11:13	3/15/23 11:13			16.30	C			FA
Turbidity	3/15/23 11:13	3/15/23 11:13			7.48	NTU			FA
Sulfide	3/15/23 11:13	3/15/23 11:13			0	mg/L			FA

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

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

Reported: 5/3/2023
Version: 3.5
COA_CCR

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/15/23 11:17
Customer ID:
Delivery Date: 3/16/23 09:24

Description: Gorgas Ash Pond - MW-36H

Laboratory ID Number: BD05371

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD05373	Aluminum, Dissolved	mg/L	0.0000168	0.0198	0.100	0.105	0.106	0.105	0.0850 to 0.115	105	70.0 to 130	0.948	20.0
BD05373	Aluminum, Total	mg/L	0.000212	0.0198	0.100	0.349	0.416	0.0988	0.0850 to 0.115	214	70.0 to 130	17.5	20.0
BD05373	Antimony, Dissolved	mg/L	0.000232	0.00100	0.100	0.0966	0.0963	0.0947	0.0850 to 0.115	96.6	70.0 to 130	0.311	20.0
BD05373	Antimony, Total	mg/L	0.000202	0.00100	0.100	0.105	0.106	0.101	0.0850 to 0.115	105	70.0 to 130	0.948	20.0
BD05373	Arsenic, Dissolved	mg/L	-0.0000026	0.000200	0.100	0.356	0.357	0.103	0.0850 to 0.115	100	70.0 to 130	0.281	20.0
BD05373	Arsenic, Total	mg/L	0.0000159	0.000200	0.100	0.366	0.368	0.101	0.0850 to 0.115	117	70.0 to 130	0.545	20.0
BD05373	Barium, Dissolved	mg/L	-0.0000285	0.00100	0.100	0.155	0.153	0.0969	0.0850 to 0.115	98.0	70.0 to 130	1.30	20.0
BD05373	Barium, Total	mg/L	-0.0000008	0.00100	0.100	0.165	0.170	0.0993	0.0850 to 0.115	102	70.0 to 130	2.99	20.0
BD05373	Beryllium, Dissolved	mg/L	0.0000237	0.000880	0.100	0.104	0.104	0.102	0.0850 to 0.115	104	70.0 to 130	0.00	20.0
BD05373	Beryllium, Total	mg/L	0.0000126	0.000880	0.100	0.0915	0.0905	0.0944	0.0850 to 0.115	91.5	70.0 to 130	1.10	20.0
BD05373	Boron, Dissolved	mg/L	0.000171	0.0650	1.00	2.77	2.77	1.04	0.850 to 1.15	104	70.0 to 130	0.00	20.0
BD05373	Boron, Total	mg/L	0.000173	0.0650	1.00	2.63	2.63	0.982	0.850 to 1.15	99.0	70.0 to 130	0.00	20.0
BD05373	Cadmium, Dissolved	mg/L	0.0000031	0.000147	0.100	0.106	0.107	0.107	0.0850 to 0.115	106	70.0 to 130	0.939	20.0
BD05373	Cadmium, Total	mg/L	-0.0000034	0.000147	0.100	0.101	0.102	0.102	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BD05373	Calcium, Dissolved	mg/L	-0.00749	0.152	5.00	15.9	15.4	5.04	4.25 to 5.75	102	70.0 to 130	3.19	20.0
BD05373	Calcium, Total	mg/L	-0.00687	0.152	5.00	16.0	16.0	4.87	4.25 to 5.75	100	70.0 to 130	0.00	20.0
BD05372	Chloride	mg/L	0.157	1.00	10.0	17.1	17.2	9.90	9.00 to 11.0	103	80.0 to 120	0.583	20.0
BD05373	Chromium, Dissolved	mg/L	0.0000269	0.000440	0.100	0.100	0.101	0.103	0.0850 to 0.115	99.8	70.0 to 130	0.995	20.0
BD05373	Chromium, Total	mg/L	-0.0000126	0.000440	0.100	0.101	0.101	0.104	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BD05373	Cobalt, Dissolved	mg/L	0.0000062	0.000147	0.100	0.105	0.105	0.106	0.0850 to 0.115	105	70.0 to 130	0.00	20.0
BD05373	Cobalt, Total	mg/L	-0.0000089	0.000147	0.100	0.103	0.102	0.104	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BD05372	Fluoride	mg/L	0.00990	0.125	2.50	2.63	2.66	2.61	2.25 to 2.75	101	80.0 to 120	1.13	20.0
BD05373	Iron, Dissolved	mg/L	-0.000052	0.0176	0.2	0.425	0.425	0.202	0.170 to 0.230	99.0	70.0 to 130	0.00	20.0
BD05373	Iron, Total	mg/L	-0.00265	0.0176	0.2	1.10	1.11	0.199	0.170 to 0.230	235	70.0 to 130	0.905	20.0

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

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/15/23 11:17
Customer ID:
Delivery Date: 3/16/23 09:24

Description: Gorgas Ash Pond - MW-36H

Laboratory ID Number: BD05371

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD05373	Lead, Dissolved	mg/L	0.0000058	0.000147	0.100	0.106	0.101	0.104	0.0850 to 0.115	106	70.0 to 130	4.83	20.0
BD05373	Lead, Total	mg/L	0.0000039	0.000147	0.100	0.106	0.107	0.107	0.0850 to 0.115	106	70.0 to 130	0.939	20.0
BD05373	Lithium, Dissolved	mg/L	0.000469	0.0154	0.200	0.415	0.410	0.199	0.170 to 0.230	100	70.0 to 130	1.21	20.0
BD05373	Lithium, Total	mg/L	0.00103	0.0154	0.200	0.406	0.404	0.194	0.170 to 0.230	99.5	70.0 to 130	0.494	20.0
BD05373	Magnesium, Dissolved	mg/L	0.00419	0.0462	5.00	8.60	8.44	4.95	4.25 to 5.75	97.6	70.0 to 130	1.88	20.0
BD05373	Magnesium, Total	mg/L	-0.00905	0.0462	5.00	8.77	8.74	4.80	4.25 to 5.75	99.6	70.0 to 130	0.343	20.0
BD05373	Manganese, Dissolved	mg/L	0.0000061	0.00033	0.100	0.143	0.144	0.107	0.0850 to 0.115	104	70.0 to 130	0.697	20.0
BD05373	Manganese, Total	mg/L	-0.0000009	0.00033	0.100	0.144	0.143	0.101	0.0850 to 0.115	99.8	70.0 to 130	0.697	20.0
BD05373	Mercury, Total by CVAA	mg/L	0.000	0.000500	0.004	0.00384	0.00384	0.00408	0.00340 to 0.00460	96.0	70.0 to 130	0.00	20.0
BD05373	Molybdenum, Dissolved	mg/L	0.000437	0.0100	0.2	0.413	0.415	0.202	0.170 to 0.230	99.0	70.0 to 130	0.483	20.0
BD05373	Molybdenum, Total	mg/L	0.000	0.0100	0.2	0.412	0.410	0.197	0.170 to 0.230	98.5	70.0 to 130	0.487	20.0
BD05373	Potassium, Dissolved	mg/L	0.0178	0.367	10.0	11.1	11.1	10.1	8.50 to 11.5	98.0	70.0 to 130	0.00	20.0
BD05373	Potassium, Total	mg/L	-0.000205	0.367	10.0	11.0	10.9	9.91	8.50 to 11.5	97.1	70.0 to 130	0.913	20.0
BD05373	Selenium, Dissolved	mg/L	0.0000061	0.00100	0.100	0.108	0.107	0.107	0.0850 to 0.115	105	70.0 to 130	0.930	20.0
BD05373	Selenium, Total	mg/L	0.0000487	0.00100	0.100	0.103	0.104	0.108	0.0850 to 0.115	103	70.0 to 130	0.966	20.0
BD05373	Silicon, Dissolved	mg/L	0.00139	0.0440	1.00	6.34	6.33	1.02	0.850 to 1.15	96.0	70.0 to 130	0.158	20.0
BD05373	Silicon, Total	mg/L	0.000118	0.0440	1.00	7.03	7.03	0.997	0.850 to 1.15	163	70.0 to 130	0.00	20.0
BD05373	Sodium, Dissolved	mg/L	-0.000881	0.0880	5.00	106	109	4.84	4.25 to 5.75	-40.0	70.0 to 130	2.79	20.0
BD05373	Sodium, Total	mg/L	0.00401	0.0880	5.00	107	104	4.75	4.25 to 5.75	170	70.0 to 130	2.84	20.0
BD05371	Sulfate	mg/L	-0.180	2.0	100	177	180	19.8	18.0 to 22.0	100	80.0 to 120	1.68	20.0
BD05373	Thallium, Dissolved	mg/L	0.0000086	0.000147	0.100	0.103	0.101	0.106	0.0850 to 0.115	103	70.0 to 130	1.96	20.0
BD05373	Thallium, Total	mg/L	0.000	0.000147	0.100	0.101	0.101	0.103	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BD05373	Total Organic Carbon	mg/L	0.0176	1.00	10.0	11.3	11.6	10.1		93.3	80.0 to 120	2.62	20.0

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

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/15/23 11:17
Customer ID:
Delivery Date: 3/16/23 09:24

Description: Gorgas Ash Pond - MW-36H

Laboratory ID Number: BD05371

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD05378	Alkalinity to pH 4.5	mg CaCO3/L					43.6	50.5	45.0 to 55.0			0.460	10.0
BD05373	Nitrogen, Nitrate/Nitrite	mg/L as N	0.09	0.200	2.00	1.98	0.073	2.08	1.80 to 2.20	99.0	90.0 to 110	0.00	15.0
BD05373	Solids, Dissolved	mg/L	0.0000	25.0			341	52.0	40.0 to 60.0			0.294	10.0

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

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

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-41HS

Location Code: WMWGORAP
Collected: 3/13/23 14:40
Customer ID:
Submittal Date: 3/16/23 09:24

Laboratory ID Number: BD05372

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	3/17/23 06:40	3/21/23 11:36		1.015	0.848	mg/L	0.030000	0.1015	
* Calcium, Total	3/17/23 06:40	3/21/23 11:36		1.015	33.3	mg/L	0.070035	0.406	
* Iron, Total	3/17/23 06:40	3/21/23 11:36		1.015	1.03	mg/L	0.008120	0.0406	
* Lithium, Total	3/17/23 06:40	3/21/23 11:36		1.015	0.0511	mg/L	0.007105	0.01999956	
* Magnesium, Total	3/17/23 06:40	3/21/23 11:36		1.015	19.3	mg/L	0.021315	0.406	
* Molybdenum, Total	3/17/23 06:40	3/21/23 11:36		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Total (calc.)	3/17/23 06:40	3/21/23 11:36		1	18.4	mg/L			
* Silicon, Total	3/17/23 06:40	3/21/23 11:36		1.015	8.60	mg/L	0.02030	0.25375	
* Sodium, Total	3/17/23 06:40	3/21/23 11:36		1.015	22.7	mg/L	0.04060	0.406	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	3/16/23 13:31	3/22/23 11:04		1.015	0.888	mg/L	0.030000	0.1015	
* Calcium, Dissolved	3/16/23 13:31	3/22/23 11:04		1.015	30.4	mg/L	0.070035	0.406	
* Iron, Dissolved	3/16/23 13:31	3/22/23 11:04		1.015	1.22	mg/L	0.008120	0.0406	
* Lithium, Dissolved	3/16/23 13:31	3/22/23 11:04		1.015	0.0517	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	3/16/23 13:31	3/22/23 11:04		1.015	18.5	mg/L	0.021315	0.406	
* Molybdenum, Dissolved	3/16/23 13:31	3/22/23 11:04		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Dissolved (calc.)	3/16/23 13:31	3/22/23 11:04		1	18.4	mg/L			
* Silicon, Dissolved	3/16/23 13:31	3/22/23 11:04		1.015	8.61	mg/L	0.02030	0.25375	
* Sodium, Dissolved	3/16/23 13:31	3/22/23 11:04		1.015	24.0	mg/L	0.04060	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/17/23 06:40	3/20/23 12:03		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Total	3/17/23 06:40	3/20/23 12:03		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Total	3/17/23 06:40	3/20/23 12:03		1.015	0.000483	mg/L	0.000112	0.000203	
* Barium, Total	3/17/23 06:40	3/20/23 12:03		1.015	0.0572	mg/L	0.000508	0.001015	
* Beryllium, Total	3/17/23 06:40	3/20/23 12:03		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	3/17/23 06:40	3/20/23 12:03		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	3/17/23 06:40	3/20/23 12:03		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	3/17/23 06:40	3/20/23 12:03		1.015	0.00193	mg/L	0.000068	0.000203	
* Lead, Total	3/17/23 06:40	3/20/23 12:03		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	3/17/23 06:40	3/20/23 12:03		1.015	0.228	mg/L	0.000152	0.001015	

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

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

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

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-41HS

Location Code: WMWGORAP
Collected: 3/13/23 14:40
Customer ID:
Submittal Date: 3/16/23 09:24

Laboratory ID Number: BD05372

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	3/17/23 06:40	3/20/23 12:03		1.015	1.90	mg/L	0.169505	0.5075	
* Selenium, Total	3/17/23 06:40	3/20/23 12:03		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	3/17/23 06:40	3/20/23 12:03		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	3/16/23 13:31	3/16/23 16:03		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	3/16/23 13:31	3/16/23 16:03		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Dissolved	3/16/23 13:31	3/16/23 16:03		1.015	0.000464	mg/L	0.000112	0.000203	
* Barium, Dissolved	3/16/23 13:31	3/16/23 16:03		1.015	0.0502	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	3/16/23 13:31	3/16/23 16:03		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	3/16/23 13:31	3/16/23 16:03		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	3/16/23 13:31	3/16/23 16:03		1.015	0.000216	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	3/16/23 13:31	3/16/23 16:03		1.015	0.00204	mg/L	0.000068	0.000203	
* Lead, Dissolved	3/16/23 13:31	3/16/23 16:03		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	3/16/23 13:31	3/16/23 16:03		1.015	0.234	mg/L	0.000152	0.001015	
* Potassium, Dissolved	3/16/23 13:31	3/16/23 16:03		1.015	1.96	mg/L	0.169505	0.5075	
* Selenium, Dissolved	3/16/23 13:31	3/16/23 16:03		1.015	0.000814	mg/L	0.000508	0.001015	J
* Thallium, Dissolved	3/16/23 13:31	3/16/23 16:03		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	3/17/23 17:55	3/17/23 22:24		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	3/21/23 12:11	3/21/23 12:11		1	0.344	mg/L as N	0.20	0.3	
Analytical Method: SM 2320 B	***Analyst: ALH***								
* Alkalinity to pH 4.5	3/17/23 13:58	3/17/23 14:40		1	99.8	mg CaCO3/L		0.10	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	3/16/23 11:25	3/17/23 13:50		1	267	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
* Bicarbonate Alkalinity, (calc.)	3/17/23 13:58	3/17/23 14:40		1	99.8	mg CaCO3/L		1	
* Carbonate Alkalinity, (calc.)	3/17/23 13:58	3/17/23 14:40		1	Not Detected	mg CaCO3/L		0.5	
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	3/16/23 18:33	3/16/23 18:33		1	3.33	mg/L	1.00	2	

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

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

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

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-41HS

Location Code: WMWGORAP
Collected: 3/13/23 14:40
Customer ID:
Submittal Date: 3/16/23 09:24

Laboratory ID Number: BD05372

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: CES***								
* Chloride	3/24/23 09:58	3/24/23 09:58		1	6.83	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: CES***								
* Fluoride	3/28/23 09:41	3/28/23 09:41		1	0.104	mg/L	0.06	0.125	J
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	3/21/23 14:14	3/21/23 14:14		4	88.6	mg/L	2.4	8	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	3/13/23 14:39	3/13/23 14:39			428.31	uS/cm			FA
pH	3/13/23 14:39	3/13/23 14:39			6.49	SU			FA
Temperature	3/13/23 14:39	3/13/23 14:39			15.54	C			FA
Turbidity	3/13/23 14:39	3/13/23 14:39			0.79	NTU			FA
Sulfide	3/13/23 14:39	3/13/23 14:39			0	mg/L			FA

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

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/13/23 14:40
Customer ID:
Delivery Date: 3/16/23 09:24

Description: Gorgas Ash Pond - MW-41HS

Laboratory ID Number: BD05372

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD05373	Aluminum, Dissolved	mg/L	0.0000168	0.0198	0.100	0.105	0.106	0.105	0.0850 to 0.115	105	70.0 to 130	0.948	20.0
BD05373	Aluminum, Total	mg/L	0.000212	0.0198	0.100	0.349	0.416	0.0988	0.0850 to 0.115	214	70.0 to 130	17.5	20.0
BD05373	Antimony, Dissolved	mg/L	0.000232	0.00100	0.100	0.0966	0.0963	0.0947	0.0850 to 0.115	96.6	70.0 to 130	0.311	20.0
BD05373	Antimony, Total	mg/L	0.000202	0.00100	0.100	0.105	0.106	0.101	0.0850 to 0.115	105	70.0 to 130	0.948	20.0
BD05373	Arsenic, Dissolved	mg/L	-0.0000026	0.000200	0.100	0.356	0.357	0.103	0.0850 to 0.115	100	70.0 to 130	0.281	20.0
BD05373	Arsenic, Total	mg/L	0.0000159	0.000200	0.100	0.366	0.368	0.101	0.0850 to 0.115	117	70.0 to 130	0.545	20.0
BD05373	Barium, Dissolved	mg/L	-0.0000285	0.00100	0.100	0.155	0.153	0.0969	0.0850 to 0.115	98.0	70.0 to 130	1.30	20.0
BD05373	Barium, Total	mg/L	-0.0000008	0.00100	0.100	0.165	0.170	0.0993	0.0850 to 0.115	102	70.0 to 130	2.99	20.0
BD05373	Beryllium, Dissolved	mg/L	0.0000237	0.000880	0.100	0.104	0.104	0.102	0.0850 to 0.115	104	70.0 to 130	0.00	20.0
BD05373	Beryllium, Total	mg/L	0.0000126	0.000880	0.100	0.0915	0.0905	0.0944	0.0850 to 0.115	91.5	70.0 to 130	1.10	20.0
BD05373	Boron, Dissolved	mg/L	0.000171	0.0650	1.00	2.77	2.77	1.04	0.850 to 1.15	104	70.0 to 130	0.00	20.0
BD05373	Boron, Total	mg/L	0.000173	0.0650	1.00	2.63	2.63	0.982	0.850 to 1.15	99.0	70.0 to 130	0.00	20.0
BD05373	Cadmium, Dissolved	mg/L	0.0000031	0.000147	0.100	0.106	0.107	0.107	0.0850 to 0.115	106	70.0 to 130	0.939	20.0
BD05373	Cadmium, Total	mg/L	-0.0000034	0.000147	0.100	0.101	0.102	0.102	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BD05373	Calcium, Dissolved	mg/L	-0.00749	0.152	5.00	15.9	15.4	5.04	4.25 to 5.75	102	70.0 to 130	3.19	20.0
BD05373	Calcium, Total	mg/L	-0.00687	0.152	5.00	16.0	16.0	4.87	4.25 to 5.75	100	70.0 to 130	0.00	20.0
BD05372	Chloride	mg/L	0.157	1.00	10.0	17.1	17.2	9.90	9.00 to 11.0	103	80.0 to 120	0.583	20.0
BD05373	Chromium, Dissolved	mg/L	0.0000269	0.000440	0.100	0.100	0.101	0.103	0.0850 to 0.115	99.8	70.0 to 130	0.995	20.0
BD05373	Chromium, Total	mg/L	-0.0000126	0.000440	0.100	0.101	0.101	0.104	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BD05373	Cobalt, Dissolved	mg/L	0.0000062	0.000147	0.100	0.105	0.105	0.106	0.0850 to 0.115	105	70.0 to 130	0.00	20.0
BD05373	Cobalt, Total	mg/L	-0.0000089	0.000147	0.100	0.103	0.102	0.104	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BD05372	Fluoride	mg/L	0.00990	0.125	2.50	2.63	2.66	2.61	2.25 to 2.75	101	80.0 to 120	1.13	20.0
BD05373	Iron, Dissolved	mg/L	-0.000052	0.0176	0.2	0.425	0.425	0.202	0.170 to 0.230	99.0	70.0 to 130	0.00	20.0
BD05373	Iron, Total	mg/L	-0.00265	0.0176	0.2	1.10	1.11	0.199	0.170 to 0.230	235	70.0 to 130	0.905	20.0

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

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/13/23 14:40
Customer ID:
Delivery Date: 3/16/23 09:24

Description: Gorgas Ash Pond - MW-41HS

Laboratory ID Number: BD05372

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD05373	Lead, Dissolved	mg/L	0.0000058	0.000147	0.100	0.106	0.101	0.104	0.0850 to 0.115	106	70.0 to 130	4.83	20.0
BD05373	Lead, Total	mg/L	0.0000039	0.000147	0.100	0.106	0.107	0.107	0.0850 to 0.115	106	70.0 to 130	0.939	20.0
BD05373	Lithium, Dissolved	mg/L	0.000469	0.0154	0.200	0.415	0.410	0.199	0.170 to 0.230	100	70.0 to 130	1.21	20.0
BD05373	Lithium, Total	mg/L	0.00103	0.0154	0.200	0.406	0.404	0.194	0.170 to 0.230	99.5	70.0 to 130	0.494	20.0
BD05373	Magnesium, Dissolved	mg/L	0.00419	0.0462	5.00	8.60	8.44	4.95	4.25 to 5.75	97.6	70.0 to 130	1.88	20.0
BD05373	Magnesium, Total	mg/L	-0.00905	0.0462	5.00	8.77	8.74	4.80	4.25 to 5.75	99.6	70.0 to 130	0.343	20.0
BD05373	Manganese, Dissolved	mg/L	0.0000061	0.00033	0.100	0.143	0.144	0.107	0.0850 to 0.115	104	70.0 to 130	0.697	20.0
BD05373	Manganese, Total	mg/L	-0.0000009	0.00033	0.100	0.144	0.143	0.101	0.0850 to 0.115	99.8	70.0 to 130	0.697	20.0
BD05373	Mercury, Total by CVAA	mg/L	0.000	0.000500	0.004	0.00384	0.00384	0.00408	0.00340 to 0.00460	96.0	70.0 to 130	0.00	20.0
BD05373	Molybdenum, Dissolved	mg/L	0.000437	0.0100	0.2	0.413	0.415	0.202	0.170 to 0.230	99.0	70.0 to 130	0.483	20.0
BD05373	Molybdenum, Total	mg/L	0.000	0.0100	0.2	0.412	0.410	0.197	0.170 to 0.230	98.5	70.0 to 130	0.487	20.0
BD05373	Potassium, Dissolved	mg/L	0.0178	0.367	10.0	11.1	11.1	10.1	8.50 to 11.5	98.0	70.0 to 130	0.00	20.0
BD05373	Potassium, Total	mg/L	-0.000205	0.367	10.0	11.0	10.9	9.91	8.50 to 11.5	97.1	70.0 to 130	0.913	20.0
BD05373	Selenium, Dissolved	mg/L	0.0000061	0.00100	0.100	0.108	0.107	0.107	0.0850 to 0.115	105	70.0 to 130	0.930	20.0
BD05373	Selenium, Total	mg/L	0.0000487	0.00100	0.100	0.103	0.104	0.108	0.0850 to 0.115	103	70.0 to 130	0.966	20.0
BD05373	Silicon, Dissolved	mg/L	0.00139	0.0440	1.00	6.34	6.33	1.02	0.850 to 1.15	96.0	70.0 to 130	0.158	20.0
BD05373	Silicon, Total	mg/L	0.000118	0.0440	1.00	7.03	7.03	0.997	0.850 to 1.15	163	70.0 to 130	0.00	20.0
BD05373	Sodium, Dissolved	mg/L	-0.000881	0.0880	5.00	106	109	4.84	4.25 to 5.75	-40.0	70.0 to 130	2.79	20.0
BD05373	Sodium, Total	mg/L	0.00401	0.0880	5.00	107	104	4.75	4.25 to 5.75	170	70.0 to 130	2.84	20.0
BD05381	Sulfate	mg/L	-0.0836	2.0	20.0	28.3	28.5	18.8	18.0 to 22.0	106	80.0 to 120	0.704	20.0
BD05373	Thallium, Dissolved	mg/L	0.0000086	0.000147	0.100	0.103	0.101	0.106	0.0850 to 0.115	103	70.0 to 130	1.96	20.0
BD05373	Thallium, Total	mg/L	0.000	0.000147	0.100	0.101	0.101	0.103	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BD05373	Total Organic Carbon	mg/L	0.0176	1.00	10.0	11.3	11.6	10.1		93.3	80.0 to 120	2.62	20.0

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

Reported: 5/3/2023
Version: 3.5
COA_CCR

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/13/23 14:40
Customer ID:
Delivery Date: 3/16/23 09:24

Description: Gorgas Ash Pond - MW-41HS

Laboratory ID Number: BD05372

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD05372	Alkalinity to pH 4.5	mg CaCO3/L					101	50.3	45.0 to 55.0			1.20	10.0
BD05373	Nitrogen, Nitrate/Nitrite	mg/L as N	0.09	0.200	2.00	1.98	0.073	2.08	1.80 to 2.20	99.0	90.0 to 110	0.00	15.0
BD05373	Solids, Dissolved	mg/L	0.0000	25.0			341	52.0	40.0 to 60.0			0.294	10.0

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

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-7

Location Code: WMWGORAP
Collected: 3/14/23 10:27
Customer ID:
Submittal Date: 3/16/23 09:24

Laboratory ID Number: BD05373

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	3/17/23 06:40	3/21/23 11:40		1.015	1.64	mg/L	0.030000	0.1015	
* Calcium, Total	3/17/23 06:40	3/21/23 11:40		1.015	11.0	mg/L	0.070035	0.406	
* Iron, Total	3/17/23 06:40	3/21/23 11:40		1.015	0.630	mg/L	0.008120	0.0406	RA
* Lithium, Total	3/17/23 06:40	3/21/23 11:40		1.015	0.207	mg/L	0.007105	0.01999956	
* Magnesium, Total	3/17/23 06:40	3/21/23 11:40		1.015	3.79	mg/L	0.021315	0.406	
* Molybdenum, Total	3/17/23 06:40	3/21/23 11:40		1.015	0.215	mg/L	0.005075	0.01015	
* Silica, Total (calc.)	3/17/23 06:40	3/21/23 11:40		1	11.6	mg/L			
* Silicon, Total	3/17/23 06:40	3/21/23 11:40		1.015	5.40	mg/L	0.02030	0.25375	RA
* Sodium, Total	3/17/23 06:40	3/21/23 13:02		10.15	98.5	mg/L	0.4060	4.06	RA
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	3/16/23 13:31	3/22/23 11:07		1.015	1.73	mg/L	0.030000	0.1015	
* Calcium, Dissolved	3/16/23 13:31	3/22/23 11:07		1.015	10.8	mg/L	0.070035	0.406	
* Iron, Dissolved	3/16/23 13:31	3/22/23 11:07		1.015	0.227	mg/L	0.008120	0.0406	
* Lithium, Dissolved	3/16/23 13:31	3/22/23 11:07		1.015	0.214	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	3/16/23 13:31	3/22/23 11:07		1.015	3.72	mg/L	0.021315	0.406	
* Molybdenum, Dissolved	3/16/23 13:31	3/22/23 11:07		1.015	0.215	mg/L	0.005075	0.01015	
* Silica, Dissolved (calc.)	3/16/23 13:31	3/22/23 11:07		1	11.5	mg/L			
* Silicon, Dissolved	3/16/23 13:31	3/22/23 11:07		1.015	5.38	mg/L	0.02030	0.25375	
* Sodium, Dissolved	3/16/23 13:31	3/22/23 12:49		10.15	108	mg/L	0.4060	4.06	RA
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/17/23 06:40	3/20/23 12:06		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Total	3/17/23 06:40	3/20/23 12:06		1.015	0.135	mg/L	0.009135	0.05075	R
* Arsenic, Total	3/17/23 06:40	3/20/23 12:06		1.015	0.249	mg/L	0.000112	0.000203	
* Barium, Total	3/17/23 06:40	3/20/23 12:06		1.015	0.0631	mg/L	0.000508	0.001015	
* Beryllium, Total	3/17/23 06:40	3/20/23 12:06		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	3/17/23 06:40	3/20/23 12:06		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	3/17/23 06:40	3/20/23 12:06		1.015	0.000482	mg/L	0.000203	0.001015	J
* Cobalt, Total	3/17/23 06:40	3/20/23 12:06		1.015	0.0000922	mg/L	0.000068	0.000203	J
* Lead, Total	3/17/23 06:40	3/20/23 12:06		1.015	0.000188	mg/L	0.000068	0.000203	J
* Manganese, Total	3/17/23 06:40	3/20/23 12:06		1.015	0.0442	mg/L	0.000152	0.001015	

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

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

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-7

Location Code: WMWGORAP
Collected: 3/14/23 10:27
Customer ID:
Submittal Date: 3/16/23 09:24

Laboratory ID Number: BD05373

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	3/17/23 06:40	3/20/23 12:06		1.015	1.29	mg/L	0.169505	0.5075	
* Selenium, Total	3/17/23 06:40	3/20/23 12:06		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	3/17/23 06:40	3/20/23 12:06		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	3/16/23 13:31	3/16/23 16:06		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	3/16/23 13:31	3/16/23 16:06		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Dissolved	3/16/23 13:31	3/16/23 16:06		1.015	0.256	mg/L	0.000112	0.000203	
* Barium, Dissolved	3/16/23 13:31	3/16/23 16:06		1.015	0.0570	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	3/16/23 13:31	3/16/23 16:06		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	3/16/23 13:31	3/16/23 16:06		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	3/16/23 13:31	3/16/23 16:06		1.015	0.000240	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	3/16/23 13:31	3/16/23 16:06		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Dissolved	3/16/23 13:31	3/16/23 16:06		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	3/16/23 13:31	3/16/23 16:06		1.015	0.0394	mg/L	0.000152	0.001015	
* Potassium, Dissolved	3/16/23 13:31	3/16/23 16:06		1.015	1.30	mg/L	0.169505	0.5075	
* Selenium, Dissolved	3/16/23 13:31	3/16/23 16:06		1.015	0.00277	mg/L	0.000508	0.001015	
* Thallium, Dissolved	3/16/23 13:31	3/16/23 16:06		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	3/17/23 17:55	3/17/23 22:28		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	3/21/23 12:12	3/21/23 12:12		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
* Alkalinity to pH 4.5	3/24/23 13:02	3/24/23 15:33		1	104	mg CaCO3/L		0.10	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	3/16/23 11:25	3/17/23 13:50		1	340	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
* Bicarbonate Alkalinity, (calc.)	3/24/23 13:02	3/24/23 15:33		1	103	mg CaCO3/L		1	
* Carbonate Alkalinity, (calc.)	3/24/23 13:02	3/24/23 15:33		1	1.01	mg CaCO3/L		0.5	
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	3/16/23 18:51	3/16/23 18:51		1	1.97	mg/L	1.00	2	J

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

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

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

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-7

Location Code: WMWGORAP
Collected: 3/14/23 10:27
Customer ID:
Submittal Date: 3/16/23 09:24

Laboratory ID Number: BD05373

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: CES***								
* Chloride	3/24/23 10:23	3/24/23 10:23		1	7.98	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: CES***								
* Fluoride	3/28/23 09:59	3/28/23 09:59		1	0.177	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	3/21/23 14:15	3/21/23 14:15		8	130	mg/L	4.8	16	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	3/14/23 10:23	3/14/23 10:23			538.18	uS/cm			FA
pH	3/14/23 10:23	3/14/23 10:23			7.67	SU			FA
Temperature	3/14/23 10:23	3/14/23 10:23			15.56	C			FA
Turbidity	3/14/23 10:23	3/14/23 10:23			9.93	NTU			FA
Sulfide	3/14/23 10:23	3/14/23 10:23			0	mg/L			FA

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

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

Reported: 5/3/2023
Version: 3.5
COA_CCR

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/14/23 10:27
Customer ID:
Delivery Date: 3/16/23 09:24

Description: Gorgas Ash Pond - MW-7

Laboratory ID Number: BD05373

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD05373	Aluminum, Dissolved	mg/L	0.0000168	0.0198	0.100	0.105	0.106	0.105	0.0850 to 0.115	105	70.0 to 130	0.948	20.0
BD05373	Aluminum, Total	mg/L	0.000212	0.0198	0.100	0.349	0.416	0.0988	0.0850 to 0.115	214	70.0 to 130	17.5	20.0
BD05373	Antimony, Dissolved	mg/L	0.000232	0.00100	0.100	0.0966	0.0963	0.0947	0.0850 to 0.115	96.6	70.0 to 130	0.311	20.0
BD05373	Antimony, Total	mg/L	0.000202	0.00100	0.100	0.105	0.106	0.101	0.0850 to 0.115	105	70.0 to 130	0.948	20.0
BD05373	Arsenic, Dissolved	mg/L	-0.0000026	0.000200	0.100	0.356	0.357	0.103	0.0850 to 0.115	100	70.0 to 130	0.281	20.0
BD05373	Arsenic, Total	mg/L	0.0000159	0.000200	0.100	0.366	0.368	0.101	0.0850 to 0.115	117	70.0 to 130	0.545	20.0
BD05373	Barium, Dissolved	mg/L	-0.0000285	0.00100	0.100	0.155	0.153	0.0969	0.0850 to 0.115	98.0	70.0 to 130	1.30	20.0
BD05373	Barium, Total	mg/L	-0.0000008	0.00100	0.100	0.165	0.170	0.0993	0.0850 to 0.115	102	70.0 to 130	2.99	20.0
BD05373	Beryllium, Dissolved	mg/L	0.0000237	0.000880	0.100	0.104	0.104	0.102	0.0850 to 0.115	104	70.0 to 130	0.00	20.0
BD05373	Beryllium, Total	mg/L	0.0000126	0.000880	0.100	0.0915	0.0905	0.0944	0.0850 to 0.115	91.5	70.0 to 130	1.10	20.0
BD05373	Boron, Dissolved	mg/L	0.000171	0.0650	1.00	2.77	2.77	1.04	0.850 to 1.15	104	70.0 to 130	0.00	20.0
BD05373	Boron, Total	mg/L	0.000173	0.0650	1.00	2.63	2.63	0.982	0.850 to 1.15	99.0	70.0 to 130	0.00	20.0
BD05373	Cadmium, Dissolved	mg/L	0.0000031	0.000147	0.100	0.106	0.107	0.107	0.0850 to 0.115	106	70.0 to 130	0.939	20.0
BD05373	Cadmium, Total	mg/L	-0.0000034	0.000147	0.100	0.101	0.102	0.102	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BD05373	Calcium, Dissolved	mg/L	-0.00749	0.152	5.00	15.9	15.4	5.04	4.25 to 5.75	102	70.0 to 130	3.19	20.0
BD05373	Calcium, Total	mg/L	-0.00687	0.152	5.00	16.0	16.0	4.87	4.25 to 5.75	100	70.0 to 130	0.00	20.0
BD05382	Chloride	mg/L	0.180	1.00	10.0	19.3	19.3	9.90	9.00 to 11.0	99.9	80.0 to 120	0.00	20.0
BD05373	Chromium, Dissolved	mg/L	0.0000269	0.000440	0.100	0.100	0.101	0.103	0.0850 to 0.115	99.8	70.0 to 130	0.995	20.0
BD05373	Chromium, Total	mg/L	-0.0000126	0.000440	0.100	0.101	0.101	0.104	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BD05373	Cobalt, Dissolved	mg/L	0.0000062	0.000147	0.100	0.105	0.105	0.106	0.0850 to 0.115	105	70.0 to 130	0.00	20.0
BD05373	Cobalt, Total	mg/L	-0.0000089	0.000147	0.100	0.103	0.102	0.104	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BD05382	Fluoride	mg/L	0.0185	0.125	2.50	2.71	2.83	2.58	2.25 to 2.75	103	80.0 to 120	4.33	20.0
BD05373	Iron, Dissolved	mg/L	-0.000052	0.0176	0.2	0.425	0.425	0.202	0.170 to 0.230	99.0	70.0 to 130	0.00	20.0
BD05373	Iron, Total	mg/L	-0.00265	0.0176	0.2	1.10	1.11	0.199	0.170 to 0.230	235	70.0 to 130	0.905	20.0

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

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/14/23 10:27
Customer ID:
Delivery Date: 3/16/23 09:24

Description: Gorgas Ash Pond - MW-7

Laboratory ID Number: BD05373

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD05373	Lead, Dissolved	mg/L	0.0000058	0.000147	0.100	0.106	0.101	0.104	0.0850 to 0.115	106	70.0 to 130	4.83	20.0
BD05373	Lead, Total	mg/L	0.0000039	0.000147	0.100	0.106	0.107	0.107	0.0850 to 0.115	106	70.0 to 130	0.939	20.0
BD05373	Lithium, Dissolved	mg/L	0.000469	0.0154	0.200	0.415	0.410	0.199	0.170 to 0.230	100	70.0 to 130	1.21	20.0
BD05373	Lithium, Total	mg/L	0.00103	0.0154	0.200	0.406	0.404	0.194	0.170 to 0.230	99.5	70.0 to 130	0.494	20.0
BD05373	Magnesium, Dissolved	mg/L	0.00419	0.0462	5.00	8.60	8.44	4.95	4.25 to 5.75	97.6	70.0 to 130	1.88	20.0
BD05373	Magnesium, Total	mg/L	-0.00905	0.0462	5.00	8.77	8.74	4.80	4.25 to 5.75	99.6	70.0 to 130	0.343	20.0
BD05373	Manganese, Dissolved	mg/L	0.0000061	0.00033	0.100	0.143	0.144	0.107	0.0850 to 0.115	104	70.0 to 130	0.697	20.0
BD05373	Manganese, Total	mg/L	-0.0000009	0.00033	0.100	0.144	0.143	0.101	0.0850 to 0.115	99.8	70.0 to 130	0.697	20.0
BD05373	Mercury, Total by CVAA	mg/L	0.000	0.000500	0.004	0.00384	0.00384	0.00408	0.00340 to 0.00460	96.0	70.0 to 130	0.00	20.0
BD05373	Molybdenum, Dissolved	mg/L	0.000437	0.0100	0.2	0.413	0.415	0.202	0.170 to 0.230	99.0	70.0 to 130	0.483	20.0
BD05373	Molybdenum, Total	mg/L	0.000	0.0100	0.2	0.412	0.410	0.197	0.170 to 0.230	98.5	70.0 to 130	0.487	20.0
BD05373	Potassium, Dissolved	mg/L	0.0178	0.367	10.0	11.1	11.1	10.1	8.50 to 11.5	98.0	70.0 to 130	0.00	20.0
BD05373	Potassium, Total	mg/L	-0.000205	0.367	10.0	11.0	10.9	9.91	8.50 to 11.5	97.1	70.0 to 130	0.913	20.0
BD05373	Selenium, Dissolved	mg/L	0.0000061	0.00100	0.100	0.108	0.107	0.107	0.0850 to 0.115	105	70.0 to 130	0.930	20.0
BD05373	Selenium, Total	mg/L	0.0000487	0.00100	0.100	0.103	0.104	0.108	0.0850 to 0.115	103	70.0 to 130	0.966	20.0
BD05373	Silicon, Dissolved	mg/L	0.00139	0.0440	1.00	6.34	6.33	1.02	0.850 to 1.15	96.0	70.0 to 130	0.158	20.0
BD05373	Silicon, Total	mg/L	0.000118	0.0440	1.00	7.03	7.03	0.997	0.850 to 1.15	163	70.0 to 130	0.00	20.0
BD05373	Sodium, Dissolved	mg/L	-0.000881	0.0880	5.00	106	109	4.84	4.25 to 5.75	-40.0	70.0 to 130	2.79	20.0
BD05373	Sodium, Total	mg/L	0.00401	0.0880	5.00	107	104	4.75	4.25 to 5.75	170	70.0 to 130	2.84	20.0
BD05381	Sulfate	mg/L	-0.0836	2.0	20.0	28.3	28.5	18.8	18.0 to 22.0	106	80.0 to 120	0.704	20.0
BD05373	Thallium, Dissolved	mg/L	0.0000086	0.000147	0.100	0.103	0.101	0.106	0.0850 to 0.115	103	70.0 to 130	1.96	20.0
BD05373	Thallium, Total	mg/L	0.000	0.000147	0.100	0.101	0.101	0.103	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BD05373	Total Organic Carbon	mg/L	0.0176	1.00	10.0	11.3	11.6	10.1		93.3	80.0 to 120	2.62	20.0

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

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/14/23 10:27
Customer ID:
Delivery Date: 3/16/23 09:24

Description: Gorgas Ash Pond - MW-7

Laboratory ID Number: BD05373

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD05378	Alkalinity to pH 4.5	mg CaCO3/L					43.6	50.5	45.0 to 55.0			0.460	10.0
BD05373	Nitrogen, Nitrate/Nitrite	mg/L as N	0.09	0.200	2.00	1.98	0.073	2.08	1.80 to 2.20	99.0	90.0 to 110	0.00	15.0
BD05373	Solids, Dissolved	mg/L	0.0000	25.0			341	52.0	40.0 to 60.0			0.294	10.0

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

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

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-6S

Location Code: WMWGORAP
Collected: 3/14/23 11:52
Customer ID:
Submittal Date: 3/16/23 09:24

Laboratory ID Number: BD05374

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	3/17/23 06:40	3/21/23 11:55		1.015	0.935	mg/L	0.030000	0.1015	
* Calcium, Total	3/17/23 06:40	3/21/23 13:12		10.15	50.9	mg/L	0.70035	4.06	
* Iron, Total	3/17/23 06:40	3/21/23 13:12		10.15	7.66	mg/L	0.08120	0.406	
* Lithium, Total	3/17/23 06:40	3/21/23 11:55		1.015	0.0468	mg/L	0.007105	0.01999956	
* Magnesium, Total	3/17/23 06:40	3/21/23 11:55		1.015	20.3	mg/L	0.021315	0.406	
* Molybdenum, Total	3/17/23 06:40	3/21/23 11:55		1.015	0.0298	mg/L	0.005075	0.01015	
* Silica, Total (calc.)	3/17/23 06:40	3/21/23 11:55		1	11.1	mg/L			
* Silicon, Total	3/17/23 06:40	3/21/23 11:55		1.015	5.17	mg/L	0.02030	0.25375	
* Sodium, Total	3/17/23 06:40	3/21/23 11:55		1.015	9.84	mg/L	0.04060	0.406	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	3/16/23 13:31	3/22/23 11:23		1.015	0.996	mg/L	0.030000	0.1015	
* Calcium, Dissolved	3/16/23 13:31	3/22/23 12:58		10.15	52.6	mg/L	0.70035	4.06	
* Iron, Dissolved	3/16/23 13:31	3/22/23 12:58		10.15	7.30	mg/L	0.08120	0.406	
* Lithium, Dissolved	3/16/23 13:31	3/22/23 11:23		1.015	0.0483	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	3/16/23 13:31	3/22/23 11:23		1.015	20.5	mg/L	0.021315	0.406	
* Molybdenum, Dissolved	3/16/23 13:31	3/22/23 11:23		1.015	0.0313	mg/L	0.005075	0.01015	
* Silica, Dissolved (calc.)	3/16/23 13:31	3/22/23 11:23		1	11.2	mg/L			
* Silicon, Dissolved	3/16/23 13:31	3/22/23 11:23		1.015	5.22	mg/L	0.02030	0.25375	
* Sodium, Dissolved	3/16/23 13:31	3/22/23 11:23		1.015	10.0	mg/L	0.04060	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/17/23 06:40	3/20/23 12:27		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Total	3/17/23 06:40	3/20/23 12:27		1.015	0.0209	mg/L	0.009135	0.05075	J
* Arsenic, Total	3/17/23 06:40	3/20/23 12:27		1.015	0.00908	mg/L	0.000112	0.000203	
* Barium, Total	3/17/23 06:40	3/20/23 12:27		1.015	0.108	mg/L	0.000508	0.001015	
* Beryllium, Total	3/17/23 06:40	3/20/23 12:27		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	3/17/23 06:40	3/20/23 12:27		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	3/17/23 06:40	3/20/23 12:27		1.015	0.000206	mg/L	0.000203	0.001015	J
* Cobalt, Total	3/17/23 06:40	3/20/23 12:27		1.015	0.000746	mg/L	0.000068	0.000203	
* Lead, Total	3/17/23 06:40	3/20/23 12:27		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	3/17/23 06:40	3/20/23 13:21		5.075	2.94	mg/L	0.000761	0.005075	

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

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

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-6S

Location Code: WMWGORAP
Collected: 3/14/23 11:52
Customer ID:
Submittal Date: 3/16/23 09:24

Laboratory ID Number: BD05374

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	3/17/23 06:40	3/20/23 12:27		1.015	3.68	mg/L	0.169505	0.5075	
* Selenium, Total	3/17/23 06:40	3/20/23 12:27		1.015	0.000886	mg/L	0.000508	0.001015	J
* Thallium, Total	3/17/23 06:40	3/20/23 12:27		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	3/16/23 13:31	3/16/23 16:28		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	3/16/23 13:31	3/16/23 16:28		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Dissolved	3/16/23 13:31	3/16/23 16:28		1.015	0.00675	mg/L	0.000112	0.000203	
* Barium, Dissolved	3/16/23 13:31	3/16/23 16:28		1.015	0.0914	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	3/16/23 13:31	3/16/23 16:28		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	3/16/23 13:31	3/16/23 16:28		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	3/16/23 13:31	3/16/23 16:28		1.015	0.000226	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	3/16/23 13:31	3/16/23 16:28		1.015	0.000692	mg/L	0.000068	0.000203	
* Lead, Dissolved	3/16/23 13:31	3/16/23 16:28		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	3/16/23 13:31	3/20/23 11:06		5.075	2.96	mg/L	0.000761	0.005075	
* Potassium, Dissolved	3/16/23 13:31	3/16/23 16:28		1.015	3.60	mg/L	0.169505	0.5075	
* Selenium, Dissolved	3/16/23 13:31	3/16/23 16:28		1.015	0.00114	mg/L	0.000508	0.001015	
* Thallium, Dissolved	3/16/23 13:31	3/16/23 16:28		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	3/22/23 16:18	3/22/23 21:23		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	3/21/23 12:22	3/21/23 12:22		1	0.285	mg/L as N	0.20	0.3	J
Analytical Method: SM 2320 B	***Analyst: ALH***								
* Alkalinity to pH 4.5	3/24/23 13:02	3/24/23 15:33		1	117	mg CaCO3/L		0.10	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	3/16/23 11:25	3/17/23 13:50		1	298	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
* Bicarbonate Alkalinity, (calc.)	3/24/23 13:02	3/24/23 15:33		1	117	mg CaCO3/L		1	
* Carbonate Alkalinity, (calc.)	3/24/23 13:02	3/24/23 15:33		1	Not Detected	mg CaCO3/L		0.5	
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	3/16/23 20:02	3/16/23 20:02		1	2.92	mg/L	1.00	2	

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

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

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-6S

Location Code: WMWGORAP
Collected: 3/14/23 11:52
Customer ID:
Submittal Date: 3/16/23 09:24

Laboratory ID Number: BD05374

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: CES***								
* Chloride	3/24/23 10:24	3/24/23 10:24		1	18.5	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: CES***								
* Fluoride	3/28/23 10:00	3/28/23 10:00		1	0.153	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	3/21/23 14:17	3/21/23 14:17		4	96.1	mg/L	2.4	8	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	3/14/23 11:48	3/14/23 11:48			491.61	uS/cm			FA
pH	3/14/23 11:48	3/14/23 11:48			7.04	SU			FA
Temperature	3/14/23 11:48	3/14/23 11:48			16.26	C			FA
Turbidity	3/14/23 11:48	3/14/23 11:48			9.24	NTU			FA
Sulfide	3/14/23 11:48	3/14/23 11:48			0	mg/L			FA

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

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

Reported: 5/3/2023
Version: 3.5
COA_CCR

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/14/23 11:52
Customer ID:
Delivery Date: 3/16/23 09:24

Description: Gorgas Ash Pond - MW-6S

Laboratory ID Number: BD05374

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD05382	Aluminum, Dissolved	mg/L	0.0000168	0.0198	0.100	0.104	0.103	0.105	0.0850 to 0.115	104	70.0 to 130	0.966	20.0
BD05383	Aluminum, Total	mg/L	0.000212	0.0198	0.100	0.101	0.101	0.0988	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BD05382	Antimony, Dissolved	mg/L	0.000232	0.00100	0.100	0.0920	0.0937	0.0947	0.0850 to 0.115	92.0	70.0 to 130	1.83	20.0
BD05383	Antimony, Total	mg/L	0.000202	0.00100	0.100	0.104	0.102	0.101	0.0850 to 0.115	104	70.0 to 130	1.94	20.0
BD05382	Arsenic, Dissolved	mg/L	-0.0000026	0.000200	0.100	0.114	0.113	0.103	0.0850 to 0.115	105	70.0 to 130	0.881	20.0
BD05383	Arsenic, Total	mg/L	0.0000159	0.000200	0.100	0.101	0.102	0.101	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BD05382	Barium, Dissolved	mg/L	-0.0000285	0.00100	0.100	0.117	0.115	0.0969	0.0850 to 0.115	94.8	70.0 to 130	1.72	20.0
BD05383	Barium, Total	mg/L	-0.0000008	0.00100	0.100	0.105	0.104	0.0993	0.0850 to 0.115	105	70.0 to 130	0.957	20.0
BD05382	Beryllium, Dissolved	mg/L	0.0000237	0.000880	0.100	0.103	0.106	0.102	0.0850 to 0.115	103	70.0 to 130	2.87	20.0
BD05383	Beryllium, Total	mg/L	0.0000126	0.000880	0.100	0.0927	0.0942	0.0944	0.0850 to 0.115	92.7	70.0 to 130	1.61	20.0
BD05382	Boron, Dissolved	mg/L	0.000171	0.0650	1.00	1.12	1.13	1.04	0.850 to 1.15	106	70.0 to 130	0.889	20.0
BD05383	Boron, Total	mg/L	0.000173	0.0650	1.00	0.977	0.982	0.982	0.850 to 1.15	97.7	70.0 to 130	0.510	20.0
BD05382	Cadmium, Dissolved	mg/L	0.0000031	0.000147	0.100	0.105	0.102	0.107	0.0850 to 0.115	105	70.0 to 130	2.90	20.0
BD05383	Cadmium, Total	mg/L	-0.0000034	0.000147	0.100	0.105	0.103	0.102	0.0850 to 0.115	105	70.0 to 130	1.92	20.0
BD05382	Calcium, Dissolved	mg/L	-0.00749	0.152	5.00	136	138	5.04	4.25 to 5.75	-40.0	70.0 to 130	1.46	20.0
BD05383	Calcium, Total	mg/L	-0.00687	0.152	5.00	4.94	4.83	4.87	4.25 to 5.75	98.8	70.0 to 130	2.25	20.0
BD05382	Chloride	mg/L	0.180	1.00	10.0	19.3	19.3	9.90	9.00 to 11.0	99.9	80.0 to 120	0.00	20.0
BD05382	Chromium, Dissolved	mg/L	0.0000269	0.000440	0.100	0.102	0.0995	0.103	0.0850 to 0.115	102	70.0 to 130	2.48	20.0
BD05383	Chromium, Total	mg/L	-0.0000126	0.000440	0.100	0.103	0.103	0.104	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BD05382	Cobalt, Dissolved	mg/L	0.0000062	0.000147	0.100	0.104	0.104	0.106	0.0850 to 0.115	104	70.0 to 130	0.00	20.0
BD05383	Cobalt, Total	mg/L	-0.0000089	0.000147	0.100	0.105	0.104	0.104	0.0850 to 0.115	105	70.0 to 130	0.957	20.0
BD05382	Fluoride	mg/L	0.0185	0.125	2.50	2.71	2.83	2.58	2.25 to 2.75	103	80.0 to 120	4.33	20.0
BD05382	Iron, Dissolved	mg/L	-0.000052	0.0176	0.2	3.81	3.81	0.202	0.170 to 0.230	85.0	70.0 to 130	0.00	20.0
BD05383	Iron, Total	mg/L	-0.00265	0.0176	0.2	0.198	0.198	0.199	0.170 to 0.230	99.0	70.0 to 130	0.00	20.0

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

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/14/23 11:52
Customer ID:
Delivery Date: 3/16/23 09:24

Description: Gorgas Ash Pond - MW-6S

Laboratory ID Number: BD05374

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD05382	Lead, Dissolved	mg/L	0.0000058	0.000147	0.100	0.106	0.109	0.104	0.0850 to 0.115	106	70.0 to 130	2.79	20.0
BD05383	Lead, Total	mg/L	0.0000039	0.000147	0.100	0.106	0.106	0.107	0.0850 to 0.115	106	70.0 to 130	0.00	20.0
BD05382	Lithium, Dissolved	mg/L	0.000469	0.0154	0.200	0.234	0.236	0.199	0.170 to 0.230	101	70.0 to 130	0.851	20.0
BD05383	Lithium, Total	mg/L	0.00103	0.0154	0.200	0.194	0.193	0.194	0.170 to 0.230	97.0	70.0 to 130	0.517	20.0
BD05382	Magnesium, Dissolved	mg/L	0.00419	0.0462	5.00	51.2	51.8	4.95	4.25 to 5.75	56.0	70.0 to 130	1.17	20.0
BD05383	Magnesium, Total	mg/L	-0.00905	0.0462	5.00	4.87	4.80	4.80	4.25 to 5.75	97.4	70.0 to 130	1.45	20.0
BD05382	Manganese, Dissolved	mg/L	0.0000061	0.00033	0.100	1.04	1.03	0.107	0.0850 to 0.115	67.0	70.0 to 130	0.966	20.0
BD05383	Manganese, Total	mg/L	-0.0000009	0.00033	0.100	0.101	0.101	0.101	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BD05383	Mercury, Total by CVAA	mg/L	4.000E-05	0.000500	0.004	0.00403	0.00407	0.00405	0.00340 to 0.00460	101	70.0 to 130	0.988	20.0
BD05382	Molybdenum, Dissolved	mg/L	0.000437	0.0100	0.2	0.202	0.204	0.202	0.170 to 0.230	101	70.0 to 130	0.985	20.0
BD05383	Molybdenum, Total	mg/L	0.000	0.0100	0.2	0.197	0.197	0.197	0.170 to 0.230	98.5	70.0 to 130	0.00	20.0
BD05382	Potassium, Dissolved	mg/L	0.0178	0.367	10.0	12.1	11.9	10.1	8.50 to 11.5	99.0	70.0 to 130	1.67	20.0
BD05383	Potassium, Total	mg/L	-0.000205	0.367	10.0	9.90	10.1	9.91	8.50 to 11.5	99.0	70.0 to 130	2.00	20.0
BD05382	Selenium, Dissolved	mg/L	0.0000061	0.00100	0.100	0.110	0.108	0.107	0.0850 to 0.115	110	70.0 to 130	1.83	20.0
BD05383	Selenium, Total	mg/L	0.0000487	0.00100	0.100	0.111	0.110	0.108	0.0850 to 0.115	111	70.0 to 130	0.905	20.0
BD05382	Silicon, Dissolved	mg/L	0.00139	0.0440	1.00	11.6	11.6	1.02	0.850 to 1.15	100	70.0 to 130	0.00	20.0
BD05383	Silicon, Total	mg/L	0.000118	0.0440	1.00	0.984	0.993	0.997	0.850 to 1.15	98.4	70.0 to 130	0.910	20.0
BD05382	Sodium, Dissolved	mg/L	-0.000881	0.0880	5.00	38.9	38.8	4.84	4.25 to 5.75	92.0	70.0 to 130	0.257	20.0
BD05383	Sodium, Total	mg/L	0.00401	0.0880	5.00	4.75	4.71	4.75	4.25 to 5.75	95.0	70.0 to 130	0.846	20.0
BD05381	Sulfate	mg/L	-0.0836	2.0	20.0	28.3	28.5	18.8	18.0 to 22.0	106	80.0 to 120	0.704	20.0
BD05382	Thallium, Dissolved	mg/L	0.0000086	0.000147	0.100	0.105	0.108	0.106	0.0850 to 0.115	105	70.0 to 130	2.82	20.0
BD05383	Thallium, Total	mg/L	0.000	0.000147	0.100	0.106	0.105	0.103	0.0850 to 0.115	106	70.0 to 130	0.948	20.0
BD05383	Total Organic Carbon	mg/L	0.004	1.00	10.0	11.0	11.3	10.6		110	80.0 to 120	2.69	20.0

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

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/14/23 11:52
Customer ID:
Delivery Date: 3/16/23 09:24

Description: Gorgas Ash Pond - MW-6S

Laboratory ID Number: BD05374

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD05378	Alkalinity to pH 4.5	mg CaCO3/L					43.6	50.5	45.0 to 55.0			0.460	10.0
BD05383	Nitrogen, Nitrate/Nitrite	mg/L as N	0.07	0.200	2.00	2.15	0.083	2.02	1.80 to 2.20	108	90.0 to 110	0.00	15.0
BD05381	Solids, Dissolved	mg/L	0.0000	25.0			255	52.0	40.0 to 60.0			0.393	10.0

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

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-6S Dup

Location Code: WMWGORAP
Collected: 3/14/23 11:52
Customer ID:
Submittal Date: 3/16/23 09:24

Laboratory ID Number: BD05375

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	3/17/23 06:40	3/21/23 11:58		1.015	0.933	mg/L	0.030000	0.1015	
* Calcium, Total	3/17/23 06:40	3/21/23 13:15		10.15	50.4	mg/L	0.70035	4.06	
* Iron, Total	3/17/23 06:40	3/21/23 13:15		10.15	7.89	mg/L	0.08120	0.406	
* Lithium, Total	3/17/23 06:40	3/21/23 11:58		1.015	0.0449	mg/L	0.007105	0.01999956	
* Magnesium, Total	3/17/23 06:40	3/21/23 11:58		1.015	20.1	mg/L	0.021315	0.406	
* Molybdenum, Total	3/17/23 06:40	3/21/23 11:58		1.015	0.0290	mg/L	0.005075	0.01015	
* Silica, Total (calc.)	3/17/23 06:40	3/21/23 11:58		1	11.0	mg/L			
* Silicon, Total	3/17/23 06:40	3/21/23 11:58		1.015	5.16	mg/L	0.02030	0.25375	
* Sodium, Total	3/17/23 06:40	3/21/23 11:58		1.015	9.83	mg/L	0.04060	0.406	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	3/16/23 13:31	3/22/23 11:26		1.015	0.992	mg/L	0.030000	0.1015	
* Calcium, Dissolved	3/16/23 13:31	3/22/23 13:01		10.15	53.1	mg/L	0.70035	4.06	
* Iron, Dissolved	3/16/23 13:31	3/22/23 13:01		10.15	7.31	mg/L	0.08120	0.406	
* Lithium, Dissolved	3/16/23 13:31	3/22/23 11:26		1.015	0.0492	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	3/16/23 13:31	3/22/23 11:26		1.015	20.6	mg/L	0.021315	0.406	
* Molybdenum, Dissolved	3/16/23 13:31	3/22/23 11:26		1.015	0.0315	mg/L	0.005075	0.01015	
* Silica, Dissolved (calc.)	3/16/23 13:31	3/22/23 11:26		1	11.1	mg/L			
* Silicon, Dissolved	3/16/23 13:31	3/22/23 11:26		1.015	5.20	mg/L	0.02030	0.25375	
* Sodium, Dissolved	3/16/23 13:31	3/22/23 11:26		1.015	10.0	mg/L	0.04060	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/17/23 06:40	3/20/23 12:31		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Total	3/17/23 06:40	3/20/23 12:31		1.015	0.0161	mg/L	0.009135	0.05075	J
* Arsenic, Total	3/17/23 06:40	3/20/23 12:31		1.015	0.00904	mg/L	0.000112	0.000203	
* Barium, Total	3/17/23 06:40	3/20/23 12:31		1.015	0.105	mg/L	0.000508	0.001015	
* Beryllium, Total	3/17/23 06:40	3/20/23 12:31		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	3/17/23 06:40	3/20/23 12:31		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	3/17/23 06:40	3/20/23 12:31		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	3/17/23 06:40	3/20/23 12:31		1.015	0.000702	mg/L	0.000068	0.000203	
* Lead, Total	3/17/23 06:40	3/20/23 12:31		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	3/17/23 06:40	3/20/23 13:24		5.075	3.19	mg/L	0.000761	0.005075	

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

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

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

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-6S Dup

Location Code: WMWGORAP
Collected: 3/14/23 11:52
Customer ID:
Submittal Date: 3/16/23 09:24

Laboratory ID Number: BD05375

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	3/17/23 06:40	3/20/23 12:31		1.015	3.51	mg/L	0.169505	0.5075	
* Selenium, Total	3/17/23 06:40	3/20/23 12:31		1.015	0.000810	mg/L	0.000508	0.001015	J
* Thallium, Total	3/17/23 06:40	3/20/23 12:31		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	3/16/23 13:31	3/16/23 16:31		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	3/16/23 13:31	3/16/23 16:31		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Dissolved	3/16/23 13:31	3/16/23 16:31		1.015	0.00740	mg/L	0.000112	0.000203	
* Barium, Dissolved	3/16/23 13:31	3/16/23 16:31		1.015	0.102	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	3/16/23 13:31	3/16/23 16:31		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	3/16/23 13:31	3/16/23 16:31		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	3/16/23 13:31	3/16/23 16:31		1.015	0.000252	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	3/16/23 13:31	3/16/23 16:31		1.015	0.000771	mg/L	0.000068	0.000203	
* Lead, Dissolved	3/16/23 13:31	3/16/23 16:31		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	3/16/23 13:31	3/20/23 11:10		5.075	2.90	mg/L	0.000761	0.005075	
* Potassium, Dissolved	3/16/23 13:31	3/16/23 16:31		1.015	3.92	mg/L	0.169505	0.5075	
* Selenium, Dissolved	3/16/23 13:31	3/16/23 16:31		1.015	0.00131	mg/L	0.000508	0.001015	
* Thallium, Dissolved	3/16/23 13:31	3/16/23 16:31		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	3/22/23 16:18	3/22/23 21:27		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	3/21/23 12:23	3/21/23 12:23		1	0.292	mg/L as N	0.20	0.3	J
Analytical Method: SM 2320 B	***Analyst: ALH***								
* Alkalinity to pH 4.5	3/24/23 13:02	3/24/23 15:33		1	117	mg CaCO3/L		0.10	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	3/16/23 11:25	3/17/23 13:50		1	304	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
* Bicarbonate Alkalinity, (calc.)	3/24/23 13:02	3/24/23 15:33		1	117	mg CaCO3/L		1	
* Carbonate Alkalinity, (calc.)	3/24/23 13:02	3/24/23 15:33		1	Not Detected	mg CaCO3/L		0.5	
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	3/16/23 20:18	3/16/23 20:18		1	3.06	mg/L	1.00	2	

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

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

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

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-6S Dup

Location Code: WMWGORAP
Collected: 3/14/23 11:52
Customer ID:
Submittal Date: 3/16/23 09:24

Laboratory ID Number: BD05375

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: CES***								
* Chloride	3/24/23 10:35	3/24/23 10:35		1	18.6	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: CES***								
* Fluoride	3/28/23 10:02	3/28/23 10:02		1	0.149	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	3/21/23 14:18	3/21/23 14:18		4	94.9	mg/L	2.4	8	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	3/14/23 11:48	3/14/23 11:48			491.61	uS/cm			FA
pH	3/14/23 11:48	3/14/23 11:48			7.04	SU			FA
Temperature	3/14/23 11:48	3/14/23 11:48			16.26	C			FA
Turbidity	3/14/23 11:48	3/14/23 11:48			9.24	NTU			FA
Sulfide	3/14/23 11:48	3/14/23 11:48			0	mg/L			FA

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

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

Reported: 5/3/2023
Version: 3.5
COA_CCR

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/14/23 11:52
Customer ID:
Delivery Date: 3/16/23 09:24

Description: Gorgas Ash Pond - MW-6S Dup

Laboratory ID Number: BD05375

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD05382	Aluminum, Dissolved	mg/L	0.0000168	0.0198	0.100	0.104	0.103	0.105	0.0850 to 0.115	104	70.0 to 130	0.966	20.0
BD05383	Aluminum, Total	mg/L	0.000212	0.0198	0.100	0.101	0.101	0.0988	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BD05382	Antimony, Dissolved	mg/L	0.000232	0.00100	0.100	0.0920	0.0937	0.0947	0.0850 to 0.115	92.0	70.0 to 130	1.83	20.0
BD05383	Antimony, Total	mg/L	0.000202	0.00100	0.100	0.104	0.102	0.101	0.0850 to 0.115	104	70.0 to 130	1.94	20.0
BD05382	Arsenic, Dissolved	mg/L	-0.0000026	0.000200	0.100	0.114	0.113	0.103	0.0850 to 0.115	105	70.0 to 130	0.881	20.0
BD05383	Arsenic, Total	mg/L	0.0000159	0.000200	0.100	0.101	0.102	0.101	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BD05382	Barium, Dissolved	mg/L	-0.0000285	0.00100	0.100	0.117	0.115	0.0969	0.0850 to 0.115	94.8	70.0 to 130	1.72	20.0
BD05383	Barium, Total	mg/L	-0.0000008	0.00100	0.100	0.105	0.104	0.0993	0.0850 to 0.115	105	70.0 to 130	0.957	20.0
BD05382	Beryllium, Dissolved	mg/L	0.0000237	0.000880	0.100	0.103	0.106	0.102	0.0850 to 0.115	103	70.0 to 130	2.87	20.0
BD05383	Beryllium, Total	mg/L	0.0000126	0.000880	0.100	0.0927	0.0942	0.0944	0.0850 to 0.115	92.7	70.0 to 130	1.61	20.0
BD05382	Boron, Dissolved	mg/L	0.000171	0.0650	1.00	1.12	1.13	1.04	0.850 to 1.15	106	70.0 to 130	0.889	20.0
BD05383	Boron, Total	mg/L	0.000173	0.0650	1.00	0.977	0.982	0.982	0.850 to 1.15	97.7	70.0 to 130	0.510	20.0
BD05382	Cadmium, Dissolved	mg/L	0.0000031	0.000147	0.100	0.105	0.102	0.107	0.0850 to 0.115	105	70.0 to 130	2.90	20.0
BD05383	Cadmium, Total	mg/L	-0.0000034	0.000147	0.100	0.105	0.103	0.102	0.0850 to 0.115	105	70.0 to 130	1.92	20.0
BD05382	Calcium, Dissolved	mg/L	-0.00749	0.152	5.00	136	138	5.04	4.25 to 5.75	-40.0	70.0 to 130	1.46	20.0
BD05383	Calcium, Total	mg/L	-0.00687	0.152	5.00	4.94	4.83	4.87	4.25 to 5.75	98.8	70.0 to 130	2.25	20.0
BD05382	Chloride	mg/L	0.180	1.00	10.0	19.3	19.3	9.90	9.00 to 11.0	99.9	80.0 to 120	0.00	20.0
BD05382	Chromium, Dissolved	mg/L	0.0000269	0.000440	0.100	0.102	0.0995	0.103	0.0850 to 0.115	102	70.0 to 130	2.48	20.0
BD05383	Chromium, Total	mg/L	-0.0000126	0.000440	0.100	0.103	0.103	0.104	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BD05382	Cobalt, Dissolved	mg/L	0.0000062	0.000147	0.100	0.104	0.104	0.106	0.0850 to 0.115	104	70.0 to 130	0.00	20.0
BD05383	Cobalt, Total	mg/L	-0.0000089	0.000147	0.100	0.105	0.104	0.104	0.0850 to 0.115	105	70.0 to 130	0.957	20.0
BD05382	Fluoride	mg/L	0.0185	0.125	2.50	2.71	2.83	2.58	2.25 to 2.75	103	80.0 to 120	4.33	20.0
BD05382	Iron, Dissolved	mg/L	-0.000052	0.0176	0.2	3.81	3.81	0.202	0.170 to 0.230	85.0	70.0 to 130	0.00	20.0
BD05383	Iron, Total	mg/L	-0.00265	0.0176	0.2	0.198	0.198	0.199	0.170 to 0.230	99.0	70.0 to 130	0.00	20.0

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

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/14/23 11:52
Customer ID:
Delivery Date: 3/16/23 09:24

Description: Gorgas Ash Pond - MW-6S Dup

Laboratory ID Number: BD05375

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD05382	Lead, Dissolved	mg/L	0.0000058	0.000147	0.100	0.106	0.109	0.104	0.0850 to 0.115	106	70.0 to 130	2.79	20.0
BD05383	Lead, Total	mg/L	0.0000039	0.000147	0.100	0.106	0.106	0.107	0.0850 to 0.115	106	70.0 to 130	0.00	20.0
BD05382	Lithium, Dissolved	mg/L	0.000469	0.0154	0.200	0.234	0.236	0.199	0.170 to 0.230	101	70.0 to 130	0.851	20.0
BD05383	Lithium, Total	mg/L	0.00103	0.0154	0.200	0.194	0.193	0.194	0.170 to 0.230	97.0	70.0 to 130	0.517	20.0
BD05382	Magnesium, Dissolved	mg/L	0.00419	0.0462	5.00	51.2	51.8	4.95	4.25 to 5.75	56.0	70.0 to 130	1.17	20.0
BD05383	Magnesium, Total	mg/L	-0.00905	0.0462	5.00	4.87	4.80	4.80	4.25 to 5.75	97.4	70.0 to 130	1.45	20.0
BD05382	Manganese, Dissolved	mg/L	0.0000061	0.00033	0.100	1.04	1.03	0.107	0.0850 to 0.115	67.0	70.0 to 130	0.966	20.0
BD05383	Manganese, Total	mg/L	-0.0000009	0.00033	0.100	0.101	0.101	0.101	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BD05383	Mercury, Total by CVAA	mg/L	4.000E-05	0.000500	0.004	0.00403	0.00407	0.00405	0.00340 to 0.00460	101	70.0 to 130	0.988	20.0
BD05382	Molybdenum, Dissolved	mg/L	0.000437	0.0100	0.2	0.202	0.204	0.202	0.170 to 0.230	101	70.0 to 130	0.985	20.0
BD05383	Molybdenum, Total	mg/L	0.000	0.0100	0.2	0.197	0.197	0.197	0.170 to 0.230	98.5	70.0 to 130	0.00	20.0
BD05382	Potassium, Dissolved	mg/L	0.0178	0.367	10.0	12.1	11.9	10.1	8.50 to 11.5	99.0	70.0 to 130	1.67	20.0
BD05383	Potassium, Total	mg/L	-0.000205	0.367	10.0	9.90	10.1	9.91	8.50 to 11.5	99.0	70.0 to 130	2.00	20.0
BD05382	Selenium, Dissolved	mg/L	0.0000061	0.00100	0.100	0.110	0.108	0.107	0.0850 to 0.115	110	70.0 to 130	1.83	20.0
BD05383	Selenium, Total	mg/L	0.0000487	0.00100	0.100	0.111	0.110	0.108	0.0850 to 0.115	111	70.0 to 130	0.905	20.0
BD05382	Silicon, Dissolved	mg/L	0.00139	0.0440	1.00	11.6	11.6	1.02	0.850 to 1.15	100	70.0 to 130	0.00	20.0
BD05383	Silicon, Total	mg/L	0.000118	0.0440	1.00	0.984	0.993	0.997	0.850 to 1.15	98.4	70.0 to 130	0.910	20.0
BD05382	Sodium, Dissolved	mg/L	-0.000881	0.0880	5.00	38.9	38.8	4.84	4.25 to 5.75	92.0	70.0 to 130	0.257	20.0
BD05383	Sodium, Total	mg/L	0.00401	0.0880	5.00	4.75	4.71	4.75	4.25 to 5.75	95.0	70.0 to 130	0.846	20.0
BD05381	Sulfate	mg/L	-0.0836	2.0	20.0	28.3	28.5	18.8	18.0 to 22.0	106	80.0 to 120	0.704	20.0
BD05382	Thallium, Dissolved	mg/L	0.0000086	0.000147	0.100	0.105	0.108	0.106	0.0850 to 0.115	105	70.0 to 130	2.82	20.0
BD05383	Thallium, Total	mg/L	0.000	0.000147	0.100	0.106	0.105	0.103	0.0850 to 0.115	106	70.0 to 130	0.948	20.0
BD05383	Total Organic Carbon	mg/L	0.004	1.00	10.0	11.0	11.3	10.6		110	80.0 to 120	2.69	20.0

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

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/14/23 11:52
Customer ID:
Delivery Date: 3/16/23 09:24

Description: Gorgas Ash Pond - MW-6S Dup

Laboratory ID Number: BD05375

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD05378	Alkalinity to pH 4.5	mg CaCO3/L					43.6	50.5	45.0 to 55.0			0.460	10.0
BD05383	Nitrogen, Nitrate/Nitrite	mg/L as N	0.07	0.200	2.00	2.15	0.083	2.02	1.80 to 2.20	108	90.0 to 110	0.00	15.0
BD05381	Solids, Dissolved	mg/L	0.0000	25.0			255	52.0	40.0 to 60.0			0.393	10.0

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

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

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-6D

Location Code: WMWGORAP
Collected: 3/14/23 12:55
Customer ID:
Submittal Date: 3/16/23 09:24

Laboratory ID Number: BD05376

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	3/17/23 06:40	3/21/23 12:02		1.015	1.32	mg/L	0.030000	0.1015	
* Calcium, Total	3/17/23 06:40	3/21/23 13:18		10.15	52.4	mg/L	0.70035	4.06	
* Iron, Total	3/17/23 06:40	3/21/23 12:02		1.015	0.0160	mg/L	0.008120	0.0406	J
* Lithium, Total	3/17/23 06:40	3/21/23 12:02		1.015	0.308	mg/L	0.007105	0.01999956	
* Magnesium, Total	3/17/23 06:40	3/21/23 12:02		1.015	15.0	mg/L	0.021315	0.406	
* Molybdenum, Total	3/17/23 06:40	3/21/23 12:02		1.015	0.0104	mg/L	0.005075	0.01015	
* Silica, Total (calc.)	3/17/23 06:40	3/21/23 12:02		1	14.0	mg/L			
* Silicon, Total	3/17/23 06:40	3/21/23 12:02		1.015	6.52	mg/L	0.02030	0.25375	
* Sodium, Total	3/17/23 06:40	3/21/23 12:02		1.015	25.4	mg/L	0.04060	0.406	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	3/16/23 13:31	3/22/23 11:30		1.015	1.38	mg/L	0.030000	0.1015	
* Calcium, Dissolved	3/16/23 13:31	3/22/23 13:04		10.15	61.2	mg/L	0.70035	4.06	
* Iron, Dissolved	3/16/23 13:31	3/22/23 11:30		1.015	0.0135	mg/L	0.008120	0.0406	J
* Lithium, Dissolved	3/16/23 13:31	3/22/23 11:30		1.015	0.310	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	3/16/23 13:31	3/22/23 11:30		1.015	15.1	mg/L	0.021315	0.406	
* Molybdenum, Dissolved	3/16/23 13:31	3/22/23 11:30		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Dissolved (calc.)	3/16/23 13:31	3/22/23 11:30		1	14.4	mg/L			
* Silicon, Dissolved	3/16/23 13:31	3/22/23 11:30		1.015	6.71	mg/L	0.02030	0.25375	
* Sodium, Dissolved	3/16/23 13:31	3/22/23 11:30		1.015	25.9	mg/L	0.04060	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/17/23 06:40	3/20/23 12:34		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Total	3/17/23 06:40	3/20/23 12:34		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Total	3/17/23 06:40	3/20/23 12:34		1.015	0.108	mg/L	0.000112	0.000203	
* Barium, Total	3/17/23 06:40	3/20/23 12:34		1.015	0.604	mg/L	0.000508	0.001015	
* Beryllium, Total	3/17/23 06:40	3/20/23 12:34		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	3/17/23 06:40	3/20/23 12:34		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	3/17/23 06:40	3/20/23 12:34		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	3/17/23 06:40	3/20/23 12:34		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	3/17/23 06:40	3/20/23 12:34		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	3/17/23 06:40	3/20/23 12:34		1.015	0.182	mg/L	0.000152	0.001015	

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

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

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

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-6D

Location Code: WMWGORAP
Collected: 3/14/23 12:55
Customer ID:
Submittal Date: 3/16/23 09:24

Laboratory ID Number: BD05376

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	3/17/23 06:40	3/20/23 12:34		1.015	2.30	mg/L	0.169505	0.5075	
* Selenium, Total	3/17/23 06:40	3/20/23 12:34		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	3/17/23 06:40	3/20/23 12:34		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	3/16/23 13:31	3/16/23 16:35		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	3/16/23 13:31	3/16/23 16:35		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Dissolved	3/16/23 13:31	3/16/23 16:35		1.015	0.0981	mg/L	0.000112	0.000203	
* Barium, Dissolved	3/16/23 13:31	3/16/23 16:35		1.015	0.652	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	3/16/23 13:31	3/16/23 16:35		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	3/16/23 13:31	3/16/23 16:35		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	3/16/23 13:31	3/16/23 16:35		1.015	0.000210	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	3/16/23 13:31	3/16/23 16:35		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Dissolved	3/16/23 13:31	3/16/23 16:35		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	3/16/23 13:31	3/16/23 16:35		1.015	0.191	mg/L	0.000152	0.001015	
* Potassium, Dissolved	3/16/23 13:31	3/16/23 16:35		1.015	2.38	mg/L	0.169505	0.5075	
* Selenium, Dissolved	4/21/23 09:03	4/21/23 09:40		1.015	0.00168	mg/L	0.000508	0.001015	
* Thallium, Dissolved	3/16/23 13:31	3/16/23 16:35		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	3/22/23 16:18	3/22/23 21:31		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	3/21/23 12:25	3/21/23 12:25		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
* Alkalinity to pH 4.5	3/24/23 13:02	3/24/23 15:33		1	183	mg CaCO3/L		0.10	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	3/16/23 11:25	3/17/23 13:50		1	300	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
* Bicarbonate Alkalinity, (calc.)	3/24/23 13:02	3/24/23 15:33		1	182	mg CaCO3/L		1	
* Carbonate Alkalinity, (calc.)	3/24/23 13:02	3/24/23 15:33		1	1.03	mg CaCO3/L		0.5	
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	3/16/23 20:37	3/16/23 20:37		1	3.50	mg/L	1.00	2	

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

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

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

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-6D

Location Code: WMWGORAP
Collected: 3/14/23 12:55
Customer ID:
Submittal Date: 3/16/23 09:24

Laboratory ID Number: BD05376

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: CES***								
* Chloride	3/24/23 10:25	3/24/23 10:25		1	9.66	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: CES***								
* Fluoride	3/28/23 10:03	3/28/23 10:03		1	0.122	mg/L	0.06	0.125	J
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	3/21/23 14:19	3/21/23 14:19		2	57.5	mg/L	1.2	4	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	3/14/23 12:52	3/14/23 12:52			487.96	uS/cm			FA
pH	3/14/23 12:52	3/14/23 12:52			7.33	SU			FA
Temperature	3/14/23 12:52	3/14/23 12:52			16.87	C			FA
Turbidity	3/14/23 12:52	3/14/23 12:52			0.38	NTU			FA
Sulfide	3/14/23 12:52	3/14/23 12:52			5	mg/L			FA

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

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

Reported: 5/3/2023
Version: 3.5
COA_CCR

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/14/23 12:55
Customer ID:
Delivery Date: 3/16/23 09:24

Description: Gorgas Ash Pond - MW-6D

Laboratory ID Number: BD05376

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD05382	Aluminum, Dissolved	mg/L	0.0000168	0.0198	0.100	0.104	0.103	0.105	0.0850 to 0.115	104	70.0 to 130	0.966	20.0
BD05383	Aluminum, Total	mg/L	0.000212	0.0198	0.100	0.101	0.101	0.0988	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BD05382	Antimony, Dissolved	mg/L	0.000232	0.00100	0.100	0.0920	0.0937	0.0947	0.0850 to 0.115	92.0	70.0 to 130	1.83	20.0
BD05383	Antimony, Total	mg/L	0.000202	0.00100	0.100	0.104	0.102	0.101	0.0850 to 0.115	104	70.0 to 130	1.94	20.0
BD05382	Arsenic, Dissolved	mg/L	-0.0000026	0.000200	0.100	0.114	0.113	0.103	0.0850 to 0.115	105	70.0 to 130	0.881	20.0
BD05383	Arsenic, Total	mg/L	0.0000159	0.000200	0.100	0.101	0.102	0.101	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BD05382	Barium, Dissolved	mg/L	-0.0000285	0.00100	0.100	0.117	0.115	0.0969	0.0850 to 0.115	94.8	70.0 to 130	1.72	20.0
BD05383	Barium, Total	mg/L	-0.0000008	0.00100	0.100	0.105	0.104	0.0993	0.0850 to 0.115	105	70.0 to 130	0.957	20.0
BD05382	Beryllium, Dissolved	mg/L	0.0000237	0.000880	0.100	0.103	0.106	0.102	0.0850 to 0.115	103	70.0 to 130	2.87	20.0
BD05383	Beryllium, Total	mg/L	0.0000126	0.000880	0.100	0.0927	0.0942	0.0944	0.0850 to 0.115	92.7	70.0 to 130	1.61	20.0
BD05382	Boron, Dissolved	mg/L	0.000171	0.0650	1.00	1.12	1.13	1.04	0.850 to 1.15	106	70.0 to 130	0.889	20.0
BD05383	Boron, Total	mg/L	0.000173	0.0650	1.00	0.977	0.982	0.982	0.850 to 1.15	97.7	70.0 to 130	0.510	20.0
BD05382	Cadmium, Dissolved	mg/L	0.0000031	0.000147	0.100	0.105	0.102	0.107	0.0850 to 0.115	105	70.0 to 130	2.90	20.0
BD05383	Cadmium, Total	mg/L	-0.0000034	0.000147	0.100	0.105	0.103	0.102	0.0850 to 0.115	105	70.0 to 130	1.92	20.0
BD05382	Calcium, Dissolved	mg/L	-0.00749	0.152	5.00	136	138	5.04	4.25 to 5.75	-40.0	70.0 to 130	1.46	20.0
BD05383	Calcium, Total	mg/L	-0.00687	0.152	5.00	4.94	4.83	4.87	4.25 to 5.75	98.8	70.0 to 130	2.25	20.0
BD05382	Chloride	mg/L	0.180	1.00	10.0	19.3	19.3	9.90	9.00 to 11.0	99.9	80.0 to 120	0.00	20.0
BD05382	Chromium, Dissolved	mg/L	0.0000269	0.000440	0.100	0.102	0.0995	0.103	0.0850 to 0.115	102	70.0 to 130	2.48	20.0
BD05383	Chromium, Total	mg/L	-0.0000126	0.000440	0.100	0.103	0.103	0.104	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BD05382	Cobalt, Dissolved	mg/L	0.0000062	0.000147	0.100	0.104	0.104	0.106	0.0850 to 0.115	104	70.0 to 130	0.00	20.0
BD05383	Cobalt, Total	mg/L	-0.0000089	0.000147	0.100	0.105	0.104	0.104	0.0850 to 0.115	105	70.0 to 130	0.957	20.0
BD05382	Fluoride	mg/L	0.0185	0.125	2.50	2.71	2.83	2.58	2.25 to 2.75	103	80.0 to 120	4.33	20.0
BD05382	Iron, Dissolved	mg/L	-0.000052	0.0176	0.2	3.81	3.81	0.202	0.170 to 0.230	85.0	70.0 to 130	0.00	20.0
BD05383	Iron, Total	mg/L	-0.00265	0.0176	0.2	0.198	0.198	0.199	0.170 to 0.230	99.0	70.0 to 130	0.00	20.0

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/14/23 12:55
Customer ID:
Delivery Date: 3/16/23 09:24

Description: Gorgas Ash Pond - MW-6D

Laboratory ID Number: BD05376

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD05382	Lead, Dissolved	mg/L	0.0000058	0.000147	0.100	0.106	0.109	0.104	0.0850 to 0.115	106	70.0 to 130	2.79	20.0
BD05383	Lead, Total	mg/L	0.0000039	0.000147	0.100	0.106	0.106	0.107	0.0850 to 0.115	106	70.0 to 130	0.00	20.0
BD05382	Lithium, Dissolved	mg/L	0.000469	0.0154	0.200	0.234	0.236	0.199	0.170 to 0.230	101	70.0 to 130	0.851	20.0
BD05383	Lithium, Total	mg/L	0.00103	0.0154	0.200	0.194	0.193	0.194	0.170 to 0.230	97.0	70.0 to 130	0.517	20.0
BD05382	Magnesium, Dissolved	mg/L	0.00419	0.0462	5.00	51.2	51.8	4.95	4.25 to 5.75	56.0	70.0 to 130	1.17	20.0
BD05383	Magnesium, Total	mg/L	-0.00905	0.0462	5.00	4.87	4.80	4.80	4.25 to 5.75	97.4	70.0 to 130	1.45	20.0
BD05382	Manganese, Dissolved	mg/L	0.0000061	0.00033	0.100	1.04	1.03	0.107	0.0850 to 0.115	67.0	70.0 to 130	0.966	20.0
BD05383	Manganese, Total	mg/L	-0.0000009	0.00033	0.100	0.101	0.101	0.101	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BD05383	Mercury, Total by CVAA	mg/L	4.000E-05	0.000500	0.004	0.00403	0.00407	0.00405	0.00340 to 0.00460	101	70.0 to 130	0.988	20.0
BD05382	Molybdenum, Dissolved	mg/L	0.000437	0.0100	0.2	0.202	0.204	0.202	0.170 to 0.230	101	70.0 to 130	0.985	20.0
BD05383	Molybdenum, Total	mg/L	0.000	0.0100	0.2	0.197	0.197	0.197	0.170 to 0.230	98.5	70.0 to 130	0.00	20.0
BD05382	Potassium, Dissolved	mg/L	0.0178	0.367	10.0	12.1	11.9	10.1	8.50 to 11.5	99.0	70.0 to 130	1.67	20.0
BD05383	Potassium, Total	mg/L	-0.000205	0.367	10.0	9.90	10.1	9.91	8.50 to 11.5	99.0	70.0 to 130	2.00	20.0
BD05858	Selenium, Dissolved	mg/L	0.0000599	0.00100	0.100	0.101	0.0964	0.105	0.0850 to 0.115	99.7	70.0 to 130	4.66	20.0
BD05383	Selenium, Total	mg/L	0.0000487	0.00100	0.100	0.111	0.110	0.108	0.0850 to 0.115	111	70.0 to 130	0.905	20.0
BD05382	Silicon, Dissolved	mg/L	0.00139	0.0440	1.00	11.6	11.6	1.02	0.850 to 1.15	100	70.0 to 130	0.00	20.0
BD05383	Silicon, Total	mg/L	0.000118	0.0440	1.00	0.984	0.993	0.997	0.850 to 1.15	98.4	70.0 to 130	0.910	20.0
BD05382	Sodium, Dissolved	mg/L	-0.000881	0.0880	5.00	38.9	38.8	4.84	4.25 to 5.75	92.0	70.0 to 130	0.257	20.0
BD05383	Sodium, Total	mg/L	0.00401	0.0880	5.00	4.75	4.71	4.75	4.25 to 5.75	95.0	70.0 to 130	0.846	20.0
BD05381	Sulfate	mg/L	-0.0836	2.0	20.0	28.3	28.5	18.8	18.0 to 22.0	106	80.0 to 120	0.704	20.0
BD05382	Thallium, Dissolved	mg/L	0.0000086	0.000147	0.100	0.105	0.108	0.106	0.0850 to 0.115	105	70.0 to 130	2.82	20.0
BD05383	Thallium, Total	mg/L	0.000	0.000147	0.100	0.106	0.105	0.103	0.0850 to 0.115	106	70.0 to 130	0.948	20.0
BD05383	Total Organic Carbon	mg/L	0.004	1.00	10.0	11.0	11.3	10.6		110	80.0 to 120	2.69	20.0

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/14/23 12:55
Customer ID:
Delivery Date: 3/16/23 09:24

Description: Gorgas Ash Pond - MW-6D

Laboratory ID Number: BD05376

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD05378	Alkalinity to pH 4.5	mg CaCO3/L					43.6	50.5	45.0 to 55.0			0.460	10.0
BD05383	Nitrogen, Nitrate/Nitrite	mg/L as N	0.07	0.200	2.00	2.15	0.083	2.02	1.80 to 2.20	108	90.0 to 110	0.00	15.0
BD05381	Solids, Dissolved	mg/L	0.0000	25.0			255	52.0	40.0 to 60.0			0.393	10.0

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

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

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-23V

Location Code: WMWGORAP
Collected: 3/14/23 14:00
Customer ID:
Submittal Date: 3/16/23 09:24

Laboratory ID Number: BD05377

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	3/17/23 06:40	3/21/23 12:05		1.015	0.409	mg/L	0.030000	0.1015	
* Calcium, Total	3/17/23 06:40	3/21/23 13:28		10.15	73.6	mg/L	0.70035	4.06	
* Iron, Total	3/17/23 06:40	3/21/23 12:05		1.015	0.211	mg/L	0.008120	0.0406	
* Lithium, Total	3/17/23 06:40	3/21/23 12:05		1.015	0.0406	mg/L	0.007105	0.01999956	
* Magnesium, Total	3/17/23 06:40	3/21/23 12:05		1.015	19.0	mg/L	0.021315	0.406	
* Molybdenum, Total	3/17/23 06:40	3/21/23 12:05		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Total (calc.)	3/17/23 06:40	3/21/23 12:05		1	22.7	mg/L			
* Silicon, Total	3/17/23 06:40	3/21/23 12:05		1.015	10.6	mg/L	0.02030	0.25375	
* Sodium, Total	3/17/23 06:40	3/21/23 13:28		10.15	49.5	mg/L	0.4060	4.06	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	3/16/23 13:31	3/22/23 11:33		1.015	0.440	mg/L	0.030000	0.1015	
* Calcium, Dissolved	3/16/23 13:31	3/22/23 13:14		10.15	72.1	mg/L	0.70035	4.06	
* Iron, Dissolved	3/16/23 13:31	3/22/23 11:33		1.015	0.192	mg/L	0.008120	0.0406	
* Lithium, Dissolved	3/16/23 13:31	3/22/23 11:33		1.015	0.0414	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	3/16/23 13:31	3/22/23 11:33		1.015	19.2	mg/L	0.021315	0.406	
* Molybdenum, Dissolved	3/16/23 13:31	3/22/23 11:33		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Dissolved (calc.)	3/16/23 13:31	3/22/23 11:33		1	23.1	mg/L			
* Silicon, Dissolved	3/16/23 13:31	3/22/23 11:33		1.015	10.8	mg/L	0.02030	0.25375	
* Sodium, Dissolved	3/16/23 13:31	3/22/23 13:14		10.15	49.7	mg/L	0.4060	4.06	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/17/23 06:40	3/20/23 12:38		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Total	3/17/23 06:40	3/20/23 12:38		1.015	0.0164	mg/L	0.009135	0.05075	J
* Arsenic, Total	3/17/23 06:40	3/20/23 12:38		1.015	Not Detected	mg/L	0.000112	0.000203	U
* Barium, Total	3/17/23 06:40	3/20/23 12:38		1.015	0.0698	mg/L	0.000508	0.001015	
* Beryllium, Total	3/17/23 06:40	3/20/23 12:38		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	3/17/23 06:40	3/20/23 12:38		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	3/17/23 06:40	3/20/23 12:38		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	3/17/23 06:40	3/20/23 12:38		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	3/17/23 06:40	3/20/23 12:38		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	3/17/23 06:40	3/20/23 12:38		1.015	0.0664	mg/L	0.000152	0.001015	

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

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

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

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-23V

Location Code: WMWGORAP
Collected: 3/14/23 14:00
Customer ID:
Submittal Date: 3/16/23 09:24

Laboratory ID Number: BD05377

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	3/17/23 06:40	3/20/23 12:38		1.015	1.96	mg/L	0.169505	0.5075	
* Selenium, Total	3/17/23 06:40	3/20/23 12:38		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	3/17/23 06:40	3/20/23 12:38		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	3/16/23 13:31	3/16/23 16:38		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	3/16/23 13:31	3/16/23 16:38		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Dissolved	3/16/23 13:31	3/16/23 16:38		1.015	Not Detected	mg/L	0.000112	0.000203	U
* Barium, Dissolved	3/16/23 13:31	3/16/23 16:38		1.015	0.0650	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	3/16/23 13:31	3/16/23 16:38		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	3/16/23 13:31	3/16/23 16:38		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	3/16/23 13:31	3/16/23 16:38		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	3/16/23 13:31	3/16/23 16:38		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Dissolved	3/16/23 13:31	3/16/23 16:38		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	3/16/23 13:31	3/16/23 16:38		1.015	0.0677	mg/L	0.000152	0.001015	
* Potassium, Dissolved	3/16/23 13:31	3/16/23 16:38		1.015	2.01	mg/L	0.169505	0.5075	
* Selenium, Dissolved	3/16/23 13:31	3/16/23 16:38		1.015	0.00101	mg/L	0.000508	0.001015	J
* Thallium, Dissolved	3/16/23 13:31	3/16/23 16:38		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	3/22/23 16:18	3/22/23 21:35		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	3/21/23 12:27	3/21/23 12:27		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
* Alkalinity to pH 4.5	3/24/23 13:02	3/24/23 15:33		1	230	mg CaCO3/L		0.10	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	3/16/23 11:25	3/17/23 13:50		1	418	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
* Bicarbonate Alkalinity, (calc.)	3/24/23 13:02	3/24/23 15:33		1	228	mg CaCO3/L		1	
* Carbonate Alkalinity, (calc.)	3/24/23 13:02	3/24/23 15:33		1	1.91	mg CaCO3/L		0.5	
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	3/16/23 20:53	3/16/23 20:53		1	3.99	mg/L	1.00	2	

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

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

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

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-23V

Location Code: WMWGORAP
Collected: 3/14/23 14:00
Customer ID:
Submittal Date: 3/16/23 09:24

Laboratory ID Number: BD05377

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: CES***								
* Chloride	3/24/23 10:26	3/24/23 10:26		1	5.79	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: CES***								
* Fluoride	3/28/23 10:04	3/28/23 10:04		1	0.189	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	3/21/23 14:20	3/21/23 14:20		5	113	mg/L	3.0	10	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	3/14/23 13:56	3/14/23 13:56			674.91	uS/cm			FA
pH	3/14/23 13:56	3/14/23 13:56			7.37	SU			FA
Temperature	3/14/23 13:56	3/14/23 13:56			16.85	C			FA
Turbidity	3/14/23 13:56	3/14/23 13:56			3.1	NTU			FA
Sulfide	3/14/23 13:56	3/14/23 13:56			0	mg/L			FA

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

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

Reported: 5/3/2023
Version: 3.5
COA_CCR

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/14/23 14:00
Customer ID:
Delivery Date: 3/16/23 09:24

Description: Gorgas Ash Pond - MW-23V

Laboratory ID Number: BD05377

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD05382	Aluminum, Dissolved	mg/L	0.0000168	0.0198	0.100	0.104	0.103	0.105	0.0850 to 0.115	104	70.0 to 130	0.966	20.0
BD05383	Aluminum, Total	mg/L	0.000212	0.0198	0.100	0.101	0.101	0.0988	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BD05382	Antimony, Dissolved	mg/L	0.000232	0.00100	0.100	0.0920	0.0937	0.0947	0.0850 to 0.115	92.0	70.0 to 130	1.83	20.0
BD05383	Antimony, Total	mg/L	0.000202	0.00100	0.100	0.104	0.102	0.101	0.0850 to 0.115	104	70.0 to 130	1.94	20.0
BD05382	Arsenic, Dissolved	mg/L	-0.0000026	0.000200	0.100	0.114	0.113	0.103	0.0850 to 0.115	105	70.0 to 130	0.881	20.0
BD05383	Arsenic, Total	mg/L	0.0000159	0.000200	0.100	0.101	0.102	0.101	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BD05382	Barium, Dissolved	mg/L	-0.0000285	0.00100	0.100	0.117	0.115	0.0969	0.0850 to 0.115	94.8	70.0 to 130	1.72	20.0
BD05383	Barium, Total	mg/L	-0.0000008	0.00100	0.100	0.105	0.104	0.0993	0.0850 to 0.115	105	70.0 to 130	0.957	20.0
BD05382	Beryllium, Dissolved	mg/L	0.0000237	0.000880	0.100	0.103	0.106	0.102	0.0850 to 0.115	103	70.0 to 130	2.87	20.0
BD05383	Beryllium, Total	mg/L	0.0000126	0.000880	0.100	0.0927	0.0942	0.0944	0.0850 to 0.115	92.7	70.0 to 130	1.61	20.0
BD05382	Boron, Dissolved	mg/L	0.000171	0.0650	1.00	1.12	1.13	1.04	0.850 to 1.15	106	70.0 to 130	0.889	20.0
BD05383	Boron, Total	mg/L	0.000173	0.0650	1.00	0.977	0.982	0.982	0.850 to 1.15	97.7	70.0 to 130	0.510	20.0
BD05382	Cadmium, Dissolved	mg/L	0.0000031	0.000147	0.100	0.105	0.102	0.107	0.0850 to 0.115	105	70.0 to 130	2.90	20.0
BD05383	Cadmium, Total	mg/L	-0.0000034	0.000147	0.100	0.105	0.103	0.102	0.0850 to 0.115	105	70.0 to 130	1.92	20.0
BD05382	Calcium, Dissolved	mg/L	-0.00749	0.152	5.00	136	138	5.04	4.25 to 5.75	-40.0	70.0 to 130	1.46	20.0
BD05383	Calcium, Total	mg/L	-0.00687	0.152	5.00	4.94	4.83	4.87	4.25 to 5.75	98.8	70.0 to 130	2.25	20.0
BD05382	Chloride	mg/L	0.180	1.00	10.0	19.3	19.3	9.90	9.00 to 11.0	99.9	80.0 to 120	0.00	20.0
BD05382	Chromium, Dissolved	mg/L	0.0000269	0.000440	0.100	0.102	0.0995	0.103	0.0850 to 0.115	102	70.0 to 130	2.48	20.0
BD05383	Chromium, Total	mg/L	-0.0000126	0.000440	0.100	0.103	0.103	0.104	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BD05382	Cobalt, Dissolved	mg/L	0.0000062	0.000147	0.100	0.104	0.104	0.106	0.0850 to 0.115	104	70.0 to 130	0.00	20.0
BD05383	Cobalt, Total	mg/L	-0.0000089	0.000147	0.100	0.105	0.104	0.104	0.0850 to 0.115	105	70.0 to 130	0.957	20.0
BD05382	Fluoride	mg/L	0.0185	0.125	2.50	2.71	2.83	2.58	2.25 to 2.75	103	80.0 to 120	4.33	20.0
BD05382	Iron, Dissolved	mg/L	-0.000052	0.0176	0.2	3.81	3.81	0.202	0.170 to 0.230	85.0	70.0 to 130	0.00	20.0
BD05383	Iron, Total	mg/L	-0.00265	0.0176	0.2	0.198	0.198	0.199	0.170 to 0.230	99.0	70.0 to 130	0.00	20.0

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

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/14/23 14:00
Customer ID:
Delivery Date: 3/16/23 09:24

Description: Gorgas Ash Pond - MW-23V

Laboratory ID Number: BD05377

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD05382	Lead, Dissolved	mg/L	0.0000058	0.000147	0.100	0.106	0.109	0.104	0.0850 to 0.115	106	70.0 to 130	2.79	20.0
BD05383	Lead, Total	mg/L	0.0000039	0.000147	0.100	0.106	0.106	0.107	0.0850 to 0.115	106	70.0 to 130	0.00	20.0
BD05382	Lithium, Dissolved	mg/L	0.000469	0.0154	0.200	0.234	0.236	0.199	0.170 to 0.230	101	70.0 to 130	0.851	20.0
BD05383	Lithium, Total	mg/L	0.00103	0.0154	0.200	0.194	0.193	0.194	0.170 to 0.230	97.0	70.0 to 130	0.517	20.0
BD05382	Magnesium, Dissolved	mg/L	0.00419	0.0462	5.00	51.2	51.8	4.95	4.25 to 5.75	56.0	70.0 to 130	1.17	20.0
BD05383	Magnesium, Total	mg/L	-0.00905	0.0462	5.00	4.87	4.80	4.80	4.25 to 5.75	97.4	70.0 to 130	1.45	20.0
BD05382	Manganese, Dissolved	mg/L	0.0000061	0.00033	0.100	1.04	1.03	0.107	0.0850 to 0.115	67.0	70.0 to 130	0.966	20.0
BD05383	Manganese, Total	mg/L	-0.0000009	0.00033	0.100	0.101	0.101	0.101	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BD05383	Mercury, Total by CVAA	mg/L	4.000E-05	0.000500	0.004	0.00403	0.00407	0.00405	0.00340 to 0.00460	101	70.0 to 130	0.988	20.0
BD05382	Molybdenum, Dissolved	mg/L	0.000437	0.0100	0.2	0.202	0.204	0.202	0.170 to 0.230	101	70.0 to 130	0.985	20.0
BD05383	Molybdenum, Total	mg/L	0.000	0.0100	0.2	0.197	0.197	0.197	0.170 to 0.230	98.5	70.0 to 130	0.00	20.0
BD05382	Potassium, Dissolved	mg/L	0.0178	0.367	10.0	12.1	11.9	10.1	8.50 to 11.5	99.0	70.0 to 130	1.67	20.0
BD05383	Potassium, Total	mg/L	-0.000205	0.367	10.0	9.90	10.1	9.91	8.50 to 11.5	99.0	70.0 to 130	2.00	20.0
BD05382	Selenium, Dissolved	mg/L	0.0000061	0.00100	0.100	0.110	0.108	0.107	0.0850 to 0.115	110	70.0 to 130	1.83	20.0
BD05383	Selenium, Total	mg/L	0.0000487	0.00100	0.100	0.111	0.110	0.108	0.0850 to 0.115	111	70.0 to 130	0.905	20.0
BD05382	Silicon, Dissolved	mg/L	0.00139	0.0440	1.00	11.6	11.6	1.02	0.850 to 1.15	100	70.0 to 130	0.00	20.0
BD05383	Silicon, Total	mg/L	0.000118	0.0440	1.00	0.984	0.993	0.997	0.850 to 1.15	98.4	70.0 to 130	0.910	20.0
BD05382	Sodium, Dissolved	mg/L	-0.000881	0.0880	5.00	38.9	38.8	4.84	4.25 to 5.75	92.0	70.0 to 130	0.257	20.0
BD05383	Sodium, Total	mg/L	0.00401	0.0880	5.00	4.75	4.71	4.75	4.25 to 5.75	95.0	70.0 to 130	0.846	20.0
BD05381	Sulfate	mg/L	-0.0836	2.0	20.0	28.3	28.5	18.8	18.0 to 22.0	106	80.0 to 120	0.704	20.0
BD05382	Thallium, Dissolved	mg/L	0.0000086	0.000147	0.100	0.105	0.108	0.106	0.0850 to 0.115	105	70.0 to 130	2.82	20.0
BD05383	Thallium, Total	mg/L	0.000	0.000147	0.100	0.106	0.105	0.103	0.0850 to 0.115	106	70.0 to 130	0.948	20.0
BD05383	Total Organic Carbon	mg/L	0.004	1.00	10.0	11.0	11.3	10.6		110	80.0 to 120	2.69	20.0

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

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/14/23 14:00
Customer ID:
Delivery Date: 3/16/23 09:24

Description: Gorgas Ash Pond - MW-23V

Laboratory ID Number: BD05377

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD05378	Alkalinity to pH 4.5	mg CaCO3/L					43.6	50.5	45.0 to 55.0			0.460	10.0
BD05383	Nitrogen, Nitrate/Nitrite	mg/L as N	0.07	0.200	2.00	2.15	0.083	2.02	1.80 to 2.20	108	90.0 to 110	0.00	15.0
BD05381	Solids, Dissolved	mg/L	0.0000	25.0			255	52.0	40.0 to 60.0			0.393	10.0

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

Reported: 5/3/2023
Version: 3.5
COA_CCR

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

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-23H

Location Code: WMWGORAP
Collected: 3/14/23 14:40
Customer ID:
Submittal Date: 3/16/23 09:24

Laboratory ID Number: BD05378

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	3/17/23 06:40	3/21/23 12:08		1.015	0.0377	mg/L	0.030000	0.1015	J
* Calcium, Total	3/17/23 06:40	3/21/23 13:31		101.5	59.5	mg/L	7.0035	40.6	
* Iron, Total	3/17/23 06:40	3/21/23 13:31		101.5	54.1	mg/L	0.8120	4.06	
* Lithium, Total	3/17/23 06:40	3/21/23 12:08		1.015	0.0286	mg/L	0.007105	0.01999956	
* Magnesium, Total	3/17/23 06:40	3/21/23 12:08		1.015	30.2	mg/L	0.021315	0.406	
* Molybdenum, Total	3/17/23 06:40	3/21/23 12:08		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Total (calc.)	3/17/23 06:40	3/21/23 12:08		1	26.8	mg/L			
* Silicon, Total	3/17/23 06:40	3/21/23 12:08		1.015	12.5	mg/L	0.02030	0.25375	
* Sodium, Total	3/17/23 06:40	3/21/23 12:08		1.015	19.6	mg/L	0.04060	0.406	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	3/16/23 13:31	3/22/23 11:36		1.015	0.0442	mg/L	0.030000	0.1015	J
* Calcium, Dissolved	3/16/23 13:31	3/22/23 13:17		101.5	60.3	mg/L	7.0035	40.6	
* Iron, Dissolved	3/16/23 13:31	3/22/23 13:17		101.5	53.6	mg/L	0.8120	4.06	
* Lithium, Dissolved	3/16/23 13:31	3/22/23 11:36		1.015	0.0291	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	3/16/23 13:31	3/22/23 11:36		1.015	30.8	mg/L	0.021315	0.406	
* Molybdenum, Dissolved	3/16/23 13:31	3/22/23 11:36		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Dissolved (calc.)	3/16/23 13:31	3/22/23 11:36		1	26.5	mg/L			
* Silicon, Dissolved	3/16/23 13:31	3/22/23 11:36		1.015	12.4	mg/L	0.02030	0.25375	
* Sodium, Dissolved	3/16/23 13:31	3/22/23 11:36		1.015	20.3	mg/L	0.04060	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/17/23 06:40	3/20/23 12:42		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Total	3/17/23 06:40	3/20/23 12:42		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Total	3/17/23 06:40	3/20/23 12:42		1.015	0.0731	mg/L	0.000112	0.000203	
* Barium, Total	3/17/23 06:40	3/20/23 12:42		1.015	0.0155	mg/L	0.000508	0.001015	
* Beryllium, Total	3/17/23 06:40	3/20/23 12:42		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	3/17/23 06:40	3/20/23 12:42		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	3/17/23 06:40	3/20/23 12:42		1.015	0.000226	mg/L	0.000203	0.001015	J
* Cobalt, Total	3/17/23 06:40	3/20/23 12:42		1.015	0.000974	mg/L	0.000068	0.000203	
* Lead, Total	3/17/23 06:40	3/20/23 12:42		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	3/17/23 06:40	3/20/23 13:28		5.075	1.53	mg/L	0.000761	0.005075	

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

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

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

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-23H

Location Code: WMWGORAP
Collected: 3/14/23 14:40
Customer ID:
Submittal Date: 3/16/23 09:24

Laboratory ID Number: BD05378

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	3/17/23 06:40	3/20/23 12:42		1.015	2.12	mg/L	0.169505	0.5075	
* Selenium, Total	3/17/23 06:40	3/20/23 12:42		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	3/17/23 06:40	3/20/23 12:42		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	3/16/23 13:31	3/16/23 16:42		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	3/16/23 13:31	3/16/23 16:42		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Dissolved	3/16/23 13:31	3/16/23 16:42		1.015	0.0723	mg/L	0.000112	0.000203	
* Barium, Dissolved	3/16/23 13:31	3/16/23 16:42		1.015	0.0143	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	3/16/23 13:31	3/16/23 16:42		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	3/16/23 13:31	3/16/23 16:42		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	3/16/23 13:31	3/16/23 16:42		1.015	0.000223	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	3/16/23 13:31	3/16/23 16:42		1.015	0.000893	mg/L	0.000068	0.000203	
* Lead, Dissolved	3/16/23 13:31	3/16/23 16:42		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	3/16/23 13:31	3/20/23 11:13		5.075	1.39	mg/L	0.000761	0.005075	
* Potassium, Dissolved	3/16/23 13:31	3/16/23 16:42		1.015	2.18	mg/L	0.169505	0.5075	
* Selenium, Dissolved	3/16/23 13:31	3/16/23 16:42		1.015	0.000654	mg/L	0.000508	0.001015	J
* Thallium, Dissolved	3/16/23 13:31	3/16/23 16:42		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	3/22/23 16:18	3/22/23 21:39		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	3/21/23 12:29	3/21/23 12:29		1	0.255	mg/L as N	0.20	0.3	J
Analytical Method: SM 2320 B	***Analyst: ALH***								
* Alkalinity to pH 4.5	3/24/23 13:02	3/24/23 15:33		1	43.4	mg CaCO3/L		0.10	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	3/16/23 11:25	3/17/23 13:50		1	587	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
* Bicarbonate Alkalinity, (calc.)	3/24/23 13:02	3/24/23 15:33		1	43.4	mg CaCO3/L		1	A
* Carbonate Alkalinity, (calc.)	3/24/23 13:02	3/24/23 15:33		1	Not Detected	mg CaCO3/L		0.5	A
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	3/16/23 21:10	3/16/23 21:10		1	3.12	mg/L	1.00	2	

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

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

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

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-23H

Location Code: WMWGORAP
Collected: 3/14/23 14:40
Customer ID:
Submittal Date: 3/16/23 09:24

Laboratory ID Number: BD05378

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: CES***								
* Chloride	3/24/23 10:28	3/24/23 10:28		1	9.24	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: CES***								
* Fluoride	3/28/23 10:05	3/28/23 10:05		1	0.165	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	3/21/23 14:21	3/21/23 14:21		20	292	mg/L	12.0	40	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	3/14/23 14:36	3/14/23 14:36			781.52	uS/cm			FA
pH	3/14/23 14:36	3/14/23 14:36			5.93	SU			FA
Temperature	3/14/23 14:36	3/14/23 14:36			16.74	C			FA
Turbidity	3/14/23 14:36	3/14/23 14:36			1.88	NTU			FA
Sulfide	3/14/23 14:36	3/14/23 14:36			0	mg/L			FA

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

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

Reported: 5/3/2023
Version: 3.5
COA_CCR

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/14/23 14:40
Customer ID:
Delivery Date: 3/16/23 09:24

Description: Gorgas Ash Pond - MW-23H

Laboratory ID Number: BD05378

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD05382	Aluminum, Dissolved	mg/L	0.0000168	0.0198	0.100	0.104	0.103	0.105	0.0850 to 0.115	104	70.0 to 130	0.966	20.0
BD05383	Aluminum, Total	mg/L	0.000212	0.0198	0.100	0.101	0.101	0.0988	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BD05382	Antimony, Dissolved	mg/L	0.000232	0.00100	0.100	0.0920	0.0937	0.0947	0.0850 to 0.115	92.0	70.0 to 130	1.83	20.0
BD05383	Antimony, Total	mg/L	0.000202	0.00100	0.100	0.104	0.102	0.101	0.0850 to 0.115	104	70.0 to 130	1.94	20.0
BD05382	Arsenic, Dissolved	mg/L	-0.0000026	0.000200	0.100	0.114	0.113	0.103	0.0850 to 0.115	105	70.0 to 130	0.881	20.0
BD05383	Arsenic, Total	mg/L	0.0000159	0.000200	0.100	0.101	0.102	0.101	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BD05382	Barium, Dissolved	mg/L	-0.0000285	0.00100	0.100	0.117	0.115	0.0969	0.0850 to 0.115	94.8	70.0 to 130	1.72	20.0
BD05383	Barium, Total	mg/L	-0.0000008	0.00100	0.100	0.105	0.104	0.0993	0.0850 to 0.115	105	70.0 to 130	0.957	20.0
BD05382	Beryllium, Dissolved	mg/L	0.0000237	0.000880	0.100	0.103	0.106	0.102	0.0850 to 0.115	103	70.0 to 130	2.87	20.0
BD05383	Beryllium, Total	mg/L	0.0000126	0.000880	0.100	0.0927	0.0942	0.0944	0.0850 to 0.115	92.7	70.0 to 130	1.61	20.0
BD05382	Boron, Dissolved	mg/L	0.000171	0.0650	1.00	1.12	1.13	1.04	0.850 to 1.15	106	70.0 to 130	0.889	20.0
BD05383	Boron, Total	mg/L	0.000173	0.0650	1.00	0.977	0.982	0.982	0.850 to 1.15	97.7	70.0 to 130	0.510	20.0
BD05382	Cadmium, Dissolved	mg/L	0.0000031	0.000147	0.100	0.105	0.102	0.107	0.0850 to 0.115	105	70.0 to 130	2.90	20.0
BD05383	Cadmium, Total	mg/L	-0.0000034	0.000147	0.100	0.105	0.103	0.102	0.0850 to 0.115	105	70.0 to 130	1.92	20.0
BD05382	Calcium, Dissolved	mg/L	-0.00749	0.152	5.00	136	138	5.04	4.25 to 5.75	-40.0	70.0 to 130	1.46	20.0
BD05383	Calcium, Total	mg/L	-0.00687	0.152	5.00	4.94	4.83	4.87	4.25 to 5.75	98.8	70.0 to 130	2.25	20.0
BD05382	Chloride	mg/L	0.180	1.00	10.0	19.3	19.3	9.90	9.00 to 11.0	99.9	80.0 to 120	0.00	20.0
BD05382	Chromium, Dissolved	mg/L	0.0000269	0.000440	0.100	0.102	0.0995	0.103	0.0850 to 0.115	102	70.0 to 130	2.48	20.0
BD05383	Chromium, Total	mg/L	-0.0000126	0.000440	0.100	0.103	0.103	0.104	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BD05382	Cobalt, Dissolved	mg/L	0.0000062	0.000147	0.100	0.104	0.104	0.106	0.0850 to 0.115	104	70.0 to 130	0.00	20.0
BD05383	Cobalt, Total	mg/L	-0.0000089	0.000147	0.100	0.105	0.104	0.104	0.0850 to 0.115	105	70.0 to 130	0.957	20.0
BD05382	Fluoride	mg/L	0.0185	0.125	2.50	2.71	2.83	2.58	2.25 to 2.75	103	80.0 to 120	4.33	20.0
BD05382	Iron, Dissolved	mg/L	-0.000052	0.0176	0.2	3.81	3.81	0.202	0.170 to 0.230	85.0	70.0 to 130	0.00	20.0
BD05383	Iron, Total	mg/L	-0.00265	0.0176	0.2	0.198	0.198	0.199	0.170 to 0.230	99.0	70.0 to 130	0.00	20.0

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

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/14/23 14:40
Customer ID:
Delivery Date: 3/16/23 09:24

Description: Gorgas Ash Pond - MW-23H

Laboratory ID Number: BD05378

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD05382	Lead, Dissolved	mg/L	0.0000058	0.000147	0.100	0.106	0.109	0.104	0.0850 to 0.115	106	70.0 to 130	2.79	20.0
BD05383	Lead, Total	mg/L	0.0000039	0.000147	0.100	0.106	0.106	0.107	0.0850 to 0.115	106	70.0 to 130	0.00	20.0
BD05382	Lithium, Dissolved	mg/L	0.000469	0.0154	0.200	0.234	0.236	0.199	0.170 to 0.230	101	70.0 to 130	0.851	20.0
BD05383	Lithium, Total	mg/L	0.00103	0.0154	0.200	0.194	0.193	0.194	0.170 to 0.230	97.0	70.0 to 130	0.517	20.0
BD05382	Magnesium, Dissolved	mg/L	0.00419	0.0462	5.00	51.2	51.8	4.95	4.25 to 5.75	56.0	70.0 to 130	1.17	20.0
BD05383	Magnesium, Total	mg/L	-0.00905	0.0462	5.00	4.87	4.80	4.80	4.25 to 5.75	97.4	70.0 to 130	1.45	20.0
BD05382	Manganese, Dissolved	mg/L	0.0000061	0.00033	0.100	1.04	1.03	0.107	0.0850 to 0.115	67.0	70.0 to 130	0.966	20.0
BD05383	Manganese, Total	mg/L	-0.0000009	0.00033	0.100	0.101	0.101	0.101	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BD05383	Mercury, Total by CVAA	mg/L	4.000E-05	0.000500	0.004	0.00403	0.00407	0.00405	0.00340 to 0.00460	101	70.0 to 130	0.988	20.0
BD05382	Molybdenum, Dissolved	mg/L	0.000437	0.0100	0.2	0.202	0.204	0.202	0.170 to 0.230	101	70.0 to 130	0.985	20.0
BD05383	Molybdenum, Total	mg/L	0.000	0.0100	0.2	0.197	0.197	0.197	0.170 to 0.230	98.5	70.0 to 130	0.00	20.0
BD05382	Potassium, Dissolved	mg/L	0.0178	0.367	10.0	12.1	11.9	10.1	8.50 to 11.5	99.0	70.0 to 130	1.67	20.0
BD05383	Potassium, Total	mg/L	-0.000205	0.367	10.0	9.90	10.1	9.91	8.50 to 11.5	99.0	70.0 to 130	2.00	20.0
BD05382	Selenium, Dissolved	mg/L	0.0000061	0.00100	0.100	0.110	0.108	0.107	0.0850 to 0.115	110	70.0 to 130	1.83	20.0
BD05383	Selenium, Total	mg/L	0.0000487	0.00100	0.100	0.111	0.110	0.108	0.0850 to 0.115	111	70.0 to 130	0.905	20.0
BD05382	Silicon, Dissolved	mg/L	0.00139	0.0440	1.00	11.6	11.6	1.02	0.850 to 1.15	100	70.0 to 130	0.00	20.0
BD05383	Silicon, Total	mg/L	0.000118	0.0440	1.00	0.984	0.993	0.997	0.850 to 1.15	98.4	70.0 to 130	0.910	20.0
BD05382	Sodium, Dissolved	mg/L	-0.000881	0.0880	5.00	38.9	38.8	4.84	4.25 to 5.75	92.0	70.0 to 130	0.257	20.0
BD05383	Sodium, Total	mg/L	0.00401	0.0880	5.00	4.75	4.71	4.75	4.25 to 5.75	95.0	70.0 to 130	0.846	20.0
BD05381	Sulfate	mg/L	-0.0836	2.0	20.0	28.3	28.5	18.8	18.0 to 22.0	106	80.0 to 120	0.704	20.0
BD05382	Thallium, Dissolved	mg/L	0.0000086	0.000147	0.100	0.105	0.108	0.106	0.0850 to 0.115	105	70.0 to 130	2.82	20.0
BD05383	Thallium, Total	mg/L	0.000	0.000147	0.100	0.106	0.105	0.103	0.0850 to 0.115	106	70.0 to 130	0.948	20.0
BD05383	Total Organic Carbon	mg/L	0.004	1.00	10.0	11.0	11.3	10.6		110	80.0 to 120	2.69	20.0

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

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/14/23 14:40
Customer ID:
Delivery Date: 3/16/23 09:24

Description: Gorgas Ash Pond - MW-23H

Laboratory ID Number: BD05378

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD05378	Alkalinity to pH 4.5	mg CaCO3/L					43.6	50.5	45.0 to 55.0			0.460	10.0
BD05383	Nitrogen, Nitrate/Nitrite	mg/L as N	0.07	0.200	2.00	2.15	0.083	2.02	1.80 to 2.20	108	90.0 to 110	0.00	15.0
BD05381	Solids, Dissolved	mg/L	0.0000	25.0			255	52.0	40.0 to 60.0			0.393	10.0

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

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

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-41HD

Location Code: WMWGORAP
Collected: 3/15/23 10:55
Customer ID:
Submittal Date: 3/16/23 09:24

Laboratory ID Number: BD05379

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	3/17/23 06:40	3/21/23 12:11		1.015	1.52	mg/L	0.030000	0.1015	
* Calcium, Total	3/17/23 06:40	3/21/23 13:34		10.15	58.9	mg/L	0.70035	4.06	
* Iron, Total	3/17/23 06:40	3/21/23 12:11		1.015	0.0253	mg/L	0.008120	0.0406	J
* Lithium, Total	3/17/23 06:40	3/21/23 12:11		1.015	0.341	mg/L	0.007105	0.01999956	
* Magnesium, Total	3/17/23 06:40	3/21/23 12:11		1.015	17.1	mg/L	0.021315	0.406	
* Molybdenum, Total	3/17/23 06:40	3/21/23 12:11		1.015	0.0339	mg/L	0.005075	0.01015	
* Silica, Total (calc.)	3/17/23 06:40	3/21/23 12:11		1	15.4	mg/L			
* Silicon, Total	3/17/23 06:40	3/21/23 12:11		1.015	7.20	mg/L	0.02030	0.25375	
* Sodium, Total	3/17/23 06:40	3/21/23 12:11		1.015	18.6	mg/L	0.04060	0.406	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	3/16/23 13:31	3/22/23 11:39		1.015	1.60	mg/L	0.030000	0.1015	
* Calcium, Dissolved	3/16/23 13:31	3/22/23 13:20		10.15	55.9	mg/L	0.70035	4.06	
* Iron, Dissolved	3/16/23 13:31	3/22/23 11:39		1.015	0.0256	mg/L	0.008120	0.0406	J
* Lithium, Dissolved	3/16/23 13:31	3/22/23 11:39		1.015	0.351	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	3/16/23 13:31	3/22/23 11:39		1.015	17.4	mg/L	0.021315	0.406	
* Molybdenum, Dissolved	3/16/23 13:31	3/22/23 11:39		1.015	0.0347	mg/L	0.005075	0.01015	
* Silica, Dissolved (calc.)	3/16/23 13:31	3/22/23 11:39		1	15.7	mg/L			
* Silicon, Dissolved	3/16/23 13:31	3/22/23 11:39		1.015	7.33	mg/L	0.02030	0.25375	
* Sodium, Dissolved	3/16/23 13:31	3/22/23 11:39		1.015	18.6	mg/L	0.04060	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/17/23 06:40	3/20/23 12:45		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Total	3/17/23 06:40	3/20/23 12:45		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Total	3/17/23 06:40	3/20/23 12:45		1.015	0.00301	mg/L	0.000112	0.000203	
* Barium, Total	3/17/23 06:40	3/20/23 12:45		1.015	0.0511	mg/L	0.000508	0.001015	
* Beryllium, Total	3/17/23 06:40	3/20/23 12:45		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	3/17/23 06:40	3/20/23 12:45		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	3/17/23 06:40	3/20/23 12:45		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	3/17/23 06:40	3/20/23 12:45		1.015	0.000970	mg/L	0.000068	0.000203	
* Lead, Total	3/17/23 06:40	3/20/23 12:45		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	3/17/23 06:40	3/20/23 12:45		1.015	0.598	mg/L	0.000152	0.001015	

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

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

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

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-41HD

Location Code: WMWGORAP
Collected: 3/15/23 10:55
Customer ID:
Submittal Date: 3/16/23 09:24

Laboratory ID Number: BD05379

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	3/17/23 06:40	3/20/23 12:45		1.015	1.69	mg/L	0.169505	0.5075	
* Selenium, Total	3/17/23 06:40	3/20/23 12:45		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	3/17/23 06:40	3/20/23 12:45		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	3/16/23 13:31	3/16/23 16:45		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	3/16/23 13:31	3/16/23 16:45		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Dissolved	3/16/23 13:31	3/16/23 16:45		1.015	0.00314	mg/L	0.000112	0.000203	
* Barium, Dissolved	3/16/23 13:31	3/16/23 16:45		1.015	0.0474	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	3/16/23 13:31	3/16/23 16:45		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	3/16/23 13:31	3/16/23 16:45		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	3/16/23 13:31	3/16/23 16:45		1.015	0.000206	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	3/16/23 13:31	3/16/23 16:45		1.015	0.00102	mg/L	0.000068	0.000203	
* Lead, Dissolved	3/16/23 13:31	3/16/23 16:45		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	3/16/23 13:31	3/16/23 16:45		1.015	0.638	mg/L	0.000152	0.001015	
* Potassium, Dissolved	3/16/23 13:31	3/16/23 16:45		1.015	1.70	mg/L	0.169505	0.5075	
* Selenium, Dissolved	3/16/23 13:31	3/16/23 16:45		1.015	0.000908	mg/L	0.000508	0.001015	J
* Thallium, Dissolved	3/16/23 13:31	3/16/23 16:45		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	3/22/23 16:18	3/22/23 21:42		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	3/21/23 12:31	3/21/23 12:31		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
* Alkalinity to pH 4.5	3/28/23 13:30	3/28/23 15:24		1	131	mg CaCO3/L		0.10	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	3/16/23 11:25	3/17/23 13:50		1	317	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
* Bicarbonate Alkalinity, (calc.)	3/28/23 13:30	3/28/23 15:24		1	130	mg CaCO3/L		1	
* Carbonate Alkalinity, (calc.)	3/28/23 13:30	3/28/23 15:24		1	1.11	mg CaCO3/L		0.5	
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	3/16/23 21:23	3/16/23 21:23		1	2.53	mg/L	1.00	2	

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

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

Reported: 5/3/2023
Version: 3.5
COA_CCR

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

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-41HD

Location Code: WMWGORAP
Collected: 3/15/23 10:55
Customer ID:
Submittal Date: 3/16/23 09:24

Laboratory ID Number: BD05379

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: CES***								
* Chloride	3/24/23 10:29	3/24/23 10:29		1	7.05	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: CES***								
* Fluoride	3/28/23 10:06	3/28/23 10:06		1	0.180	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	3/21/23 14:23	3/21/23 14:23		5	103	mg/L	3.0	10	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	3/15/23 10:50	3/15/23 10:50			487.34	uS/cm			FA
pH	3/15/23 10:50	3/15/23 10:50			7.43	SU			FA
Temperature	3/15/23 10:50	3/15/23 10:50			15.72	C			FA
Turbidity	3/15/23 10:50	3/15/23 10:50			0.28	NTU			FA
Sulfide	3/15/23 10:50	3/15/23 10:50			0	mg/L			FA

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

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

Reported: 5/3/2023
Version: 3.5
COA_CCR

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/15/23 10:55
Customer ID:
Delivery Date: 3/16/23 09:24

Description: Gorgas Ash Pond - MW-41HD

Laboratory ID Number: BD05379

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD05382	Aluminum, Dissolved	mg/L	0.0000168	0.0198	0.100	0.104	0.103	0.105	0.0850 to 0.115	104	70.0 to 130	0.966	20.0
BD05383	Aluminum, Total	mg/L	0.000212	0.0198	0.100	0.101	0.101	0.0988	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BD05382	Antimony, Dissolved	mg/L	0.000232	0.00100	0.100	0.0920	0.0937	0.0947	0.0850 to 0.115	92.0	70.0 to 130	1.83	20.0
BD05383	Antimony, Total	mg/L	0.000202	0.00100	0.100	0.104	0.102	0.101	0.0850 to 0.115	104	70.0 to 130	1.94	20.0
BD05382	Arsenic, Dissolved	mg/L	-0.0000026	0.000200	0.100	0.114	0.113	0.103	0.0850 to 0.115	105	70.0 to 130	0.881	20.0
BD05383	Arsenic, Total	mg/L	0.0000159	0.000200	0.100	0.101	0.102	0.101	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BD05382	Barium, Dissolved	mg/L	-0.0000285	0.00100	0.100	0.117	0.115	0.0969	0.0850 to 0.115	94.8	70.0 to 130	1.72	20.0
BD05383	Barium, Total	mg/L	-0.0000008	0.00100	0.100	0.105	0.104	0.0993	0.0850 to 0.115	105	70.0 to 130	0.957	20.0
BD05382	Beryllium, Dissolved	mg/L	0.0000237	0.000880	0.100	0.103	0.106	0.102	0.0850 to 0.115	103	70.0 to 130	2.87	20.0
BD05383	Beryllium, Total	mg/L	0.0000126	0.000880	0.100	0.0927	0.0942	0.0944	0.0850 to 0.115	92.7	70.0 to 130	1.61	20.0
BD05382	Boron, Dissolved	mg/L	0.000171	0.0650	1.00	1.12	1.13	1.04	0.850 to 1.15	106	70.0 to 130	0.889	20.0
BD05383	Boron, Total	mg/L	0.000173	0.0650	1.00	0.977	0.982	0.982	0.850 to 1.15	97.7	70.0 to 130	0.510	20.0
BD05382	Cadmium, Dissolved	mg/L	0.0000031	0.000147	0.100	0.105	0.102	0.107	0.0850 to 0.115	105	70.0 to 130	2.90	20.0
BD05383	Cadmium, Total	mg/L	-0.0000034	0.000147	0.100	0.105	0.103	0.102	0.0850 to 0.115	105	70.0 to 130	1.92	20.0
BD05382	Calcium, Dissolved	mg/L	-0.00749	0.152	5.00	136	138	5.04	4.25 to 5.75	-40.0	70.0 to 130	1.46	20.0
BD05383	Calcium, Total	mg/L	-0.00687	0.152	5.00	4.94	4.83	4.87	4.25 to 5.75	98.8	70.0 to 130	2.25	20.0
BD05382	Chloride	mg/L	0.180	1.00	10.0	19.3	19.3	9.90	9.00 to 11.0	99.9	80.0 to 120	0.00	20.0
BD05382	Chromium, Dissolved	mg/L	0.0000269	0.000440	0.100	0.102	0.0995	0.103	0.0850 to 0.115	102	70.0 to 130	2.48	20.0
BD05383	Chromium, Total	mg/L	-0.0000126	0.000440	0.100	0.103	0.103	0.104	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BD05382	Cobalt, Dissolved	mg/L	0.0000062	0.000147	0.100	0.104	0.104	0.106	0.0850 to 0.115	104	70.0 to 130	0.00	20.0
BD05383	Cobalt, Total	mg/L	-0.0000089	0.000147	0.100	0.105	0.104	0.104	0.0850 to 0.115	105	70.0 to 130	0.957	20.0
BD05382	Fluoride	mg/L	0.0185	0.125	2.50	2.71	2.83	2.58	2.25 to 2.75	103	80.0 to 120	4.33	20.0
BD05382	Iron, Dissolved	mg/L	-0.000052	0.0176	0.2	3.81	3.81	0.202	0.170 to 0.230	85.0	70.0 to 130	0.00	20.0
BD05383	Iron, Total	mg/L	-0.00265	0.0176	0.2	0.198	0.198	0.199	0.170 to 0.230	99.0	70.0 to 130	0.00	20.0

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/15/23 10:55
Customer ID:
Delivery Date: 3/16/23 09:24

Description: Gorgas Ash Pond - MW-41HD

Laboratory ID Number: BD05379

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD05382	Lead, Dissolved	mg/L	0.0000058	0.000147	0.100	0.106	0.109	0.104	0.0850 to 0.115	106	70.0 to 130	2.79	20.0
BD05383	Lead, Total	mg/L	0.0000039	0.000147	0.100	0.106	0.106	0.107	0.0850 to 0.115	106	70.0 to 130	0.00	20.0
BD05382	Lithium, Dissolved	mg/L	0.000469	0.0154	0.200	0.234	0.236	0.199	0.170 to 0.230	101	70.0 to 130	0.851	20.0
BD05383	Lithium, Total	mg/L	0.00103	0.0154	0.200	0.194	0.193	0.194	0.170 to 0.230	97.0	70.0 to 130	0.517	20.0
BD05382	Magnesium, Dissolved	mg/L	0.00419	0.0462	5.00	51.2	51.8	4.95	4.25 to 5.75	56.0	70.0 to 130	1.17	20.0
BD05383	Magnesium, Total	mg/L	-0.00905	0.0462	5.00	4.87	4.80	4.80	4.25 to 5.75	97.4	70.0 to 130	1.45	20.0
BD05382	Manganese, Dissolved	mg/L	0.0000061	0.00033	0.100	1.04	1.03	0.107	0.0850 to 0.115	67.0	70.0 to 130	0.966	20.0
BD05383	Manganese, Total	mg/L	-0.0000009	0.00033	0.100	0.101	0.101	0.101	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BD05383	Mercury, Total by CVAA	mg/L	4.000E-05	0.000500	0.004	0.00403	0.00407	0.00405	0.00340 to 0.00460	101	70.0 to 130	0.988	20.0
BD05382	Molybdenum, Dissolved	mg/L	0.000437	0.0100	0.2	0.202	0.204	0.202	0.170 to 0.230	101	70.0 to 130	0.985	20.0
BD05383	Molybdenum, Total	mg/L	0.000	0.0100	0.2	0.197	0.197	0.197	0.170 to 0.230	98.5	70.0 to 130	0.00	20.0
BD05382	Potassium, Dissolved	mg/L	0.0178	0.367	10.0	12.1	11.9	10.1	8.50 to 11.5	99.0	70.0 to 130	1.67	20.0
BD05383	Potassium, Total	mg/L	-0.000205	0.367	10.0	9.90	10.1	9.91	8.50 to 11.5	99.0	70.0 to 130	2.00	20.0
BD05382	Selenium, Dissolved	mg/L	0.0000061	0.00100	0.100	0.110	0.108	0.107	0.0850 to 0.115	110	70.0 to 130	1.83	20.0
BD05383	Selenium, Total	mg/L	0.0000487	0.00100	0.100	0.111	0.110	0.108	0.0850 to 0.115	111	70.0 to 130	0.905	20.0
BD05382	Silicon, Dissolved	mg/L	0.00139	0.0440	1.00	11.6	11.6	1.02	0.850 to 1.15	100	70.0 to 130	0.00	20.0
BD05383	Silicon, Total	mg/L	0.000118	0.0440	1.00	0.984	0.993	0.997	0.850 to 1.15	98.4	70.0 to 130	0.910	20.0
BD05382	Sodium, Dissolved	mg/L	-0.000881	0.0880	5.00	38.9	38.8	4.84	4.25 to 5.75	92.0	70.0 to 130	0.257	20.0
BD05383	Sodium, Total	mg/L	0.00401	0.0880	5.00	4.75	4.71	4.75	4.25 to 5.75	95.0	70.0 to 130	0.846	20.0
BD05381	Sulfate	mg/L	-0.0836	2.0	20.0	28.3	28.5	18.8	18.0 to 22.0	106	80.0 to 120	0.704	20.0
BD05382	Thallium, Dissolved	mg/L	0.0000086	0.000147	0.100	0.105	0.108	0.106	0.0850 to 0.115	105	70.0 to 130	2.82	20.0
BD05383	Thallium, Total	mg/L	0.000	0.000147	0.100	0.106	0.105	0.103	0.0850 to 0.115	106	70.0 to 130	0.948	20.0
BD05383	Total Organic Carbon	mg/L	0.004	1.00	10.0	11.0	11.3	10.6		110	80.0 to 120	2.69	20.0

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

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/15/23 10:55
Customer ID:
Delivery Date: 3/16/23 09:24

Description: Gorgas Ash Pond - MW-41HD

Laboratory ID Number: BD05379

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD05870	Alkalinity to pH 4.5	mg CaCO3/L					247	50.3	45.0 to 55.0			0.406	10.0
BD05383	Nitrogen, Nitrate/Nitrite	mg/L as N	0.07	0.200	2.00	2.15	0.083	2.02	1.80 to 2.20	108	90.0 to 110	0.00	15.0
BD05381	Solids, Dissolved	mg/L	0.0000	25.0			255	52.0	40.0 to 60.0			0.393	10.0

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

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

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-24H

Location Code: WMWGORAP
Collected: 3/15/23 12:30
Customer ID:
Submittal Date: 3/16/23 09:24

Laboratory ID Number: BD05380

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	3/17/23 06:40	3/21/23 12:14		1.015	0.0674	mg/L	0.030000	0.1015	J
* Calcium, Total	3/17/23 06:40	3/21/23 13:37		10.15	41.2	mg/L	0.70035	4.06	
* Iron, Total	3/17/23 06:40	3/21/23 12:14		1.015	1.91	mg/L	0.008120	0.0406	
* Lithium, Total	3/17/23 06:40	3/21/23 12:14		1.015	0.0238	mg/L	0.007105	0.01999956	
* Magnesium, Total	3/17/23 06:40	3/21/23 12:14		1.015	13.4	mg/L	0.021315	0.406	
* Molybdenum, Total	3/17/23 06:40	3/21/23 12:14		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Total (calc.)	3/17/23 06:40	3/21/23 12:14		1	28.2	mg/L			
* Silicon, Total	3/17/23 06:40	3/21/23 12:14		1.015	13.2	mg/L	0.02030	0.25375	
* Sodium, Total	3/17/23 06:40	3/21/23 12:14		1.015	30.3	mg/L	0.04060	0.406	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	3/16/23 13:31	3/22/23 11:42		1.015	0.0729	mg/L	0.030000	0.1015	J
* Calcium, Dissolved	3/16/23 13:31	3/22/23 13:23		10.15	44.8	mg/L	0.70035	4.06	
* Iron, Dissolved	3/16/23 13:31	3/22/23 11:42		1.015	1.80	mg/L	0.008120	0.0406	
* Lithium, Dissolved	3/16/23 13:31	3/22/23 11:42		1.015	0.0234	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	3/16/23 13:31	3/22/23 11:42		1.015	13.6	mg/L	0.021315	0.406	
* Molybdenum, Dissolved	3/16/23 13:31	3/22/23 11:42		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Dissolved (calc.)	3/16/23 13:31	3/22/23 11:42		1	28.7	mg/L			
* Silicon, Dissolved	3/16/23 13:31	3/22/23 11:42		1.015	13.4	mg/L	0.02030	0.25375	
* Sodium, Dissolved	3/16/23 13:31	3/22/23 11:42		1.015	30.3	mg/L	0.04060	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/17/23 06:40	3/20/23 12:49		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Total	3/17/23 06:40	3/20/23 12:49		1.015	0.0393	mg/L	0.009135	0.05075	J
* Arsenic, Total	3/17/23 06:40	3/20/23 12:49		1.015	0.000211	mg/L	0.000112	0.000203	
* Barium, Total	3/17/23 06:40	3/20/23 12:49		1.015	1.08	mg/L	0.000508	0.001015	
* Beryllium, Total	3/17/23 06:40	3/20/23 12:49		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	3/17/23 06:40	3/20/23 12:49		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	3/17/23 06:40	3/20/23 12:49		1.015	0.000208	mg/L	0.000203	0.001015	J
* Cobalt, Total	3/17/23 06:40	3/20/23 12:49		1.015	0.000286	mg/L	0.000068	0.000203	
* Lead, Total	3/17/23 06:40	3/20/23 12:49		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	3/17/23 06:40	3/20/23 12:49		1.015	0.101	mg/L	0.000152	0.001015	

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

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

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

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-24H

Location Code: WMWGORAP
Collected: 3/15/23 12:30
Customer ID:
Submittal Date: 3/16/23 09:24

Laboratory ID Number: BD05380

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	3/17/23 06:40	3/20/23 12:49		1.015	1.44	mg/L	0.169505	0.5075	
* Selenium, Total	3/17/23 06:40	3/20/23 12:49		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	3/17/23 06:40	3/20/23 12:49		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	3/16/23 13:31	3/16/23 16:49		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	3/16/23 13:31	3/16/23 16:49		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Dissolved	3/16/23 13:31	3/16/23 16:49		1.015	0.000158	mg/L	0.000112	0.000203	J
* Barium, Dissolved	3/16/23 13:31	3/16/23 16:49		1.015	0.960	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	3/16/23 13:31	3/16/23 16:49		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	3/16/23 13:31	3/16/23 16:49		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	3/16/23 13:31	3/16/23 16:49		1.015	0.000209	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	3/16/23 13:31	3/16/23 16:49		1.015	0.000256	mg/L	0.000068	0.000203	
* Lead, Dissolved	3/16/23 13:31	3/16/23 16:49		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	3/16/23 13:31	3/16/23 16:49		1.015	0.104	mg/L	0.000152	0.001015	
* Potassium, Dissolved	3/16/23 13:31	3/16/23 16:49		1.015	1.46	mg/L	0.169505	0.5075	
* Selenium, Dissolved	3/16/23 13:31	3/16/23 16:49		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	3/16/23 13:31	3/16/23 16:49		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	3/22/23 16:18	3/22/23 21:46		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	3/21/23 12:32	3/21/23 12:32		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
* Alkalinity to pH 4.5	3/28/23 13:30	3/28/23 15:24		1	219	mg CaCO3/L		0.10	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	3/16/23 11:25	3/17/23 13:50		1	255	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
* Bicarbonate Alkalinity, (calc.)	3/28/23 13:30	3/28/23 15:24		1	218	mg CaCO3/L		1	
* Carbonate Alkalinity, (calc.)	3/28/23 13:30	3/28/23 15:24		1	0.855	mg CaCO3/L		0.5	
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	3/16/23 21:41	3/16/23 21:41		1	3.76	mg/L	1.00	2	

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

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

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

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-24H

Location Code: WMWGORAP
Collected: 3/15/23 12:30
Customer ID:
Submittal Date: 3/16/23 09:24

Laboratory ID Number: BD05380

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: CES***								
* Chloride	3/24/23 10:30	3/24/23 10:30		1	2.88	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: CES***								
* Fluoride	3/28/23 10:08	3/28/23 10:08		1	0.172	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	3/21/23 14:09	3/21/23 14:09		1	7.51	mg/L	0.6	2	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	3/15/23 12:26	3/15/23 12:26			405.33	uS/cm			FA
pH	3/15/23 12:26	3/15/23 12:26			6.93	SU			FA
Temperature	3/15/23 12:26	3/15/23 12:26			17.20	C			FA
Turbidity	3/15/23 12:26	3/15/23 12:26			1.86	NTU			FA
Sulfide	3/15/23 12:26	3/15/23 12:26			0	mg/L			FA

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

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

Reported: 5/3/2023
Version: 3.5
COA_CCR

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/15/23 12:30
Customer ID:
Delivery Date: 3/16/23 09:24

Description: Gorgas Ash Pond - MW-24H

Laboratory ID Number: BD05380

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD05382	Aluminum, Dissolved	mg/L	0.0000168	0.0198	0.100	0.104	0.103	0.105	0.0850 to 0.115	104	70.0 to 130	0.966	20.0
BD05383	Aluminum, Total	mg/L	0.000212	0.0198	0.100	0.101	0.101	0.0988	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BD05382	Antimony, Dissolved	mg/L	0.000232	0.00100	0.100	0.0920	0.0937	0.0947	0.0850 to 0.115	92.0	70.0 to 130	1.83	20.0
BD05383	Antimony, Total	mg/L	0.000202	0.00100	0.100	0.104	0.102	0.101	0.0850 to 0.115	104	70.0 to 130	1.94	20.0
BD05382	Arsenic, Dissolved	mg/L	-0.0000026	0.000200	0.100	0.114	0.113	0.103	0.0850 to 0.115	105	70.0 to 130	0.881	20.0
BD05383	Arsenic, Total	mg/L	0.0000159	0.000200	0.100	0.101	0.102	0.101	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BD05382	Barium, Dissolved	mg/L	-0.0000285	0.00100	0.100	0.117	0.115	0.0969	0.0850 to 0.115	94.8	70.0 to 130	1.72	20.0
BD05383	Barium, Total	mg/L	-0.0000008	0.00100	0.100	0.105	0.104	0.0993	0.0850 to 0.115	105	70.0 to 130	0.957	20.0
BD05382	Beryllium, Dissolved	mg/L	0.0000237	0.000880	0.100	0.103	0.106	0.102	0.0850 to 0.115	103	70.0 to 130	2.87	20.0
BD05383	Beryllium, Total	mg/L	0.0000126	0.000880	0.100	0.0927	0.0942	0.0944	0.0850 to 0.115	92.7	70.0 to 130	1.61	20.0
BD05382	Boron, Dissolved	mg/L	0.000171	0.0650	1.00	1.12	1.13	1.04	0.850 to 1.15	106	70.0 to 130	0.889	20.0
BD05383	Boron, Total	mg/L	0.000173	0.0650	1.00	0.977	0.982	0.982	0.850 to 1.15	97.7	70.0 to 130	0.510	20.0
BD05382	Cadmium, Dissolved	mg/L	0.0000031	0.000147	0.100	0.105	0.102	0.107	0.0850 to 0.115	105	70.0 to 130	2.90	20.0
BD05383	Cadmium, Total	mg/L	-0.0000034	0.000147	0.100	0.105	0.103	0.102	0.0850 to 0.115	105	70.0 to 130	1.92	20.0
BD05382	Calcium, Dissolved	mg/L	-0.00749	0.152	5.00	136	138	5.04	4.25 to 5.75	-40.0	70.0 to 130	1.46	20.0
BD05383	Calcium, Total	mg/L	-0.00687	0.152	5.00	4.94	4.83	4.87	4.25 to 5.75	98.8	70.0 to 130	2.25	20.0
BD05382	Chloride	mg/L	0.180	1.00	10.0	19.3	19.3	9.90	9.00 to 11.0	99.9	80.0 to 120	0.00	20.0
BD05382	Chromium, Dissolved	mg/L	0.0000269	0.000440	0.100	0.102	0.0995	0.103	0.0850 to 0.115	102	70.0 to 130	2.48	20.0
BD05383	Chromium, Total	mg/L	-0.0000126	0.000440	0.100	0.103	0.103	0.104	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BD05382	Cobalt, Dissolved	mg/L	0.0000062	0.000147	0.100	0.104	0.104	0.106	0.0850 to 0.115	104	70.0 to 130	0.00	20.0
BD05383	Cobalt, Total	mg/L	-0.0000089	0.000147	0.100	0.105	0.104	0.104	0.0850 to 0.115	105	70.0 to 130	0.957	20.0
BD05382	Fluoride	mg/L	0.0185	0.125	2.50	2.71	2.83	2.58	2.25 to 2.75	103	80.0 to 120	4.33	20.0
BD05382	Iron, Dissolved	mg/L	-0.000052	0.0176	0.2	3.81	3.81	0.202	0.170 to 0.230	85.0	70.0 to 130	0.00	20.0
BD05383	Iron, Total	mg/L	-0.00265	0.0176	0.2	0.198	0.198	0.199	0.170 to 0.230	99.0	70.0 to 130	0.00	20.0

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/15/23 12:30
Customer ID:
Delivery Date: 3/16/23 09:24

Description: Gorgas Ash Pond - MW-24H

Laboratory ID Number: BD05380

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD05382	Lead, Dissolved	mg/L	0.0000058	0.000147	0.100	0.106	0.109	0.104	0.0850 to 0.115	106	70.0 to 130	2.79	20.0
BD05383	Lead, Total	mg/L	0.0000039	0.000147	0.100	0.106	0.106	0.107	0.0850 to 0.115	106	70.0 to 130	0.00	20.0
BD05382	Lithium, Dissolved	mg/L	0.000469	0.0154	0.200	0.234	0.236	0.199	0.170 to 0.230	101	70.0 to 130	0.851	20.0
BD05383	Lithium, Total	mg/L	0.00103	0.0154	0.200	0.194	0.193	0.194	0.170 to 0.230	97.0	70.0 to 130	0.517	20.0
BD05382	Magnesium, Dissolved	mg/L	0.00419	0.0462	5.00	51.2	51.8	4.95	4.25 to 5.75	56.0	70.0 to 130	1.17	20.0
BD05383	Magnesium, Total	mg/L	-0.00905	0.0462	5.00	4.87	4.80	4.80	4.25 to 5.75	97.4	70.0 to 130	1.45	20.0
BD05382	Manganese, Dissolved	mg/L	0.0000061	0.00033	0.100	1.04	1.03	0.107	0.0850 to 0.115	67.0	70.0 to 130	0.966	20.0
BD05383	Manganese, Total	mg/L	-0.0000009	0.00033	0.100	0.101	0.101	0.101	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BD05383	Mercury, Total by CVAA	mg/L	4.000E-05	0.000500	0.004	0.00403	0.00407	0.00405	0.00340 to 0.00460	101	70.0 to 130	0.988	20.0
BD05382	Molybdenum, Dissolved	mg/L	0.000437	0.0100	0.2	0.202	0.204	0.202	0.170 to 0.230	101	70.0 to 130	0.985	20.0
BD05383	Molybdenum, Total	mg/L	0.000	0.0100	0.2	0.197	0.197	0.197	0.170 to 0.230	98.5	70.0 to 130	0.00	20.0
BD05382	Potassium, Dissolved	mg/L	0.0178	0.367	10.0	12.1	11.9	10.1	8.50 to 11.5	99.0	70.0 to 130	1.67	20.0
BD05383	Potassium, Total	mg/L	-0.000205	0.367	10.0	9.90	10.1	9.91	8.50 to 11.5	99.0	70.0 to 130	2.00	20.0
BD05382	Selenium, Dissolved	mg/L	0.0000061	0.00100	0.100	0.110	0.108	0.107	0.0850 to 0.115	110	70.0 to 130	1.83	20.0
BD05383	Selenium, Total	mg/L	0.0000487	0.00100	0.100	0.111	0.110	0.108	0.0850 to 0.115	111	70.0 to 130	0.905	20.0
BD05382	Silicon, Dissolved	mg/L	0.00139	0.0440	1.00	11.6	11.6	1.02	0.850 to 1.15	100	70.0 to 130	0.00	20.0
BD05383	Silicon, Total	mg/L	0.000118	0.0440	1.00	0.984	0.993	0.997	0.850 to 1.15	98.4	70.0 to 130	0.910	20.0
BD05382	Sodium, Dissolved	mg/L	-0.000881	0.0880	5.00	38.9	38.8	4.84	4.25 to 5.75	92.0	70.0 to 130	0.257	20.0
BD05383	Sodium, Total	mg/L	0.00401	0.0880	5.00	4.75	4.71	4.75	4.25 to 5.75	95.0	70.0 to 130	0.846	20.0
BD05381	Sulfate	mg/L	-0.0836	2.0	20.0	28.3	28.5	18.8	18.0 to 22.0	106	80.0 to 120	0.704	20.0
BD05382	Thallium, Dissolved	mg/L	0.0000086	0.000147	0.100	0.105	0.108	0.106	0.0850 to 0.115	105	70.0 to 130	2.82	20.0
BD05383	Thallium, Total	mg/L	0.000	0.000147	0.100	0.106	0.105	0.103	0.0850 to 0.115	106	70.0 to 130	0.948	20.0
BD05383	Total Organic Carbon	mg/L	0.004	1.00	10.0	11.0	11.3	10.6		110	80.0 to 120	2.69	20.0

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

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/15/23 12:30
Customer ID:
Delivery Date: 3/16/23 09:24

Description: Gorgas Ash Pond - MW-24H

Laboratory ID Number: BD05380

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD05870	Alkalinity to pH 4.5	mg CaCO3/L					247	50.3	45.0 to 55.0			0.406	10.0
BD05383	Nitrogen, Nitrate/Nitrite	mg/L as N	0.07	0.200	2.00	2.15	0.083	2.02	1.80 to 2.20	108	90.0 to 110	0.00	15.0
BD05381	Solids, Dissolved	mg/L	0.0000	25.0			255	52.0	40.0 to 60.0			0.393	10.0

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

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-24H Dup

Location Code: WMWGORAP
Collected: 3/15/23 12:30
Customer ID:
Submittal Date: 3/16/23 09:24

Laboratory ID Number: BD05381

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	3/17/23 06:40	3/21/23 12:17		1.015	0.0677	mg/L	0.030000	0.1015	J
* Calcium, Total	3/17/23 06:40	3/21/23 13:40		10.15	40.8	mg/L	0.70035	4.06	
* Iron, Total	3/17/23 06:40	3/21/23 12:17		1.015	1.91	mg/L	0.008120	0.0406	
* Lithium, Total	3/17/23 06:40	3/21/23 12:17		1.015	0.0233	mg/L	0.007105	0.01999956	
* Magnesium, Total	3/17/23 06:40	3/21/23 12:17		1.015	13.4	mg/L	0.021315	0.406	
* Molybdenum, Total	3/17/23 06:40	3/21/23 12:17		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Total (calc.)	3/17/23 06:40	3/21/23 12:17		1	28.2	mg/L			
* Silicon, Total	3/17/23 06:40	3/21/23 12:17		1.015	13.2	mg/L	0.02030	0.25375	
* Sodium, Total	3/17/23 06:40	3/21/23 12:17		1.015	30.1	mg/L	0.04060	0.406	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	3/16/23 13:31	3/22/23 11:45		1.015	0.0725	mg/L	0.030000	0.1015	J
* Calcium, Dissolved	3/16/23 13:31	3/22/23 13:26		10.15	43.6	mg/L	0.70035	4.06	
* Iron, Dissolved	3/16/23 13:31	3/22/23 11:45		1.015	1.81	mg/L	0.008120	0.0406	
* Lithium, Dissolved	3/16/23 13:31	3/22/23 11:45		1.015	0.0228	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	3/16/23 13:31	3/22/23 11:45		1.015	13.5	mg/L	0.021315	0.406	
* Molybdenum, Dissolved	3/16/23 13:31	3/22/23 11:45		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Dissolved (calc.)	3/16/23 13:31	3/22/23 11:45		1	28.5	mg/L			
* Silicon, Dissolved	3/16/23 13:31	3/22/23 11:45		1.015	13.3	mg/L	0.02030	0.25375	
* Sodium, Dissolved	3/16/23 13:31	3/22/23 11:45		1.015	30.2	mg/L	0.04060	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/17/23 06:40	3/20/23 12:52		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Total	3/17/23 06:40	3/20/23 12:52		1.015	0.0349	mg/L	0.009135	0.05075	J
* Arsenic, Total	3/17/23 06:40	3/20/23 12:52		1.015	0.000226	mg/L	0.000112	0.000203	
* Barium, Total	3/17/23 06:40	3/20/23 12:52		1.015	1.08	mg/L	0.000508	0.001015	
* Beryllium, Total	3/17/23 06:40	3/20/23 12:52		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	3/17/23 06:40	3/20/23 12:52		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	3/17/23 06:40	3/20/23 12:52		1.015	0.000227	mg/L	0.000203	0.001015	J
* Cobalt, Total	3/17/23 06:40	3/20/23 12:52		1.015	0.000255	mg/L	0.000068	0.000203	
* Lead, Total	3/17/23 06:40	3/20/23 12:52		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	3/17/23 06:40	3/20/23 12:52		1.015	0.102	mg/L	0.000152	0.001015	

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

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

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

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-24H Dup

Location Code: WMWGORAP
Collected: 3/15/23 12:30
Customer ID:
Submittal Date: 3/16/23 09:24

Laboratory ID Number: BD05381

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	3/17/23 06:40	3/20/23 12:52		1.015	1.45	mg/L	0.169505	0.5075	
* Selenium, Total	3/17/23 06:40	3/20/23 12:52		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	3/17/23 06:40	3/20/23 12:52		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	3/16/23 13:31	3/16/23 16:52		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	3/16/23 13:31	3/16/23 16:52		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Dissolved	3/16/23 13:31	3/16/23 16:52		1.015	0.000208	mg/L	0.000112	0.000203	
* Barium, Dissolved	3/16/23 13:31	3/16/23 16:52		1.015	0.983	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	3/16/23 13:31	3/16/23 16:52		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	3/16/23 13:31	3/16/23 16:52		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	3/16/23 13:31	3/16/23 16:52		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	3/16/23 13:31	3/16/23 16:52		1.015	0.000232	mg/L	0.000068	0.000203	
* Lead, Dissolved	3/16/23 13:31	3/16/23 16:52		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	3/16/23 13:31	3/16/23 16:52		1.015	0.102	mg/L	0.000152	0.001015	
* Potassium, Dissolved	3/16/23 13:31	3/16/23 16:52		1.015	1.42	mg/L	0.169505	0.5075	
* Selenium, Dissolved	3/16/23 13:31	3/16/23 16:52		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	3/16/23 13:31	3/16/23 16:52		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	3/22/23 16:18	3/22/23 21:50		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	3/21/23 12:33	3/21/23 12:33		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
* Alkalinity to pH 4.5	3/28/23 13:30	3/28/23 15:24		1	219	mg CaCO3/L		0.10	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	3/16/23 11:25	3/17/23 13:50		1	254	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
* Bicarbonate Alkalinity, (calc.)	3/28/23 13:30	3/28/23 15:24		1	218	mg CaCO3/L		1	
* Carbonate Alkalinity, (calc.)	3/28/23 13:30	3/28/23 15:24		1	1.13	mg CaCO3/L		0.5	
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	3/16/23 21:57	3/16/23 21:57		1	3.60	mg/L	1.00	2	

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

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

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

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-24H Dup

Location Code: WMWGORAP
Collected: 3/15/23 12:30
Customer ID:
Submittal Date: 3/16/23 09:24

Laboratory ID Number: BD05381

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: CES***								
* Chloride	3/24/23 10:36	3/24/23 10:36		1	2.94	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: CES***								
* Fluoride	3/28/23 10:09	3/28/23 10:09		1	0.186	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	3/21/23 14:11	3/21/23 14:11		1	7.20	mg/L	0.6	2	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	3/15/23 12:26	3/15/23 12:26			405.33	uS/cm			FA
pH	3/15/23 12:26	3/15/23 12:26			6.93	SU			FA
Temperature	3/15/23 12:26	3/15/23 12:26			17.20	C			FA
Turbidity	3/15/23 12:26	3/15/23 12:26			1.86	NTU			FA
Sulfide	3/15/23 12:26	3/15/23 12:26			0	mg/L			FA

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

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

Reported: 5/3/2023
Version: 3.5
COA_CCR

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/15/23 12:30
Customer ID:
Delivery Date: 3/16/23 09:24

Description: Gorgas Ash Pond - MW-24H Dup

Laboratory ID Number: BD05381

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD05382	Aluminum, Dissolved	mg/L	0.0000168	0.0198	0.100	0.104	0.103	0.105	0.0850 to 0.115	104	70.0 to 130	0.966	20.0
BD05383	Aluminum, Total	mg/L	0.000212	0.0198	0.100	0.101	0.101	0.0988	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BD05382	Antimony, Dissolved	mg/L	0.000232	0.00100	0.100	0.0920	0.0937	0.0947	0.0850 to 0.115	92.0	70.0 to 130	1.83	20.0
BD05383	Antimony, Total	mg/L	0.000202	0.00100	0.100	0.104	0.102	0.101	0.0850 to 0.115	104	70.0 to 130	1.94	20.0
BD05382	Arsenic, Dissolved	mg/L	-0.0000026	0.000200	0.100	0.114	0.113	0.103	0.0850 to 0.115	105	70.0 to 130	0.881	20.0
BD05383	Arsenic, Total	mg/L	0.0000159	0.000200	0.100	0.101	0.102	0.101	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BD05382	Barium, Dissolved	mg/L	-0.0000285	0.00100	0.100	0.117	0.115	0.0969	0.0850 to 0.115	94.8	70.0 to 130	1.72	20.0
BD05383	Barium, Total	mg/L	-0.0000008	0.00100	0.100	0.105	0.104	0.0993	0.0850 to 0.115	105	70.0 to 130	0.957	20.0
BD05382	Beryllium, Dissolved	mg/L	0.0000237	0.000880	0.100	0.103	0.106	0.102	0.0850 to 0.115	103	70.0 to 130	2.87	20.0
BD05383	Beryllium, Total	mg/L	0.0000126	0.000880	0.100	0.0927	0.0942	0.0944	0.0850 to 0.115	92.7	70.0 to 130	1.61	20.0
BD05382	Boron, Dissolved	mg/L	0.000171	0.0650	1.00	1.12	1.13	1.04	0.850 to 1.15	106	70.0 to 130	0.889	20.0
BD05383	Boron, Total	mg/L	0.000173	0.0650	1.00	0.977	0.982	0.982	0.850 to 1.15	97.7	70.0 to 130	0.510	20.0
BD05382	Cadmium, Dissolved	mg/L	0.0000031	0.000147	0.100	0.105	0.102	0.107	0.0850 to 0.115	105	70.0 to 130	2.90	20.0
BD05383	Cadmium, Total	mg/L	-0.0000034	0.000147	0.100	0.105	0.103	0.102	0.0850 to 0.115	105	70.0 to 130	1.92	20.0
BD05382	Calcium, Dissolved	mg/L	-0.00749	0.152	5.00	136	138	5.04	4.25 to 5.75	-40.0	70.0 to 130	1.46	20.0
BD05383	Calcium, Total	mg/L	-0.00687	0.152	5.00	4.94	4.83	4.87	4.25 to 5.75	98.8	70.0 to 130	2.25	20.0
BD05382	Chloride	mg/L	0.180	1.00	10.0	19.3	19.3	9.90	9.00 to 11.0	99.9	80.0 to 120	0.00	20.0
BD05382	Chromium, Dissolved	mg/L	0.0000269	0.000440	0.100	0.102	0.0995	0.103	0.0850 to 0.115	102	70.0 to 130	2.48	20.0
BD05383	Chromium, Total	mg/L	-0.0000126	0.000440	0.100	0.103	0.103	0.104	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BD05382	Cobalt, Dissolved	mg/L	0.0000062	0.000147	0.100	0.104	0.104	0.106	0.0850 to 0.115	104	70.0 to 130	0.00	20.0
BD05383	Cobalt, Total	mg/L	-0.0000089	0.000147	0.100	0.105	0.104	0.104	0.0850 to 0.115	105	70.0 to 130	0.957	20.0
BD05382	Fluoride	mg/L	0.0185	0.125	2.50	2.71	2.83	2.58	2.25 to 2.75	103	80.0 to 120	4.33	20.0
BD05382	Iron, Dissolved	mg/L	-0.000052	0.0176	0.2	3.81	3.81	0.202	0.170 to 0.230	85.0	70.0 to 130	0.00	20.0
BD05383	Iron, Total	mg/L	-0.00265	0.0176	0.2	0.198	0.198	0.199	0.170 to 0.230	99.0	70.0 to 130	0.00	20.0

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/15/23 12:30
Customer ID:
Delivery Date: 3/16/23 09:24

Description: Gorgas Ash Pond - MW-24H Dup

Laboratory ID Number: BD05381

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD05382	Lead, Dissolved	mg/L	0.0000058	0.000147	0.100	0.106	0.109	0.104	0.0850 to 0.115	106	70.0 to 130	2.79	20.0
BD05383	Lead, Total	mg/L	0.0000039	0.000147	0.100	0.106	0.106	0.107	0.0850 to 0.115	106	70.0 to 130	0.00	20.0
BD05382	Lithium, Dissolved	mg/L	0.000469	0.0154	0.200	0.234	0.236	0.199	0.170 to 0.230	101	70.0 to 130	0.851	20.0
BD05383	Lithium, Total	mg/L	0.00103	0.0154	0.200	0.194	0.193	0.194	0.170 to 0.230	97.0	70.0 to 130	0.517	20.0
BD05382	Magnesium, Dissolved	mg/L	0.00419	0.0462	5.00	51.2	51.8	4.95	4.25 to 5.75	56.0	70.0 to 130	1.17	20.0
BD05383	Magnesium, Total	mg/L	-0.00905	0.0462	5.00	4.87	4.80	4.80	4.25 to 5.75	97.4	70.0 to 130	1.45	20.0
BD05382	Manganese, Dissolved	mg/L	0.0000061	0.00033	0.100	1.04	1.03	0.107	0.0850 to 0.115	67.0	70.0 to 130	0.966	20.0
BD05383	Manganese, Total	mg/L	-0.0000009	0.00033	0.100	0.101	0.101	0.101	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BD05383	Mercury, Total by CVAA	mg/L	4.000E-05	0.000500	0.004	0.00403	0.00407	0.00405	0.00340 to 0.00460	101	70.0 to 130	0.988	20.0
BD05382	Molybdenum, Dissolved	mg/L	0.000437	0.0100	0.2	0.202	0.204	0.202	0.170 to 0.230	101	70.0 to 130	0.985	20.0
BD05383	Molybdenum, Total	mg/L	0.000	0.0100	0.2	0.197	0.197	0.197	0.170 to 0.230	98.5	70.0 to 130	0.00	20.0
BD05382	Potassium, Dissolved	mg/L	0.0178	0.367	10.0	12.1	11.9	10.1	8.50 to 11.5	99.0	70.0 to 130	1.67	20.0
BD05383	Potassium, Total	mg/L	-0.000205	0.367	10.0	9.90	10.1	9.91	8.50 to 11.5	99.0	70.0 to 130	2.00	20.0
BD05382	Selenium, Dissolved	mg/L	0.0000061	0.00100	0.100	0.110	0.108	0.107	0.0850 to 0.115	110	70.0 to 130	1.83	20.0
BD05383	Selenium, Total	mg/L	0.0000487	0.00100	0.100	0.111	0.110	0.108	0.0850 to 0.115	111	70.0 to 130	0.905	20.0
BD05382	Silicon, Dissolved	mg/L	0.00139	0.0440	1.00	11.6	11.6	1.02	0.850 to 1.15	100	70.0 to 130	0.00	20.0
BD05383	Silicon, Total	mg/L	0.000118	0.0440	1.00	0.984	0.993	0.997	0.850 to 1.15	98.4	70.0 to 130	0.910	20.0
BD05382	Sodium, Dissolved	mg/L	-0.000881	0.0880	5.00	38.9	38.8	4.84	4.25 to 5.75	92.0	70.0 to 130	0.257	20.0
BD05383	Sodium, Total	mg/L	0.00401	0.0880	5.00	4.75	4.71	4.75	4.25 to 5.75	95.0	70.0 to 130	0.846	20.0
BD05381	Sulfate	mg/L	-0.0836	2.0	20.0	28.3	28.5	18.8	18.0 to 22.0	106	80.0 to 120	0.704	20.0
BD05382	Thallium, Dissolved	mg/L	0.0000086	0.000147	0.100	0.105	0.108	0.106	0.0850 to 0.115	105	70.0 to 130	2.82	20.0
BD05383	Thallium, Total	mg/L	0.000	0.000147	0.100	0.106	0.105	0.103	0.0850 to 0.115	106	70.0 to 130	0.948	20.0
BD05383	Total Organic Carbon	mg/L	0.004	1.00	10.0	11.0	11.3	10.6		110	80.0 to 120	2.69	20.0

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

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/15/23 12:30
Customer ID:
Delivery Date: 3/16/23 09:24

Description: Gorgas Ash Pond - MW-24H Dup

Laboratory ID Number: BD05381

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD05870	Alkalinity to pH 4.5	mg CaCO3/L					247	50.3	45.0 to 55.0			0.406	10.0
BD05383	Nitrogen, Nitrate/Nitrite	mg/L as N	0.07	0.200	2.00	2.15	0.083	2.02	1.80 to 2.20	108	90.0 to 110	0.00	15.0
BD05381	Solids, Dissolved	mg/L	0.0000	25.0			255	52.0	40.0 to 60.0			0.393	10.0

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

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

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-42H

Location Code: WMWGORAP
Collected: 3/15/23 14:20
Customer ID:
Submittal Date: 3/16/23 09:24

Laboratory ID Number: BD05382

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	3/17/23 06:40	3/21/23 12:21		1.015	0.0550	mg/L	0.030000	0.1015	J
* Calcium, Total	3/17/23 06:40	3/21/23 13:44		10.15	128	mg/L	0.70035	4.06	
* Iron, Total	3/17/23 06:40	3/21/23 13:44		10.15	4.44	mg/L	0.08120	0.406	
* Lithium, Total	3/17/23 06:40	3/21/23 12:21		1.015	0.0309	mg/L	0.007105	0.01999956	
* Magnesium, Total	3/17/23 06:40	3/21/23 13:44		10.15	45.0	mg/L	0.21315	4.06	
* Molybdenum, Total	3/17/23 06:40	3/21/23 12:21		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Total (calc.)	3/17/23 06:40	3/21/23 12:21		1	22.7	mg/L			
* Silicon, Total	3/17/23 06:40	3/21/23 12:21		1.015	10.6	mg/L	0.02030	0.25375	
* Sodium, Total	3/17/23 06:40	3/21/23 12:21		1.015	33.7	mg/L	0.04060	0.406	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	3/16/23 13:31	3/22/23 11:49		1.015	0.0582	mg/L	0.030000	0.1015	J
* Calcium, Dissolved	3/16/23 13:31	3/22/23 13:30		10.15	138	mg/L	0.70035	4.06	RA
* Iron, Dissolved	3/16/23 13:31	3/22/23 11:49		1.015	3.64	mg/L	0.008120	0.0406	
* Lithium, Dissolved	3/16/23 13:31	3/22/23 11:49		1.015	0.0320	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	3/16/23 13:31	3/22/23 13:30		10.15	48.4	mg/L	0.21315	4.06	RA
* Molybdenum, Dissolved	3/16/23 13:31	3/22/23 11:49		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Dissolved (calc.)	3/16/23 13:31	3/22/23 11:49		1	22.7	mg/L			
* Silicon, Dissolved	3/16/23 13:31	3/22/23 11:49		1.015	10.6	mg/L	0.02030	0.25375	
* Sodium, Dissolved	3/16/23 13:31	3/22/23 11:49		1.015	34.3	mg/L	0.04060	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/17/23 06:40	3/20/23 12:56		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Total	3/17/23 06:40	3/20/23 12:56		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Total	3/17/23 06:40	3/20/23 12:56		1.015	0.0105	mg/L	0.000112	0.000203	
* Barium, Total	3/17/23 06:40	3/20/23 12:56		1.015	0.0241	mg/L	0.000508	0.001015	
* Beryllium, Total	3/17/23 06:40	3/20/23 12:56		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	3/17/23 06:40	3/20/23 12:56		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	3/17/23 06:40	3/20/23 12:56		1.015	0.000226	mg/L	0.000203	0.001015	J
* Cobalt, Total	3/17/23 06:40	3/20/23 12:56		1.015	0.000371	mg/L	0.000068	0.000203	
* Lead, Total	3/17/23 06:40	3/20/23 12:56		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	3/17/23 06:40	3/20/23 12:56		1.015	0.864	mg/L	0.000152	0.001015	

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

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

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

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-42H

Location Code: WMWGORAP
Collected: 3/15/23 14:20
Customer ID:
Submittal Date: 3/16/23 09:24

Laboratory ID Number: BD05382

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	3/17/23 06:40	3/20/23 12:56		1.015	2.12	mg/L	0.169505	0.5075	
* Selenium, Total	3/17/23 06:40	3/20/23 12:56		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	3/17/23 06:40	3/20/23 12:56		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	3/16/23 13:31	3/16/23 16:56		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	3/16/23 13:31	3/16/23 16:56		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Dissolved	3/16/23 13:31	3/16/23 16:56		1.015	0.00922	mg/L	0.000112	0.000203	
* Barium, Dissolved	3/16/23 13:31	3/16/23 16:56		1.015	0.0222	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	3/16/23 13:31	3/16/23 16:56		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	3/16/23 13:31	3/16/23 16:56		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	3/16/23 13:31	3/16/23 16:56		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	3/16/23 13:31	3/16/23 16:56		1.015	0.000380	mg/L	0.000068	0.000203	
* Lead, Dissolved	3/16/23 13:31	3/16/23 16:56		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	3/16/23 13:31	3/16/23 16:56		1.015	0.973	mg/L	0.000152	0.001015	RA
* Potassium, Dissolved	3/16/23 13:31	3/16/23 16:56		1.015	2.20	mg/L	0.169505	0.5075	
* Selenium, Dissolved	3/16/23 13:31	3/16/23 16:56		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	3/16/23 13:31	3/16/23 16:56		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	3/22/23 16:18	3/22/23 21:54		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	3/21/23 12:33	3/21/23 12:33		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
* Alkalinity to pH 4.5	3/28/23 13:30	3/28/23 15:24		1	190	mg CaCO3/L		0.10	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	3/16/23 11:25	3/17/23 13:50		1	744	mg/L		50	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
* Bicarbonate Alkalinity, (calc.)	3/28/23 13:30	3/28/23 15:24		1	190	mg CaCO3/L		1	A
* Carbonate Alkalinity, (calc.)	3/28/23 13:30	3/28/23 15:24		1	Not Detected	mg CaCO3/L		0.5	A
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	3/16/23 22:15	3/16/23 22:15		1	4.63	mg/L	1.00	2	

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

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

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

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-42H

Location Code: WMWGORAP
Collected: 3/15/23 14:20
Customer ID:
Submittal Date: 3/16/23 09:24

Laboratory ID Number: BD05382

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: CES***								
* Chloride	3/24/23 10:31	3/24/23 10:31		1	9.31	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: CES***								
* Fluoride	3/28/23 10:10	3/28/23 10:10		1	0.128	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	3/21/23 14:35	3/21/23 14:35		20	329	mg/L	12.0	40	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	3/15/23 14:16	3/15/23 14:16			1015.21	uS/cm			FA
pH	3/15/23 14:16	3/15/23 14:16			6.63	SU			FA
Temperature	3/15/23 14:16	3/15/23 14:16			17.77	C			FA
Turbidity	3/15/23 14:16	3/15/23 14:16			9.37	NTU			FA
Sulfide	3/15/23 14:16	3/15/23 14:16			0	mg/L			FA

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

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/15/23 14:20
Customer ID:
Delivery Date: 3/16/23 09:24

Description: Gorgas Ash Pond - MW-42H

Laboratory ID Number: BD05382

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD05382	Aluminum, Dissolved	mg/L	0.0000168	0.0198	0.100	0.104	0.103	0.105	0.0850 to 0.115	104	70.0 to 130	0.966	20.0
BD05383	Aluminum, Total	mg/L	0.000212	0.0198	0.100	0.101	0.101	0.0988	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BD05382	Antimony, Dissolved	mg/L	0.000232	0.00100	0.100	0.0920	0.0937	0.0947	0.0850 to 0.115	92.0	70.0 to 130	1.83	20.0
BD05383	Antimony, Total	mg/L	0.000202	0.00100	0.100	0.104	0.102	0.101	0.0850 to 0.115	104	70.0 to 130	1.94	20.0
BD05382	Arsenic, Dissolved	mg/L	-0.0000026	0.000200	0.100	0.114	0.113	0.103	0.0850 to 0.115	105	70.0 to 130	0.881	20.0
BD05383	Arsenic, Total	mg/L	0.0000159	0.000200	0.100	0.101	0.102	0.101	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BD05382	Barium, Dissolved	mg/L	-0.0000285	0.00100	0.100	0.117	0.115	0.0969	0.0850 to 0.115	94.8	70.0 to 130	1.72	20.0
BD05383	Barium, Total	mg/L	-0.0000008	0.00100	0.100	0.105	0.104	0.0993	0.0850 to 0.115	105	70.0 to 130	0.957	20.0
BD05382	Beryllium, Dissolved	mg/L	0.0000237	0.000880	0.100	0.103	0.106	0.102	0.0850 to 0.115	103	70.0 to 130	2.87	20.0
BD05383	Beryllium, Total	mg/L	0.0000126	0.000880	0.100	0.0927	0.0942	0.0944	0.0850 to 0.115	92.7	70.0 to 130	1.61	20.0
BD05382	Boron, Dissolved	mg/L	0.000171	0.0650	1.00	1.12	1.13	1.04	0.850 to 1.15	106	70.0 to 130	0.889	20.0
BD05383	Boron, Total	mg/L	0.000173	0.0650	1.00	0.977	0.982	0.982	0.850 to 1.15	97.7	70.0 to 130	0.510	20.0
BD05382	Cadmium, Dissolved	mg/L	0.0000031	0.000147	0.100	0.105	0.102	0.107	0.0850 to 0.115	105	70.0 to 130	2.90	20.0
BD05383	Cadmium, Total	mg/L	-0.0000034	0.000147	0.100	0.105	0.103	0.102	0.0850 to 0.115	105	70.0 to 130	1.92	20.0
BD05382	Calcium, Dissolved	mg/L	-0.00749	0.152	5.00	136	138	5.04	4.25 to 5.75	-40.0	70.0 to 130	1.46	20.0
BD05383	Calcium, Total	mg/L	-0.00687	0.152	5.00	4.94	4.83	4.87	4.25 to 5.75	98.8	70.0 to 130	2.25	20.0
BD05382	Chloride	mg/L	0.180	1.00	10.0	19.3	19.3	9.90	9.00 to 11.0	99.9	80.0 to 120	0.00	20.0
BD05382	Chromium, Dissolved	mg/L	0.0000269	0.000440	0.100	0.102	0.0995	0.103	0.0850 to 0.115	102	70.0 to 130	2.48	20.0
BD05383	Chromium, Total	mg/L	-0.0000126	0.000440	0.100	0.103	0.103	0.104	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BD05382	Cobalt, Dissolved	mg/L	0.0000062	0.000147	0.100	0.104	0.104	0.106	0.0850 to 0.115	104	70.0 to 130	0.00	20.0
BD05383	Cobalt, Total	mg/L	-0.0000089	0.000147	0.100	0.105	0.104	0.104	0.0850 to 0.115	105	70.0 to 130	0.957	20.0
BD05382	Fluoride	mg/L	0.0185	0.125	2.50	2.71	2.83	2.58	2.25 to 2.75	103	80.0 to 120	4.33	20.0
BD05382	Iron, Dissolved	mg/L	-0.000052	0.0176	0.2	3.81	3.81	0.202	0.170 to 0.230	85.0	70.0 to 130	0.00	20.0
BD05383	Iron, Total	mg/L	-0.00265	0.0176	0.2	0.198	0.198	0.199	0.170 to 0.230	99.0	70.0 to 130	0.00	20.0

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/15/23 14:20
Customer ID:
Delivery Date: 3/16/23 09:24

Description: Gorgas Ash Pond - MW-42H

Laboratory ID Number: BD05382

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD05382	Lead, Dissolved	mg/L	0.0000058	0.000147	0.100	0.106	0.109	0.104	0.0850 to 0.115	106	70.0 to 130	2.79	20.0
BD05383	Lead, Total	mg/L	0.0000039	0.000147	0.100	0.106	0.106	0.107	0.0850 to 0.115	106	70.0 to 130	0.00	20.0
BD05382	Lithium, Dissolved	mg/L	0.000469	0.0154	0.200	0.234	0.236	0.199	0.170 to 0.230	101	70.0 to 130	0.851	20.0
BD05383	Lithium, Total	mg/L	0.00103	0.0154	0.200	0.194	0.193	0.194	0.170 to 0.230	97.0	70.0 to 130	0.517	20.0
BD05382	Magnesium, Dissolved	mg/L	0.00419	0.0462	5.00	51.2	51.8	4.95	4.25 to 5.75	56.0	70.0 to 130	1.17	20.0
BD05383	Magnesium, Total	mg/L	-0.00905	0.0462	5.00	4.87	4.80	4.80	4.25 to 5.75	97.4	70.0 to 130	1.45	20.0
BD05382	Manganese, Dissolved	mg/L	0.0000061	0.00033	0.100	1.04	1.03	0.107	0.0850 to 0.115	67.0	70.0 to 130	0.966	20.0
BD05383	Manganese, Total	mg/L	-0.0000009	0.00033	0.100	0.101	0.101	0.101	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BD05383	Mercury, Total by CVAA	mg/L	4.000E-05	0.000500	0.004	0.00403	0.00407	0.00405	0.00340 to 0.00460	101	70.0 to 130	0.988	20.0
BD05382	Molybdenum, Dissolved	mg/L	0.000437	0.0100	0.2	0.202	0.204	0.202	0.170 to 0.230	101	70.0 to 130	0.985	20.0
BD05383	Molybdenum, Total	mg/L	0.000	0.0100	0.2	0.197	0.197	0.197	0.170 to 0.230	98.5	70.0 to 130	0.00	20.0
BD05382	Potassium, Dissolved	mg/L	0.0178	0.367	10.0	12.1	11.9	10.1	8.50 to 11.5	99.0	70.0 to 130	1.67	20.0
BD05383	Potassium, Total	mg/L	-0.000205	0.367	10.0	9.90	10.1	9.91	8.50 to 11.5	99.0	70.0 to 130	2.00	20.0
BD05382	Selenium, Dissolved	mg/L	0.0000061	0.00100	0.100	0.110	0.108	0.107	0.0850 to 0.115	110	70.0 to 130	1.83	20.0
BD05383	Selenium, Total	mg/L	0.0000487	0.00100	0.100	0.111	0.110	0.108	0.0850 to 0.115	111	70.0 to 130	0.905	20.0
BD05382	Silicon, Dissolved	mg/L	0.00139	0.0440	1.00	11.6	11.6	1.02	0.850 to 1.15	100	70.0 to 130	0.00	20.0
BD05383	Silicon, Total	mg/L	0.000118	0.0440	1.00	0.984	0.993	0.997	0.850 to 1.15	98.4	70.0 to 130	0.910	20.0
BD05382	Sodium, Dissolved	mg/L	-0.000881	0.0880	5.00	38.9	38.8	4.84	4.25 to 5.75	92.0	70.0 to 130	0.257	20.0
BD05383	Sodium, Total	mg/L	0.00401	0.0880	5.00	4.75	4.71	4.75	4.25 to 5.75	95.0	70.0 to 130	0.846	20.0
BD05383	Sulfate	mg/L	-0.0254	2.0	20.0	18.5	19.2	18.8	18.0 to 22.0	92.5	80.0 to 120	3.71	20.0
BD05382	Thallium, Dissolved	mg/L	0.0000086	0.000147	0.100	0.105	0.108	0.106	0.0850 to 0.115	105	70.0 to 130	2.82	20.0
BD05383	Thallium, Total	mg/L	0.000	0.000147	0.100	0.106	0.105	0.103	0.0850 to 0.115	106	70.0 to 130	0.948	20.0
BD05383	Total Organic Carbon	mg/L	0.004	1.00	10.0	11.0	11.3	10.6		110	80.0 to 120	2.69	20.0

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

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/15/23 14:20
Customer ID:
Delivery Date: 3/16/23 09:24

Description: Gorgas Ash Pond - MW-42H

Laboratory ID Number: BD05382

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD05870	Alkalinity to pH 4.5	mg CaCO3/L					247	50.3	45.0 to 55.0			0.406	10.0
BD05383	Nitrogen, Nitrate/Nitrite	mg/L as N	0.07	0.200	2.00	2.15	0.083	2.02	1.80 to 2.20	108	90.0 to 110	0.00	15.0
BD05381	Solids, Dissolved	mg/L	0.0000	25.0			255	52.0	40.0 to 60.0			0.393	10.0

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

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond Field Blank-1

Location Code: WMWGORAPFB
Collected: 3/15/23 14:45
Customer ID:
Submittal Date: 3/16/23 09:24

Laboratory ID Number: BD05383

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	3/17/23 06:40	3/21/23 12:24		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	3/17/23 06:40	3/21/23 12:24		1.015	Not Detected	mg/L	0.070035	0.406	U
* Iron, Total	3/17/23 06:40	3/21/23 12:24		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Total	3/17/23 06:40	3/21/23 12:24		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	3/17/23 06:40	3/21/23 12:24		1.015	Not Detected	mg/L	0.021315	0.406	U
* Molybdenum, Total	3/17/23 06:40	3/21/23 12:24		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Total (calc.)	3/17/23 06:40	3/21/23 12:24		1	Not Detected	mg/L			
* Silicon, Total	3/17/23 06:40	3/21/23 12:24		1.015	Not Detected	mg/L	0.02030	0.25375	U
* Sodium, Total	3/17/23 06:40	3/21/23 12:24		1.015	Not Detected	mg/L	0.04060	0.406	U
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/17/23 06:40	3/20/23 12:59		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Total	3/17/23 06:40	3/20/23 12:59		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Total	3/17/23 06:40	3/20/23 12:59		1.015	Not Detected	mg/L	0.000112	0.000203	U
* Barium, Total	3/17/23 06:40	3/20/23 12:59		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Beryllium, Total	3/17/23 06:40	3/20/23 12:59		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	3/17/23 06:40	3/20/23 12:59		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	3/17/23 06:40	3/20/23 12:59		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	3/17/23 06:40	3/20/23 12:59		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	3/17/23 06:40	3/20/23 12:59		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	3/17/23 06:40	3/20/23 12:59		1.015	Not Detected	mg/L	0.000152	0.001015	U
* Potassium, Total	3/17/23 06:40	3/20/23 12:59		1.015	Not Detected	mg/L	0.169505	0.5075	U
* Selenium, Total	3/17/23 06:40	3/20/23 12:59		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	3/17/23 06:40	3/20/23 12:59		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	3/22/23 16:18	3/22/23 21:58		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	3/21/23 12:34	3/21/23 12:34		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	3/16/23 11:25	3/17/23 13:50		1	Not Detected	mg/L		25	U

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

Comments:

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

Certificate Of Analysis

Description: Gorgas Ash Pond Field Blank-1

Location Code: WMWGORAPFB
Collected: 3/15/23 14:45
Customer ID:
Submittal Date: 3/16/23 09:24

Laboratory ID Number: BD05383

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	3/16/23 22:29	3/16/23 22:29		1	Not Detected	mg/L	1.00	2	U
Analytical Method: SM4500Cl E	***Analyst: CES***								
* Chloride	3/24/23 10:46	3/24/23 10:46		1	Not Detected	mg/L	0.50	1	U
Analytical Method: SM4500F G 2017	***Analyst: CES***								
* Fluoride	3/28/23 10:22	3/28/23 10:22		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	3/21/23 14:37	3/21/23 14:37		1	Not Detected	mg/L	0.6	2	U

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

Comments:

Reported: 5/3/2023
Version: 3.5
COA_CCR

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

Batch QC Summary

Customer Account: WMWGORAPFB
Sample Date: 3/15/23 14:45
Customer ID:
Delivery Date: 3/16/23 09:24

Description: Gorgas Ash Pond Field Blank-1

Laboratory ID Number: BD05383

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD05383	Aluminum, Total	mg/L	0.000212	0.0198	0.100	0.101	0.101	0.0988	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BD05383	Antimony, Total	mg/L	0.000202	0.00100	0.100	0.104	0.102	0.101	0.0850 to 0.115	104	70.0 to 130	1.94	20.0
BD05383	Arsenic, Total	mg/L	0.0000159	0.000200	0.100	0.101	0.102	0.101	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BD05383	Barium, Total	mg/L	-0.0000008	0.00100	0.100	0.105	0.104	0.0993	0.0850 to 0.115	105	70.0 to 130	0.957	20.0
BD05383	Beryllium, Total	mg/L	0.0000126	0.000880	0.100	0.0927	0.0942	0.0944	0.0850 to 0.115	92.7	70.0 to 130	1.61	20.0
BD05383	Boron, Total	mg/L	0.000173	0.0650	1.00	0.977	0.982	0.982	0.850 to 1.15	97.7	70.0 to 130	0.510	20.0
BD05383	Cadmium, Total	mg/L	-0.0000034	0.000147	0.100	0.105	0.103	0.102	0.0850 to 0.115	105	70.0 to 130	1.92	20.0
BD05383	Calcium, Total	mg/L	-0.00687	0.152	5.00	4.94	4.83	4.87	4.25 to 5.75	98.8	70.0 to 130	2.25	20.0
BD05858	Chloride	mg/L	0.167	1.00	160	181	186	9.86	9.00 to 11.0	95.3	80.0 to 120	2.72	20.0
BD05383	Chromium, Total	mg/L	-0.0000126	0.000440	0.100	0.103	0.103	0.104	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BD05383	Cobalt, Total	mg/L	-0.0000089	0.000147	0.100	0.105	0.104	0.104	0.0850 to 0.115	105	70.0 to 130	0.957	20.0
BD05858	Fluoride	mg/L	0.00531	0.125	2.50	4.77	4.79	2.64	2.25 to 2.75	110	80.0 to 120	0.418	20.0
BD05383	Iron, Total	mg/L	-0.00265	0.0176	0.2	0.198	0.198	0.199	0.170 to 0.230	99.0	70.0 to 130	0.00	20.0
BD05383	Lead, Total	mg/L	0.0000039	0.000147	0.100	0.106	0.106	0.107	0.0850 to 0.115	106	70.0 to 130	0.00	20.0
BD05383	Lithium, Total	mg/L	0.00103	0.0154	0.200	0.194	0.193	0.194	0.170 to 0.230	97.0	70.0 to 130	0.517	20.0
BD05383	Magnesium, Total	mg/L	-0.00905	0.0462	5.00	4.87	4.80	4.80	4.25 to 5.75	97.4	70.0 to 130	1.45	20.0
BD05383	Manganese, Total	mg/L	-0.0000009	0.00033	0.100	0.101	0.101	0.101	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BD05383	Mercury, Total by CVAA	mg/L	4.000E-05	0.000500	0.004	0.00403	0.00407	0.00405	0.00340 to 0.00460	101	70.0 to 130	0.988	20.0
BD05383	Molybdenum, Total	mg/L	0.000	0.0100	0.2	0.197	0.197	0.197	0.170 to 0.230	98.5	70.0 to 130	0.00	20.0
BD05383	Potassium, Total	mg/L	-0.000205	0.367	10.0	9.90	10.1	9.91	8.50 to 11.5	99.0	70.0 to 130	2.00	20.0
BD05383	Selenium, Total	mg/L	0.0000487	0.00100	0.100	0.111	0.110	0.108	0.0850 to 0.115	111	70.0 to 130	0.905	20.0
BD05383	Silicon, Total	mg/L	0.000118	0.0440	1.00	0.984	0.993	0.997	0.850 to 1.15	98.4	70.0 to 130	0.910	20.0
BD05383	Sodium, Total	mg/L	0.00401	0.0880	5.00	4.75	4.71	4.75	4.25 to 5.75	95.0	70.0 to 130	0.846	20.0
BD05383	Sulfate	mg/L	-0.0254	2.0	20.0	18.5	19.2	18.8	18.0 to 22.0	92.5	80.0 to 120	3.71	20.0

Comments:

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORAPFB
Sample Date: 3/15/23 14:45
Customer ID:
Delivery Date: 3/16/23 09:24

Description: Gorgas Ash Pond Field Blank-1

Laboratory ID Number: BD05383

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD05383	Thallium, Total	mg/L	0.000	0.000147	0.100	0.106	0.105	0.103	0.0850 to 0.115	106	70.0 to 130	0.948	20.0
BD05383	Total Organic Carbon	mg/L	0.004	1.00	10.0	11.0	11.3	10.6		110	80.0 to 120	2.69	20.0

Comments:

Reported: 5/3/2023
Version: 3.5
COA_CCR

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

Batch QC Summary

Customer Account: WMWGORAPFB
Sample Date: 3/15/23 14:45
Customer ID:
Delivery Date: 3/16/23 09:24

Description: Gorgas Ash Pond Field Blank-1

Laboratory ID Number: BD05383

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD05383	Nitrogen, Nitrate/Nitrite	mg/L as N	0.07	0.200	2.00	2.15	0.083	2.02	1.80 to 2.20	108	90.0 to 110	0.00	15.0
BD05381	Solids, Dissolved	mg/L	0.0000	25.0			255	52.0	40.0 to 60.0			0.393	10.0

Comments:

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

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-15V

Location Code: WMWGORAP
Collected: 3/20/23 12:27
Customer ID:
Submittal Date: 3/23/23 10:12

Laboratory ID Number: BD05850

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	3/24/23 11:57	3/31/23 10:59		1.015	0.0536	mg/L	0.030000	0.1015	J
* Calcium, Total	3/24/23 11:57	3/31/23 10:59		1.015	18.2	mg/L	0.070035	0.406	
* Iron, Total	3/24/23 11:57	3/31/23 10:59		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Total	3/24/23 11:57	3/31/23 10:59		1.015	0.0787	mg/L	0.007105	0.01999956	
* Magnesium, Total	3/24/23 11:57	3/31/23 10:59		1.015	4.47	mg/L	0.021315	0.406	
* Molybdenum, Total	3/24/23 11:57	3/31/23 10:59		1.015	0.0195	mg/L	0.005075	0.01015	
* Silica, Total (calc.)	3/24/23 11:57	3/31/23 10:59		1	16.6	mg/L			
* Silicon, Total	3/24/23 11:57	3/31/23 10:59		1.015	7.76	mg/L	0.02030	0.25375	
* Sodium, Total	3/24/23 11:57	3/31/23 13:59		10.15	188	mg/L	0.4060	4.06	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	3/24/23 08:37	3/29/23 12:00		1.015	0.0578	mg/L	0.030000	0.1015	J
* Calcium, Dissolved	3/24/23 08:37	3/29/23 12:00		1.015	22.5	mg/L	0.070035	0.406	
* Iron, Dissolved	3/24/23 08:37	3/29/23 12:00		1.015	0.0176	mg/L	0.008120	0.0406	J
* Lithium, Dissolved	3/24/23 08:37	3/29/23 12:00		1.015	0.0835	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	3/24/23 08:37	3/29/23 12:00		1.015	5.21	mg/L	0.021315	0.406	
* Molybdenum, Dissolved	3/24/23 08:37	3/29/23 12:00		1.015	0.0232	mg/L	0.005075	0.01015	
* Silica, Dissolved (calc.)	3/24/23 08:37	3/29/23 12:00		1	16.4	mg/L			
* Silicon, Dissolved	3/24/23 08:37	3/29/23 12:00		1.015	7.68	mg/L	0.02030	0.25375	
* Sodium, Dissolved	3/24/23 08:37	3/29/23 14:03		10.15	210	mg/L	0.4060	4.06	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/24/23 11:57	3/24/23 14:02		1.015	0.00133	mg/L	0.000710	0.001015	
* Aluminum, Total	3/24/23 11:57	3/24/23 14:02		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Total	3/24/23 11:57	3/24/23 14:02		1.015	0.00375	mg/L	0.000112	0.000203	
* Barium, Total	3/24/23 11:57	3/24/23 14:02		1.015	0.175	mg/L	0.000508	0.001015	
* Beryllium, Total	3/24/23 11:57	3/24/23 14:02		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	3/24/23 11:57	3/24/23 14:02		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	3/24/23 11:57	3/24/23 14:02		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	3/24/23 11:57	3/24/23 14:02		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	3/24/23 11:57	3/24/23 14:02		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	3/24/23 11:57	3/24/23 14:02		1.015	0.0101	mg/L	0.000152	0.001015	

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

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

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-15V

Location Code: WMWGORAP
Collected: 3/20/23 12:27
Customer ID:
Submittal Date: 3/23/23 10:12

Laboratory ID Number: BD05850

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	3/24/23 11:57	3/24/23 14:02		1.015	8.43	mg/L	0.169505	0.5075	
* Selenium, Total	3/24/23 11:57	3/24/23 14:02		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	3/24/23 11:57	3/24/23 14:02		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	3/24/23 08:37	3/24/23 10:01		1.015	0.00140	mg/L	0.000710	0.001015	
* Aluminum, Dissolved	3/24/23 08:37	3/24/23 10:01		1.015	0.0198	mg/L	0.009135	0.05075	J
* Arsenic, Dissolved	3/24/23 08:37	3/24/23 10:01		1.015	0.00439	mg/L	0.000112	0.000203	
* Barium, Dissolved	3/24/23 08:37	3/24/23 10:01		1.015	0.209	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	3/24/23 08:37	3/24/23 10:01		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	3/24/23 08:37	3/24/23 10:01		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	3/24/23 08:37	3/24/23 10:01		1.015	0.000512	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	3/24/23 08:37	3/24/23 10:01		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Dissolved	3/24/23 08:37	3/24/23 10:01		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	3/24/23 08:37	3/24/23 10:01		1.015	0.0134	mg/L	0.000152	0.001015	
* Potassium, Dissolved	3/24/23 08:37	3/24/23 10:01		1.015	10.4	mg/L	0.169505	0.5075	
* Selenium, Dissolved	3/24/23 08:37	3/24/23 10:01		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	3/24/23 08:37	3/24/23 10:01		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ELH***								
* Mercury, Total by CVAA	3/27/23 17:52	3/27/23 21:54		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	3/24/23 10:37	3/24/23 10:37		1	0.771	mg/L as N	0.20	0.3	
Analytical Method: SM 2320 B	***Analyst: ALH***								
* Alkalinity to pH 4.5	3/28/23 13:30	3/28/23 15:24		1	232	mg CaCO3/L		0.10	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	3/23/23 13:10	3/24/23 13:10		1	694	mg/L		75.8	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
* Bicarbonate Alkalinity, (calc.)	3/28/23 13:30	3/28/23 15:24		1	228	mg CaCO3/L		1	A
* Carbonate Alkalinity, (calc.)	3/28/23 13:30	3/28/23 15:24		1	3.64	mg CaCO3/L		0.5	A
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	3/23/23 15:13	3/23/23 15:13		1	10.5	mg/L	1.00	2	

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

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

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

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-15V

Location Code: WMWGORAP
Collected: 3/20/23 12:27
Customer ID:
Submittal Date: 3/23/23 10:12

Laboratory ID Number: BD05850

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: CES***								
* Chloride	3/24/23 11:00	3/24/23 11:00		50	93.5	mg/L	25.00	50	
Analytical Method: SM4500F G 2017	***Analyst: CES***								
* Fluoride	3/28/23 10:23	3/28/23 10:23		1	0.183	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	4/4/23 13:04	4/4/23 13:04		8	176	mg/L	4.8	16	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	3/20/23 12:24	3/20/23 12:24			1291.78	uS/cm			FA
pH	3/20/23 12:24	3/20/23 12:24			7.96	SU			FA
Temperature	3/20/23 12:24	3/20/23 12:24			16.07	C			FA
Turbidity	3/20/23 12:24	3/20/23 12:24			2.88	NTU			FA
Sulfide	3/20/23 12:24	3/20/23 12:24			0	mg/L			FA

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

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

Reported: 5/3/2023
Version: 3.5
COA_CCR

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/20/23 12:27
Customer ID:
Delivery Date: 3/23/23 10:12

Description: Gorgas Ash Pond - MW-15V

Laboratory ID Number: BD05850

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD05860	Aluminum, Dissolved	mg/L	-0.000280	0.0198	0.100	0.103	0.101	0.104	0.0850 to 0.115	103	70.0 to 130	1.96	20.0
BD05859	Aluminum, Total	mg/L	0.000318	0.0198	0.100	0.106	0.104	0.0985	0.0850 to 0.115	96.8	70.0 to 130	1.90	20.0
BD05860	Antimony, Dissolved	mg/L	0.000258	0.00100	0.100	0.0924	0.0941	0.0933	0.0850 to 0.115	92.4	70.0 to 130	1.82	20.0
BD05859	Antimony, Total	mg/L	0.000323	0.00100	0.100	0.0919	0.0915	0.0909	0.0850 to 0.115	91.9	70.0 to 130	0.436	20.0
BD05860	Arsenic, Dissolved	mg/L	-0.0000068	0.000200	0.100	0.102	0.103	0.102	0.0850 to 0.115	102	70.0 to 130	0.976	20.0
BD05859	Arsenic, Total	mg/L	0.0000036	0.000200	0.100	0.0945	0.0940	0.0969	0.0850 to 0.115	94.4	70.0 to 130	0.531	20.0
BD05860	Barium, Dissolved	mg/L	-0.0000031	0.00100	0.100	0.131	0.129	0.101	0.0850 to 0.115	103	70.0 to 130	1.54	20.0
BD05859	Barium, Total	mg/L	-0.0000258	0.00100	0.100	0.782	0.774	0.0969	0.0850 to 0.115	57.0	70.0 to 130	1.03	20.0
BD05860	Beryllium, Dissolved	mg/L	0.0000000	0.000880	0.100	0.0904	0.0893	0.0998	0.0850 to 0.115	90.4	70.0 to 130	1.22	20.0
BD05859	Beryllium, Total	mg/L	0.0000000	0.000880	0.100	0.0962	0.0941	0.0970	0.0850 to 0.115	96.2	70.0 to 130	2.21	20.0
BD05860	Boron, Dissolved	mg/L	-0.000072	0.0650	1.00	1.06	1.07	0.994	0.850 to 1.15	103	70.0 to 130	0.939	20.0
BD05859	Boron, Total	mg/L	-0.000178	0.0650	1.00	1.06	1.07	1.03	0.850 to 1.15	106	70.0 to 130	0.939	20.0
BD05860	Cadmium, Dissolved	mg/L	0.0000000	0.000147	0.100	0.0993	0.101	0.101	0.0850 to 0.115	99.3	70.0 to 130	1.70	20.0
BD05859	Cadmium, Total	mg/L	0.0000000	0.000147	0.100	0.0931	0.0952	0.0960	0.0850 to 0.115	93.1	70.0 to 130	2.23	20.0
BD05860	Calcium, Dissolved	mg/L	0.00206	0.152	5.00	223	223	4.92	4.25 to 5.75	200	70.0 to 130	0.00	20.0
BD05859	Calcium, Total	mg/L	0.00772	0.152	5.00	30.7	30.4	4.93	4.25 to 5.75	100	70.0 to 130	0.982	20.0
BD05858	Chloride	mg/L	0.167	1.00	160	181	186	9.86	9.00 to 11.0	95.3	80.0 to 120	2.72	20.0
BD05860	Chromium, Dissolved	mg/L	-0.0000195	0.000440	0.100	0.0982	0.0983	0.102	0.0850 to 0.115	98.2	70.0 to 130	0.102	20.0
BD05859	Chromium, Total	mg/L	-0.0000978	0.000440	0.100	0.0930	0.0923	0.0966	0.0850 to 0.115	92.6	70.0 to 130	0.756	20.0
BD05860	Cobalt, Dissolved	mg/L	-0.0000142	0.000147	0.100	0.0987	0.0993	0.104	0.0850 to 0.115	98.6	70.0 to 130	0.606	20.0
BD05859	Cobalt, Total	mg/L	-0.0000154	0.000147	0.100	0.0945	0.0919	0.0986	0.0850 to 0.115	94.5	70.0 to 130	2.79	20.0
BD05858	Fluoride	mg/L	0.00531	0.125	2.50	4.77	4.79	2.64	2.25 to 2.75	110	80.0 to 120	0.418	20.0
BD05860	Iron, Dissolved	mg/L	0.000948	0.0176	0.2	2.99	2.96	0.206	0.170 to 0.230	85.0	70.0 to 130	1.01	20.0
BD05859	Iron, Total	mg/L	-0.00369	0.0176	0.2	0.985	0.989	0.204	0.170 to 0.230	100	70.0 to 130	0.405	20.0

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/20/23 12:27
Customer ID:
Delivery Date: 3/23/23 10:12

Description: Gorgas Ash Pond - MW-15V

Laboratory ID Number: BD05850

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD05860	Lead, Dissolved	mg/L	0.0000087	0.000147	0.100	0.103	0.102	0.103	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BD05859	Lead, Total	mg/L	0.0000057	0.000147	0.100	0.0880	0.0874	0.0956	0.0850 to 0.115	88.0	70.0 to 130	0.684	20.0
BD05860	Lithium, Dissolved	mg/L	0.000435	0.0154	0.200	0.269	0.262	0.202	0.170 to 0.230	105	70.0 to 130	2.64	20.0
BD05859	Lithium, Total	mg/L	0.00118	0.0154	0.200	0.289	0.297	0.201	0.170 to 0.230	102	70.0 to 130	2.73	20.0
BD05860	Magnesium, Dissolved	mg/L	-0.00332	0.0462	5.00	106	106	4.91	4.25 to 5.75	162	70.0 to 130	0.00	20.0
BD05859	Magnesium, Total	mg/L	-0.0125	0.0462	5.00	16.2	16.4	4.93	4.25 to 5.75	98.0	70.0 to 130	1.23	20.0
BD05860	Manganese, Dissolved	mg/L	0.0000667	0.00033	0.100	0.377	0.377	0.105	0.0850 to 0.115	92.0	70.0 to 130	0.00	20.0
BD05859	Manganese, Total	mg/L	0.0000890	0.00033	0.100	0.111	0.110	0.0997	0.0850 to 0.115	94.8	70.0 to 130	0.905	20.0
BD05859	Mercury, Total by CVAA	mg/L	-5.000E-05	0.000500	0.004	0.00399	0.00397	0.00401	0.00340 to 0.00460	99.8	70.0 to 130	0.503	20.0
BD05860	Molybdenum, Dissolved	mg/L	0.000945	0.0100	0.2	0.202	0.198	0.201	0.170 to 0.230	101	70.0 to 130	2.00	20.0
BD05859	Molybdenum, Total	mg/L	0.000	0.0100	0.2	0.206	0.202	0.204	0.170 to 0.230	103	70.0 to 130	1.96	20.0
BD05860	Potassium, Dissolved	mg/L	0.0435	0.367	10.0	14.9	14.9	10.6	8.50 to 11.5	99.2	70.0 to 130	0.00	20.0
BD05859	Potassium, Total	mg/L	0.00723	0.367	10.0	12.3	12.1	10.1	8.50 to 11.5	97.0	70.0 to 130	1.64	20.0
BD05860	Selenium, Dissolved	mg/L	0.0000397	0.00100	0.100	0.106	0.105	0.107	0.0850 to 0.115	105	70.0 to 130	0.948	20.0
BD05859	Selenium, Total	mg/L	0.000273	0.00100	0.100	0.0957	0.0963	0.0989	0.0850 to 0.115	95.7	70.0 to 130	0.625	20.0
BD05860	Silicon, Dissolved	mg/L	-0.00163	0.0440	1.00	12.5	12.4	0.997	0.850 to 1.15	100	70.0 to 130	0.803	20.0
BD05859	Silicon, Total	mg/L	0.000711	0.0440	1.00	11.4	11.4	1.01	0.850 to 1.15	110	70.0 to 130	0.00	20.0
BD05860	Sodium, Dissolved	mg/L	0.00324	0.0880	5.00	78.4	79.0	4.89	4.25 to 5.75	142	70.0 to 130	0.762	20.0
BD05859	Sodium, Total	mg/L	0.00384	0.0880	5.00	72.5	69.5	4.87	4.25 to 5.75	138	70.0 to 130	4.23	20.0
BD05858	Sulfate	mg/L	0.148	2.0	80.0	143	144	20.1	18.0 to 22.0	101	80.0 to 120	0.697	20.0
BD05860	Thallium, Dissolved	mg/L	-0.0000089	0.000147	0.100	0.103	0.103	0.102	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BD05859	Thallium, Total	mg/L	-0.0000132	0.000147	0.100	0.0891	0.0876	0.0956	0.0850 to 0.115	89.1	70.0 to 130	1.70	20.0
BD05859	Total Organic Carbon	mg/L	0.0414	1.00	10.0	14.3	15.1	10.8		96.1	80.0 to 120	5.44	20.0

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/20/23 12:27
Customer ID:
Delivery Date: 3/23/23 10:12

Description: Gorgas Ash Pond - MW-15V

Laboratory ID Number: BD05850

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD05870	Alkalinity to pH 4.5	mg CaCO3/L					247	50.3	45.0 to 55.0			0.406	10.0
BD05859	Nitrogen, Nitrate/Nitrite	mg/L as N	0.02	0.200	2.00	2.08	0.017	2.12	1.80 to 2.20	104	90.0 to 110	0.00	15.0
BD05852	Solids, Dissolved	mg/L	1.00	25.0			440	52.0	40.0 to 60.0			0.905	10.0

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

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

Certificate Of Analysis

Description: Gorgas Ash Pond Field Blank-3

Location Code: WMWGORAPFB
Collected: 3/20/23 14:00
Customer ID:
Submittal Date: 3/23/23 10:13

Laboratory ID Number: BD05851

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	3/24/23 11:57	3/31/23 11:02		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	3/24/23 11:57	3/31/23 11:02		1.015	Not Detected	mg/L	0.070035	0.406	U
* Iron, Total	3/24/23 11:57	3/31/23 11:02		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Total	3/24/23 11:57	3/31/23 11:02		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	3/24/23 11:57	3/31/23 11:02		1.015	Not Detected	mg/L	0.021315	0.406	U
* Molybdenum, Total	3/24/23 11:57	3/31/23 11:02		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Total (calc.)	3/24/23 11:57	3/31/23 11:02		1	Not Detected	mg/L			
* Silicon, Total	3/24/23 11:57	3/31/23 11:02		1.015	Not Detected	mg/L	0.02030	0.25375	U
* Sodium, Total	3/24/23 11:57	3/31/23 11:02		1.015	Not Detected	mg/L	0.04060	0.406	U
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/24/23 11:57	3/24/23 14:05		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Total	3/24/23 11:57	3/24/23 14:05		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Total	3/24/23 11:57	3/24/23 14:05		1.015	Not Detected	mg/L	0.000112	0.000203	U
* Barium, Total	3/24/23 11:57	3/24/23 14:05		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Beryllium, Total	3/24/23 11:57	3/24/23 14:05		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	3/24/23 11:57	3/24/23 14:05		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	3/24/23 11:57	3/24/23 14:05		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	3/24/23 11:57	3/24/23 14:05		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	3/24/23 11:57	3/24/23 14:05		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	3/24/23 11:57	3/24/23 14:05		1.015	Not Detected	mg/L	0.000152	0.001015	U
* Potassium, Total	3/24/23 11:57	3/24/23 14:05		1.015	Not Detected	mg/L	0.169505	0.5075	U
* Selenium, Total	3/24/23 11:57	3/24/23 14:05		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	3/24/23 11:57	3/24/23 14:05		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ELH***								
* Mercury, Total by CVAA	3/27/23 17:52	3/27/23 21:58		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	3/24/23 10:39	3/24/23 10:39		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	3/23/23 13:10	3/24/23 13:10		1	Not Detected	mg/L		25	U

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

Comments:

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

Certificate Of Analysis

Description: Gorgas Ash Pond Field Blank-3

Location Code: WMWGORAPFB
Collected: 3/20/23 14:00
Customer ID:
Submittal Date: 3/23/23 10:13

Laboratory ID Number: BD05851

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	3/23/23 15:28	3/23/23 15:28		1	Not Detected	mg/L	1.00	2	U
Analytical Method: SM4500Cl E	***Analyst: CES***								
* Chloride	3/24/23 10:48	3/24/23 10:48		1	Not Detected	mg/L	0.50	1	U
Analytical Method: SM4500F G 2017	***Analyst: CES***								
* Fluoride	3/28/23 10:24	3/28/23 10:24		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	4/4/23 12:52	4/4/23 12:52		1	Not Detected	mg/L	0.6	2	U

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

Comments:

Reported: 5/3/2023
Version: 3.5
COA_CCR

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

Batch QC Summary

Customer Account: WMWGORAPFB
Sample Date: 3/20/23 14:00
Customer ID:
Delivery Date: 3/23/23 10:13

Description: Gorgas Ash Pond Field Blank-3

Laboratory ID Number: BD05851

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD05859	Aluminum, Total	mg/L	0.000318	0.0198	0.100	0.106	0.104	0.0985	0.0850 to 0.115	96.8	70.0 to 130	1.90	20.0
BD05859	Antimony, Total	mg/L	0.000323	0.00100	0.100	0.0919	0.0915	0.0909	0.0850 to 0.115	91.9	70.0 to 130	0.436	20.0
BD05859	Arsenic, Total	mg/L	0.0000036	0.000200	0.100	0.0945	0.0940	0.0969	0.0850 to 0.115	94.4	70.0 to 130	0.531	20.0
BD05859	Barium, Total	mg/L	-0.0000258	0.00100	0.100	0.782	0.774	0.0969	0.0850 to 0.115	57.0	70.0 to 130	1.03	20.0
BD05859	Beryllium, Total	mg/L	0.0000000	0.000880	0.100	0.0962	0.0941	0.0970	0.0850 to 0.115	96.2	70.0 to 130	2.21	20.0
BD05859	Boron, Total	mg/L	-0.000178	0.0650	1.00	1.06	1.07	1.03	0.850 to 1.15	106	70.0 to 130	0.939	20.0
BD05859	Cadmium, Total	mg/L	0.0000000	0.000147	0.100	0.0931	0.0952	0.0960	0.0850 to 0.115	93.1	70.0 to 130	2.23	20.0
BD05859	Calcium, Total	mg/L	0.00772	0.152	5.00	30.7	30.4	4.93	4.25 to 5.75	100	70.0 to 130	0.982	20.0
BD05858	Chloride	mg/L	0.167	1.00	160	181	186	9.86	9.00 to 11.0	95.3	80.0 to 120	2.72	20.0
BD05859	Chromium, Total	mg/L	-0.0000978	0.000440	0.100	0.0930	0.0923	0.0966	0.0850 to 0.115	92.6	70.0 to 130	0.756	20.0
BD05859	Cobalt, Total	mg/L	-0.0000154	0.000147	0.100	0.0945	0.0919	0.0986	0.0850 to 0.115	94.5	70.0 to 130	2.79	20.0
BD05858	Fluoride	mg/L	0.00531	0.125	2.50	4.77	4.79	2.64	2.25 to 2.75	110	80.0 to 120	0.418	20.0
BD05859	Iron, Total	mg/L	-0.00369	0.0176	0.2	0.985	0.989	0.204	0.170 to 0.230	100	70.0 to 130	0.405	20.0
BD05859	Lead, Total	mg/L	0.0000057	0.000147	0.100	0.0880	0.0874	0.0956	0.0850 to 0.115	88.0	70.0 to 130	0.684	20.0
BD05859	Lithium, Total	mg/L	0.00118	0.0154	0.200	0.289	0.297	0.201	0.170 to 0.230	102	70.0 to 130	2.73	20.0
BD05859	Magnesium, Total	mg/L	-0.0125	0.0462	5.00	16.2	16.4	4.93	4.25 to 5.75	98.0	70.0 to 130	1.23	20.0
BD05859	Manganese, Total	mg/L	0.0000890	0.00033	0.100	0.111	0.110	0.0997	0.0850 to 0.115	94.8	70.0 to 130	0.905	20.0
BD05859	Mercury, Total by CVAA	mg/L	-5.000E-05	0.000500	0.004	0.00399	0.00397	0.00401	0.00340 to 0.00460	99.8	70.0 to 130	0.503	20.0
BD05859	Molybdenum, Total	mg/L	0.000	0.0100	0.2	0.206	0.202	0.204	0.170 to 0.230	103	70.0 to 130	1.96	20.0
BD05859	Potassium, Total	mg/L	0.00723	0.367	10.0	12.3	12.1	10.1	8.50 to 11.5	97.0	70.0 to 130	1.64	20.0
BD05859	Selenium, Total	mg/L	0.000273	0.00100	0.100	0.0957	0.0963	0.0989	0.0850 to 0.115	95.7	70.0 to 130	0.625	20.0
BD05859	Silicon, Total	mg/L	0.000711	0.0440	1.00	11.4	11.4	1.01	0.850 to 1.15	110	70.0 to 130	0.00	20.0
BD05859	Sodium, Total	mg/L	0.00384	0.0880	5.00	72.5	69.5	4.87	4.25 to 5.75	138	70.0 to 130	4.23	20.0
BD05858	Sulfate	mg/L	0.148	2.0	80.0	143	144	20.1	18.0 to 22.0	101	80.0 to 120	0.697	20.0

Comments:

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

Batch QC Summary

Customer Account: WMWGORAPFB
Sample Date: 3/20/23 14:00
Customer ID:
Delivery Date: 3/23/23 10:13

Description: Gorgas Ash Pond Field Blank-3

Laboratory ID Number: BD05851

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD05859	Thallium, Total	mg/L	-0.0000132	0.000147	0.100	0.0891	0.0876	0.0956	0.0850 to 0.115	89.1	70.0 to 130	1.70	20.0
BD05859	Total Organic Carbon	mg/L	0.0414	1.00	10.0	14.3	15.1	10.8		96.1	80.0 to 120	5.44	20.0

Comments:

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

Batch QC Summary

Customer Account: WMWGORAPFB
Sample Date: 3/20/23 14:00
Customer ID:
Delivery Date: 3/23/23 10:13

Description: Gorgas Ash Pond Field Blank-3

Laboratory ID Number: BD05851

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD05859	Nitrogen, Nitrate/Nitrite	mg/L as N	0.02	0.200	2.00	2.08	0.017	2.12	1.80 to 2.20	104	90.0 to 110	0.00	15.0
BD05852	Solids, Dissolved	mg/L	1.00	25.0			440	52.0	40.0 to 60.0			0.905	10.0

Comments:

Reported: 5/3/2023
Version: 3.5
COA_CCR

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

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-15

Location Code: WMWGORAP
Collected: 3/20/23 15:06
Customer ID:
Submittal Date: 3/23/23 10:13

Laboratory ID Number: BD05852

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	3/24/23 11:57	3/31/23 11:06		1.015	0.0308	mg/L	0.030000	0.1015	J
* Calcium, Total	3/24/23 11:57	3/31/23 11:06		1.015	6.60	mg/L	0.070035	0.406	
* Iron, Total	3/24/23 11:57	3/31/23 11:06		1.015	0.0171	mg/L	0.008120	0.0406	J
* Lithium, Total	3/24/23 11:57	3/31/23 11:06		1.015	0.305	mg/L	0.007105	0.01999956	
* Magnesium, Total	3/24/23 11:57	3/31/23 11:06		1.015	1.53	mg/L	0.021315	0.406	
* Molybdenum, Total	3/24/23 11:57	3/31/23 11:06		1.015	0.0315	mg/L	0.005075	0.01015	
* Silica, Total (calc.)	3/24/23 11:57	3/31/23 14:02		1	57.4	mg/L			
* Silicon, Total	3/24/23 11:57	3/31/23 14:02		10.15	26.8	mg/L	0.2030	2.5375	
* Sodium, Total	3/24/23 11:57	3/31/23 14:02		10.15	168	mg/L	0.4060	4.06	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	3/24/23 08:37	3/29/23 12:03		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Dissolved	3/24/23 08:37	3/29/23 12:03		1.015	6.89	mg/L	0.070035	0.406	
* Iron, Dissolved	3/24/23 08:37	3/29/23 12:03		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Dissolved	3/24/23 08:37	3/29/23 12:03		1.015	0.300	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	3/24/23 08:37	3/29/23 12:03		1.015	1.71	mg/L	0.021315	0.406	
* Molybdenum, Dissolved	3/24/23 08:37	3/29/23 12:03		1.015	0.0302	mg/L	0.005075	0.01015	
* Silica, Dissolved (calc.)	3/24/23 08:37	3/29/23 14:06		1	49.9	mg/L			
* Silicon, Dissolved	3/24/23 08:37	3/29/23 14:06		10.15	23.3	mg/L	0.2030	2.5375	
* Sodium, Dissolved	3/24/23 08:37	3/29/23 14:06		10.15	151	mg/L	0.4060	4.06	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/24/23 11:57	3/24/23 14:09		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Total	3/24/23 11:57	3/24/23 14:09		1.015	0.456	mg/L	0.009135	0.05075	
* Arsenic, Total	3/24/23 11:57	3/24/23 14:09		1.015	0.00427	mg/L	0.000112	0.000203	
* Barium, Total	3/24/23 11:57	3/24/23 14:09		1.015	0.276	mg/L	0.000508	0.001015	
* Beryllium, Total	3/24/23 11:57	3/24/23 14:09		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	3/24/23 11:57	3/24/23 14:09		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	3/24/23 11:57	3/24/23 14:09		1.015	0.000384	mg/L	0.000203	0.001015	J
* Cobalt, Total	3/24/23 11:57	3/24/23 14:09		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	3/24/23 11:57	3/24/23 14:09		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	3/24/23 11:57	3/24/23 14:09		1.015	0.000353	mg/L	0.000152	0.001015	J

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

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

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

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-15

Location Code: WMWGORAP
Collected: 3/20/23 15:06
Customer ID:
Submittal Date: 3/23/23 10:13

Laboratory ID Number: BD05852

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	3/24/23 11:57	3/24/23 14:09		1.015	5.39	mg/L	0.169505	0.5075	
* Selenium, Total	3/24/23 11:57	3/24/23 14:09		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	3/24/23 11:57	3/24/23 14:09		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	3/24/23 08:37	3/24/23 10:05		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	3/24/23 08:37	3/24/23 10:05		1.015	0.376	mg/L	0.009135	0.05075	
* Arsenic, Dissolved	3/24/23 08:37	3/24/23 10:05		1.015	0.00405	mg/L	0.000112	0.000203	
* Barium, Dissolved	3/24/23 08:37	3/24/23 10:05		1.015	0.305	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	3/24/23 08:37	3/24/23 10:05		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	3/24/23 08:37	3/24/23 10:05		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	3/24/23 08:37	3/24/23 10:05		1.015	0.000290	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	3/24/23 08:37	3/24/23 10:05		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Dissolved	3/24/23 08:37	3/24/23 10:05		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	3/24/23 08:37	3/24/23 10:05		1.015	Not Detected	mg/L	0.000152	0.001015	U
* Potassium, Dissolved	3/24/23 08:37	3/24/23 10:05		1.015	5.38	mg/L	0.169505	0.5075	
* Selenium, Dissolved	4/21/23 09:03	4/21/23 09:43		1.015	0.00154	mg/L	0.000508	0.001015	
* Thallium, Dissolved	3/24/23 08:37	3/24/23 10:05		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ELH***								
* Mercury, Total by CVAA	3/27/23 17:52	3/27/23 22:02		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	3/24/23 10:41	3/24/23 10:41		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
* Alkalinity to pH 4.5	3/28/23 13:30	3/28/23 15:24		1	386	mg CaCO3/L		0.10	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	3/23/23 13:10	3/24/23 13:10		1	444	mg/L		50	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
* Bicarbonate Alkalinity, (calc.)	3/28/23 13:30	3/28/23 15:24		1	17.3	mg CaCO3/L		1	A
* Carbonate Alkalinity, (calc.)	3/28/23 13:30	3/28/23 15:24		1	282	mg CaCO3/L		0.5	A
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	3/23/23 15:42	3/23/23 15:42		1	11.0	mg/L	1.00	2	

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

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

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

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-15

Location Code: WMWGORAP
Collected: 3/20/23 15:06
Customer ID:
Submittal Date: 3/23/23 10:13

Laboratory ID Number: BD05852

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: CES***								
* Chloride	3/24/23 10:49	3/24/23 10:49		1	5.41	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: CES***								
* Fluoride	3/28/23 10:25	3/28/23 10:25		1	0.333	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	4/4/23 12:53	4/4/23 12:53		1	6.57	mg/L	0.6	2	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	3/20/23 15:03	3/20/23 15:03			906.63	uS/cm			FA
pH	3/20/23 15:03	3/20/23 15:03			11.26	SU			FA
Temperature	3/20/23 15:03	3/20/23 15:03			16.74	C			FA
Turbidity	3/20/23 15:03	3/20/23 15:03			1.84	NTU			FA
Sulfide	3/20/23 15:03	3/20/23 15:03			1.0	mg/L			FA

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

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

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/20/23 15:06
Customer ID:
Delivery Date: 3/23/23 10:13

Description: Gorgas Ash Pond - MW-15

Laboratory ID Number: BD05852

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD05860	Aluminum, Dissolved	mg/L	-0.000280	0.0198	0.100	0.103	0.101	0.104	0.0850 to 0.115	103	70.0 to 130	1.96	20.0
BD05859	Aluminum, Total	mg/L	0.000318	0.0198	0.100	0.106	0.104	0.0985	0.0850 to 0.115	96.8	70.0 to 130	1.90	20.0
BD05860	Antimony, Dissolved	mg/L	0.000258	0.00100	0.100	0.0924	0.0941	0.0933	0.0850 to 0.115	92.4	70.0 to 130	1.82	20.0
BD05859	Antimony, Total	mg/L	0.000323	0.00100	0.100	0.0919	0.0915	0.0909	0.0850 to 0.115	91.9	70.0 to 130	0.436	20.0
BD05860	Arsenic, Dissolved	mg/L	-0.0000068	0.000200	0.100	0.102	0.103	0.102	0.0850 to 0.115	102	70.0 to 130	0.976	20.0
BD05859	Arsenic, Total	mg/L	0.0000036	0.000200	0.100	0.0945	0.0940	0.0969	0.0850 to 0.115	94.4	70.0 to 130	0.531	20.0
BD05860	Barium, Dissolved	mg/L	-0.0000031	0.00100	0.100	0.131	0.129	0.101	0.0850 to 0.115	103	70.0 to 130	1.54	20.0
BD05859	Barium, Total	mg/L	-0.0000258	0.00100	0.100	0.782	0.774	0.0969	0.0850 to 0.115	57.0	70.0 to 130	1.03	20.0
BD05860	Beryllium, Dissolved	mg/L	0.0000000	0.000880	0.100	0.0904	0.0893	0.0998	0.0850 to 0.115	90.4	70.0 to 130	1.22	20.0
BD05859	Beryllium, Total	mg/L	0.0000000	0.000880	0.100	0.0962	0.0941	0.0970	0.0850 to 0.115	96.2	70.0 to 130	2.21	20.0
BD05860	Boron, Dissolved	mg/L	-0.000072	0.0650	1.00	1.06	1.07	0.994	0.850 to 1.15	103	70.0 to 130	0.939	20.0
BD05859	Boron, Total	mg/L	-0.000178	0.0650	1.00	1.06	1.07	1.03	0.850 to 1.15	106	70.0 to 130	0.939	20.0
BD05860	Cadmium, Dissolved	mg/L	0.0000000	0.000147	0.100	0.0993	0.101	0.101	0.0850 to 0.115	99.3	70.0 to 130	1.70	20.0
BD05859	Cadmium, Total	mg/L	0.0000000	0.000147	0.100	0.0931	0.0952	0.0960	0.0850 to 0.115	93.1	70.0 to 130	2.23	20.0
BD05860	Calcium, Dissolved	mg/L	0.00206	0.152	5.00	223	223	4.92	4.25 to 5.75	200	70.0 to 130	0.00	20.0
BD05859	Calcium, Total	mg/L	0.00772	0.152	5.00	30.7	30.4	4.93	4.25 to 5.75	100	70.0 to 130	0.982	20.0
BD05858	Chloride	mg/L	0.167	1.00	160	181	186	9.86	9.00 to 11.0	95.3	80.0 to 120	2.72	20.0
BD05860	Chromium, Dissolved	mg/L	-0.0000195	0.000440	0.100	0.0982	0.0983	0.102	0.0850 to 0.115	98.2	70.0 to 130	0.102	20.0
BD05859	Chromium, Total	mg/L	-0.0000978	0.000440	0.100	0.0930	0.0923	0.0966	0.0850 to 0.115	92.6	70.0 to 130	0.756	20.0
BD05860	Cobalt, Dissolved	mg/L	-0.0000142	0.000147	0.100	0.0987	0.0993	0.104	0.0850 to 0.115	98.6	70.0 to 130	0.606	20.0
BD05859	Cobalt, Total	mg/L	-0.0000154	0.000147	0.100	0.0945	0.0919	0.0986	0.0850 to 0.115	94.5	70.0 to 130	2.79	20.0
BD05858	Fluoride	mg/L	0.00531	0.125	2.50	4.77	4.79	2.64	2.25 to 2.75	110	80.0 to 120	0.418	20.0
BD05860	Iron, Dissolved	mg/L	0.000948	0.0176	0.2	2.99	2.96	0.206	0.170 to 0.230	85.0	70.0 to 130	1.01	20.0
BD05859	Iron, Total	mg/L	-0.00369	0.0176	0.2	0.985	0.989	0.204	0.170 to 0.230	100	70.0 to 130	0.405	20.0

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

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/20/23 15:06
Customer ID:
Delivery Date: 3/23/23 10:13

Description: Gorgas Ash Pond - MW-15

Laboratory ID Number: BD05852

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD05860	Lead, Dissolved	mg/L	0.0000087	0.000147	0.100	0.103	0.102	0.103	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BD05859	Lead, Total	mg/L	0.0000057	0.000147	0.100	0.0880	0.0874	0.0956	0.0850 to 0.115	88.0	70.0 to 130	0.684	20.0
BD05860	Lithium, Dissolved	mg/L	0.000435	0.0154	0.200	0.269	0.262	0.202	0.170 to 0.230	105	70.0 to 130	2.64	20.0
BD05859	Lithium, Total	mg/L	0.00118	0.0154	0.200	0.289	0.297	0.201	0.170 to 0.230	102	70.0 to 130	2.73	20.0
BD05860	Magnesium, Dissolved	mg/L	-0.00332	0.0462	5.00	106	106	4.91	4.25 to 5.75	162	70.0 to 130	0.00	20.0
BD05859	Magnesium, Total	mg/L	-0.0125	0.0462	5.00	16.2	16.4	4.93	4.25 to 5.75	98.0	70.0 to 130	1.23	20.0
BD05860	Manganese, Dissolved	mg/L	0.0000667	0.00033	0.100	0.377	0.377	0.105	0.0850 to 0.115	92.0	70.0 to 130	0.00	20.0
BD05859	Manganese, Total	mg/L	0.0000890	0.00033	0.100	0.111	0.110	0.0997	0.0850 to 0.115	94.8	70.0 to 130	0.905	20.0
BD05859	Mercury, Total by CVAA	mg/L	-5.000E-05	0.000500	0.004	0.00399	0.00397	0.00401	0.00340 to 0.00460	99.8	70.0 to 130	0.503	20.0
BD05860	Molybdenum, Dissolved	mg/L	0.000945	0.0100	0.2	0.202	0.198	0.201	0.170 to 0.230	101	70.0 to 130	2.00	20.0
BD05859	Molybdenum, Total	mg/L	0.000	0.0100	0.2	0.206	0.202	0.204	0.170 to 0.230	103	70.0 to 130	1.96	20.0
BD05860	Potassium, Dissolved	mg/L	0.0435	0.367	10.0	14.9	14.9	10.6	8.50 to 11.5	99.2	70.0 to 130	0.00	20.0
BD05859	Potassium, Total	mg/L	0.00723	0.367	10.0	12.3	12.1	10.1	8.50 to 11.5	97.0	70.0 to 130	1.64	20.0
BD05858	Selenium, Dissolved	mg/L	0.0000599	0.00100	0.100	0.101	0.0964	0.105	0.0850 to 0.115	99.7	70.0 to 130	4.66	20.0
BD05859	Selenium, Total	mg/L	0.000273	0.00100	0.100	0.0957	0.0963	0.0989	0.0850 to 0.115	95.7	70.0 to 130	0.625	20.0
BD05860	Silicon, Dissolved	mg/L	-0.00163	0.0440	1.00	12.5	12.4	0.997	0.850 to 1.15	100	70.0 to 130	0.803	20.0
BD05859	Silicon, Total	mg/L	0.000711	0.0440	1.00	11.4	11.4	1.01	0.850 to 1.15	110	70.0 to 130	0.00	20.0
BD05860	Sodium, Dissolved	mg/L	0.00324	0.0880	5.00	78.4	79.0	4.89	4.25 to 5.75	142	70.0 to 130	0.762	20.0
BD05859	Sodium, Total	mg/L	0.00384	0.0880	5.00	72.5	69.5	4.87	4.25 to 5.75	138	70.0 to 130	4.23	20.0
BD05858	Sulfate	mg/L	0.148	2.0	80.0	143	144	20.1	18.0 to 22.0	101	80.0 to 120	0.697	20.0
BD05860	Thallium, Dissolved	mg/L	-0.0000089	0.000147	0.100	0.103	0.103	0.102	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BD05859	Thallium, Total	mg/L	-0.0000132	0.000147	0.100	0.0891	0.0876	0.0956	0.0850 to 0.115	89.1	70.0 to 130	1.70	20.0
BD05859	Total Organic Carbon	mg/L	0.0414	1.00	10.0	14.3	15.1	10.8		96.1	80.0 to 120	5.44	20.0

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

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/20/23 15:06
Customer ID:
Delivery Date: 3/23/23 10:13

Description: Gorgas Ash Pond - MW-15

Laboratory ID Number: BD05852

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD05870	Alkalinity to pH 4.5	mg CaCO3/L					247	50.3	45.0 to 55.0			0.406	10.0
BD05859	Nitrogen, Nitrate/Nitrite	mg/L as N	0.02	0.200	2.00	2.08	0.017	2.12	1.80 to 2.20	104	90.0 to 110	0.00	15.0
BD05852	Solids, Dissolved	mg/L	1.00	25.0			440	52.0	40.0 to 60.0			0.905	10.0

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

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

Certificate Of Analysis

Description: Gorgas Ash Pond - PZ-16

Location Code: WMWGORAP
Collected: 3/21/23 08:52
Customer ID:
Submittal Date: 3/23/23 10:13

Laboratory ID Number: BD05853

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	3/24/23 11:57	3/31/23 11:09		1.015	0.0798	mg/L	0.030000	0.1015	J
* Calcium, Total	3/24/23 11:57	3/31/23 11:09		1.015	12.4	mg/L	0.070035	0.406	
* Iron, Total	3/24/23 11:57	3/31/23 11:09		1.015	0.0742	mg/L	0.008120	0.0406	
* Lithium, Total	3/24/23 11:57	3/31/23 11:09		1.015	0.0522	mg/L	0.007105	0.01999956	
* Magnesium, Total	3/24/23 11:57	3/31/23 11:09		1.015	3.14	mg/L	0.021315	0.406	
* Molybdenum, Total	3/24/23 11:57	3/31/23 11:09		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Total (calc.)	3/24/23 11:57	3/31/23 11:09		1	18.8	mg/L			
* Silicon, Total	3/24/23 11:57	3/31/23 11:09		1.015	8.80	mg/L	0.02030	0.25375	
* Sodium, Total	3/24/23 11:57	3/31/23 14:05		10.15	132	mg/L	0.4060	4.06	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	3/24/23 08:37	3/29/23 12:06		1.015	0.0781	mg/L	0.030000	0.1015	J
* Calcium, Dissolved	3/24/23 08:37	3/29/23 12:06		1.015	9.06	mg/L	0.070035	0.406	
* Iron, Dissolved	3/24/23 08:37	3/29/23 12:06		1.015	0.0149	mg/L	0.008120	0.0406	J
* Lithium, Dissolved	3/24/23 08:37	3/29/23 12:06		1.015	0.0505	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	3/24/23 08:37	3/29/23 12:06		1.015	2.98	mg/L	0.021315	0.406	
* Molybdenum, Dissolved	3/24/23 08:37	3/29/23 12:06		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Dissolved (calc.)	3/24/23 08:37	3/29/23 12:06		1	18.6	mg/L			
* Silicon, Dissolved	3/24/23 08:37	3/29/23 12:06		1.015	8.68	mg/L	0.02030	0.25375	
* Sodium, Dissolved	3/24/23 08:37	3/29/23 14:09		10.15	147	mg/L	0.4060	4.06	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/24/23 11:57	3/24/23 14:13		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Total	3/24/23 11:57	3/24/23 14:13		1.015	0.112	mg/L	0.009135	0.05075	
* Arsenic, Total	3/24/23 11:57	3/24/23 14:13		1.015	Not Detected	mg/L	0.000112	0.000203	U
* Barium, Total	3/24/23 11:57	3/24/23 14:13		1.015	0.248	mg/L	0.000508	0.001015	
* Beryllium, Total	3/24/23 11:57	3/24/23 14:13		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	3/24/23 11:57	3/24/23 14:13		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	3/24/23 11:57	3/24/23 14:13		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	3/24/23 11:57	3/24/23 14:13		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	3/24/23 11:57	3/24/23 14:13		1.015	0.000192	mg/L	0.000068	0.000203	J
* Manganese, Total	3/24/23 11:57	3/24/23 14:13		1.015	0.00555	mg/L	0.000152	0.001015	

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

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

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

Certificate Of Analysis

Description: Gorgas Ash Pond - PZ-16

Location Code: WMWGORAP
Collected: 3/21/23 08:52
Customer ID:
Submittal Date: 3/23/23 10:13

Laboratory ID Number: BD05853

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	3/24/23 11:57	3/24/23 14:13		1.015	1.03	mg/L	0.169505	0.5075	
* Selenium, Total	3/24/23 11:57	3/24/23 14:13		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	3/24/23 11:57	3/24/23 14:13		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	3/24/23 08:37	3/24/23 10:09		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	3/24/23 08:37	3/24/23 10:09		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Dissolved	3/24/23 08:37	3/24/23 10:09		1.015	Not Detected	mg/L	0.000112	0.000203	U
* Barium, Dissolved	3/24/23 08:37	3/24/23 10:09		1.015	0.233	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	3/24/23 08:37	3/24/23 10:09		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	3/24/23 08:37	3/24/23 10:09		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	3/24/23 08:37	3/24/23 10:09		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	3/24/23 08:37	3/24/23 10:09		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Dissolved	3/24/23 08:37	3/24/23 10:09		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	3/24/23 08:37	3/24/23 10:09		1.015	0.00440	mg/L	0.000152	0.001015	
* Potassium, Dissolved	3/24/23 08:37	3/24/23 10:09		1.015	0.988	mg/L	0.169505	0.5075	
* Selenium, Dissolved	4/21/23 09:03	4/21/23 09:47		1.015	0.000711	mg/L	0.000508	0.001015	J
* Thallium, Dissolved	3/24/23 08:37	3/24/23 10:09		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ELH***								
* Mercury, Total by CVAA	3/27/23 17:52	3/27/23 22:06		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	3/24/23 10:43	3/24/23 10:43		1	0.241	mg/L as N	0.20	0.3	J
Analytical Method: SM 2320 B	***Analyst: ALH***								
* Alkalinity to pH 4.5	3/28/23 13:30	3/28/23 15:24		1	312	mg CaCO3/L		0.10	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	3/23/23 13:10	3/24/23 13:10		1	372	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
* Bicarbonate Alkalinity, (calc.)	3/28/23 13:30	3/28/23 15:24		1	296	mg CaCO3/L		1	
* Carbonate Alkalinity, (calc.)	3/28/23 13:30	3/28/23 15:24		1	15.3	mg CaCO3/L		0.5	
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	3/23/23 15:58	3/23/23 15:58		1	3.62	mg/L	1.00	2	

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

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

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

Certificate Of Analysis

Description: Gorgas Ash Pond - PZ-16

Location Code: WMWGORAP
Collected: 3/21/23 08:52
Customer ID:
Submittal Date: 3/23/23 10:13

Laboratory ID Number: BD05853

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: CES***								
* Chloride	3/24/23 10:50	3/24/23 10:50		1	5.96	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: CES***								
* Fluoride	3/28/23 10:27	3/28/23 10:27		1	0.171	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	4/4/23 12:55	4/4/23 12:55		1	8.80	mg/L	0.6	2	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	3/21/23 08:49	3/21/23 08:49			581.99	uS/cm			FA
pH	3/21/23 08:49	3/21/23 08:49			8.44	SU			FA
Temperature	3/21/23 08:49	3/21/23 08:49			15.98	C			FA
Turbidity	3/21/23 08:49	3/21/23 08:49			4.36	NTU			FA
Sulfide	3/21/23 08:49	3/21/23 08:49			1.0	mg/L			FA

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

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

Reported: 5/3/2023
Version: 3.5
COA_CCR

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/21/23 08:52
Customer ID:
Delivery Date: 3/23/23 10:13

Description: Gorgas Ash Pond - PZ-16

Laboratory ID Number: BD05853

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD05860	Aluminum, Dissolved	mg/L	-0.000280	0.0198	0.100	0.103	0.101	0.104	0.0850 to 0.115	103	70.0 to 130	1.96	20.0
BD05859	Aluminum, Total	mg/L	0.000318	0.0198	0.100	0.106	0.104	0.0985	0.0850 to 0.115	96.8	70.0 to 130	1.90	20.0
BD05860	Antimony, Dissolved	mg/L	0.000258	0.00100	0.100	0.0924	0.0941	0.0933	0.0850 to 0.115	92.4	70.0 to 130	1.82	20.0
BD05859	Antimony, Total	mg/L	0.000323	0.00100	0.100	0.0919	0.0915	0.0909	0.0850 to 0.115	91.9	70.0 to 130	0.436	20.0
BD05860	Arsenic, Dissolved	mg/L	-0.0000068	0.000200	0.100	0.102	0.103	0.102	0.0850 to 0.115	102	70.0 to 130	0.976	20.0
BD05859	Arsenic, Total	mg/L	0.0000036	0.000200	0.100	0.0945	0.0940	0.0969	0.0850 to 0.115	94.4	70.0 to 130	0.531	20.0
BD05860	Barium, Dissolved	mg/L	-0.0000031	0.00100	0.100	0.131	0.129	0.101	0.0850 to 0.115	103	70.0 to 130	1.54	20.0
BD05859	Barium, Total	mg/L	-0.0000258	0.00100	0.100	0.782	0.774	0.0969	0.0850 to 0.115	57.0	70.0 to 130	1.03	20.0
BD05860	Beryllium, Dissolved	mg/L	0.0000000	0.000880	0.100	0.0904	0.0893	0.0998	0.0850 to 0.115	90.4	70.0 to 130	1.22	20.0
BD05859	Beryllium, Total	mg/L	0.0000000	0.000880	0.100	0.0962	0.0941	0.0970	0.0850 to 0.115	96.2	70.0 to 130	2.21	20.0
BD05860	Boron, Dissolved	mg/L	-0.000072	0.0650	1.00	1.06	1.07	0.994	0.850 to 1.15	103	70.0 to 130	0.939	20.0
BD05859	Boron, Total	mg/L	-0.000178	0.0650	1.00	1.06	1.07	1.03	0.850 to 1.15	106	70.0 to 130	0.939	20.0
BD05860	Cadmium, Dissolved	mg/L	0.0000000	0.000147	0.100	0.0993	0.101	0.101	0.0850 to 0.115	99.3	70.0 to 130	1.70	20.0
BD05859	Cadmium, Total	mg/L	0.0000000	0.000147	0.100	0.0931	0.0952	0.0960	0.0850 to 0.115	93.1	70.0 to 130	2.23	20.0
BD05860	Calcium, Dissolved	mg/L	0.00206	0.152	5.00	223	223	4.92	4.25 to 5.75	200	70.0 to 130	0.00	20.0
BD05859	Calcium, Total	mg/L	0.00772	0.152	5.00	30.7	30.4	4.93	4.25 to 5.75	100	70.0 to 130	0.982	20.0
BD05858	Chloride	mg/L	0.167	1.00	160	181	186	9.86	9.00 to 11.0	95.3	80.0 to 120	2.72	20.0
BD05860	Chromium, Dissolved	mg/L	-0.0000195	0.000440	0.100	0.0982	0.0983	0.102	0.0850 to 0.115	98.2	70.0 to 130	0.102	20.0
BD05859	Chromium, Total	mg/L	-0.0000978	0.000440	0.100	0.0930	0.0923	0.0966	0.0850 to 0.115	92.6	70.0 to 130	0.756	20.0
BD05860	Cobalt, Dissolved	mg/L	-0.0000142	0.000147	0.100	0.0987	0.0993	0.104	0.0850 to 0.115	98.6	70.0 to 130	0.606	20.0
BD05859	Cobalt, Total	mg/L	-0.0000154	0.000147	0.100	0.0945	0.0919	0.0986	0.0850 to 0.115	94.5	70.0 to 130	2.79	20.0
BD05858	Fluoride	mg/L	0.00531	0.125	2.50	4.77	4.79	2.64	2.25 to 2.75	110	80.0 to 120	0.418	20.0
BD05860	Iron, Dissolved	mg/L	0.000948	0.0176	0.2	2.99	2.96	0.206	0.170 to 0.230	85.0	70.0 to 130	1.01	20.0
BD05859	Iron, Total	mg/L	-0.00369	0.0176	0.2	0.985	0.989	0.204	0.170 to 0.230	100	70.0 to 130	0.405	20.0

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/21/23 08:52
Customer ID:
Delivery Date: 3/23/23 10:13

Description: Gorgas Ash Pond - PZ-16

Laboratory ID Number: BD05853

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD05860	Lead, Dissolved	mg/L	0.0000087	0.000147	0.100	0.103	0.102	0.103	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BD05859	Lead, Total	mg/L	0.0000057	0.000147	0.100	0.0880	0.0874	0.0956	0.0850 to 0.115	88.0	70.0 to 130	0.684	20.0
BD05860	Lithium, Dissolved	mg/L	0.000435	0.0154	0.200	0.269	0.262	0.202	0.170 to 0.230	105	70.0 to 130	2.64	20.0
BD05859	Lithium, Total	mg/L	0.00118	0.0154	0.200	0.289	0.297	0.201	0.170 to 0.230	102	70.0 to 130	2.73	20.0
BD05860	Magnesium, Dissolved	mg/L	-0.00332	0.0462	5.00	106	106	4.91	4.25 to 5.75	162	70.0 to 130	0.00	20.0
BD05859	Magnesium, Total	mg/L	-0.0125	0.0462	5.00	16.2	16.4	4.93	4.25 to 5.75	98.0	70.0 to 130	1.23	20.0
BD05860	Manganese, Dissolved	mg/L	0.0000667	0.00033	0.100	0.377	0.377	0.105	0.0850 to 0.115	92.0	70.0 to 130	0.00	20.0
BD05859	Manganese, Total	mg/L	0.0000890	0.00033	0.100	0.111	0.110	0.0997	0.0850 to 0.115	94.8	70.0 to 130	0.905	20.0
BD05859	Mercury, Total by CVAA	mg/L	-5.000E-05	0.000500	0.004	0.00399	0.00397	0.00401	0.00340 to 0.00460	99.8	70.0 to 130	0.503	20.0
BD05860	Molybdenum, Dissolved	mg/L	0.000945	0.0100	0.2	0.202	0.198	0.201	0.170 to 0.230	101	70.0 to 130	2.00	20.0
BD05859	Molybdenum, Total	mg/L	0.000	0.0100	0.2	0.206	0.202	0.204	0.170 to 0.230	103	70.0 to 130	1.96	20.0
BD05860	Potassium, Dissolved	mg/L	0.0435	0.367	10.0	14.9	14.9	10.6	8.50 to 11.5	99.2	70.0 to 130	0.00	20.0
BD05859	Potassium, Total	mg/L	0.00723	0.367	10.0	12.3	12.1	10.1	8.50 to 11.5	97.0	70.0 to 130	1.64	20.0
BD05858	Selenium, Dissolved	mg/L	0.0000599	0.00100	0.100	0.101	0.0964	0.105	0.0850 to 0.115	99.7	70.0 to 130	4.66	20.0
BD05859	Selenium, Total	mg/L	0.000273	0.00100	0.100	0.0957	0.0963	0.0989	0.0850 to 0.115	95.7	70.0 to 130	0.625	20.0
BD05860	Silicon, Dissolved	mg/L	-0.00163	0.0440	1.00	12.5	12.4	0.997	0.850 to 1.15	100	70.0 to 130	0.803	20.0
BD05859	Silicon, Total	mg/L	0.000711	0.0440	1.00	11.4	11.4	1.01	0.850 to 1.15	110	70.0 to 130	0.00	20.0
BD05860	Sodium, Dissolved	mg/L	0.00324	0.0880	5.00	78.4	79.0	4.89	4.25 to 5.75	142	70.0 to 130	0.762	20.0
BD05859	Sodium, Total	mg/L	0.00384	0.0880	5.00	72.5	69.5	4.87	4.25 to 5.75	138	70.0 to 130	4.23	20.0
BD05858	Sulfate	mg/L	0.148	2.0	80.0	143	144	20.1	18.0 to 22.0	101	80.0 to 120	0.697	20.0
BD05860	Thallium, Dissolved	mg/L	-0.0000089	0.000147	0.100	0.103	0.103	0.102	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BD05859	Thallium, Total	mg/L	-0.0000132	0.000147	0.100	0.0891	0.0876	0.0956	0.0850 to 0.115	89.1	70.0 to 130	1.70	20.0
BD05859	Total Organic Carbon	mg/L	0.0414	1.00	10.0	14.3	15.1	10.8		96.1	80.0 to 120	5.44	20.0

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

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/21/23 08:52
Customer ID:
Delivery Date: 3/23/23 10:13

Description: Gorgas Ash Pond - PZ-16

Laboratory ID Number: BD05853

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD05870	Alkalinity to pH 4.5	mg CaCO3/L					247	50.3	45.0 to 55.0			0.406	10.0
BD05859	Nitrogen, Nitrate/Nitrite	mg/L as N	0.02	0.200	2.00	2.08	0.017	2.12	1.80 to 2.20	104	90.0 to 110	0.00	15.0
BD05862	Solids, Dissolved	mg/L	1.00	25.0			321	52.0	40.0 to 60.0			0.312	10.0

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

Reported: 5/3/2023
Version: 3.5
COA_CCR

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-16D

Location Code: WMWGORAP
Collected: 3/21/23 10:00
Customer ID:
Submittal Date: 3/23/23 10:13

Laboratory ID Number: BD05854

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	3/24/23 11:57	3/31/23 11:12		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	3/24/23 11:57	3/31/23 11:12		1.015	32.0	mg/L	0.070035	0.406	
* Iron, Total	3/24/23 11:57	3/31/23 11:12		1.015	0.292	mg/L	0.008120	0.0406	
* Lithium, Total	3/24/23 11:57	3/31/23 11:12		1.015	0.0340	mg/L	0.007105	0.01999956	
* Magnesium, Total	3/24/23 11:57	3/31/23 11:12		1.015	12.0	mg/L	0.021315	0.406	
* Molybdenum, Total	3/24/23 11:57	3/31/23 11:12		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Total (calc.)	3/24/23 11:57	3/31/23 11:12		1	22.7	mg/L			
* Silicon, Total	3/24/23 11:57	3/31/23 11:12		1.015	10.6	mg/L	0.02030	0.25375	
* Sodium, Total	3/24/23 11:57	3/31/23 11:12		1.015	28.8	mg/L	0.04060	0.406	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	3/24/23 08:37	3/29/23 12:09		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Dissolved	3/24/23 08:37	3/29/23 12:09		1.015	33.3	mg/L	0.070035	0.406	
* Iron, Dissolved	3/24/23 08:37	3/29/23 12:09		1.015	0.180	mg/L	0.008120	0.0406	
* Lithium, Dissolved	3/24/23 08:37	3/29/23 12:09		1.015	0.0331	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	3/24/23 08:37	3/29/23 12:09		1.015	12.2	mg/L	0.021315	0.406	
* Molybdenum, Dissolved	3/24/23 08:37	3/29/23 12:09		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Dissolved (calc.)	3/24/23 08:37	3/29/23 12:09		1	22.5	mg/L			
* Silicon, Dissolved	3/24/23 08:37	3/29/23 12:09		1.015	10.5	mg/L	0.02030	0.25375	
* Sodium, Dissolved	3/24/23 08:37	3/29/23 12:09		1.015	28.9	mg/L	0.04060	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/24/23 11:57	3/24/23 14:16		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Total	3/24/23 11:57	3/24/23 14:16		1.015	0.0534	mg/L	0.009135	0.05075	
* Arsenic, Total	3/24/23 11:57	3/24/23 14:16		1.015	Not Detected	mg/L	0.000112	0.000203	U
* Barium, Total	3/24/23 11:57	3/24/23 14:16		1.015	0.324	mg/L	0.000508	0.001015	
* Beryllium, Total	3/24/23 11:57	3/24/23 14:16		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	3/24/23 11:57	3/24/23 14:16		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	3/24/23 11:57	3/24/23 14:16		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	3/24/23 11:57	3/24/23 14:16		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	3/24/23 11:57	3/24/23 14:16		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	3/24/23 11:57	3/24/23 14:16		1.015	0.0113	mg/L	0.000152	0.001015	

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

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

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

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-16D

Location Code: WMWGORAP
Collected: 3/21/23 10:00
Customer ID:
Submittal Date: 3/23/23 10:13

Laboratory ID Number: BD05854

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	3/24/23 11:57	3/24/23 14:16		1.015	1.52	mg/L	0.169505	0.5075	
* Selenium, Total	3/24/23 11:57	3/24/23 14:16		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	3/24/23 11:57	3/24/23 14:16		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8		***Analyst: DLJ***							
* Antimony, Dissolved	3/24/23 08:37	3/24/23 10:12		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	3/24/23 08:37	3/24/23 10:12		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Dissolved	3/24/23 08:37	3/24/23 10:12		1.015	Not Detected	mg/L	0.000112	0.000203	U
* Barium, Dissolved	3/24/23 08:37	3/24/23 10:12		1.015	0.333	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	3/24/23 08:37	3/24/23 10:12		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	3/24/23 08:37	3/24/23 10:12		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	3/24/23 08:37	3/24/23 10:12		1.015	0.000204	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	3/24/23 08:37	3/24/23 10:12		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Dissolved	3/24/23 08:37	3/24/23 10:12		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	3/24/23 08:37	3/24/23 10:12		1.015	0.0108	mg/L	0.000152	0.001015	
* Potassium, Dissolved	3/24/23 08:37	3/24/23 10:12		1.015	1.50	mg/L	0.169505	0.5075	
* Selenium, Dissolved	3/24/23 08:37	3/24/23 10:12		1.015	0.000660	mg/L	0.000508	0.001015	J
* Thallium, Dissolved	3/24/23 08:37	3/24/23 10:12		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1		***Analyst: ELH***							
* Mercury, Total by CVAA	3/27/23 17:52	3/27/23 22:10		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2		***Analyst: SC***							
* Nitrogen, Nitrate/Nitrite	3/24/23 10:45	3/24/23 10:45		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B		***Analyst: ALH***							
* Alkalinity to pH 4.5	3/28/23 13:30	3/28/23 15:24		1	178	mg CaCO3/L		0.10	
Analytical Method: SM 2540C		***Analyst: CNJ***							
* Solids, Dissolved	3/23/23 13:10	3/24/23 13:10		1	221	mg/L		25	
Analytical Method: SM 4500CO2 D		***Analyst: ALH***							
* Bicarbonate Alkalinity, (calc.)	3/28/23 13:30	3/28/23 15:24		1	176	mg CaCO3/L		1	
* Carbonate Alkalinity, (calc.)	3/28/23 13:30	3/28/23 15:24		1	1.51	mg CaCO3/L		0.5	
Analytical Method: SM 5310 B		***Analyst: SC***							
* Total Organic Carbon	3/23/23 16:16	3/23/23 16:16		1	3.27	mg/L	1.00	2	

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

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

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

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-16D

Location Code: WMWGORAP
Collected: 3/21/23 10:00
Customer ID:
Submittal Date: 3/23/23 10:13

Laboratory ID Number: BD05854

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: CES***								
* Chloride	3/24/23 10:52	3/24/23 10:52		1	3.72	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: CES***								
* Fluoride	3/28/23 10:28	3/28/23 10:28		1	0.0849	mg/L	0.06	0.125	J
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	4/4/23 12:56	4/4/23 12:56		1	14.7	mg/L	0.6	2	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	3/21/23 09:57	3/21/23 09:57			356.64	uS/cm			FA
pH	3/21/23 09:57	3/21/23 09:57			7.51	SU			FA
Temperature	3/21/23 09:57	3/21/23 09:57			16.16	C			FA
Turbidity	3/21/23 09:57	3/21/23 09:57			2.98	NTU			FA
Sulfide	3/21/23 09:57	3/21/23 09:57			0	mg/L			FA

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

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

Reported: 5/3/2023
Version: 3.5
COA_CCR

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/21/23 10:00
Customer ID:
Delivery Date: 3/23/23 10:13

Description: Gorgas Ash Pond - MW-16D

Laboratory ID Number: BD05854

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD05860	Aluminum, Dissolved	mg/L	-0.000280	0.0198	0.100	0.103	0.101	0.104	0.0850 to 0.115	103	70.0 to 130	1.96	20.0
BD05859	Aluminum, Total	mg/L	0.000318	0.0198	0.100	0.106	0.104	0.0985	0.0850 to 0.115	96.8	70.0 to 130	1.90	20.0
BD05860	Antimony, Dissolved	mg/L	0.000258	0.00100	0.100	0.0924	0.0941	0.0933	0.0850 to 0.115	92.4	70.0 to 130	1.82	20.0
BD05859	Antimony, Total	mg/L	0.000323	0.00100	0.100	0.0919	0.0915	0.0909	0.0850 to 0.115	91.9	70.0 to 130	0.436	20.0
BD05860	Arsenic, Dissolved	mg/L	-0.0000068	0.000200	0.100	0.102	0.103	0.102	0.0850 to 0.115	102	70.0 to 130	0.976	20.0
BD05859	Arsenic, Total	mg/L	0.0000036	0.000200	0.100	0.0945	0.0940	0.0969	0.0850 to 0.115	94.4	70.0 to 130	0.531	20.0
BD05860	Barium, Dissolved	mg/L	-0.0000031	0.00100	0.100	0.131	0.129	0.101	0.0850 to 0.115	103	70.0 to 130	1.54	20.0
BD05859	Barium, Total	mg/L	-0.0000258	0.00100	0.100	0.782	0.774	0.0969	0.0850 to 0.115	57.0	70.0 to 130	1.03	20.0
BD05860	Beryllium, Dissolved	mg/L	0.0000000	0.000880	0.100	0.0904	0.0893	0.0998	0.0850 to 0.115	90.4	70.0 to 130	1.22	20.0
BD05859	Beryllium, Total	mg/L	0.0000000	0.000880	0.100	0.0962	0.0941	0.0970	0.0850 to 0.115	96.2	70.0 to 130	2.21	20.0
BD05860	Boron, Dissolved	mg/L	-0.000072	0.0650	1.00	1.06	1.07	0.994	0.850 to 1.15	103	70.0 to 130	0.939	20.0
BD05859	Boron, Total	mg/L	-0.000178	0.0650	1.00	1.06	1.07	1.03	0.850 to 1.15	106	70.0 to 130	0.939	20.0
BD05860	Cadmium, Dissolved	mg/L	0.0000000	0.000147	0.100	0.0993	0.101	0.101	0.0850 to 0.115	99.3	70.0 to 130	1.70	20.0
BD05859	Cadmium, Total	mg/L	0.0000000	0.000147	0.100	0.0931	0.0952	0.0960	0.0850 to 0.115	93.1	70.0 to 130	2.23	20.0
BD05860	Calcium, Dissolved	mg/L	0.00206	0.152	5.00	223	223	4.92	4.25 to 5.75	200	70.0 to 130	0.00	20.0
BD05859	Calcium, Total	mg/L	0.00772	0.152	5.00	30.7	30.4	4.93	4.25 to 5.75	100	70.0 to 130	0.982	20.0
BD05858	Chloride	mg/L	0.167	1.00	160	181	186	9.86	9.00 to 11.0	95.3	80.0 to 120	2.72	20.0
BD05860	Chromium, Dissolved	mg/L	-0.0000195	0.000440	0.100	0.0982	0.0983	0.102	0.0850 to 0.115	98.2	70.0 to 130	0.102	20.0
BD05859	Chromium, Total	mg/L	-0.0000978	0.000440	0.100	0.0930	0.0923	0.0966	0.0850 to 0.115	92.6	70.0 to 130	0.756	20.0
BD05860	Cobalt, Dissolved	mg/L	-0.0000142	0.000147	0.100	0.0987	0.0993	0.104	0.0850 to 0.115	98.6	70.0 to 130	0.606	20.0
BD05859	Cobalt, Total	mg/L	-0.0000154	0.000147	0.100	0.0945	0.0919	0.0986	0.0850 to 0.115	94.5	70.0 to 130	2.79	20.0
BD05858	Fluoride	mg/L	0.00531	0.125	2.50	4.77	4.79	2.64	2.25 to 2.75	110	80.0 to 120	0.418	20.0
BD05860	Iron, Dissolved	mg/L	0.000948	0.0176	0.2	2.99	2.96	0.206	0.170 to 0.230	85.0	70.0 to 130	1.01	20.0
BD05859	Iron, Total	mg/L	-0.00369	0.0176	0.2	0.985	0.989	0.204	0.170 to 0.230	100	70.0 to 130	0.405	20.0

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

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/21/23 10:00
Customer ID:
Delivery Date: 3/23/23 10:13

Description: Gorgas Ash Pond - MW-16D

Laboratory ID Number: BD05854

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD05860	Lead, Dissolved	mg/L	0.0000087	0.000147	0.100	0.103	0.102	0.103	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BD05859	Lead, Total	mg/L	0.0000057	0.000147	0.100	0.0880	0.0874	0.0956	0.0850 to 0.115	88.0	70.0 to 130	0.684	20.0
BD05860	Lithium, Dissolved	mg/L	0.000435	0.0154	0.200	0.269	0.262	0.202	0.170 to 0.230	105	70.0 to 130	2.64	20.0
BD05859	Lithium, Total	mg/L	0.00118	0.0154	0.200	0.289	0.297	0.201	0.170 to 0.230	102	70.0 to 130	2.73	20.0
BD05860	Magnesium, Dissolved	mg/L	-0.00332	0.0462	5.00	106	106	4.91	4.25 to 5.75	162	70.0 to 130	0.00	20.0
BD05859	Magnesium, Total	mg/L	-0.0125	0.0462	5.00	16.2	16.4	4.93	4.25 to 5.75	98.0	70.0 to 130	1.23	20.0
BD05860	Manganese, Dissolved	mg/L	0.0000667	0.00033	0.100	0.377	0.377	0.105	0.0850 to 0.115	92.0	70.0 to 130	0.00	20.0
BD05859	Manganese, Total	mg/L	0.0000890	0.00033	0.100	0.111	0.110	0.0997	0.0850 to 0.115	94.8	70.0 to 130	0.905	20.0
BD05859	Mercury, Total by CVAA	mg/L	-5.000E-05	0.000500	0.004	0.00399	0.00397	0.00401	0.00340 to 0.00460	99.8	70.0 to 130	0.503	20.0
BD05860	Molybdenum, Dissolved	mg/L	0.000945	0.0100	0.2	0.202	0.198	0.201	0.170 to 0.230	101	70.0 to 130	2.00	20.0
BD05859	Molybdenum, Total	mg/L	0.000	0.0100	0.2	0.206	0.202	0.204	0.170 to 0.230	103	70.0 to 130	1.96	20.0
BD05860	Potassium, Dissolved	mg/L	0.0435	0.367	10.0	14.9	14.9	10.6	8.50 to 11.5	99.2	70.0 to 130	0.00	20.0
BD05859	Potassium, Total	mg/L	0.00723	0.367	10.0	12.3	12.1	10.1	8.50 to 11.5	97.0	70.0 to 130	1.64	20.0
BD05860	Selenium, Dissolved	mg/L	0.0000397	0.00100	0.100	0.106	0.105	0.107	0.0850 to 0.115	105	70.0 to 130	0.948	20.0
BD05859	Selenium, Total	mg/L	0.000273	0.00100	0.100	0.0957	0.0963	0.0989	0.0850 to 0.115	95.7	70.0 to 130	0.625	20.0
BD05860	Silicon, Dissolved	mg/L	-0.00163	0.0440	1.00	12.5	12.4	0.997	0.850 to 1.15	100	70.0 to 130	0.803	20.0
BD05859	Silicon, Total	mg/L	0.000711	0.0440	1.00	11.4	11.4	1.01	0.850 to 1.15	110	70.0 to 130	0.00	20.0
BD05860	Sodium, Dissolved	mg/L	0.00324	0.0880	5.00	78.4	79.0	4.89	4.25 to 5.75	142	70.0 to 130	0.762	20.0
BD05859	Sodium, Total	mg/L	0.00384	0.0880	5.00	72.5	69.5	4.87	4.25 to 5.75	138	70.0 to 130	4.23	20.0
BD05858	Sulfate	mg/L	0.148	2.0	80.0	143	144	20.1	18.0 to 22.0	101	80.0 to 120	0.697	20.0
BD05860	Thallium, Dissolved	mg/L	-0.0000089	0.000147	0.100	0.103	0.103	0.102	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BD05859	Thallium, Total	mg/L	-0.0000132	0.000147	0.100	0.0891	0.0876	0.0956	0.0850 to 0.115	89.1	70.0 to 130	1.70	20.0
BD05859	Total Organic Carbon	mg/L	0.0414	1.00	10.0	14.3	15.1	10.8		96.1	80.0 to 120	5.44	20.0

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

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/21/23 10:00
Customer ID:
Delivery Date: 3/23/23 10:13

Description: Gorgas Ash Pond - MW-16D

Laboratory ID Number: BD05854

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD05870	Alkalinity to pH 4.5	mg CaCO3/L					247	50.3	45.0 to 55.0			0.406	10.0
BD05859	Nitrogen, Nitrate/Nitrite	mg/L as N	0.02	0.200	2.00	2.08	0.017	2.12	1.80 to 2.20	104	90.0 to 110	0.00	15.0
BD05862	Solids, Dissolved	mg/L	1.00	25.0			321	52.0	40.0 to 60.0			0.312	10.0

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

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

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-16S

Location Code: WMWGORAP
Collected: 3/21/23 11:30
Customer ID:
Submittal Date: 3/23/23 10:13

Laboratory ID Number: BD05855

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	3/24/23 11:57	3/31/23 11:15		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	3/24/23 11:57	3/31/23 14:08		10.15	59.2	mg/L	0.70035	4.06	
* Iron, Total	3/24/23 11:57	3/31/23 11:15		1.015	0.0773	mg/L	0.008120	0.0406	
* Lithium, Total	3/24/23 11:57	3/31/23 11:15		1.015	0.101	mg/L	0.007105	0.01999956	
* Magnesium, Total	3/24/23 11:57	3/31/23 11:15		1.015	Not Detected	mg/L	0.021315	0.406	U
* Molybdenum, Total	3/24/23 11:57	3/31/23 11:15		1.015	0.0409	mg/L	0.005075	0.01015	
* Silica, Total (calc.)	3/24/23 11:57	3/31/23 11:15		1	15.6	mg/L			
* Silicon, Total	3/24/23 11:57	3/31/23 11:15		1.015	7.31	mg/L	0.02030	0.25375	
* Sodium, Total	3/24/23 11:57	3/31/23 14:08		10.15	228	mg/L	0.4060	4.06	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	3/24/23 08:37	3/29/23 12:13		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Dissolved	3/24/23 08:37	3/29/23 14:12		10.15	55.9	mg/L	0.70035	4.06	
* Iron, Dissolved	3/24/23 08:37	3/29/23 12:13		1.015	0.0744	mg/L	0.008120	0.0406	
* Lithium, Dissolved	3/24/23 08:37	3/29/23 12:13		1.015	0.0898	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	3/24/23 08:37	3/29/23 12:13		1.015	Not Detected	mg/L	0.021315	0.406	U
* Molybdenum, Dissolved	3/24/23 08:37	3/29/23 12:13		1.015	0.0410	mg/L	0.005075	0.01015	
* Silica, Dissolved (calc.)	3/24/23 08:37	3/29/23 12:13		1	19.8	mg/L			
* Silicon, Dissolved	3/24/23 08:37	3/29/23 12:13		1.015	9.27	mg/L	0.02030	0.25375	
* Sodium, Dissolved	3/24/23 08:37	3/29/23 14:12		10.15	223	mg/L	0.4060	4.06	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/24/23 11:57	3/24/23 14:20		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Total	3/24/23 11:57	3/27/23 13:49		5.075	3.72	mg/L	0.045675	0.25375	
* Arsenic, Total	3/24/23 11:57	3/24/23 14:20		1.015	0.00171	mg/L	0.000112	0.000203	
* Barium, Total	3/24/23 11:57	3/24/23 14:20		1.015	0.424	mg/L	0.000508	0.001015	
* Beryllium, Total	3/24/23 11:57	3/24/23 14:20		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	3/24/23 11:57	3/24/23 14:20		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	3/24/23 11:57	3/24/23 14:20		1.015	0.000220	mg/L	0.000203	0.001015	J
* Cobalt, Total	3/24/23 11:57	3/24/23 14:20		1.015	0.000183	mg/L	0.000068	0.000203	J
* Lead, Total	3/24/23 11:57	3/24/23 14:20		1.015	0.0000806	mg/L	0.000068	0.000203	J
* Manganese, Total	3/24/23 11:57	3/24/23 14:20		1.015	0.000294	mg/L	0.000152	0.001015	J

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

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

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

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-16S

Location Code: WMWGORAP
Collected: 3/21/23 11:30
Customer ID:
Submittal Date: 3/23/23 10:13

Laboratory ID Number: BD05855

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	3/24/23 11:57	3/24/23 14:20		1.015	4.66	mg/L	0.169505	0.5075	
* Selenium, Total	3/24/23 11:57	3/24/23 14:20		1.015	0.000703	mg/L	0.000508	0.001015	J
* Thallium, Total	3/24/23 11:57	3/24/23 14:20		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	3/24/23 08:37	3/24/23 10:16		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	3/24/23 08:37	3/24/23 12:16		5.075	3.61	mg/L	0.045675	0.25375	
* Arsenic, Dissolved	3/24/23 08:37	3/24/23 10:16		1.015	0.00225	mg/L	0.000112	0.000203	
* Barium, Dissolved	3/24/23 08:37	3/24/23 10:16		1.015	0.369	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	3/24/23 08:37	3/24/23 10:16		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	3/24/23 08:37	3/24/23 10:16		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	3/24/23 08:37	3/24/23 10:16		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	3/24/23 08:37	3/24/23 10:16		1.015	0.000142	mg/L	0.000068	0.000203	J
* Lead, Dissolved	3/24/23 08:37	3/24/23 10:16		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	3/24/23 08:37	3/24/23 10:16		1.015	Not Detected	mg/L	0.000152	0.001015	U
* Potassium, Dissolved	3/24/23 08:37	3/24/23 10:16		1.015	3.99	mg/L	0.169505	0.5075	
* Selenium, Dissolved	3/24/23 08:37	3/24/23 10:16		1.015	0.000970	mg/L	0.000508	0.001015	J
* Thallium, Dissolved	3/24/23 08:37	3/24/23 10:16		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ELH***								
* Mercury, Total by CVAA	3/27/23 17:52	3/27/23 22:14		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	3/24/23 10:47	3/24/23 10:47		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
* Alkalinity to pH 4.5	3/28/23 13:30	3/28/23 15:24		1	657	mg CaCO3/L		0.10	AI
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	3/23/23 13:10	3/24/23 13:10		1	707	mg/L		178.6	
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	3/23/23 16:32	3/23/23 16:32		1	2.62	mg/L	1.00	2	
Analytical Method: SM4500Cl E	***Analyst: CES***								
* Chloride	3/24/23 10:53	3/24/23 10:53		1	3.99	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: CES***								
* Fluoride	3/28/23 10:29	3/28/23 10:29		1	0.123	mg/L	0.06	0.125	J

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

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

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

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-16S

Location Code: WMWGORAP
Collected: 3/21/23 11:30
Customer ID:
Submittal Date: 3/23/23 10:13

Laboratory ID Number: BD05855

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	4/4/23 12:57	4/4/23 12:57		1	7.08	mg/L	0.6	2	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	3/21/23 11:27	3/21/23 11:27			3001.38	uS/cm			FA
pH	3/21/23 11:27	3/21/23 11:27			12.20	SU			FA
Temperature	3/21/23 11:27	3/21/23 11:27			16.91	C			FA
Turbidity	3/21/23 11:27	3/21/23 11:27			3.82	NTU			FA
Sulfide	3/21/23 11:27	3/21/23 11:27			0	mg/L			FA

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

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

Reported: 5/3/2023
Version: 3.5
COA_CCR

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/21/23 11:30
Customer ID:
Delivery Date: 3/23/23 10:13

Description: Gorgas Ash Pond - MW-16S

Laboratory ID Number: BD05855

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD05860	Aluminum, Dissolved	mg/L	-0.000280	0.0198	0.100	0.103	0.101	0.104	0.0850 to 0.115	103	70.0 to 130	1.96	20.0
BD05859	Aluminum, Total	mg/L	0.000318	0.0198	0.100	0.106	0.104	0.0985	0.0850 to 0.115	96.8	70.0 to 130	1.90	20.0
BD05860	Antimony, Dissolved	mg/L	0.000258	0.00100	0.100	0.0924	0.0941	0.0933	0.0850 to 0.115	92.4	70.0 to 130	1.82	20.0
BD05859	Antimony, Total	mg/L	0.000323	0.00100	0.100	0.0919	0.0915	0.0909	0.0850 to 0.115	91.9	70.0 to 130	0.436	20.0
BD05860	Arsenic, Dissolved	mg/L	-0.0000068	0.000200	0.100	0.102	0.103	0.102	0.0850 to 0.115	102	70.0 to 130	0.976	20.0
BD05859	Arsenic, Total	mg/L	0.0000036	0.000200	0.100	0.0945	0.0940	0.0969	0.0850 to 0.115	94.4	70.0 to 130	0.531	20.0
BD05860	Barium, Dissolved	mg/L	-0.0000031	0.00100	0.100	0.131	0.129	0.101	0.0850 to 0.115	103	70.0 to 130	1.54	20.0
BD05859	Barium, Total	mg/L	-0.0000258	0.00100	0.100	0.782	0.774	0.0969	0.0850 to 0.115	57.0	70.0 to 130	1.03	20.0
BD05860	Beryllium, Dissolved	mg/L	0.0000000	0.000880	0.100	0.0904	0.0893	0.0998	0.0850 to 0.115	90.4	70.0 to 130	1.22	20.0
BD05859	Beryllium, Total	mg/L	0.0000000	0.000880	0.100	0.0962	0.0941	0.0970	0.0850 to 0.115	96.2	70.0 to 130	2.21	20.0
BD05860	Boron, Dissolved	mg/L	-0.000072	0.0650	1.00	1.06	1.07	0.994	0.850 to 1.15	103	70.0 to 130	0.939	20.0
BD05859	Boron, Total	mg/L	-0.000178	0.0650	1.00	1.06	1.07	1.03	0.850 to 1.15	106	70.0 to 130	0.939	20.0
BD05860	Cadmium, Dissolved	mg/L	0.0000000	0.000147	0.100	0.0993	0.101	0.101	0.0850 to 0.115	99.3	70.0 to 130	1.70	20.0
BD05859	Cadmium, Total	mg/L	0.0000000	0.000147	0.100	0.0931	0.0952	0.0960	0.0850 to 0.115	93.1	70.0 to 130	2.23	20.0
BD05860	Calcium, Dissolved	mg/L	0.00206	0.152	5.00	223	223	4.92	4.25 to 5.75	200	70.0 to 130	0.00	20.0
BD05859	Calcium, Total	mg/L	0.00772	0.152	5.00	30.7	30.4	4.93	4.25 to 5.75	100	70.0 to 130	0.982	20.0
BD05858	Chloride	mg/L	0.167	1.00	160	181	186	9.86	9.00 to 11.0	95.3	80.0 to 120	2.72	20.0
BD05860	Chromium, Dissolved	mg/L	-0.0000195	0.000440	0.100	0.0982	0.0983	0.102	0.0850 to 0.115	98.2	70.0 to 130	0.102	20.0
BD05859	Chromium, Total	mg/L	-0.0000978	0.000440	0.100	0.0930	0.0923	0.0966	0.0850 to 0.115	92.6	70.0 to 130	0.756	20.0
BD05860	Cobalt, Dissolved	mg/L	-0.0000142	0.000147	0.100	0.0987	0.0993	0.104	0.0850 to 0.115	98.6	70.0 to 130	0.606	20.0
BD05859	Cobalt, Total	mg/L	-0.0000154	0.000147	0.100	0.0945	0.0919	0.0986	0.0850 to 0.115	94.5	70.0 to 130	2.79	20.0
BD05858	Fluoride	mg/L	0.00531	0.125	2.50	4.77	4.79	2.64	2.25 to 2.75	110	80.0 to 120	0.418	20.0
BD05860	Iron, Dissolved	mg/L	0.000948	0.0176	0.2	2.99	2.96	0.206	0.170 to 0.230	85.0	70.0 to 130	1.01	20.0
BD05859	Iron, Total	mg/L	-0.00369	0.0176	0.2	0.985	0.989	0.204	0.170 to 0.230	100	70.0 to 130	0.405	20.0

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/21/23 11:30
Customer ID:
Delivery Date: 3/23/23 10:13

Description: Gorgas Ash Pond - MW-16S

Laboratory ID Number: BD05855

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD05860	Lead, Dissolved	mg/L	0.0000087	0.000147	0.100	0.103	0.102	0.103	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BD05859	Lead, Total	mg/L	0.0000057	0.000147	0.100	0.0880	0.0874	0.0956	0.0850 to 0.115	88.0	70.0 to 130	0.684	20.0
BD05860	Lithium, Dissolved	mg/L	0.000435	0.0154	0.200	0.269	0.262	0.202	0.170 to 0.230	105	70.0 to 130	2.64	20.0
BD05859	Lithium, Total	mg/L	0.00118	0.0154	0.200	0.289	0.297	0.201	0.170 to 0.230	102	70.0 to 130	2.73	20.0
BD05860	Magnesium, Dissolved	mg/L	-0.00332	0.0462	5.00	106	106	4.91	4.25 to 5.75	162	70.0 to 130	0.00	20.0
BD05859	Magnesium, Total	mg/L	-0.0125	0.0462	5.00	16.2	16.4	4.93	4.25 to 5.75	98.0	70.0 to 130	1.23	20.0
BD05860	Manganese, Dissolved	mg/L	0.0000667	0.00033	0.100	0.377	0.377	0.105	0.0850 to 0.115	92.0	70.0 to 130	0.00	20.0
BD05859	Manganese, Total	mg/L	0.0000890	0.00033	0.100	0.111	0.110	0.0997	0.0850 to 0.115	94.8	70.0 to 130	0.905	20.0
BD05859	Mercury, Total by CVAA	mg/L	-5.000E-05	0.000500	0.004	0.00399	0.00397	0.00401	0.00340 to 0.00460	99.8	70.0 to 130	0.503	20.0
BD05860	Molybdenum, Dissolved	mg/L	0.000945	0.0100	0.2	0.202	0.198	0.201	0.170 to 0.230	101	70.0 to 130	2.00	20.0
BD05859	Molybdenum, Total	mg/L	0.000	0.0100	0.2	0.206	0.202	0.204	0.170 to 0.230	103	70.0 to 130	1.96	20.0
BD05860	Potassium, Dissolved	mg/L	0.0435	0.367	10.0	14.9	14.9	10.6	8.50 to 11.5	99.2	70.0 to 130	0.00	20.0
BD05859	Potassium, Total	mg/L	0.00723	0.367	10.0	12.3	12.1	10.1	8.50 to 11.5	97.0	70.0 to 130	1.64	20.0
BD05860	Selenium, Dissolved	mg/L	0.0000397	0.00100	0.100	0.106	0.105	0.107	0.0850 to 0.115	105	70.0 to 130	0.948	20.0
BD05859	Selenium, Total	mg/L	0.000273	0.00100	0.100	0.0957	0.0963	0.0989	0.0850 to 0.115	95.7	70.0 to 130	0.625	20.0
BD05860	Silicon, Dissolved	mg/L	-0.00163	0.0440	1.00	12.5	12.4	0.997	0.850 to 1.15	100	70.0 to 130	0.803	20.0
BD05859	Silicon, Total	mg/L	0.000711	0.0440	1.00	11.4	11.4	1.01	0.850 to 1.15	110	70.0 to 130	0.00	20.0
BD05860	Sodium, Dissolved	mg/L	0.00324	0.0880	5.00	78.4	79.0	4.89	4.25 to 5.75	142	70.0 to 130	0.762	20.0
BD05859	Sodium, Total	mg/L	0.00384	0.0880	5.00	72.5	69.5	4.87	4.25 to 5.75	138	70.0 to 130	4.23	20.0
BD05858	Sulfate	mg/L	0.148	2.0	80.0	143	144	20.1	18.0 to 22.0	101	80.0 to 120	0.697	20.0
BD05860	Thallium, Dissolved	mg/L	-0.0000089	0.000147	0.100	0.103	0.103	0.102	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BD05859	Thallium, Total	mg/L	-0.0000132	0.000147	0.100	0.0891	0.0876	0.0956	0.0850 to 0.115	89.1	70.0 to 130	1.70	20.0
BD05859	Total Organic Carbon	mg/L	0.0414	1.00	10.0	14.3	15.1	10.8		96.1	80.0 to 120	5.44	20.0

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

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/21/23 11:30
Customer ID:
Delivery Date: 3/23/23 10:13

Description: Gorgas Ash Pond - MW-16S

Laboratory ID Number: BD05855

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD05870	Alkalinity to pH 4.5	mg CaCO3/L					247	50.3	45.0 to 55.0			0.406	10.0
BD05859	Nitrogen, Nitrate/Nitrite	mg/L as N	0.02	0.200	2.00	2.08	0.017	2.12	1.80 to 2.20	104	90.0 to 110	0.00	15.0
BD05862	Solids, Dissolved	mg/L	1.00	25.0			321	52.0	40.0 to 60.0			0.312	10.0

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

Reported: 5/3/2023
Version: 3.5
COA_CCR

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

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-21

Location Code: WMWGORAP
Collected: 3/21/23 13:09
Customer ID:
Submittal Date: 3/23/23 10:13

Laboratory ID Number: BD05856

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	3/24/23 11:57	3/31/23 11:18		1.015	0.130	mg/L	0.030000	0.1015	
* Calcium, Total	3/24/23 11:57	3/31/23 11:18		1.015	2.74	mg/L	0.070035	0.406	
* Iron, Total	3/24/23 11:57	3/31/23 11:18		1.015	0.0110	mg/L	0.008120	0.0406	J
* Lithium, Total	3/24/23 11:57	3/31/23 11:18		1.015	0.0884	mg/L	0.007105	0.01999956	
* Magnesium, Total	3/24/23 11:57	3/31/23 11:18		1.015	0.421	mg/L	0.021315	0.406	
* Molybdenum, Total	3/24/23 11:57	3/31/23 11:18		1.015	0.0103	mg/L	0.005075	0.01015	
* Silica, Total (calc.)	3/24/23 11:57	3/31/23 11:18		1	8.73	mg/L			
* Silicon, Total	3/24/23 11:57	3/31/23 11:18		1.015	4.08	mg/L	0.02030	0.25375	
* Sodium, Total	3/24/23 11:57	3/31/23 14:11		10.15	208	mg/L	0.4060	4.06	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	3/24/23 08:37	3/29/23 12:16		1.015	0.129	mg/L	0.030000	0.1015	
* Calcium, Dissolved	3/24/23 08:37	3/29/23 12:16		1.015	1.58	mg/L	0.070035	0.406	
* Iron, Dissolved	3/24/23 08:37	3/29/23 12:16		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Dissolved	3/24/23 08:37	3/29/23 12:16		1.015	0.0788	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	3/24/23 08:37	3/29/23 12:16		1.015	0.396	mg/L	0.021315	0.406	J
* Molybdenum, Dissolved	3/24/23 08:37	3/29/23 12:16		1.015	0.00866	mg/L	0.005075	0.01015	J
* Silica, Dissolved (calc.)	3/24/23 08:37	3/29/23 12:16		1	8.77	mg/L			
* Silicon, Dissolved	3/24/23 08:37	3/29/23 12:16		1.015	4.10	mg/L	0.02030	0.25375	
* Sodium, Dissolved	3/24/23 08:37	3/29/23 14:15		10.15	222	mg/L	0.4060	4.06	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/24/23 11:57	3/24/23 14:24		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Total	3/24/23 11:57	3/24/23 14:24		1.015	0.0464	mg/L	0.009135	0.05075	J
* Arsenic, Total	3/24/23 11:57	3/24/23 14:24		1.015	0.000472	mg/L	0.000112	0.000203	
* Barium, Total	3/24/23 11:57	3/24/23 14:24		1.015	0.127	mg/L	0.000508	0.001015	
* Beryllium, Total	3/24/23 11:57	3/24/23 14:24		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	3/24/23 11:57	3/24/23 14:24		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	3/24/23 11:57	3/24/23 14:24		1.015	0.000459	mg/L	0.000203	0.001015	J
* Cobalt, Total	3/24/23 11:57	3/24/23 14:24		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	3/24/23 11:57	3/24/23 14:24		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	3/24/23 11:57	3/24/23 14:24		1.015	0.000786	mg/L	0.000152	0.001015	J

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

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

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

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-21

Location Code: WMWGORAP
Collected: 3/21/23 13:09
Customer ID:
Submittal Date: 3/23/23 10:13

Laboratory ID Number: BD05856

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	3/24/23 11:57	3/24/23 14:24		1.015	1.61	mg/L	0.169505	0.5075	
* Selenium, Total	3/24/23 11:57	3/24/23 14:24		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	3/24/23 11:57	3/24/23 14:24		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	3/24/23 08:37	3/24/23 10:20		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	3/24/23 08:37	3/24/23 10:20		1.015	0.0222	mg/L	0.009135	0.05075	J
* Arsenic, Dissolved	3/24/23 08:37	3/24/23 10:20		1.015	0.000405	mg/L	0.000112	0.000203	
* Barium, Dissolved	3/24/23 08:37	3/24/23 10:20		1.015	0.129	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	3/24/23 08:37	3/24/23 10:20		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	3/24/23 08:37	3/24/23 10:20		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	3/24/23 08:37	3/24/23 10:20		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	3/24/23 08:37	3/24/23 10:20		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Dissolved	3/24/23 08:37	3/24/23 10:20		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	3/24/23 08:37	3/24/23 10:20		1.015	0.000687	mg/L	0.000152	0.001015	J
* Potassium, Dissolved	3/24/23 08:37	3/24/23 10:20		1.015	1.48	mg/L	0.169505	0.5075	
* Selenium, Dissolved	4/21/23 09:03	4/21/23 09:51		1.015	0.00283	mg/L	0.000508	0.001015	
* Thallium, Dissolved	3/24/23 08:37	3/24/23 10:20		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ELH***								
* Mercury, Total by CVAA	3/27/23 17:52	3/27/23 22:18		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	3/24/23 10:48	3/24/23 10:48		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
* Alkalinity to pH 4.5	3/28/23 13:30	3/28/23 15:24		1	185	mg CaCO3/L		0.10	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	3/23/23 13:10	3/24/23 13:10		1	606	mg/L		50	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
* Bicarbonate Alkalinity, (calc.)	3/28/23 13:30	3/28/23 15:24		1	127	mg CaCO3/L		1	A
* Carbonate Alkalinity, (calc.)	3/28/23 13:30	3/28/23 15:24		1	55.8	mg CaCO3/L		0.5	A
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	3/23/23 16:45	3/23/23 16:45		1	3.38	mg/L	1.00	2	

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

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

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

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-21

Location Code: WMWGORAP
Collected: 3/21/23 13:09
Customer ID:
Submittal Date: 3/23/23 10:13

Laboratory ID Number: BD05856

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: CES***								
* Chloride	3/24/23 11:01	3/24/23 11:01		32	38.5	mg/L	16.00	32	
Analytical Method: SM4500F G 2017	***Analyst: CES***								
* Fluoride	3/28/23 10:30	3/28/23 10:30		1	0.194	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	4/4/23 13:05	4/4/23 13:05		16	238	mg/L	9.6	32	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	3/21/23 13:06	3/21/23 13:06			993.99	uS/cm			FA
pH	3/21/23 13:06	3/21/23 13:06			9.56	SU			FA
Temperature	3/21/23 13:06	3/21/23 13:06			17.10	C			FA
Turbidity	3/21/23 13:06	3/21/23 13:06			2.76	NTU			FA
Sulfide	3/21/23 13:06	3/21/23 13:06			3.0	mg/L			FA

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

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

Reported: 5/3/2023
Version: 3.5
COA_CCR

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/21/23 13:09
Customer ID:
Delivery Date: 3/23/23 10:13

Description: Gorgas Ash Pond - MW-21

Laboratory ID Number: BD05856

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD05860	Aluminum, Dissolved	mg/L	-0.000280	0.0198	0.100	0.103	0.101	0.104	0.0850 to 0.115	103	70.0 to 130	1.96	20.0
BD05859	Aluminum, Total	mg/L	0.000318	0.0198	0.100	0.106	0.104	0.0985	0.0850 to 0.115	96.8	70.0 to 130	1.90	20.0
BD05860	Antimony, Dissolved	mg/L	0.000258	0.00100	0.100	0.0924	0.0941	0.0933	0.0850 to 0.115	92.4	70.0 to 130	1.82	20.0
BD05859	Antimony, Total	mg/L	0.000323	0.00100	0.100	0.0919	0.0915	0.0909	0.0850 to 0.115	91.9	70.0 to 130	0.436	20.0
BD05860	Arsenic, Dissolved	mg/L	-0.0000068	0.000200	0.100	0.102	0.103	0.102	0.0850 to 0.115	102	70.0 to 130	0.976	20.0
BD05859	Arsenic, Total	mg/L	0.0000036	0.000200	0.100	0.0945	0.0940	0.0969	0.0850 to 0.115	94.4	70.0 to 130	0.531	20.0
BD05860	Barium, Dissolved	mg/L	-0.0000031	0.00100	0.100	0.131	0.129	0.101	0.0850 to 0.115	103	70.0 to 130	1.54	20.0
BD05859	Barium, Total	mg/L	-0.0000258	0.00100	0.100	0.782	0.774	0.0969	0.0850 to 0.115	57.0	70.0 to 130	1.03	20.0
BD05860	Beryllium, Dissolved	mg/L	0.0000000	0.000880	0.100	0.0904	0.0893	0.0998	0.0850 to 0.115	90.4	70.0 to 130	1.22	20.0
BD05859	Beryllium, Total	mg/L	0.0000000	0.000880	0.100	0.0962	0.0941	0.0970	0.0850 to 0.115	96.2	70.0 to 130	2.21	20.0
BD05860	Boron, Dissolved	mg/L	-0.000072	0.0650	1.00	1.06	1.07	0.994	0.850 to 1.15	103	70.0 to 130	0.939	20.0
BD05859	Boron, Total	mg/L	-0.000178	0.0650	1.00	1.06	1.07	1.03	0.850 to 1.15	106	70.0 to 130	0.939	20.0
BD05860	Cadmium, Dissolved	mg/L	0.0000000	0.000147	0.100	0.0993	0.101	0.101	0.0850 to 0.115	99.3	70.0 to 130	1.70	20.0
BD05859	Cadmium, Total	mg/L	0.0000000	0.000147	0.100	0.0931	0.0952	0.0960	0.0850 to 0.115	93.1	70.0 to 130	2.23	20.0
BD05860	Calcium, Dissolved	mg/L	0.00206	0.152	5.00	223	223	4.92	4.25 to 5.75	200	70.0 to 130	0.00	20.0
BD05859	Calcium, Total	mg/L	0.00772	0.152	5.00	30.7	30.4	4.93	4.25 to 5.75	100	70.0 to 130	0.982	20.0
BD05858	Chloride	mg/L	0.167	1.00	160	181	186	9.86	9.00 to 11.0	95.3	80.0 to 120	2.72	20.0
BD05860	Chromium, Dissolved	mg/L	-0.0000195	0.000440	0.100	0.0982	0.0983	0.102	0.0850 to 0.115	98.2	70.0 to 130	0.102	20.0
BD05859	Chromium, Total	mg/L	-0.0000978	0.000440	0.100	0.0930	0.0923	0.0966	0.0850 to 0.115	92.6	70.0 to 130	0.756	20.0
BD05860	Cobalt, Dissolved	mg/L	-0.0000142	0.000147	0.100	0.0987	0.0993	0.104	0.0850 to 0.115	98.6	70.0 to 130	0.606	20.0
BD05859	Cobalt, Total	mg/L	-0.0000154	0.000147	0.100	0.0945	0.0919	0.0986	0.0850 to 0.115	94.5	70.0 to 130	2.79	20.0
BD05858	Fluoride	mg/L	0.00531	0.125	2.50	4.77	4.79	2.64	2.25 to 2.75	110	80.0 to 120	0.418	20.0
BD05860	Iron, Dissolved	mg/L	0.000948	0.0176	0.2	2.99	2.96	0.206	0.170 to 0.230	85.0	70.0 to 130	1.01	20.0
BD05859	Iron, Total	mg/L	-0.00369	0.0176	0.2	0.985	0.989	0.204	0.170 to 0.230	100	70.0 to 130	0.405	20.0

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/21/23 13:09
Customer ID:
Delivery Date: 3/23/23 10:13

Description: Gorgas Ash Pond - MW-21

Laboratory ID Number: BD05856

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD05860	Lead, Dissolved	mg/L	0.0000087	0.000147	0.100	0.103	0.102	0.103	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BD05859	Lead, Total	mg/L	0.0000057	0.000147	0.100	0.0880	0.0874	0.0956	0.0850 to 0.115	88.0	70.0 to 130	0.684	20.0
BD05860	Lithium, Dissolved	mg/L	0.000435	0.0154	0.200	0.269	0.262	0.202	0.170 to 0.230	105	70.0 to 130	2.64	20.0
BD05859	Lithium, Total	mg/L	0.00118	0.0154	0.200	0.289	0.297	0.201	0.170 to 0.230	102	70.0 to 130	2.73	20.0
BD05860	Magnesium, Dissolved	mg/L	-0.00332	0.0462	5.00	106	106	4.91	4.25 to 5.75	162	70.0 to 130	0.00	20.0
BD05859	Magnesium, Total	mg/L	-0.0125	0.0462	5.00	16.2	16.4	4.93	4.25 to 5.75	98.0	70.0 to 130	1.23	20.0
BD05860	Manganese, Dissolved	mg/L	0.0000667	0.00033	0.100	0.377	0.377	0.105	0.0850 to 0.115	92.0	70.0 to 130	0.00	20.0
BD05859	Manganese, Total	mg/L	0.0000890	0.00033	0.100	0.111	0.110	0.0997	0.0850 to 0.115	94.8	70.0 to 130	0.905	20.0
BD05859	Mercury, Total by CVAA	mg/L	-5.000E-05	0.000500	0.004	0.00399	0.00397	0.00401	0.00340 to 0.00460	99.8	70.0 to 130	0.503	20.0
BD05860	Molybdenum, Dissolved	mg/L	0.000945	0.0100	0.2	0.202	0.198	0.201	0.170 to 0.230	101	70.0 to 130	2.00	20.0
BD05859	Molybdenum, Total	mg/L	0.000	0.0100	0.2	0.206	0.202	0.204	0.170 to 0.230	103	70.0 to 130	1.96	20.0
BD05860	Potassium, Dissolved	mg/L	0.0435	0.367	10.0	14.9	14.9	10.6	8.50 to 11.5	99.2	70.0 to 130	0.00	20.0
BD05859	Potassium, Total	mg/L	0.00723	0.367	10.0	12.3	12.1	10.1	8.50 to 11.5	97.0	70.0 to 130	1.64	20.0
BD05858	Selenium, Dissolved	mg/L	0.0000599	0.00100	0.100	0.101	0.0964	0.105	0.0850 to 0.115	99.7	70.0 to 130	4.66	20.0
BD05859	Selenium, Total	mg/L	0.000273	0.00100	0.100	0.0957	0.0963	0.0989	0.0850 to 0.115	95.7	70.0 to 130	0.625	20.0
BD05860	Silicon, Dissolved	mg/L	-0.00163	0.0440	1.00	12.5	12.4	0.997	0.850 to 1.15	100	70.0 to 130	0.803	20.0
BD05859	Silicon, Total	mg/L	0.000711	0.0440	1.00	11.4	11.4	1.01	0.850 to 1.15	110	70.0 to 130	0.00	20.0
BD05860	Sodium, Dissolved	mg/L	0.00324	0.0880	5.00	78.4	79.0	4.89	4.25 to 5.75	142	70.0 to 130	0.762	20.0
BD05859	Sodium, Total	mg/L	0.00384	0.0880	5.00	72.5	69.5	4.87	4.25 to 5.75	138	70.0 to 130	4.23	20.0
BD05858	Sulfate	mg/L	0.148	2.0	80.0	143	144	20.1	18.0 to 22.0	101	80.0 to 120	0.697	20.0
BD05860	Thallium, Dissolved	mg/L	-0.0000089	0.000147	0.100	0.103	0.103	0.102	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BD05859	Thallium, Total	mg/L	-0.0000132	0.000147	0.100	0.0891	0.0876	0.0956	0.0850 to 0.115	89.1	70.0 to 130	1.70	20.0
BD05859	Total Organic Carbon	mg/L	0.0414	1.00	10.0	14.3	15.1	10.8		96.1	80.0 to 120	5.44	20.0

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

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/21/23 13:09
Customer ID:
Delivery Date: 3/23/23 10:13

Description: Gorgas Ash Pond - MW-21

Laboratory ID Number: BD05856

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD05870	Alkalinity to pH 4.5	mg CaCO3/L					247	50.3	45.0 to 55.0			0.406	10.0
BD05859	Nitrogen, Nitrate/Nitrite	mg/L as N	0.02	0.200	2.00	2.08	0.017	2.12	1.80 to 2.20	104	90.0 to 110	0.00	15.0
BD05862	Solids, Dissolved	mg/L	1.00	25.0			321	52.0	40.0 to 60.0			0.312	10.0

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

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-21V

Location Code: WMWGORAP
Collected: 3/21/23 14:40
Customer ID:
Submittal Date: 3/23/23 10:13

Laboratory ID Number: BD05857

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	3/24/23 11:57	3/31/23 11:21		1.015	0.106	mg/L	0.030000	0.1015	
* Calcium, Total	3/24/23 11:57	3/31/23 14:15		101.5	46.6	mg/L	7.0035	40.6	
* Iron, Total	3/24/23 11:57	3/31/23 11:21		1.015	0.122	mg/L	0.008120	0.0406	
* Lithium, Total	3/24/23 11:57	3/31/23 11:21		1.015	0.110	mg/L	0.007105	0.01999956	
* Magnesium, Total	3/24/23 11:57	3/31/23 11:21		1.015	13.0	mg/L	0.021315	0.406	
* Molybdenum, Total	3/24/23 11:57	3/31/23 11:21		1.015	0.0361	mg/L	0.005075	0.01015	
* Silica, Total (calc.)	3/24/23 11:57	3/31/23 11:21		1	11.9	mg/L			
* Silicon, Total	3/24/23 11:57	3/31/23 11:21		1.015	5.55	mg/L	0.02030	0.25375	
* Sodium, Total	3/24/23 11:57	3/31/23 14:15		101.5	542	mg/L	4.060	40.6	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	3/24/23 08:37	3/29/23 12:19		1.015	0.101	mg/L	0.030000	0.1015	J
* Calcium, Dissolved	4/24/23 10:50	4/24/23 11:01		10.15	46.7	mg/L	0.70035	4.06	RA
* Iron, Dissolved	3/24/23 08:37	3/29/23 12:19		1.015	0.0982	mg/L	0.008120	0.0406	
* Lithium, Dissolved	3/24/23 08:37	3/29/23 12:19		1.015	0.101	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	3/24/23 08:37	3/29/23 12:19		1.015	11.5	mg/L	0.021315	0.406	
* Molybdenum, Dissolved	3/24/23 08:37	3/29/23 12:19		1.015	0.0313	mg/L	0.005075	0.01015	
* Silica, Dissolved (calc.)	3/24/23 08:37	3/29/23 12:19		1	11.7	mg/L			
* Silicon, Dissolved	3/24/23 08:37	3/29/23 12:19		1.015	5.47	mg/L	0.02030	0.25375	
* Sodium, Dissolved	3/24/23 08:37	3/29/23 14:19		101.5	486	mg/L	4.060	40.6	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/24/23 11:57	3/24/23 14:27		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Total	3/24/23 11:57	3/24/23 14:27		1.015	0.0240	mg/L	0.009135	0.05075	J
* Arsenic, Total	3/24/23 11:57	3/24/23 14:27		1.015	0.00444	mg/L	0.000112	0.000203	
* Barium, Total	3/24/23 11:57	3/24/23 14:27		1.015	0.0590	mg/L	0.000508	0.001015	
* Beryllium, Total	3/24/23 11:57	3/24/23 14:27		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	3/24/23 11:57	3/24/23 14:27		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	3/24/23 11:57	3/24/23 14:27		1.015	0.000223	mg/L	0.000203	0.001015	J
* Cobalt, Total	3/24/23 11:57	3/24/23 14:27		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	3/24/23 11:57	3/24/23 14:27		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	3/24/23 11:57	3/24/23 14:27		1.015	0.0355	mg/L	0.000152	0.001015	

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

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

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

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-21V

Location Code: WMWGORAP
Collected: 3/21/23 14:40
Customer ID:
Submittal Date: 3/23/23 10:13

Laboratory ID Number: BD05857

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	3/24/23 11:57	3/24/23 14:27		1.015	74.2	mg/L	0.169505	0.5075	
* Selenium, Total	3/24/23 11:57	3/24/23 14:27		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	3/24/23 11:57	3/24/23 14:27		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	3/24/23 08:37	3/24/23 10:23		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	3/24/23 08:37	3/24/23 10:23		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Dissolved	3/24/23 08:37	3/24/23 10:23		1.015	0.00414	mg/L	0.000112	0.000203	
* Barium, Dissolved	3/24/23 08:37	3/24/23 10:23		1.015	0.0554	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	3/24/23 08:37	3/24/23 10:23		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	3/24/23 08:37	3/24/23 10:23		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	3/24/23 08:37	3/24/23 10:23		1.015	0.000263	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	3/24/23 08:37	3/24/23 10:23		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Dissolved	3/24/23 08:37	3/24/23 10:23		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	3/24/23 08:37	3/24/23 10:23		1.015	0.0329	mg/L	0.000152	0.001015	
* Potassium, Dissolved	3/24/23 08:37	3/24/23 10:23		1.015	68.3	mg/L	0.169505	0.5075	
* Selenium, Dissolved	4/21/23 09:03	4/21/23 09:54		1.015	0.00191	mg/L	0.000508	0.001015	
* Thallium, Dissolved	3/24/23 08:37	3/24/23 10:23		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ELH***								
* Mercury, Total by CVAA	3/27/23 17:52	3/27/23 22:21		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	3/24/23 10:50	3/24/23 10:50		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
* Alkalinity to pH 4.5	3/28/23 13:30	3/28/23 15:24		1	226	mg CaCO3/L		0.10	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	3/23/23 13:10	3/24/23 13:10		1	1950	mg/L		227.3	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
* Bicarbonate Alkalinity, (calc.)	3/28/23 13:30	3/28/23 15:24		1	224	mg CaCO3/L		1	A
* Carbonate Alkalinity, (calc.)	3/28/23 13:30	3/28/23 15:24		1	2.10	mg CaCO3/L		0.5	A
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	3/23/23 16:59	3/23/23 16:59		1	8.65	mg/L	1.00	2	

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

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

Reported: 5/3/2023
Version: 3.5
COA_CCR

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

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-21V

Location Code: WMWGORAP
Collected: 3/21/23 14:40
Customer ID:
Submittal Date: 3/23/23 10:13

Laboratory ID Number: BD05857

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: CES***								
* Chloride	3/24/23 11:02	3/24/23 11:02		100	564	mg/L	50.00	100	
Analytical Method: SM4500F G 2017	***Analyst: CES***								
* Fluoride	3/28/23 10:31	3/28/23 10:31		1	0.381	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	4/4/23 13:07	4/4/23 13:07		32	595	mg/L	19.2	64	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	3/21/23 14:37	3/21/23 14:37			3641.79	uS/cm			FA
pH	3/21/23 14:37	3/21/23 14:37			7.67	SU			FA
Temperature	3/21/23 14:37	3/21/23 14:37			18.85	C			FA
Turbidity	3/21/23 14:37	3/21/23 14:37			2.33	NTU			FA
Sulfide	3/21/23 14:37	3/21/23 14:37			0	mg/L			FA

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

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

Reported: 5/3/2023
Version: 3.5
COA_CCR

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/21/23 14:40
Customer ID:
Delivery Date: 3/23/23 10:13

Description: Gorgas Ash Pond - MW-21V

Laboratory ID Number: BD05857

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD05860	Aluminum, Dissolved	mg/L	-0.000280	0.0198	0.100	0.103	0.101	0.104	0.0850 to 0.115	103	70.0 to 130	1.96	20.0
BD05859	Aluminum, Total	mg/L	0.000318	0.0198	0.100	0.106	0.104	0.0985	0.0850 to 0.115	96.8	70.0 to 130	1.90	20.0
BD05860	Antimony, Dissolved	mg/L	0.000258	0.00100	0.100	0.0924	0.0941	0.0933	0.0850 to 0.115	92.4	70.0 to 130	1.82	20.0
BD05859	Antimony, Total	mg/L	0.000323	0.00100	0.100	0.0919	0.0915	0.0909	0.0850 to 0.115	91.9	70.0 to 130	0.436	20.0
BD05860	Arsenic, Dissolved	mg/L	-0.0000068	0.000200	0.100	0.102	0.103	0.102	0.0850 to 0.115	102	70.0 to 130	0.976	20.0
BD05859	Arsenic, Total	mg/L	0.0000036	0.000200	0.100	0.0945	0.0940	0.0969	0.0850 to 0.115	94.4	70.0 to 130	0.531	20.0
BD05860	Barium, Dissolved	mg/L	-0.0000031	0.00100	0.100	0.131	0.129	0.101	0.0850 to 0.115	103	70.0 to 130	1.54	20.0
BD05859	Barium, Total	mg/L	-0.0000258	0.00100	0.100	0.782	0.774	0.0969	0.0850 to 0.115	57.0	70.0 to 130	1.03	20.0
BD05860	Beryllium, Dissolved	mg/L	0.0000000	0.000880	0.100	0.0904	0.0893	0.0998	0.0850 to 0.115	90.4	70.0 to 130	1.22	20.0
BD05859	Beryllium, Total	mg/L	0.0000000	0.000880	0.100	0.0962	0.0941	0.0970	0.0850 to 0.115	96.2	70.0 to 130	2.21	20.0
BD05860	Boron, Dissolved	mg/L	-0.000072	0.0650	1.00	1.06	1.07	0.994	0.850 to 1.15	103	70.0 to 130	0.939	20.0
BD05859	Boron, Total	mg/L	-0.000178	0.0650	1.00	1.06	1.07	1.03	0.850 to 1.15	106	70.0 to 130	0.939	20.0
BD05860	Cadmium, Dissolved	mg/L	0.0000000	0.000147	0.100	0.0993	0.101	0.101	0.0850 to 0.115	99.3	70.0 to 130	1.70	20.0
BD05859	Cadmium, Total	mg/L	0.0000000	0.000147	0.100	0.0931	0.0952	0.0960	0.0850 to 0.115	93.1	70.0 to 130	2.23	20.0
BD05857	Calcium, Dissolved	mg/L	0.00269	0.152	5.00	50.0	51.4	5.11	4.25 to 5.75	66.0	70.0 to 130	2.76	20.0
BD05859	Calcium, Total	mg/L	0.00772	0.152	5.00	30.7	30.4	4.93	4.25 to 5.75	100	70.0 to 130	0.982	20.0
BD05858	Chloride	mg/L	0.167	1.00	160	181	186	9.86	9.00 to 11.0	95.3	80.0 to 120	2.72	20.0
BD05860	Chromium, Dissolved	mg/L	-0.0000195	0.000440	0.100	0.0982	0.0983	0.102	0.0850 to 0.115	98.2	70.0 to 130	0.102	20.0
BD05859	Chromium, Total	mg/L	-0.0000978	0.000440	0.100	0.0930	0.0923	0.0966	0.0850 to 0.115	92.6	70.0 to 130	0.756	20.0
BD05860	Cobalt, Dissolved	mg/L	-0.0000142	0.000147	0.100	0.0987	0.0993	0.104	0.0850 to 0.115	98.6	70.0 to 130	0.606	20.0
BD05859	Cobalt, Total	mg/L	-0.0000154	0.000147	0.100	0.0945	0.0919	0.0986	0.0850 to 0.115	94.5	70.0 to 130	2.79	20.0
BD05858	Fluoride	mg/L	0.00531	0.125	2.50	4.77	4.79	2.64	2.25 to 2.75	110	80.0 to 120	0.418	20.0
BD05860	Iron, Dissolved	mg/L	0.000948	0.0176	0.2	2.99	2.96	0.206	0.170 to 0.230	85.0	70.0 to 130	1.01	20.0
BD05859	Iron, Total	mg/L	-0.00369	0.0176	0.2	0.985	0.989	0.204	0.170 to 0.230	100	70.0 to 130	0.405	20.0

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

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/21/23 14:40
Customer ID:
Delivery Date: 3/23/23 10:13

Description: Gorgas Ash Pond - MW-21V

Laboratory ID Number: BD05857

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD05860	Lead, Dissolved	mg/L	0.0000087	0.000147	0.100	0.103	0.102	0.103	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BD05859	Lead, Total	mg/L	0.0000057	0.000147	0.100	0.0880	0.0874	0.0956	0.0850 to 0.115	88.0	70.0 to 130	0.684	20.0
BD05860	Lithium, Dissolved	mg/L	0.000435	0.0154	0.200	0.269	0.262	0.202	0.170 to 0.230	105	70.0 to 130	2.64	20.0
BD05859	Lithium, Total	mg/L	0.00118	0.0154	0.200	0.289	0.297	0.201	0.170 to 0.230	102	70.0 to 130	2.73	20.0
BD05860	Magnesium, Dissolved	mg/L	-0.00332	0.0462	5.00	106	106	4.91	4.25 to 5.75	162	70.0 to 130	0.00	20.0
BD05859	Magnesium, Total	mg/L	-0.0125	0.0462	5.00	16.2	16.4	4.93	4.25 to 5.75	98.0	70.0 to 130	1.23	20.0
BD05860	Manganese, Dissolved	mg/L	0.0000667	0.00033	0.100	0.377	0.377	0.105	0.0850 to 0.115	92.0	70.0 to 130	0.00	20.0
BD05859	Manganese, Total	mg/L	0.0000890	0.00033	0.100	0.111	0.110	0.0997	0.0850 to 0.115	94.8	70.0 to 130	0.905	20.0
BD05859	Mercury, Total by CVAA	mg/L	-5.000E-05	0.000500	0.004	0.00399	0.00397	0.00401	0.00340 to 0.00460	99.8	70.0 to 130	0.503	20.0
BD05860	Molybdenum, Dissolved	mg/L	0.000945	0.0100	0.2	0.202	0.198	0.201	0.170 to 0.230	101	70.0 to 130	2.00	20.0
BD05859	Molybdenum, Total	mg/L	0.000	0.0100	0.2	0.206	0.202	0.204	0.170 to 0.230	103	70.0 to 130	1.96	20.0
BD05860	Potassium, Dissolved	mg/L	0.0435	0.367	10.0	14.9	14.9	10.6	8.50 to 11.5	99.2	70.0 to 130	0.00	20.0
BD05859	Potassium, Total	mg/L	0.00723	0.367	10.0	12.3	12.1	10.1	8.50 to 11.5	97.0	70.0 to 130	1.64	20.0
BD05858	Selenium, Dissolved	mg/L	0.0000599	0.00100	0.100	0.101	0.0964	0.105	0.0850 to 0.115	99.7	70.0 to 130	4.66	20.0
BD05859	Selenium, Total	mg/L	0.000273	0.00100	0.100	0.0957	0.0963	0.0989	0.0850 to 0.115	95.7	70.0 to 130	0.625	20.0
BD05860	Silicon, Dissolved	mg/L	-0.00163	0.0440	1.00	12.5	12.4	0.997	0.850 to 1.15	100	70.0 to 130	0.803	20.0
BD05859	Silicon, Total	mg/L	0.000711	0.0440	1.00	11.4	11.4	1.01	0.850 to 1.15	110	70.0 to 130	0.00	20.0
BD05860	Sodium, Dissolved	mg/L	0.00324	0.0880	5.00	78.4	79.0	4.89	4.25 to 5.75	142	70.0 to 130	0.762	20.0
BD05859	Sodium, Total	mg/L	0.00384	0.0880	5.00	72.5	69.5	4.87	4.25 to 5.75	138	70.0 to 130	4.23	20.0
BD05858	Sulfate	mg/L	0.148	2.0	80.0	143	144	20.1	18.0 to 22.0	101	80.0 to 120	0.697	20.0
BD05860	Thallium, Dissolved	mg/L	-0.0000089	0.000147	0.100	0.103	0.103	0.102	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BD05859	Thallium, Total	mg/L	-0.0000132	0.000147	0.100	0.0891	0.0876	0.0956	0.0850 to 0.115	89.1	70.0 to 130	1.70	20.0
BD05859	Total Organic Carbon	mg/L	0.0414	1.00	10.0	14.3	15.1	10.8		96.1	80.0 to 120	5.44	20.0

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

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/21/23 14:40
Customer ID:
Delivery Date: 3/23/23 10:13

Description: Gorgas Ash Pond - MW-21V

Laboratory ID Number: BD05857

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD05870	Alkalinity to pH 4.5	mg CaCO3/L					247	50.3	45.0 to 55.0			0.406	10.0
BD05859	Nitrogen, Nitrate/Nitrite	mg/L as N	0.02	0.200	2.00	2.08	0.017	2.12	1.80 to 2.20	104	90.0 to 110	0.00	15.0
BD05862	Solids, Dissolved	mg/L	1.00	25.0			321	52.0	40.0 to 60.0			0.312	10.0

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

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

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-25HA

Location Code: WMWGORAP
Collected: 3/22/23 09:30
Customer ID:
Submittal Date: 3/23/23 10:13

Laboratory ID Number: BD05858

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	3/24/23 11:57	3/31/23 11:25		1.015	0.151	mg/L	0.030000	0.1015	
* Calcium, Total	3/24/23 11:57	3/31/23 11:25		1.015	1.84	mg/L	0.070035	0.406	
* Iron, Total	3/24/23 11:57	3/31/23 11:25		1.015	0.0459	mg/L	0.008120	0.0406	
* Lithium, Total	3/24/23 11:57	3/31/23 11:25		1.015	0.0564	mg/L	0.007105	0.01999956	
* Magnesium, Total	3/24/23 11:57	3/31/23 11:25		1.015	0.620	mg/L	0.021315	0.406	
* Molybdenum, Total	3/24/23 11:57	3/31/23 11:25		1.015	0.00584	mg/L	0.005075	0.01015	J
* Silica, Total (calc.)	3/24/23 11:57	3/31/23 11:25		1	10.5	mg/L			
* Silicon, Total	3/24/23 11:57	3/31/23 11:25		1.015	4.91	mg/L	0.02030	0.25375	
* Sodium, Total	3/24/23 11:57	3/31/23 14:18		10.15	362	mg/L	0.4060	4.06	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	3/24/23 08:37	3/29/23 12:22		1.015	0.147	mg/L	0.030000	0.1015	
* Calcium, Dissolved	3/24/23 08:37	3/29/23 12:22		1.015	1.73	mg/L	0.070035	0.406	
* Iron, Dissolved	3/24/23 08:37	3/29/23 12:22		1.015	0.0113	mg/L	0.008120	0.0406	J
* Lithium, Dissolved	3/24/23 08:37	3/29/23 12:22		1.015	0.0551	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	3/24/23 08:37	3/29/23 12:22		1.015	0.586	mg/L	0.021315	0.406	
* Molybdenum, Dissolved	3/24/23 08:37	3/29/23 12:22		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Dissolved (calc.)	3/24/23 08:37	3/29/23 12:22		1	10.4	mg/L			
* Silicon, Dissolved	3/24/23 08:37	3/29/23 12:22		1.015	4.87	mg/L	0.02030	0.25375	
* Sodium, Dissolved	3/24/23 08:37	3/29/23 14:22		10.15	366	mg/L	0.4060	4.06	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/24/23 11:57	3/24/23 14:31		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Total	3/24/23 11:57	3/24/23 14:31		1.015	0.181	mg/L	0.009135	0.05075	
* Arsenic, Total	3/24/23 11:57	3/24/23 14:31		1.015	0.00851	mg/L	0.000112	0.000203	
* Barium, Total	3/24/23 11:57	3/24/23 14:31		1.015	0.196	mg/L	0.000508	0.001015	
* Beryllium, Total	3/24/23 11:57	3/24/23 14:31		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	3/24/23 11:57	3/24/23 14:31		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	3/24/23 11:57	3/24/23 14:31		1.015	0.000240	mg/L	0.000203	0.001015	J
* Cobalt, Total	3/24/23 11:57	3/24/23 14:31		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	3/24/23 11:57	3/24/23 14:31		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	3/24/23 11:57	3/24/23 14:31		1.015	0.00507	mg/L	0.000152	0.001015	

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

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

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

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-25HA

Location Code: WMWGORAP
Collected: 3/22/23 09:30
Customer ID:
Submittal Date: 3/23/23 10:13

Laboratory ID Number: BD05858

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	3/24/23 11:57	3/24/23 14:31		1.015	1.39	mg/L	0.169505	0.5075	
* Selenium, Total	3/24/23 11:57	3/24/23 14:31		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	3/24/23 11:57	3/24/23 14:31		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	3/24/23 08:37	3/24/23 10:27		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	3/24/23 08:37	3/24/23 10:27		1.015	0.0371	mg/L	0.009135	0.05075	J
* Arsenic, Dissolved	3/24/23 08:37	3/24/23 10:27		1.015	0.00777	mg/L	0.000112	0.000203	
* Barium, Dissolved	3/24/23 08:37	3/24/23 10:27		1.015	0.194	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	3/24/23 08:37	3/24/23 10:27		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	3/24/23 08:37	3/24/23 10:27		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	3/24/23 08:37	3/24/23 10:27		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	3/24/23 08:37	3/24/23 10:27		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Dissolved	3/24/23 08:37	3/24/23 10:27		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	3/24/23 08:37	3/24/23 10:27		1.015	0.00423	mg/L	0.000152	0.001015	
* Potassium, Dissolved	3/24/23 08:37	3/24/23 10:27		1.015	1.15	mg/L	0.169505	0.5075	
* Selenium, Dissolved	4/21/23 09:03	4/21/23 09:58		1.015	0.00128	mg/L	0.000508	0.001015	
* Thallium, Dissolved	3/24/23 08:37	3/24/23 10:27		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ELH***								
* Mercury, Total by CVAA	3/27/23 17:52	3/27/23 22:25		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	3/24/23 10:52	3/24/23 10:52		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
* Alkalinity to pH 4.5	4/4/23 15:54	4/4/23 17:47		1	643	mg CaCO3/L		0.10	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	3/23/23 13:10	3/24/23 13:10		1	873	mg/L		75.8	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
* Bicarbonate Alkalinity, (calc.)	4/4/23 15:54	4/4/23 17:47		1	613	mg CaCO3/L		1	A
* Carbonate Alkalinity, (calc.)	4/4/23 15:54	4/4/23 17:47		1	30.2	mg CaCO3/L		0.5	A
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	3/23/23 17:20	3/23/23 17:20		1	23.9	mg/L	1.00	2	

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

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

Reported: 5/3/2023
Version: 3.5
COA_CCR

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

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-25HA

Location Code: WMWGORAP
Collected: 3/22/23 09:30
Customer ID:
Submittal Date: 3/23/23 10:13

Laboratory ID Number: BD05858

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: CES***								
* Chloride	3/24/23 11:07	3/24/23 11:07		16	28.5	mg/L	8.00	16	
Analytical Method: SM4500F G 2017	***Analyst: CES***								
* Fluoride	3/28/23 10:33	3/28/23 10:33		1	2.03	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	4/4/23 13:17	4/4/23 13:17		4	62.1	mg/L	2.4	8	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	3/22/23 09:27	3/22/23 09:27			1397.98	uS/cm			FA
pH	3/22/23 09:27	3/22/23 09:27			8.78	SU			FA
Temperature	3/22/23 09:27	3/22/23 09:27			16.71	C			FA
Turbidity	3/22/23 09:27	3/22/23 09:27			5.1	NTU			FA
Sulfide	3/22/23 09:27	3/22/23 09:27			3.0	mg/L			FA

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

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

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/22/23 09:30
Customer ID:
Delivery Date: 3/23/23 10:13

Description: Gorgas Ash Pond - MW-25HA

Laboratory ID Number: BD05858

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD05860	Aluminum, Dissolved	mg/L	-0.000280	0.0198	0.100	0.103	0.101	0.104	0.0850 to 0.115	103	70.0 to 130	1.96	20.0
BD05859	Aluminum, Total	mg/L	0.000318	0.0198	0.100	0.106	0.104	0.0985	0.0850 to 0.115	96.8	70.0 to 130	1.90	20.0
BD05860	Antimony, Dissolved	mg/L	0.000258	0.00100	0.100	0.0924	0.0941	0.0933	0.0850 to 0.115	92.4	70.0 to 130	1.82	20.0
BD05859	Antimony, Total	mg/L	0.000323	0.00100	0.100	0.0919	0.0915	0.0909	0.0850 to 0.115	91.9	70.0 to 130	0.436	20.0
BD05860	Arsenic, Dissolved	mg/L	-0.0000068	0.000200	0.100	0.102	0.103	0.102	0.0850 to 0.115	102	70.0 to 130	0.976	20.0
BD05859	Arsenic, Total	mg/L	0.0000036	0.000200	0.100	0.0945	0.0940	0.0969	0.0850 to 0.115	94.4	70.0 to 130	0.531	20.0
BD05860	Barium, Dissolved	mg/L	-0.0000031	0.00100	0.100	0.131	0.129	0.101	0.0850 to 0.115	103	70.0 to 130	1.54	20.0
BD05859	Barium, Total	mg/L	-0.0000258	0.00100	0.100	0.782	0.774	0.0969	0.0850 to 0.115	57.0	70.0 to 130	1.03	20.0
BD05860	Beryllium, Dissolved	mg/L	0.0000000	0.000880	0.100	0.0904	0.0893	0.0998	0.0850 to 0.115	90.4	70.0 to 130	1.22	20.0
BD05859	Beryllium, Total	mg/L	0.0000000	0.000880	0.100	0.0962	0.0941	0.0970	0.0850 to 0.115	96.2	70.0 to 130	2.21	20.0
BD05860	Boron, Dissolved	mg/L	-0.000072	0.0650	1.00	1.06	1.07	0.994	0.850 to 1.15	103	70.0 to 130	0.939	20.0
BD05859	Boron, Total	mg/L	-0.000178	0.0650	1.00	1.06	1.07	1.03	0.850 to 1.15	106	70.0 to 130	0.939	20.0
BD05860	Cadmium, Dissolved	mg/L	0.0000000	0.000147	0.100	0.0993	0.101	0.101	0.0850 to 0.115	99.3	70.0 to 130	1.70	20.0
BD05859	Cadmium, Total	mg/L	0.0000000	0.000147	0.100	0.0931	0.0952	0.0960	0.0850 to 0.115	93.1	70.0 to 130	2.23	20.0
BD05860	Calcium, Dissolved	mg/L	0.00206	0.152	5.00	223	223	4.92	4.25 to 5.75	200	70.0 to 130	0.00	20.0
BD05859	Calcium, Total	mg/L	0.00772	0.152	5.00	30.7	30.4	4.93	4.25 to 5.75	100	70.0 to 130	0.982	20.0
BD05858	Chloride	mg/L	0.167	1.00	160	181	186	9.86	9.00 to 11.0	95.3	80.0 to 120	2.72	20.0
BD05860	Chromium, Dissolved	mg/L	-0.0000195	0.000440	0.100	0.0982	0.0983	0.102	0.0850 to 0.115	98.2	70.0 to 130	0.102	20.0
BD05859	Chromium, Total	mg/L	-0.0000978	0.000440	0.100	0.0930	0.0923	0.0966	0.0850 to 0.115	92.6	70.0 to 130	0.756	20.0
BD05860	Cobalt, Dissolved	mg/L	-0.0000142	0.000147	0.100	0.0987	0.0993	0.104	0.0850 to 0.115	98.6	70.0 to 130	0.606	20.0
BD05859	Cobalt, Total	mg/L	-0.0000154	0.000147	0.100	0.0945	0.0919	0.0986	0.0850 to 0.115	94.5	70.0 to 130	2.79	20.0
BD05858	Fluoride	mg/L	0.00531	0.125	2.50	4.77	4.79	2.64	2.25 to 2.75	110	80.0 to 120	0.418	20.0
BD05860	Iron, Dissolved	mg/L	0.000948	0.0176	0.2	2.99	2.96	0.206	0.170 to 0.230	85.0	70.0 to 130	1.01	20.0
BD05859	Iron, Total	mg/L	-0.00369	0.0176	0.2	0.985	0.989	0.204	0.170 to 0.230	100	70.0 to 130	0.405	20.0

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

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/22/23 09:30
Customer ID:
Delivery Date: 3/23/23 10:13

Description: Gorgas Ash Pond - MW-25HA

Laboratory ID Number: BD05858

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD05860	Lead, Dissolved	mg/L	0.0000087	0.000147	0.100	0.103	0.102	0.103	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BD05859	Lead, Total	mg/L	0.0000057	0.000147	0.100	0.0880	0.0874	0.0956	0.0850 to 0.115	88.0	70.0 to 130	0.684	20.0
BD05860	Lithium, Dissolved	mg/L	0.000435	0.0154	0.200	0.269	0.262	0.202	0.170 to 0.230	105	70.0 to 130	2.64	20.0
BD05859	Lithium, Total	mg/L	0.00118	0.0154	0.200	0.289	0.297	0.201	0.170 to 0.230	102	70.0 to 130	2.73	20.0
BD05860	Magnesium, Dissolved	mg/L	-0.00332	0.0462	5.00	106	106	4.91	4.25 to 5.75	162	70.0 to 130	0.00	20.0
BD05859	Magnesium, Total	mg/L	-0.0125	0.0462	5.00	16.2	16.4	4.93	4.25 to 5.75	98.0	70.0 to 130	1.23	20.0
BD05860	Manganese, Dissolved	mg/L	0.0000667	0.00033	0.100	0.377	0.377	0.105	0.0850 to 0.115	92.0	70.0 to 130	0.00	20.0
BD05859	Manganese, Total	mg/L	0.0000890	0.00033	0.100	0.111	0.110	0.0997	0.0850 to 0.115	94.8	70.0 to 130	0.905	20.0
BD05859	Mercury, Total by CVAA	mg/L	-5.000E-05	0.000500	0.004	0.00399	0.00397	0.00401	0.00340 to 0.00460	99.8	70.0 to 130	0.503	20.0
BD05860	Molybdenum, Dissolved	mg/L	0.000945	0.0100	0.2	0.202	0.198	0.201	0.170 to 0.230	101	70.0 to 130	2.00	20.0
BD05859	Molybdenum, Total	mg/L	0.000	0.0100	0.2	0.206	0.202	0.204	0.170 to 0.230	103	70.0 to 130	1.96	20.0
BD05860	Potassium, Dissolved	mg/L	0.0435	0.367	10.0	14.9	14.9	10.6	8.50 to 11.5	99.2	70.0 to 130	0.00	20.0
BD05859	Potassium, Total	mg/L	0.00723	0.367	10.0	12.3	12.1	10.1	8.50 to 11.5	97.0	70.0 to 130	1.64	20.0
BD05858	Selenium, Dissolved	mg/L	0.0000599	0.00100	0.100	0.101	0.0964	0.105	0.0850 to 0.115	99.7	70.0 to 130	4.66	20.0
BD05859	Selenium, Total	mg/L	0.000273	0.00100	0.100	0.0957	0.0963	0.0989	0.0850 to 0.115	95.7	70.0 to 130	0.625	20.0
BD05860	Silicon, Dissolved	mg/L	-0.00163	0.0440	1.00	12.5	12.4	0.997	0.850 to 1.15	100	70.0 to 130	0.803	20.0
BD05859	Silicon, Total	mg/L	0.000711	0.0440	1.00	11.4	11.4	1.01	0.850 to 1.15	110	70.0 to 130	0.00	20.0
BD05860	Sodium, Dissolved	mg/L	0.00324	0.0880	5.00	78.4	79.0	4.89	4.25 to 5.75	142	70.0 to 130	0.762	20.0
BD05859	Sodium, Total	mg/L	0.00384	0.0880	5.00	72.5	69.5	4.87	4.25 to 5.75	138	70.0 to 130	4.23	20.0
BD05858	Sulfate	mg/L	0.148	2.0	80.0	143	144	20.1	18.0 to 22.0	101	80.0 to 120	0.697	20.0
BD05860	Thallium, Dissolved	mg/L	-0.0000089	0.000147	0.100	0.103	0.103	0.102	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BD05859	Thallium, Total	mg/L	-0.0000132	0.000147	0.100	0.0891	0.0876	0.0956	0.0850 to 0.115	89.1	70.0 to 130	1.70	20.0
BD05859	Total Organic Carbon	mg/L	0.0414	1.00	10.0	14.3	15.1	10.8		96.1	80.0 to 120	5.44	20.0

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/22/23 09:30
Customer ID:
Delivery Date: 3/23/23 10:13

Description: Gorgas Ash Pond - MW-25HA

Laboratory ID Number: BD05858

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD05875	Alkalinity to pH 4.5	mg CaCO3/L					176	50.6	45.0 to 55.0			1.13	10.0
BD05859	Nitrogen, Nitrate/Nitrite	mg/L as N	0.02	0.200	2.00	2.08	0.017	2.12	1.80 to 2.20	104	90.0 to 110	0.00	15.0
BD05862	Solids, Dissolved	mg/L	1.00	25.0			321	52.0	40.0 to 60.0			0.312	10.0

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

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

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-26H

Location Code: WMWGORAP
Collected: 3/22/23 11:32
Customer ID:
Submittal Date: 3/23/23 10:13

Laboratory ID Number: BD05859

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	3/24/23 11:57	3/31/23 11:28		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	3/24/23 11:57	3/31/23 11:28		1.015	25.7	mg/L	0.070035	0.406	
* Iron, Total	3/24/23 11:57	3/31/23 11:28		1.015	0.785	mg/L	0.008120	0.0406	
* Lithium, Total	3/24/23 11:57	3/31/23 11:28		1.015	0.0850	mg/L	0.007105	0.01999956	
* Magnesium, Total	3/24/23 11:57	3/31/23 11:28		1.015	11.3	mg/L	0.021315	0.406	
* Molybdenum, Total	3/24/23 11:57	3/31/23 11:28		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Total (calc.)	3/24/23 11:57	3/31/23 11:28		1	22.0	mg/L			
* Silicon, Total	3/24/23 11:57	3/31/23 11:28		1.015	10.3	mg/L	0.02030	0.25375	
* Sodium, Total	3/24/23 11:57	3/31/23 14:21		10.15	65.6	mg/L	0.4060	4.06	RA
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	3/24/23 08:37	3/29/23 12:25		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Dissolved	3/24/23 08:37	3/29/23 12:25		1.015	25.6	mg/L	0.070035	0.406	
* Iron, Dissolved	3/24/23 08:37	3/29/23 12:25		1.015	0.761	mg/L	0.008120	0.0406	
* Lithium, Dissolved	3/24/23 08:37	3/29/23 12:25		1.015	0.0825	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	3/24/23 08:37	3/29/23 12:25		1.015	11.0	mg/L	0.021315	0.406	
* Molybdenum, Dissolved	3/24/23 08:37	3/29/23 12:25		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Dissolved (calc.)	3/24/23 08:37	3/29/23 12:25		1	22.3	mg/L			
* Silicon, Dissolved	3/24/23 08:37	3/29/23 12:25		1.015	10.4	mg/L	0.02030	0.25375	
* Sodium, Dissolved	3/24/23 08:37	3/29/23 14:25		10.15	63.7	mg/L	0.4060	4.06	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/24/23 11:57	3/24/23 14:34		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Total	3/24/23 11:57	3/24/23 14:34		1.015	0.00923	mg/L	0.009135	0.05075	J
* Arsenic, Total	3/24/23 11:57	3/24/23 14:34		1.015	0.000149	mg/L	0.000112	0.000203	J
* Barium, Total	3/24/23 11:57	3/24/23 14:34		1.015	0.725	mg/L	0.000508	0.001015	RA
* Beryllium, Total	3/24/23 11:57	3/24/23 14:34		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	3/24/23 11:57	3/24/23 14:34		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	3/24/23 11:57	3/24/23 14:34		1.015	0.000429	mg/L	0.000203	0.001015	J
* Cobalt, Total	3/24/23 11:57	3/24/23 14:34		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	3/24/23 11:57	3/24/23 14:34		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	3/24/23 11:57	3/24/23 14:34		1.015	0.0162	mg/L	0.000152	0.001015	

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

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

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-26H

Location Code: WMWGORAP
Collected: 3/22/23 11:32
Customer ID:
Submittal Date: 3/23/23 10:13

Laboratory ID Number: BD05859

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	3/24/23 11:57	3/24/23 14:34		1.015	2.60	mg/L	0.169505	0.5075	
* Selenium, Total	3/24/23 11:57	3/24/23 14:34		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	3/24/23 11:57	3/24/23 14:34		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	3/24/23 08:37	3/24/23 10:30		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	3/24/23 08:37	3/24/23 10:30		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Dissolved	3/24/23 08:37	3/24/23 10:30		1.015	0.000135	mg/L	0.000112	0.000203	J
* Barium, Dissolved	3/24/23 08:37	3/24/23 10:30		1.015	0.667	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	3/24/23 08:37	3/24/23 10:30		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	3/24/23 08:37	3/24/23 10:30		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	3/24/23 08:37	3/24/23 10:30		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	3/24/23 08:37	3/24/23 10:30		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Dissolved	3/24/23 08:37	3/24/23 10:30		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	3/24/23 08:37	3/24/23 10:30		1.015	0.0155	mg/L	0.000152	0.001015	
* Potassium, Dissolved	3/24/23 08:37	3/24/23 10:30		1.015	2.45	mg/L	0.169505	0.5075	
* Selenium, Dissolved	3/24/23 08:37	3/24/23 10:30		1.015	0.00105	mg/L	0.000508	0.001015	
* Thallium, Dissolved	3/24/23 08:37	3/24/23 10:30		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ELH***								
* Mercury, Total by CVAA	3/27/23 17:52	3/27/23 22:29		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	3/24/23 10:54	3/24/23 10:54		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
* Alkalinity to pH 4.5	4/4/23 15:54	4/4/23 17:47		1	249	mg CaCO3/L		0.10	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	3/23/23 13:10	3/24/23 13:10		1	280	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
* Bicarbonate Alkalinity, (calc.)	4/4/23 15:54	4/4/23 17:47		1	248	mg CaCO3/L		1	
* Carbonate Alkalinity, (calc.)	4/4/23 15:54	4/4/23 17:47		1	0.773	mg CaCO3/L		0.5	
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	3/23/23 17:36	3/23/23 17:36		1	4.69	mg/L	1.00	2	

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

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

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

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-26H

Location Code: WMWGORAP
Collected: 3/22/23 11:32
Customer ID:
Submittal Date: 3/23/23 10:13

Laboratory ID Number: BD05859

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: CES***								
* Chloride	3/24/23 11:21	3/24/23 11:21		1	2.33	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: CES***								
* Fluoride	3/28/23 10:45	3/28/23 10:45		1	0.123	mg/L	0.06	0.125	J
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	4/4/23 13:29	4/4/23 13:29		1	4.65	mg/L	0.6	2	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	3/22/23 11:29	3/22/23 11:29			404.65	uS/cm			FA
pH	3/22/23 11:29	3/22/23 11:29			7.23	SU			FA
Temperature	3/22/23 11:29	3/22/23 11:29			17.99	C			FA
Turbidity	3/22/23 11:29	3/22/23 11:29			0.12	NTU			FA
Sulfide	3/22/23 11:29	3/22/23 11:29			0	mg/L			FA

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

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

Reported: 5/3/2023
Version: 3.5
COA_CCR

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/22/23 11:32
Customer ID:
Delivery Date: 3/23/23 10:13

Description: Gorgas Ash Pond - MW-26H

Laboratory ID Number: BD05859

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD05860	Aluminum, Dissolved	mg/L	-0.000280	0.0198	0.100	0.103	0.101	0.104	0.0850 to 0.115	103	70.0 to 130	1.96	20.0
BD05859	Aluminum, Total	mg/L	0.000318	0.0198	0.100	0.106	0.104	0.0985	0.0850 to 0.115	96.8	70.0 to 130	1.90	20.0
BD05860	Antimony, Dissolved	mg/L	0.000258	0.00100	0.100	0.0924	0.0941	0.0933	0.0850 to 0.115	92.4	70.0 to 130	1.82	20.0
BD05859	Antimony, Total	mg/L	0.000323	0.00100	0.100	0.0919	0.0915	0.0909	0.0850 to 0.115	91.9	70.0 to 130	0.436	20.0
BD05860	Arsenic, Dissolved	mg/L	-0.0000068	0.000200	0.100	0.102	0.103	0.102	0.0850 to 0.115	102	70.0 to 130	0.976	20.0
BD05859	Arsenic, Total	mg/L	0.0000036	0.000200	0.100	0.0945	0.0940	0.0969	0.0850 to 0.115	94.4	70.0 to 130	0.531	20.0
BD05860	Barium, Dissolved	mg/L	-0.0000031	0.00100	0.100	0.131	0.129	0.101	0.0850 to 0.115	103	70.0 to 130	1.54	20.0
BD05859	Barium, Total	mg/L	-0.0000258	0.00100	0.100	0.782	0.774	0.0969	0.0850 to 0.115	57.0	70.0 to 130	1.03	20.0
BD05860	Beryllium, Dissolved	mg/L	0.0000000	0.000880	0.100	0.0904	0.0893	0.0998	0.0850 to 0.115	90.4	70.0 to 130	1.22	20.0
BD05859	Beryllium, Total	mg/L	0.0000000	0.000880	0.100	0.0962	0.0941	0.0970	0.0850 to 0.115	96.2	70.0 to 130	2.21	20.0
BD05860	Boron, Dissolved	mg/L	-0.000072	0.0650	1.00	1.06	1.07	0.994	0.850 to 1.15	103	70.0 to 130	0.939	20.0
BD05859	Boron, Total	mg/L	-0.000178	0.0650	1.00	1.06	1.07	1.03	0.850 to 1.15	106	70.0 to 130	0.939	20.0
BD05860	Cadmium, Dissolved	mg/L	0.0000000	0.000147	0.100	0.0993	0.101	0.101	0.0850 to 0.115	99.3	70.0 to 130	1.70	20.0
BD05859	Cadmium, Total	mg/L	0.0000000	0.000147	0.100	0.0931	0.0952	0.0960	0.0850 to 0.115	93.1	70.0 to 130	2.23	20.0
BD05860	Calcium, Dissolved	mg/L	0.00206	0.152	5.00	223	223	4.92	4.25 to 5.75	200	70.0 to 130	0.00	20.0
BD05859	Calcium, Total	mg/L	0.00772	0.152	5.00	30.7	30.4	4.93	4.25 to 5.75	100	70.0 to 130	0.982	20.0
BD05868	Chloride	mg/L	0.0761	1.00	10.0	10.0	10.1	9.82	9.00 to 11.0	100	80.0 to 120	0.995	20.0
BD05860	Chromium, Dissolved	mg/L	-0.0000195	0.000440	0.100	0.0982	0.0983	0.102	0.0850 to 0.115	98.2	70.0 to 130	0.102	20.0
BD05859	Chromium, Total	mg/L	-0.0000978	0.000440	0.100	0.0930	0.0923	0.0966	0.0850 to 0.115	92.6	70.0 to 130	0.756	20.0
BD05860	Cobalt, Dissolved	mg/L	-0.0000142	0.000147	0.100	0.0987	0.0993	0.104	0.0850 to 0.115	98.6	70.0 to 130	0.606	20.0
BD05859	Cobalt, Total	mg/L	-0.0000154	0.000147	0.100	0.0945	0.0919	0.0986	0.0850 to 0.115	94.5	70.0 to 130	2.79	20.0
BD05867	Fluoride	mg/L	0.00143	0.125				2.64	2.25 to 2.75		80.0 to 120		20.0
BD05860	Iron, Dissolved	mg/L	0.000948	0.0176	0.2	2.99	2.96	0.206	0.170 to 0.230	85.0	70.0 to 130	1.01	20.0
BD05859	Iron, Total	mg/L	-0.00369	0.0176	0.2	0.985	0.989	0.204	0.170 to 0.230	100	70.0 to 130	0.405	20.0

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/22/23 11:32
Customer ID:
Delivery Date: 3/23/23 10:13

Description: Gorgas Ash Pond - MW-26H

Laboratory ID Number: BD05859

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD05860	Lead, Dissolved	mg/L	0.0000087	0.000147	0.100	0.103	0.102	0.103	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BD05859	Lead, Total	mg/L	0.0000057	0.000147	0.100	0.0880	0.0874	0.0956	0.0850 to 0.115	88.0	70.0 to 130	0.684	20.0
BD05860	Lithium, Dissolved	mg/L	0.000435	0.0154	0.200	0.269	0.262	0.202	0.170 to 0.230	105	70.0 to 130	2.64	20.0
BD05859	Lithium, Total	mg/L	0.00118	0.0154	0.200	0.289	0.297	0.201	0.170 to 0.230	102	70.0 to 130	2.73	20.0
BD05860	Magnesium, Dissolved	mg/L	-0.00332	0.0462	5.00	106	106	4.91	4.25 to 5.75	162	70.0 to 130	0.00	20.0
BD05859	Magnesium, Total	mg/L	-0.0125	0.0462	5.00	16.2	16.4	4.93	4.25 to 5.75	98.0	70.0 to 130	1.23	20.0
BD05860	Manganese, Dissolved	mg/L	0.0000667	0.00033	0.100	0.377	0.377	0.105	0.0850 to 0.115	92.0	70.0 to 130	0.00	20.0
BD05859	Manganese, Total	mg/L	0.0000890	0.00033	0.100	0.111	0.110	0.0997	0.0850 to 0.115	94.8	70.0 to 130	0.905	20.0
BD05859	Mercury, Total by CVAA	mg/L	-5.000E-05	0.000500	0.004	0.00399	0.00397	0.00401	0.00340 to 0.00460	99.8	70.0 to 130	0.503	20.0
BD05860	Molybdenum, Dissolved	mg/L	0.000945	0.0100	0.2	0.202	0.198	0.201	0.170 to 0.230	101	70.0 to 130	2.00	20.0
BD05859	Molybdenum, Total	mg/L	0.000	0.0100	0.2	0.206	0.202	0.204	0.170 to 0.230	103	70.0 to 130	1.96	20.0
BD05860	Potassium, Dissolved	mg/L	0.0435	0.367	10.0	14.9	14.9	10.6	8.50 to 11.5	99.2	70.0 to 130	0.00	20.0
BD05859	Potassium, Total	mg/L	0.00723	0.367	10.0	12.3	12.1	10.1	8.50 to 11.5	97.0	70.0 to 130	1.64	20.0
BD05860	Selenium, Dissolved	mg/L	0.0000397	0.00100	0.100	0.106	0.105	0.107	0.0850 to 0.115	105	70.0 to 130	0.948	20.0
BD05859	Selenium, Total	mg/L	0.000273	0.00100	0.100	0.0957	0.0963	0.0989	0.0850 to 0.115	95.7	70.0 to 130	0.625	20.0
BD05860	Silicon, Dissolved	mg/L	-0.00163	0.0440	1.00	12.5	12.4	0.997	0.850 to 1.15	100	70.0 to 130	0.803	20.0
BD05859	Silicon, Total	mg/L	0.000711	0.0440	1.00	11.4	11.4	1.01	0.850 to 1.15	110	70.0 to 130	0.00	20.0
BD05860	Sodium, Dissolved	mg/L	0.00324	0.0880	5.00	78.4	79.0	4.89	4.25 to 5.75	142	70.0 to 130	0.762	20.0
BD05859	Sodium, Total	mg/L	0.00384	0.0880	5.00	72.5	69.5	4.87	4.25 to 5.75	138	70.0 to 130	4.23	20.0
BD05868	Sulfate	mg/L	-0.377	2.0	20.0	20.5	20.0	20.1	18.0 to 22.0	102	80.0 to 120	2.47	20.0
BD05860	Thallium, Dissolved	mg/L	-0.0000089	0.000147	0.100	0.103	0.103	0.102	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BD05859	Thallium, Total	mg/L	-0.0000132	0.000147	0.100	0.0891	0.0876	0.0956	0.0850 to 0.115	89.1	70.0 to 130	1.70	20.0
BD05859	Total Organic Carbon	mg/L	0.0414	1.00	10.0	14.3	15.1	10.8		96.1	80.0 to 120	5.44	20.0

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

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/22/23 11:32
Customer ID:
Delivery Date: 3/23/23 10:13

Description: Gorgas Ash Pond - MW-26H

Laboratory ID Number: BD05859

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD05875	Alkalinity to pH 4.5	mg CaCO3/L					176	50.6	45.0 to 55.0			1.13	10.0
BD05859	Nitrogen, Nitrate/Nitrite	mg/L as N	0.02	0.200	2.00	2.08	0.017	2.12	1.80 to 2.20	104	90.0 to 110	0.00	15.0
BD05862	Solids, Dissolved	mg/L	1.00	25.0			321	52.0	40.0 to 60.0			0.312	10.0

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

Reported: 5/3/2023
Version: 3.5
COA_CCR

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

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-40H

Location Code: WMWGORAP
Collected: 3/22/23 12:48
Customer ID:
Submittal Date: 3/23/23 10:14

Laboratory ID Number: BD05860

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	3/24/23 11:57	3/31/23 11:43		1.015	0.0379	mg/L	0.030000	0.1015	J
* Calcium, Total	3/24/23 11:57	3/31/23 14:30		10.15	196	mg/L	0.70035	4.06	
* Iron, Total	3/24/23 11:57	3/31/23 11:43		1.015	3.14	mg/L	0.008120	0.0406	
* Lithium, Total	3/24/23 11:57	3/31/23 11:43		1.015	0.0548	mg/L	0.007105	0.01999956	
* Magnesium, Total	3/24/23 11:57	3/31/23 14:30		10.15	90.2	mg/L	0.21315	4.06	
* Molybdenum, Total	3/24/23 11:57	3/31/23 11:43		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Total (calc.)	3/24/23 11:57	3/31/23 11:43		1	24.4	mg/L			
* Silicon, Total	3/24/23 11:57	3/31/23 11:43		1.015	11.4	mg/L	0.02030	0.25375	
* Sodium, Total	3/24/23 11:57	3/31/23 14:30		10.15	72.9	mg/L	0.4060	4.06	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	3/24/23 08:37	3/29/23 12:28		1.015	0.0338	mg/L	0.030000	0.1015	J
* Calcium, Dissolved	3/24/23 08:37	3/29/23 14:28		10.15	213	mg/L	0.70035	4.06	RA
* Iron, Dissolved	3/24/23 08:37	3/29/23 12:28		1.015	2.82	mg/L	0.008120	0.0406	
* Lithium, Dissolved	3/24/23 08:37	3/29/23 12:28		1.015	0.0581	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	3/24/23 08:37	3/29/23 14:28		10.15	97.9	mg/L	0.21315	4.06	RA
* Molybdenum, Dissolved	3/24/23 08:37	3/29/23 12:28		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Dissolved (calc.)	3/24/23 08:37	3/29/23 12:28		1	24.6	mg/L			
* Silicon, Dissolved	3/24/23 08:37	3/29/23 12:28		1.015	11.5	mg/L	0.02030	0.25375	
* Sodium, Dissolved	3/24/23 08:37	3/29/23 14:28		10.15	71.3	mg/L	0.4060	4.06	RA
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/24/23 11:57	3/24/23 14:56		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Total	3/24/23 11:57	3/24/23 14:56		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Total	3/24/23 11:57	3/24/23 14:56		1.015	0.000810	mg/L	0.000112	0.000203	
* Barium, Total	3/24/23 11:57	3/24/23 14:56		1.015	0.0302	mg/L	0.000508	0.001015	
* Beryllium, Total	3/24/23 11:57	3/24/23 14:56		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	3/24/23 11:57	3/24/23 14:56		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	3/24/23 11:57	3/24/23 14:56		1.015	0.000209	mg/L	0.000203	0.001015	J
* Cobalt, Total	3/24/23 11:57	3/24/23 14:56		1.015	0.000195	mg/L	0.000068	0.000203	J
* Lead, Total	3/24/23 11:57	3/24/23 14:56		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	3/24/23 11:57	3/24/23 14:56		1.015	0.266	mg/L	0.000152	0.001015	

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

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

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

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-40H

Location Code: WMWGORAP
Collected: 3/22/23 12:48
Customer ID:
Submittal Date: 3/23/23 10:14

Laboratory ID Number: BD05860

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	3/24/23 11:57	3/24/23 14:56		1.015	5.46	mg/L	0.169505	0.5075	
* Selenium, Total	3/24/23 11:57	3/24/23 14:56		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	3/24/23 11:57	3/24/23 14:56		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	3/24/23 08:37	3/24/23 10:34		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	3/24/23 08:37	3/24/23 10:34		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Dissolved	3/24/23 08:37	3/24/23 10:34		1.015	0.000472	mg/L	0.000112	0.000203	
* Barium, Dissolved	3/24/23 08:37	3/24/23 10:34		1.015	0.0280	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	3/24/23 08:37	3/24/23 10:34		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	3/24/23 08:37	3/24/23 10:34		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	3/24/23 08:37	3/24/23 10:34		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	3/24/23 08:37	3/24/23 10:34		1.015	0.000135	mg/L	0.000068	0.000203	J
* Lead, Dissolved	3/24/23 08:37	3/24/23 10:34		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	3/24/23 08:37	3/24/23 10:34		1.015	0.285	mg/L	0.000152	0.001015	
* Potassium, Dissolved	3/24/23 08:37	3/24/23 10:34		1.015	4.98	mg/L	0.169505	0.5075	
* Selenium, Dissolved	3/24/23 08:37	3/24/23 10:34		1.015	0.00105	mg/L	0.000508	0.001015	
* Thallium, Dissolved	3/24/23 08:37	3/24/23 10:34		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ELH***								
* Mercury, Total by CVAA	3/27/23 17:52	3/27/23 22:49		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	3/24/23 11:03	3/24/23 11:03		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
* Alkalinity to pH 4.5	4/4/23 15:54	4/4/23 17:47		1	245	mg CaCO3/L		0.10	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	3/23/23 13:10	3/24/23 13:10		1	1300	mg/L		100	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
* Bicarbonate Alkalinity, (calc.)	4/4/23 15:54	4/4/23 17:47		1	245	mg CaCO3/L		1	A
* Carbonate Alkalinity, (calc.)	4/4/23 15:54	4/4/23 17:47		1	Not Detected	mg CaCO3/L		0.5	A
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	3/23/23 18:52	3/23/23 18:52		1	7.52	mg/L	1.00	2	

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

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

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

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-40H

Location Code: WMWGORAP
Collected: 3/22/23 12:48
Customer ID:
Submittal Date: 3/23/23 10:14

Laboratory ID Number: BD05860

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: CES***								
* Chloride	3/24/23 11:22	3/24/23 11:22		1	15.5	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: CES***								
* Fluoride	3/28/23 10:46	3/28/23 10:46		1	0.100	mg/L	0.06	0.125	J
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	4/4/23 13:43	4/4/23 13:43		32	683	mg/L	19.2	64	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	3/22/23 12:45	3/22/23 12:45			1626.76	uS/cm			FA
pH	3/22/23 12:45	3/22/23 12:45			6.60	SU			FA
Temperature	3/22/23 12:45	3/22/23 12:45			19.43	C			FA
Turbidity	3/22/23 12:45	3/22/23 12:45			4.55	NTU			FA
Sulfide	3/22/23 12:45	3/22/23 12:45			0	mg/L			FA

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

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

Reported: 5/3/2023
Version: 3.5
COA_CCR

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/22/23 12:48
Customer ID:
Delivery Date: 3/23/23 10:14

Description: Gorgas Ash Pond - MW-40H

Laboratory ID Number: BD05860

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD05860	Aluminum, Dissolved	mg/L	-0.000280	0.0198	0.100	0.103	0.101	0.104	0.0850 to 0.115	103	70.0 to 130	1.96	20.0
BD05869	Aluminum, Total	mg/L	0.000318	0.0198	0.100	0.228	0.216	0.0985	0.0850 to 0.115	104	70.0 to 130	5.41	20.0
BD05860	Antimony, Dissolved	mg/L	0.000258	0.00100	0.100	0.0924	0.0941	0.0933	0.0850 to 0.115	92.4	70.0 to 130	1.82	20.0
BD05869	Antimony, Total	mg/L	0.000323	0.00100	0.100	0.0925	0.0829	0.0909	0.0850 to 0.115	92.5	70.0 to 130	10.9	20.0
BD05860	Arsenic, Dissolved	mg/L	-0.0000068	0.000200	0.100	0.102	0.103	0.102	0.0850 to 0.115	102	70.0 to 130	0.976	20.0
BD05869	Arsenic, Total	mg/L	0.0000036	0.000200	0.100	0.0940	0.0861	0.0969	0.0850 to 0.115	94.0	70.0 to 130	8.77	20.0
BD05860	Barium, Dissolved	mg/L	-0.0000031	0.00100	0.100	0.131	0.129	0.101	0.0850 to 0.115	103	70.0 to 130	1.54	20.0
BD05869	Barium, Total	mg/L	-0.0000258	0.00100	0.100	0.143	0.129	0.0969	0.0850 to 0.115	97.4	70.0 to 130	10.3	20.0
BD05860	Beryllium, Dissolved	mg/L	0.0000000	0.000880	0.100	0.0904	0.0893	0.0998	0.0850 to 0.115	90.4	70.0 to 130	1.22	20.0
BD05869	Beryllium, Total	mg/L	0.0000000	0.000880	0.100	0.0973	0.0942	0.0970	0.0850 to 0.115	97.3	70.0 to 130	3.24	20.0
BD05860	Boron, Dissolved	mg/L	-0.000072	0.0650	1.00	1.06	1.07	0.994	0.850 to 1.15	103	70.0 to 130	0.939	20.0
BD05869	Boron, Total	mg/L	-0.000178	0.0650	1.00	1.12	1.12	1.03	0.850 to 1.15	102	70.0 to 130	0.00	20.0
BD05860	Cadmium, Dissolved	mg/L	0.0000000	0.000147	0.100	0.0993	0.101	0.101	0.0850 to 0.115	99.3	70.0 to 130	1.70	20.0
BD05869	Cadmium, Total	mg/L	0.0000000	0.000147	0.100	0.0964	0.0876	0.0960	0.0850 to 0.115	96.4	70.0 to 130	9.57	20.0
BD05860	Calcium, Dissolved	mg/L	0.00206	0.152	5.00	223	223	4.92	4.25 to 5.75	200	70.0 to 130	0.00	20.0
BD05869	Calcium, Total	mg/L	0.00772	0.152	5.00	4.98	5.03	4.93	4.25 to 5.75	91.6	70.0 to 130	0.999	20.0
BD05868	Chloride	mg/L	0.0761	1.00	10.0	10.0	10.1	9.82	9.00 to 11.0	100	80.0 to 120	0.995	20.0
BD05860	Chromium, Dissolved	mg/L	-0.0000195	0.000440	0.100	0.0982	0.0983	0.102	0.0850 to 0.115	98.2	70.0 to 130	0.102	20.0
BD05869	Chromium, Total	mg/L	-0.0000978	0.000440	0.100	0.0906	0.0850	0.0966	0.0850 to 0.115	90.3	70.0 to 130	6.38	20.0
BD05860	Cobalt, Dissolved	mg/L	-0.0000142	0.000147	0.100	0.0987	0.0993	0.104	0.0850 to 0.115	98.6	70.0 to 130	0.606	20.0
BD05869	Cobalt, Total	mg/L	-0.0000154	0.000147	0.100	0.0927	0.0869	0.0986	0.0850 to 0.115	92.7	70.0 to 130	6.46	20.0
BD05867	Fluoride	mg/L	0.00143	0.125				2.64	2.25 to 2.75		80.0 to 120		20.0
BD05860	Iron, Dissolved	mg/L	0.000948	0.0176	0.2	2.99	2.96	0.206	0.170 to 0.230	85.0	70.0 to 130	1.01	20.0
BD05869	Iron, Total	mg/L	-0.00369	0.0176	0.2	0.234	0.233	0.204	0.170 to 0.230	101	70.0 to 130	0.428	20.0

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

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/22/23 12:48
Customer ID:
Delivery Date: 3/23/23 10:14

Description: Gorgas Ash Pond - MW-40H

Laboratory ID Number: BD05860

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD05860	Lead, Dissolved	mg/L	0.0000087	0.000147	0.100	0.103	0.102	0.103	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BD05869	Lead, Total	mg/L	0.0000057	0.000147	0.100	0.0965	0.0853	0.0956	0.0850 to 0.115	96.5	70.0 to 130	12.3	20.0
BD05860	Lithium, Dissolved	mg/L	0.000435	0.0154	0.200	0.269	0.262	0.202	0.170 to 0.230	105	70.0 to 130	2.64	20.0
BD05869	Lithium, Total	mg/L	0.00118	0.0154	0.200	0.249	0.249	0.201	0.170 to 0.230	107	70.0 to 130	0.00	20.0
BD05860	Magnesium, Dissolved	mg/L	-0.00332	0.0462	5.00	106	106	4.91	4.25 to 5.75	162	70.0 to 130	0.00	20.0
BD05869	Magnesium, Total	mg/L	-0.0125	0.0462	5.00	5.06	5.14	4.93	4.25 to 5.75	99.0	70.0 to 130	1.57	20.0
BD05860	Manganese, Dissolved	mg/L	0.0000667	0.00033	0.100	0.377	0.377	0.105	0.0850 to 0.115	92.0	70.0 to 130	0.00	20.0
BD05869	Manganese, Total	mg/L	0.0000890	0.00033	0.100	0.0947	0.0895	0.0997	0.0850 to 0.115	93.9	70.0 to 130	5.65	20.0
BD05869	Mercury, Total by CVAA	mg/L	-5.000E-05	0.000500	0.004	0.00401	0.00399	0.00401	0.00340 to 0.00460	100	70.0 to 130	0.500	20.0
BD05860	Molybdenum, Dissolved	mg/L	0.000945	0.0100	0.2	0.202	0.198	0.201	0.170 to 0.230	101	70.0 to 130	2.00	20.0
BD05869	Molybdenum, Total	mg/L	0.000	0.0100	0.2	0.202	0.207	0.204	0.170 to 0.230	101	70.0 to 130	2.44	20.0
BD05860	Potassium, Dissolved	mg/L	0.0435	0.367	10.0	14.9	14.9	10.6	8.50 to 11.5	99.2	70.0 to 130	0.00	20.0
BD05869	Potassium, Total	mg/L	0.00723	0.367	10.0	10.3	9.45	10.1	8.50 to 11.5	99.2	70.0 to 130	8.61	20.0
BD05860	Selenium, Dissolved	mg/L	0.0000397	0.00100	0.100	0.106	0.105	0.107	0.0850 to 0.115	105	70.0 to 130	0.948	20.0
BD05869	Selenium, Total	mg/L	0.000273	0.00100	0.100	0.0849	0.0792	0.0989	0.0850 to 0.115	84.9	70.0 to 130	6.95	20.0
BD05860	Silicon, Dissolved	mg/L	-0.00163	0.0440	1.00	12.5	12.4	0.997	0.850 to 1.15	100	70.0 to 130	0.803	20.0
BD05869	Silicon, Total	mg/L	0.000711	0.0440	1.00	6.27	6.29	1.01	0.850 to 1.15	102	70.0 to 130	0.318	20.0
BD05860	Sodium, Dissolved	mg/L	0.00324	0.0880	5.00	78.4	79.0	4.89	4.25 to 5.75	142	70.0 to 130	0.762	20.0
BD05869	Sodium, Total	mg/L	0.00384	0.0880	5.00	125	125	4.87	4.25 to 5.75	120	70.0 to 130	0.00	20.0
BD05868	Sulfate	mg/L	-0.377	2.0	20.0	20.5	20.0	20.1	18.0 to 22.0	102	80.0 to 120	2.47	20.0
BD05860	Thallium, Dissolved	mg/L	-0.0000089	0.000147	0.100	0.103	0.103	0.102	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BD05869	Thallium, Total	mg/L	-0.0000132	0.000147	0.100	0.0979	0.0873	0.0956	0.0850 to 0.115	97.9	70.0 to 130	11.4	20.0
BD05869	Total Organic Carbon	mg/L	0.0312	1.00	10.0	13.3	13.2	10.5		102	80.0 to 120	0.755	20.0

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/22/23 12:48
Customer ID:
Delivery Date: 3/23/23 10:14

Description: Gorgas Ash Pond - MW-40H

Laboratory ID Number: BD05860

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD05875	Alkalinity to pH 4.5	mg CaCO3/L					176	50.6	45.0 to 55.0			1.13	10.0
BD05869	Nitrogen, Nitrate/Nitrite	mg/L as N	0.04	0.200	2.00	1.99	0.025	2.00	1.80 to 2.20	99.5	90.0 to 110	0.00	15.0
BD05862	Solids, Dissolved	mg/L	1.00	25.0			321	52.0	40.0 to 60.0			0.312	10.0

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

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

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-32H

Location Code: WMWGORAP
Collected: 3/21/23 10:45
Customer ID:
Submittal Date: 3/23/23 10:14

Laboratory ID Number: BD05861

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	3/24/23 11:57	3/31/23 11:47		1.015	0.0455	mg/L	0.030000	0.1015	J
* Calcium, Total	3/24/23 11:57	3/31/23 11:47		1.015	2.42	mg/L	0.070035	0.406	
* Iron, Total	3/24/23 11:57	3/31/23 11:47		1.015	0.0386	mg/L	0.008120	0.0406	J
* Lithium, Total	3/24/23 11:57	3/31/23 11:47		1.015	0.0418	mg/L	0.007105	0.01999956	
* Magnesium, Total	3/24/23 11:57	3/31/23 11:47		1.015	0.526	mg/L	0.021315	0.406	
* Molybdenum, Total	3/24/23 11:57	3/31/23 11:47		1.015	0.0860	mg/L	0.005075	0.01015	
* Silica, Total (calc.)	3/24/23 11:57	3/31/23 11:47		1	10.8	mg/L			
* Silicon, Total	3/24/23 11:57	3/31/23 11:47		1.015	5.06	mg/L	0.02030	0.25375	
* Sodium, Total	3/24/23 11:57	3/31/23 14:34		10.15	132	mg/L	0.4060	4.06	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	3/24/23 08:37	3/29/23 12:44		1.015	0.0449	mg/L	0.030000	0.1015	J
* Calcium, Dissolved	3/24/23 08:37	3/29/23 12:44		1.015	2.22	mg/L	0.070035	0.406	
* Iron, Dissolved	3/24/23 08:37	3/29/23 12:44		1.015	0.0172	mg/L	0.008120	0.0406	J
* Lithium, Dissolved	3/24/23 08:37	3/29/23 12:44		1.015	0.0409	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	3/24/23 08:37	3/29/23 12:44		1.015	0.468	mg/L	0.021315	0.406	
* Molybdenum, Dissolved	3/24/23 08:37	3/29/23 12:44		1.015	0.0871	mg/L	0.005075	0.01015	
* Silica, Dissolved (calc.)	3/24/23 08:37	3/29/23 12:44		1	10.9	mg/L			
* Silicon, Dissolved	3/24/23 08:37	3/29/23 12:44		1.015	5.09	mg/L	0.02030	0.25375	
* Sodium, Dissolved	3/24/23 08:37	3/29/23 14:38		10.15	137	mg/L	0.4060	4.06	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/24/23 11:57	3/24/23 15:00		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Total	3/24/23 11:57	3/24/23 15:00		1.015	0.0324	mg/L	0.009135	0.05075	J
* Arsenic, Total	3/24/23 11:57	3/24/23 15:00		1.015	0.000407	mg/L	0.000112	0.000203	
* Barium, Total	3/24/23 11:57	3/24/23 15:00		1.015	0.0393	mg/L	0.000508	0.001015	
* Beryllium, Total	3/24/23 11:57	3/24/23 15:00		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	3/24/23 11:57	3/24/23 15:00		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	3/24/23 11:57	3/24/23 15:00		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	3/24/23 11:57	3/24/23 15:00		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	3/24/23 11:57	3/24/23 15:00		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	3/24/23 11:57	3/24/23 15:00		1.015	0.00614	mg/L	0.000152	0.001015	

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

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

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-32H

Location Code: WMWGORAP
Collected: 3/21/23 10:45
Customer ID:
Submittal Date: 3/23/23 10:14

Laboratory ID Number: BD05861

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	3/24/23 11:57	3/24/23 15:00		1.015	2.25	mg/L	0.169505	0.5075	
* Selenium, Total	3/24/23 11:57	3/24/23 15:00		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	3/24/23 11:57	3/24/23 15:00		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	3/24/23 08:37	3/24/23 10:56		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	3/24/23 08:37	3/24/23 10:56		1.015	0.0120	mg/L	0.009135	0.05075	J
* Arsenic, Dissolved	3/24/23 08:37	3/24/23 10:56		1.015	0.000395	mg/L	0.000112	0.000203	
* Barium, Dissolved	3/24/23 08:37	3/24/23 10:56		1.015	0.0382	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	3/24/23 08:37	3/24/23 10:56		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	3/24/23 08:37	3/24/23 10:56		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	3/24/23 08:37	3/24/23 10:56		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	3/24/23 08:37	3/24/23 10:56		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Dissolved	3/24/23 08:37	3/24/23 10:56		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	3/24/23 08:37	3/24/23 10:56		1.015	0.00568	mg/L	0.000152	0.001015	
* Potassium, Dissolved	3/24/23 08:37	3/24/23 10:56		1.015	2.19	mg/L	0.169505	0.5075	
* Selenium, Dissolved	3/24/23 08:37	3/24/23 10:56		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	3/24/23 08:37	3/24/23 10:56		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ELH***								
* Mercury, Total by CVAA	3/27/23 17:52	3/27/23 22:53		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	3/24/23 11:05	3/24/23 11:05		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
* Alkalinity to pH 4.5	3/30/23 10:20	3/30/23 11:10		1	225	mg CaCO3/L		0.10	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	3/23/23 13:10	3/24/23 13:10		1	359	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
* Bicarbonate Alkalinity, (calc.)	3/30/23 10:20	3/30/23 11:10		1	220	mg CaCO3/L		1	
* Carbonate Alkalinity, (calc.)	3/30/23 10:20	3/30/23 11:10		1	4.74	mg CaCO3/L		0.5	
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	3/23/23 19:07	3/23/23 19:07		1	3.34	mg/L	1.00	2	

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

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

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

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-32H

Location Code: WMWGORAP
Collected: 3/21/23 10:45
Customer ID:
Submittal Date: 3/23/23 10:14

Laboratory ID Number: BD05861

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: CES***								
* Chloride	3/24/23 11:35	3/24/23 11:35		2	32.6	mg/L	1.00	2	
Analytical Method: SM4500F G 2017	***Analyst: CES***								
* Fluoride	3/28/23 10:47	3/28/23 10:47		1	0.144	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	4/4/23 13:31	4/4/23 13:31		1	38.5	mg/L	0.6	2	
Analytical Method: Field Measurements	***Analyst: AWG***								
Conductivity	3/21/23 10:37	3/21/23 10:37			567.87	uS/cm			FA
pH	3/21/23 10:37	3/21/23 10:37			8.30	SU			FA
Temperature	3/21/23 10:37	3/21/23 10:37			16.16	C			FA
Turbidity	3/21/23 10:37	3/21/23 10:37			3.04	NTU			FA
Sulfide	3/21/23 10:37	3/21/23 10:37			0	mg/L			FA

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

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

Reported: 5/3/2023
Version: 3.5
COA_CCR

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/21/23 10:45
Customer ID:
Delivery Date: 3/23/23 10:14

Description: Gorgas Ash Pond - MW-32H

Laboratory ID Number: BD05861

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD05872	Aluminum, Dissolved	mg/L	-0.000280	0.0198	0.100	0.0983	0.0955	0.104	0.0850 to 0.115	98.3	70.0 to 130	2.89	20.0
BD05869	Aluminum, Total	mg/L	0.000318	0.0198	0.100	0.228	0.216	0.0985	0.0850 to 0.115	104	70.0 to 130	5.41	20.0
BD05872	Antimony, Dissolved	mg/L	0.000258	0.00100	0.100	0.0893	0.0859	0.0933	0.0850 to 0.115	89.3	70.0 to 130	3.88	20.0
BD05869	Antimony, Total	mg/L	0.000323	0.00100	0.100	0.0925	0.0829	0.0909	0.0850 to 0.115	92.5	70.0 to 130	10.9	20.0
BD05872	Arsenic, Dissolved	mg/L	-0.0000068	0.000200	0.100	0.0938	0.0933	0.102	0.0850 to 0.115	93.4	70.0 to 130	0.534	20.0
BD05869	Arsenic, Total	mg/L	0.0000036	0.000200	0.100	0.0940	0.0861	0.0969	0.0850 to 0.115	94.0	70.0 to 130	8.77	20.0
BD05872	Barium, Dissolved	mg/L	-0.0000031	0.00100	0.100	0.110	0.105	0.101	0.0850 to 0.115	94.0	70.0 to 130	4.65	20.0
BD05869	Barium, Total	mg/L	-0.0000258	0.00100	0.100	0.143	0.129	0.0969	0.0850 to 0.115	97.4	70.0 to 130	10.3	20.0
BD05872	Beryllium, Dissolved	mg/L	0.0000000	0.000880	0.100	0.0901	0.0894	0.0998	0.0850 to 0.115	90.1	70.0 to 130	0.780	20.0
BD05869	Beryllium, Total	mg/L	0.0000000	0.000880	0.100	0.0973	0.0942	0.0970	0.0850 to 0.115	97.3	70.0 to 130	3.24	20.0
BD05872	Boron, Dissolved	mg/L	-0.000072	0.0650	1.00	1.08	1.06	0.994	0.850 to 1.15	103	70.0 to 130	1.87	20.0
BD05869	Boron, Total	mg/L	-0.000178	0.0650	1.00	1.12	1.12	1.03	0.850 to 1.15	102	70.0 to 130	0.00	20.0
BD05872	Cadmium, Dissolved	mg/L	0.0000000	0.000147	0.100	0.0907	0.0919	0.101	0.0850 to 0.115	90.7	70.0 to 130	1.31	20.0
BD05869	Cadmium, Total	mg/L	0.0000000	0.000147	0.100	0.0964	0.0876	0.0960	0.0850 to 0.115	96.4	70.0 to 130	9.57	20.0
BD05872	Calcium, Dissolved	mg/L	0.00206	0.152	5.00	12.5	12.7	4.92	4.25 to 5.75	94.0	70.0 to 130	1.59	20.0
BD05869	Calcium, Total	mg/L	0.00772	0.152	5.00	4.98	5.03	4.93	4.25 to 5.75	91.6	70.0 to 130	0.999	20.0
BD05868	Chloride	mg/L	0.0761	1.00	10.0	10.0	10.1	9.82	9.00 to 11.0	100	80.0 to 120	0.995	20.0
BD05872	Chromium, Dissolved	mg/L	-0.0000195	0.000440	0.100	0.0908	0.0882	0.102	0.0850 to 0.115	90.8	70.0 to 130	2.91	20.0
BD05869	Chromium, Total	mg/L	-0.0000978	0.000440	0.100	0.0906	0.0850	0.0966	0.0850 to 0.115	90.3	70.0 to 130	6.38	20.0
BD05872	Cobalt, Dissolved	mg/L	-0.0000142	0.000147	0.100	0.0940	0.0906	0.104	0.0850 to 0.115	94.0	70.0 to 130	3.68	20.0
BD05869	Cobalt, Total	mg/L	-0.0000154	0.000147	0.100	0.0927	0.0869	0.0986	0.0850 to 0.115	92.7	70.0 to 130	6.46	20.0
BD05867	Fluoride	mg/L	0.00143	0.125				2.64	2.25 to 2.75		80.0 to 120		20.0
BD05872	Iron, Dissolved	mg/L	0.000948	0.0176	0.2	0.288	0.281	0.206	0.170 to 0.230	104	70.0 to 130	2.46	20.0
BD05869	Iron, Total	mg/L	-0.00369	0.0176	0.2	0.234	0.233	0.204	0.170 to 0.230	101	70.0 to 130	0.428	20.0

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

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/21/23 10:45
Customer ID:
Delivery Date: 3/23/23 10:14

Description: Gorgas Ash Pond - MW-32H

Laboratory ID Number: BD05861

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD05872	Lead, Dissolved	mg/L	0.0000087	0.000147	0.100	0.0968	0.0911	0.103	0.0850 to 0.115	96.8	70.0 to 130	6.07	20.0
BD05869	Lead, Total	mg/L	0.0000057	0.000147	0.100	0.0965	0.0853	0.0956	0.0850 to 0.115	96.5	70.0 to 130	12.3	20.0
BD05872	Lithium, Dissolved	mg/L	0.000435	0.0154	0.200	0.286	0.289	0.202	0.170 to 0.230	103	70.0 to 130	1.04	20.0
BD05869	Lithium, Total	mg/L	0.00118	0.0154	0.200	0.249	0.249	0.201	0.170 to 0.230	107	70.0 to 130	0.00	20.0
BD05872	Magnesium, Dissolved	mg/L	-0.00332	0.0462	5.00	7.64	7.81	4.91	4.25 to 5.75	95.4	70.0 to 130	2.20	20.0
BD05869	Magnesium, Total	mg/L	-0.0125	0.0462	5.00	5.06	5.14	4.93	4.25 to 5.75	99.0	70.0 to 130	1.57	20.0
BD05872	Manganese, Dissolved	mg/L	0.0000667	0.00033	0.100	0.107	0.103	0.105	0.0850 to 0.115	92.7	70.0 to 130	3.81	20.0
BD05869	Manganese, Total	mg/L	0.0000890	0.00033	0.100	0.0947	0.0895	0.0997	0.0850 to 0.115	93.9	70.0 to 130	5.65	20.0
BD05869	Mercury, Total by CVAA	mg/L	-5.000E-05	0.000500	0.004	0.00401	0.00399	0.00401	0.00340 to 0.00460	100	70.0 to 130	0.500	20.0
BD05872	Molybdenum, Dissolved	mg/L	0.000945	0.0100	0.2	0.225	0.219	0.201	0.170 to 0.230	104	70.0 to 130	2.70	20.0
BD05869	Molybdenum, Total	mg/L	0.000	0.0100	0.2	0.202	0.207	0.204	0.170 to 0.230	101	70.0 to 130	2.44	20.0
BD05872	Potassium, Dissolved	mg/L	0.0435	0.367	10.0	23.3	22.6	10.6	8.50 to 11.5	85.0	70.0 to 130	3.05	20.0
BD05869	Potassium, Total	mg/L	0.00723	0.367	10.0	10.3	9.45	10.1	8.50 to 11.5	99.2	70.0 to 130	8.61	20.0
BD05872	Selenium, Dissolved	mg/L	0.0000397	0.00100	0.100	0.0961	0.0955	0.107	0.0850 to 0.115	96.1	70.0 to 130	0.626	20.0
BD05869	Selenium, Total	mg/L	0.000273	0.00100	0.100	0.0849	0.0792	0.0989	0.0850 to 0.115	84.9	70.0 to 130	6.95	20.0
BD05872	Silicon, Dissolved	mg/L	-0.00163	0.0440	1.00	8.24	8.04	0.997	0.850 to 1.15	117	70.0 to 130	2.46	20.0
BD05869	Silicon, Total	mg/L	0.000711	0.0440	1.00	6.27	6.29	1.01	0.850 to 1.15	102	70.0 to 130	0.318	20.0
BD05872	Sodium, Dissolved	mg/L	0.00324	0.0880	5.00	300	296	4.89	4.25 to 5.75	420	70.0 to 130	1.34	20.0
BD05869	Sodium, Total	mg/L	0.00384	0.0880	5.00	125	125	4.87	4.25 to 5.75	120	70.0 to 130	0.00	20.0
BD05868	Sulfate	mg/L	-0.377	2.0	20.0	20.5	20.0	20.1	18.0 to 22.0	102	80.0 to 120	2.47	20.0
BD05872	Thallium, Dissolved	mg/L	-0.0000089	0.000147	0.100	0.0957	0.0905	0.102	0.0850 to 0.115	95.7	70.0 to 130	5.59	20.0
BD05869	Thallium, Total	mg/L	-0.0000132	0.000147	0.100	0.0979	0.0873	0.0956	0.0850 to 0.115	97.9	70.0 to 130	11.4	20.0
BD05869	Total Organic Carbon	mg/L	0.0312	1.00	10.0	13.3	13.2	10.5		102	80.0 to 120	0.755	20.0

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

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/21/23 10:45
Customer ID:
Delivery Date: 3/23/23 10:14

Description: Gorgas Ash Pond - MW-32H

Laboratory ID Number: BD05861

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD05872	Alkalinity to pH 4.5	mg CaCO3/L					198	51.0	45.0 to 55.0			1.01	10.0
BD05869	Nitrogen, Nitrate/Nitrite	mg/L as N	0.04	0.200	2.00	1.99	0.025	2.00	1.80 to 2.20	99.5	90.0 to 110	0.00	15.0
BD05862	Solids, Dissolved	mg/L	1.00	25.0			321	52.0	40.0 to 60.0			0.312	10.0

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

Reported: 5/3/2023
Version: 3.5
COA_CCR

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

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-19

Location Code: WMWGORAP
Collected: 3/21/23 12:30
Customer ID:
Submittal Date: 3/23/23 10:14

Laboratory ID Number: BD05862

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	3/24/23 11:57	3/31/23 11:50		1.015	0.0334	mg/L	0.030000	0.1015	J
* Calcium, Total	3/24/23 11:57	3/31/23 14:43		10.15	46.9	mg/L	0.70035	4.06	
* Iron, Total	3/24/23 11:57	3/31/23 11:50		1.015	0.380	mg/L	0.008120	0.0406	
* Lithium, Total	3/24/23 11:57	3/31/23 11:50		1.015	0.0402	mg/L	0.007105	0.01999956	
* Magnesium, Total	3/24/23 11:57	3/31/23 11:50		1.015	14.6	mg/L	0.021315	0.406	
* Molybdenum, Total	3/24/23 11:57	3/31/23 11:50		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Total (calc.)	3/24/23 11:57	3/31/23 11:50		1	19.6	mg/L			
* Silicon, Total	3/24/23 11:57	3/31/23 11:50		1.015	9.15	mg/L	0.02030	0.25375	
* Sodium, Total	3/24/23 11:57	3/31/23 14:43		10.15	50.9	mg/L	0.4060	4.06	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	3/24/23 08:37	3/29/23 12:47		1.015	0.0319	mg/L	0.030000	0.1015	J
* Calcium, Dissolved	3/24/23 08:37	3/29/23 14:47		10.15	55.8	mg/L	0.70035	4.06	
* Iron, Dissolved	3/24/23 08:37	3/29/23 12:47		1.015	0.392	mg/L	0.008120	0.0406	
* Lithium, Dissolved	3/24/23 08:37	3/29/23 12:47		1.015	0.0353	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	3/24/23 08:37	3/29/23 12:47		1.015	15.1	mg/L	0.021315	0.406	
* Molybdenum, Dissolved	3/24/23 08:37	3/29/23 12:47		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Dissolved (calc.)	3/24/23 08:37	3/29/23 12:47		1	20.2	mg/L			
* Silicon, Dissolved	3/24/23 08:37	3/29/23 12:47		1.015	9.42	mg/L	0.02030	0.25375	
* Sodium, Dissolved	3/24/23 08:37	3/29/23 14:47		10.15	53.8	mg/L	0.4060	4.06	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/24/23 11:57	3/24/23 15:03		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Total	3/24/23 11:57	3/24/23 15:03		1.015	0.00928	mg/L	0.009135	0.05075	J
* Arsenic, Total	3/24/23 11:57	3/24/23 15:03		1.015	0.00197	mg/L	0.000112	0.000203	
* Barium, Total	3/24/23 11:57	3/24/23 15:03		1.015	0.304	mg/L	0.000508	0.001015	
* Beryllium, Total	3/24/23 11:57	3/24/23 15:03		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	3/24/23 11:57	3/24/23 15:03		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	3/24/23 11:57	3/24/23 15:03		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	3/24/23 11:57	3/24/23 15:03		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	3/24/23 11:57	3/24/23 15:03		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	3/24/23 11:57	3/24/23 15:03		1.015	0.0221	mg/L	0.000152	0.001015	

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

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

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

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-19

Location Code: WMWGORAP
Collected: 3/21/23 12:30
Customer ID:
Submittal Date: 3/23/23 10:14

Laboratory ID Number: BD05862

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	3/24/23 11:57	3/24/23 15:03		1.015	2.08	mg/L	0.169505	0.5075	
* Selenium, Total	3/24/23 11:57	3/24/23 15:03		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	3/24/23 11:57	3/24/23 15:03		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	3/24/23 08:37	3/24/23 10:59		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	3/24/23 08:37	3/24/23 10:59		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Dissolved	3/24/23 08:37	3/24/23 10:59		1.015	0.00140	mg/L	0.000112	0.000203	
* Barium, Dissolved	3/24/23 08:37	3/24/23 10:59		1.015	0.310	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	3/24/23 08:37	3/24/23 10:59		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	3/24/23 08:37	3/24/23 10:59		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	3/24/23 08:37	3/24/23 10:59		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	3/24/23 08:37	3/24/23 10:59		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Dissolved	3/24/23 08:37	3/24/23 10:59		1.015	0.000112	mg/L	0.000068	0.000203	J
* Manganese, Dissolved	3/24/23 08:37	3/24/23 10:59		1.015	0.0225	mg/L	0.000152	0.001015	
* Potassium, Dissolved	3/24/23 08:37	3/24/23 10:59		1.015	2.04	mg/L	0.169505	0.5075	
* Selenium, Dissolved	3/24/23 08:37	3/24/23 10:59		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	3/24/23 08:37	3/24/23 10:59		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ELH***								
* Mercury, Total by CVAA	3/27/23 17:52	3/27/23 22:57		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	3/24/23 11:07	3/24/23 11:07		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
* Alkalinity to pH 4.5	3/30/23 10:20	3/30/23 11:10		1	274	mg CaCO3/L		0.10	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	3/23/23 13:10	3/24/23 13:10		1	320	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
* Bicarbonate Alkalinity, (calc.)	3/30/23 10:20	3/30/23 11:10		1	270	mg CaCO3/L		1	
* Carbonate Alkalinity, (calc.)	3/30/23 10:20	3/30/23 11:10		1	3.76	mg CaCO3/L		0.5	
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	3/23/23 19:25	3/23/23 19:25		1	4.10	mg/L	1.00	2	

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

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

Reported: 5/3/2023
Version: 3.5
COA_CCR

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

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-19

Location Code: WMWGORAP
Collected: 3/21/23 12:30
Customer ID:
Submittal Date: 3/23/23 10:14

Laboratory ID Number: BD05862

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: CES***								
* Chloride	3/24/23 11:24	3/24/23 11:24		1	5.22	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: CES***								
* Fluoride	3/28/23 10:48	3/28/23 10:48		1	0.240	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	4/4/23 13:32	4/4/23 13:32		1	16.4	mg/L	0.6	2	
Analytical Method: Field Measurements	***Analyst: AWG***								
Conductivity	3/21/23 12:29	3/21/23 12:29			516.74	uS/cm			FA
pH	3/21/23 12:29	3/21/23 12:29			7.85	SU			FA
Temperature	3/21/23 12:29	3/21/23 12:29			16.91	C			FA
Turbidity	3/21/23 12:29	3/21/23 12:29			1.4	NTU			FA
Sulfide	3/21/23 12:29	3/21/23 12:29			0	mg/L			FA

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

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

Reported: 5/3/2023
Version: 3.5
COA_CCR

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/21/23 12:30
Customer ID:
Delivery Date: 3/23/23 10:14

Description: Gorgas Ash Pond - MW-19

Laboratory ID Number: BD05862

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD05872	Aluminum, Dissolved	mg/L	-0.000280	0.0198	0.100	0.0983	0.0955	0.104	0.0850 to 0.115	98.3	70.0 to 130	2.89	20.0
BD05869	Aluminum, Total	mg/L	0.000318	0.0198	0.100	0.228	0.216	0.0985	0.0850 to 0.115	104	70.0 to 130	5.41	20.0
BD05872	Antimony, Dissolved	mg/L	0.000258	0.00100	0.100	0.0893	0.0859	0.0933	0.0850 to 0.115	89.3	70.0 to 130	3.88	20.0
BD05869	Antimony, Total	mg/L	0.000323	0.00100	0.100	0.0925	0.0829	0.0909	0.0850 to 0.115	92.5	70.0 to 130	10.9	20.0
BD05872	Arsenic, Dissolved	mg/L	-0.0000068	0.000200	0.100	0.0938	0.0933	0.102	0.0850 to 0.115	93.4	70.0 to 130	0.534	20.0
BD05869	Arsenic, Total	mg/L	0.0000036	0.000200	0.100	0.0940	0.0861	0.0969	0.0850 to 0.115	94.0	70.0 to 130	8.77	20.0
BD05872	Barium, Dissolved	mg/L	-0.0000031	0.00100	0.100	0.110	0.105	0.101	0.0850 to 0.115	94.0	70.0 to 130	4.65	20.0
BD05869	Barium, Total	mg/L	-0.0000258	0.00100	0.100	0.143	0.129	0.0969	0.0850 to 0.115	97.4	70.0 to 130	10.3	20.0
BD05872	Beryllium, Dissolved	mg/L	0.0000000	0.000880	0.100	0.0901	0.0894	0.0998	0.0850 to 0.115	90.1	70.0 to 130	0.780	20.0
BD05869	Beryllium, Total	mg/L	0.0000000	0.000880	0.100	0.0973	0.0942	0.0970	0.0850 to 0.115	97.3	70.0 to 130	3.24	20.0
BD05872	Boron, Dissolved	mg/L	-0.000072	0.0650	1.00	1.08	1.06	0.994	0.850 to 1.15	103	70.0 to 130	1.87	20.0
BD05869	Boron, Total	mg/L	-0.000178	0.0650	1.00	1.12	1.12	1.03	0.850 to 1.15	102	70.0 to 130	0.00	20.0
BD05872	Cadmium, Dissolved	mg/L	0.0000000	0.000147	0.100	0.0907	0.0919	0.101	0.0850 to 0.115	90.7	70.0 to 130	1.31	20.0
BD05869	Cadmium, Total	mg/L	0.0000000	0.000147	0.100	0.0964	0.0876	0.0960	0.0850 to 0.115	96.4	70.0 to 130	9.57	20.0
BD05872	Calcium, Dissolved	mg/L	0.00206	0.152	5.00	12.5	12.7	4.92	4.25 to 5.75	94.0	70.0 to 130	1.59	20.0
BD05869	Calcium, Total	mg/L	0.00772	0.152	5.00	4.98	5.03	4.93	4.25 to 5.75	91.6	70.0 to 130	0.999	20.0
BD05868	Chloride	mg/L	0.0761	1.00	10.0	10.0	10.1	9.82	9.00 to 11.0	100	80.0 to 120	0.995	20.0
BD05872	Chromium, Dissolved	mg/L	-0.0000195	0.000440	0.100	0.0908	0.0882	0.102	0.0850 to 0.115	90.8	70.0 to 130	2.91	20.0
BD05869	Chromium, Total	mg/L	-0.0000978	0.000440	0.100	0.0906	0.0850	0.0966	0.0850 to 0.115	90.3	70.0 to 130	6.38	20.0
BD05872	Cobalt, Dissolved	mg/L	-0.0000142	0.000147	0.100	0.0940	0.0906	0.104	0.0850 to 0.115	94.0	70.0 to 130	3.68	20.0
BD05869	Cobalt, Total	mg/L	-0.0000154	0.000147	0.100	0.0927	0.0869	0.0986	0.0850 to 0.115	92.7	70.0 to 130	6.46	20.0
BD05867	Fluoride	mg/L	0.00143	0.125				2.64	2.25 to 2.75		80.0 to 120		20.0
BD05872	Iron, Dissolved	mg/L	0.000948	0.0176	0.2	0.288	0.281	0.206	0.170 to 0.230	104	70.0 to 130	2.46	20.0
BD05869	Iron, Total	mg/L	-0.00369	0.0176	0.2	0.234	0.233	0.204	0.170 to 0.230	101	70.0 to 130	0.428	20.0

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

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/21/23 12:30
Customer ID:
Delivery Date: 3/23/23 10:14

Description: Gorgas Ash Pond - MW-19

Laboratory ID Number: BD05862

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD05872	Lead, Dissolved	mg/L	0.0000087	0.000147	0.100	0.0968	0.0911	0.103	0.0850 to 0.115	96.8	70.0 to 130	6.07	20.0
BD05869	Lead, Total	mg/L	0.0000057	0.000147	0.100	0.0965	0.0853	0.0956	0.0850 to 0.115	96.5	70.0 to 130	12.3	20.0
BD05872	Lithium, Dissolved	mg/L	0.000435	0.0154	0.200	0.286	0.289	0.202	0.170 to 0.230	103	70.0 to 130	1.04	20.0
BD05869	Lithium, Total	mg/L	0.00118	0.0154	0.200	0.249	0.249	0.201	0.170 to 0.230	107	70.0 to 130	0.00	20.0
BD05872	Magnesium, Dissolved	mg/L	-0.00332	0.0462	5.00	7.64	7.81	4.91	4.25 to 5.75	95.4	70.0 to 130	2.20	20.0
BD05869	Magnesium, Total	mg/L	-0.0125	0.0462	5.00	5.06	5.14	4.93	4.25 to 5.75	99.0	70.0 to 130	1.57	20.0
BD05872	Manganese, Dissolved	mg/L	0.0000667	0.00033	0.100	0.107	0.103	0.105	0.0850 to 0.115	92.7	70.0 to 130	3.81	20.0
BD05869	Manganese, Total	mg/L	0.0000890	0.00033	0.100	0.0947	0.0895	0.0997	0.0850 to 0.115	93.9	70.0 to 130	5.65	20.0
BD05869	Mercury, Total by CVAA	mg/L	-5.000E-05	0.000500	0.004	0.00401	0.00399	0.00401	0.00340 to 0.00460	100	70.0 to 130	0.500	20.0
BD05872	Molybdenum, Dissolved	mg/L	0.000945	0.0100	0.2	0.225	0.219	0.201	0.170 to 0.230	104	70.0 to 130	2.70	20.0
BD05869	Molybdenum, Total	mg/L	0.000	0.0100	0.2	0.202	0.207	0.204	0.170 to 0.230	101	70.0 to 130	2.44	20.0
BD05872	Potassium, Dissolved	mg/L	0.0435	0.367	10.0	23.3	22.6	10.6	8.50 to 11.5	85.0	70.0 to 130	3.05	20.0
BD05869	Potassium, Total	mg/L	0.00723	0.367	10.0	10.3	9.45	10.1	8.50 to 11.5	99.2	70.0 to 130	8.61	20.0
BD05872	Selenium, Dissolved	mg/L	0.0000397	0.00100	0.100	0.0961	0.0955	0.107	0.0850 to 0.115	96.1	70.0 to 130	0.626	20.0
BD05869	Selenium, Total	mg/L	0.000273	0.00100	0.100	0.0849	0.0792	0.0989	0.0850 to 0.115	84.9	70.0 to 130	6.95	20.0
BD05872	Silicon, Dissolved	mg/L	-0.00163	0.0440	1.00	8.24	8.04	0.997	0.850 to 1.15	117	70.0 to 130	2.46	20.0
BD05869	Silicon, Total	mg/L	0.000711	0.0440	1.00	6.27	6.29	1.01	0.850 to 1.15	102	70.0 to 130	0.318	20.0
BD05872	Sodium, Dissolved	mg/L	0.00324	0.0880	5.00	300	296	4.89	4.25 to 5.75	420	70.0 to 130	1.34	20.0
BD05869	Sodium, Total	mg/L	0.00384	0.0880	5.00	125	125	4.87	4.25 to 5.75	120	70.0 to 130	0.00	20.0
BD05868	Sulfate	mg/L	-0.377	2.0	20.0	20.5	20.0	20.1	18.0 to 22.0	102	80.0 to 120	2.47	20.0
BD05872	Thallium, Dissolved	mg/L	-0.0000089	0.000147	0.100	0.0957	0.0905	0.102	0.0850 to 0.115	95.7	70.0 to 130	5.59	20.0
BD05869	Thallium, Total	mg/L	-0.0000132	0.000147	0.100	0.0979	0.0873	0.0956	0.0850 to 0.115	97.9	70.0 to 130	11.4	20.0
BD05869	Total Organic Carbon	mg/L	0.0312	1.00	10.0	13.3	13.2	10.5		102	80.0 to 120	0.755	20.0

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/21/23 12:30
Customer ID:
Delivery Date: 3/23/23 10:14

Description: Gorgas Ash Pond - MW-19

Laboratory ID Number: BD05862

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD05872	Alkalinity to pH 4.5	mg CaCO3/L					198	51.0	45.0 to 55.0			1.01	10.0
BD05869	Nitrogen, Nitrate/Nitrite	mg/L as N	0.04	0.200	2.00	1.99	0.025	2.00	1.80 to 2.20	99.5	90.0 to 110	0.00	15.0
BD05862	Solids, Dissolved	mg/L	1.00	25.0			321	52.0	40.0 to 60.0			0.312	10.0

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

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

Certificate Of Analysis

Description: Gorgas Ash Pond Field Blank-2

Location Code: WMWGORAPFB
Collected: 3/21/23 12:50
Customer ID:
Submittal Date: 3/23/23 10:14

Laboratory ID Number: BD05863

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7		***Analyst: ABB***			***Preparation Method: EPA 1638***				
* Boron, Total	3/24/23 11:57	3/31/23 11:53		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	3/24/23 11:57	3/31/23 11:53		1.015	0.118	mg/L	0.070035	0.406	J
* Iron, Total	3/24/23 11:57	3/31/23 11:53		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Total	3/24/23 11:57	3/31/23 11:53		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	3/24/23 11:57	3/31/23 11:53		1.015	0.0416	mg/L	0.021315	0.406	J
* Molybdenum, Total	3/24/23 11:57	3/31/23 11:53		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Total (calc.)	3/24/23 11:57	3/31/23 11:53		1	Not Detected	mg/L			
* Silicon, Total	3/24/23 11:57	3/31/23 11:53		1.015	Not Detected	mg/L	0.02030	0.25375	U
* Sodium, Total	3/24/23 11:57	4/6/23 10:23		1.015	Not Detected	mg/L	0.04060	0.406	U
Analytical Method: EPA 200.8		***Analyst: DLJ***			***Preparation Method: EPA 1638***				
* Antimony, Total	3/24/23 11:57	3/24/23 15:07		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Total	3/24/23 11:57	3/24/23 15:07		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Total	3/24/23 11:57	3/24/23 15:07		1.015	Not Detected	mg/L	0.000112	0.000203	U
* Barium, Total	3/24/23 11:57	3/24/23 15:07		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Beryllium, Total	3/24/23 11:57	3/24/23 15:07		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	3/24/23 11:57	3/24/23 15:07		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	3/24/23 11:57	3/24/23 15:07		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	3/24/23 11:57	3/24/23 15:07		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	3/24/23 11:57	3/24/23 15:07		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	3/24/23 11:57	3/24/23 15:07		1.015	Not Detected	mg/L	0.000152	0.001015	U
* Potassium, Total	3/24/23 11:57	3/24/23 15:07		1.015	Not Detected	mg/L	0.169505	0.5075	U
* Selenium, Total	3/24/23 11:57	3/24/23 15:07		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	3/24/23 11:57	3/24/23 15:07		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1		***Analyst: ELH***							
* Mercury, Total by CVAA	3/27/23 17:52	3/27/23 23:01		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2		***Analyst: SC***							
* Nitrogen, Nitrate/Nitrite	3/24/23 11:09	3/24/23 11:09		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2540C		***Analyst: CNJ***							
* Solids, Dissolved	3/24/23 09:08	3/28/23 10:02		1	Not Detected	mg/L		25	U

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

Comments:

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

Certificate Of Analysis

Description: Gorgas Ash Pond Field Blank-2

Location Code: WMWGORAPFB
Collected: 3/21/23 12:50
Customer ID:
Submittal Date: 3/23/23 10:14

Laboratory ID Number: BD05863

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	3/23/23 19:39	3/23/23 19:39		1	Not Detected	mg/L	1.00	2	U
Analytical Method: SM4500Cl E	***Analyst: CES***								
* Chloride	3/24/23 11:34	3/24/23 11:34		1	Not Detected	mg/L	0.50	1	U
Analytical Method: SM4500F G 2017	***Analyst: CES***								
* Fluoride	3/28/23 10:50	3/28/23 10:50		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	4/4/23 13:33	4/4/23 13:33		1	Not Detected	mg/L	0.6	2	U

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

Comments:

Reported: 5/3/2023
Version: 3.5
COA_CCR

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

Batch QC Summary

Customer Account: WMWGORAPFB
Sample Date: 3/21/23 12:50
Customer ID:
Delivery Date: 3/23/23 10:14

Description: Gorgas Ash Pond Field Blank-2

Laboratory ID Number: BD05863

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD05869	Aluminum, Total	mg/L	0.000318	0.0198	0.100	0.228	0.216	0.0985	0.0850 to 0.115	104	70.0 to 130	5.41	20.0
BD05869	Antimony, Total	mg/L	0.000323	0.00100	0.100	0.0925	0.0829	0.0909	0.0850 to 0.115	92.5	70.0 to 130	10.9	20.0
BD05869	Arsenic, Total	mg/L	0.0000036	0.000200	0.100	0.0940	0.0861	0.0969	0.0850 to 0.115	94.0	70.0 to 130	8.77	20.0
BD05869	Barium, Total	mg/L	-0.0000258	0.00100	0.100	0.143	0.129	0.0969	0.0850 to 0.115	97.4	70.0 to 130	10.3	20.0
BD05869	Beryllium, Total	mg/L	0.0000000	0.000880	0.100	0.0973	0.0942	0.0970	0.0850 to 0.115	97.3	70.0 to 130	3.24	20.0
BD05869	Boron, Total	mg/L	-0.000178	0.0650	1.00	1.12	1.12	1.03	0.850 to 1.15	102	70.0 to 130	0.00	20.0
BD05869	Cadmium, Total	mg/L	0.0000000	0.000147	0.100	0.0964	0.0876	0.0960	0.0850 to 0.115	96.4	70.0 to 130	9.57	20.0
BD05869	Calcium, Total	mg/L	0.00772	0.152	5.00	4.98	5.03	4.93	4.25 to 5.75	91.6	70.0 to 130	0.999	20.0
BD05868	Chloride	mg/L	0.0761	1.00	10.0	10.0	10.1	9.82	9.00 to 11.0	100	80.0 to 120	0.995	20.0
BD05869	Chromium, Total	mg/L	-0.0000978	0.000440	0.100	0.0906	0.0850	0.0966	0.0850 to 0.115	90.3	70.0 to 130	6.38	20.0
BD05869	Cobalt, Total	mg/L	-0.0000154	0.000147	0.100	0.0927	0.0869	0.0986	0.0850 to 0.115	92.7	70.0 to 130	6.46	20.0
BD05867	Fluoride	mg/L	0.00143	0.125				2.64	2.25 to 2.75		80.0 to 120		20.0
BD05869	Iron, Total	mg/L	-0.00369	0.0176	0.2	0.234	0.233	0.204	0.170 to 0.230	101	70.0 to 130	0.428	20.0
BD05869	Lead, Total	mg/L	0.0000057	0.000147	0.100	0.0965	0.0853	0.0956	0.0850 to 0.115	96.5	70.0 to 130	12.3	20.0
BD05869	Lithium, Total	mg/L	0.00118	0.0154	0.200	0.249	0.249	0.201	0.170 to 0.230	107	70.0 to 130	0.00	20.0
BD05869	Magnesium, Total	mg/L	-0.0125	0.0462	5.00	5.06	5.14	4.93	4.25 to 5.75	99.0	70.0 to 130	1.57	20.0
BD05869	Manganese, Total	mg/L	0.0000890	0.00033	0.100	0.0947	0.0895	0.0997	0.0850 to 0.115	93.9	70.0 to 130	5.65	20.0
BD05869	Mercury, Total by CVAA	mg/L	-5.000E-05	0.000500	0.004	0.00401	0.00399	0.00401	0.00340 to 0.00460	100	70.0 to 130	0.500	20.0
BD05869	Molybdenum, Total	mg/L	0.000	0.0100	0.2	0.202	0.207	0.204	0.170 to 0.230	101	70.0 to 130	2.44	20.0
BD05869	Potassium, Total	mg/L	0.00723	0.367	10.0	10.3	9.45	10.1	8.50 to 11.5	99.2	70.0 to 130	8.61	20.0
BD05869	Selenium, Total	mg/L	0.000273	0.00100	0.100	0.0849	0.0792	0.0989	0.0850 to 0.115	84.9	70.0 to 130	6.95	20.0
BD05869	Silicon, Total	mg/L	0.000711	0.0440	1.00	6.27	6.29	1.01	0.850 to 1.15	102	70.0 to 130	0.318	20.0
BD05869	Sodium, Total	mg/L	0.00384	0.0880	5.00	125	125	4.87	4.25 to 5.75	120	70.0 to 130	0.00	20.0
BD05868	Sulfate	mg/L	-0.377	2.0	20.0	20.5	20.0	20.1	18.0 to 22.0	102	80.0 to 120	2.47	20.0

Comments:

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

Batch QC Summary

Customer Account: WMWGORAPFB
Sample Date: 3/21/23 12:50
Customer ID:
Delivery Date: 3/23/23 10:14

Description: Gorgas Ash Pond Field Blank-2

Laboratory ID Number: BD05863

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD05869	Thallium, Total	mg/L	-0.0000132	0.000147	0.100	0.0979	0.0873	0.0956	0.0850 to 0.115	97.9	70.0 to 130	11.4	20.0
BD05869	Total Organic Carbon	mg/L	0.0312	1.00	10.0	13.3	13.2	10.5		102	80.0 to 120	0.755	20.0

Comments:

Reported: 5/3/2023
Version: 3.5
COA_CCR

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

Batch QC Summary

Customer Account: WMWGORAPFB
Sample Date: 3/21/23 12:50
Customer ID:
Delivery Date: 3/23/23 10:14

Description: Gorgas Ash Pond Field Blank-2

Laboratory ID Number: BD05863

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD05869	Nitrogen, Nitrate/Nitrite	mg/L as N	0.04	0.200	2.00	1.99	0.025	2.00	1.80 to 2.20	99.5	90.0 to 110	0.00	15.0
BD05871	Solids, Dissolved	mg/L	0.0000	25.0			300	55.0	40.0 to 60.0			1.68	10.0

Comments:

Reported: 5/3/2023
Version: 3.5
COA_CCR

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

Certificate Of Analysis

Description: Gorgas Ash Pond - PZ-22

Location Code: WMWGORAP
Collected: 3/21/23 13:38
Customer ID:
Submittal Date: 3/23/23 10:14

Laboratory ID Number: BD05864

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	3/24/23 11:57	3/31/23 11:56		1.015	0.0442	mg/L	0.030000	0.1015	J
* Calcium, Total	3/24/23 11:57	3/31/23 11:56		1.015	7.61	mg/L	0.070035	0.406	
* Iron, Total	3/24/23 11:57	3/31/23 11:56		1.015	0.624	mg/L	0.008120	0.0406	
* Lithium, Total	3/24/23 11:57	3/31/23 11:56		1.015	0.0940	mg/L	0.007105	0.01999956	
* Magnesium, Total	3/24/23 11:57	3/31/23 11:56		1.015	3.55	mg/L	0.021315	0.406	
* Molybdenum, Total	3/24/23 11:57	3/31/23 11:56		1.015	0.00545	mg/L	0.005075	0.01015	J
* Silica, Total (calc.)	3/24/23 11:57	3/31/23 11:56		1	10.4	mg/L			
* Silicon, Total	3/24/23 11:57	3/31/23 11:56		1.015	4.85	mg/L	0.02030	0.25375	
* Sodium, Total	3/24/23 11:57	3/31/23 14:46		10.15	149	mg/L	0.4060	4.06	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	3/24/23 08:37	3/29/23 12:50		1.015	0.0437	mg/L	0.030000	0.1015	J
* Calcium, Dissolved	3/24/23 08:37	3/29/23 12:50		1.015	7.78	mg/L	0.070035	0.406	
* Iron, Dissolved	3/24/23 08:37	3/29/23 12:50		1.015	0.287	mg/L	0.008120	0.0406	
* Lithium, Dissolved	3/24/23 08:37	3/29/23 12:50		1.015	0.0842	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	3/24/23 08:37	3/29/23 12:50		1.015	3.60	mg/L	0.021315	0.406	
* Molybdenum, Dissolved	3/24/23 08:37	3/29/23 12:50		1.015	0.00538	mg/L	0.005075	0.01015	J
* Silica, Dissolved (calc.)	3/24/23 08:37	3/29/23 12:50		1	10.2	mg/L			
* Silicon, Dissolved	3/24/23 08:37	3/29/23 12:50		1.015	4.78	mg/L	0.02030	0.25375	
* Sodium, Dissolved	3/24/23 08:37	3/29/23 14:50		10.15	158	mg/L	0.4060	4.06	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/24/23 11:57	3/24/23 15:11		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Total	3/24/23 11:57	3/24/23 15:11		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Total	3/24/23 11:57	3/24/23 15:11		1.015	0.00226	mg/L	0.000112	0.000203	
* Barium, Total	3/24/23 11:57	3/24/23 15:11		1.015	0.0615	mg/L	0.000508	0.001015	
* Beryllium, Total	3/24/23 11:57	3/24/23 15:11		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	3/24/23 11:57	3/24/23 15:11		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	3/24/23 11:57	3/24/23 15:11		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	3/24/23 11:57	3/24/23 15:11		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	3/24/23 11:57	3/24/23 15:11		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	3/24/23 11:57	3/24/23 15:11		1.015	0.0221	mg/L	0.000152	0.001015	

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

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

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

Certificate Of Analysis

Description: Gorgas Ash Pond - PZ-22

Location Code: WMWGORAP
Collected: 3/21/23 13:38
Customer ID:
Submittal Date: 3/23/23 10:14

Laboratory ID Number: BD05864

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	3/24/23 11:57	3/24/23 15:11		1.015	4.16	mg/L	0.169505	0.5075	
* Selenium, Total	3/24/23 11:57	3/24/23 15:11		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	3/24/23 11:57	3/24/23 15:11		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	3/24/23 08:37	3/24/23 11:03		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	3/24/23 08:37	3/24/23 11:03		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Dissolved	3/24/23 08:37	3/24/23 11:03		1.015	0.00219	mg/L	0.000112	0.000203	
* Barium, Dissolved	3/24/23 08:37	3/24/23 11:03		1.015	0.0681	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	3/24/23 08:37	3/24/23 11:03		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	3/24/23 08:37	3/24/23 11:03		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	3/24/23 08:37	3/24/23 11:03		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	3/24/23 08:37	3/24/23 11:03		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Dissolved	3/24/23 08:37	3/24/23 11:03		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	3/24/23 08:37	3/24/23 11:03		1.015	0.0257	mg/L	0.000152	0.001015	
* Potassium, Dissolved	3/24/23 08:37	3/24/23 11:03		1.015	3.86	mg/L	0.169505	0.5075	
* Selenium, Dissolved	3/24/23 08:37	3/24/23 11:03		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	3/24/23 08:37	3/24/23 11:03		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ELH***								
* Mercury, Total by CVAA	3/27/23 17:52	3/27/23 23:05		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	3/24/23 11:11	3/24/23 11:11		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
* Alkalinity to pH 4.5	3/30/23 10:20	3/30/23 11:10		1	295	mg CaCO3/L		0.10	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	3/24/23 09:08	3/28/23 10:02		1	421	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
* Bicarbonate Alkalinity, (calc.)	3/30/23 10:20	3/30/23 11:10		1	256	mg CaCO3/L		1	
* Carbonate Alkalinity, (calc.)	3/30/23 10:20	3/30/23 11:10		1	38.1	mg CaCO3/L		0.5	
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	3/23/23 19:55	3/23/23 19:55		1	4.20	mg/L	1.00	2	

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

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

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

Certificate Of Analysis

Description: Gorgas Ash Pond - PZ-22

Location Code: WMWGORAP
Collected: 3/21/23 13:38
Customer ID:
Submittal Date: 3/23/23 10:14

Laboratory ID Number: BD05864

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: CES***								
* Chloride	3/24/23 11:26	3/24/23 11:26		1	2.80	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: CES***								
* Fluoride	3/28/23 10:51	3/28/23 10:51		1	0.393	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	4/4/23 13:44	4/4/23 13:44		3	62.9	mg/L	1.8	6	
Analytical Method: Field Measurements	***Analyst: AWG***								
Conductivity	3/21/23 13:35	3/21/23 13:35			669.22	uS/cm			FA
pH	3/21/23 13:35	3/21/23 13:35			9.53	SU			FA
Temperature	3/21/23 13:35	3/21/23 13:35			17.74	C			FA
Turbidity	3/21/23 13:35	3/21/23 13:35			3.09	NTU			FA
Sulfide	3/21/23 13:35	3/21/23 13:35			0	mg/L			FA

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

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

Reported: 5/3/2023
Version: 3.5
COA_CCR

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/21/23 13:38
Customer ID:
Delivery Date: 3/23/23 10:14

Description: Gorgas Ash Pond - PZ-22

Laboratory ID Number: BD05864

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD05872	Aluminum, Dissolved	mg/L	-0.000280	0.0198	0.100	0.0983	0.0955	0.104	0.0850 to 0.115	98.3	70.0 to 130	2.89	20.0
BD05869	Aluminum, Total	mg/L	0.000318	0.0198	0.100	0.228	0.216	0.0985	0.0850 to 0.115	104	70.0 to 130	5.41	20.0
BD05872	Antimony, Dissolved	mg/L	0.000258	0.00100	0.100	0.0893	0.0859	0.0933	0.0850 to 0.115	89.3	70.0 to 130	3.88	20.0
BD05869	Antimony, Total	mg/L	0.000323	0.00100	0.100	0.0925	0.0829	0.0909	0.0850 to 0.115	92.5	70.0 to 130	10.9	20.0
BD05872	Arsenic, Dissolved	mg/L	-0.0000068	0.000200	0.100	0.0938	0.0933	0.102	0.0850 to 0.115	93.4	70.0 to 130	0.534	20.0
BD05869	Arsenic, Total	mg/L	0.0000036	0.000200	0.100	0.0940	0.0861	0.0969	0.0850 to 0.115	94.0	70.0 to 130	8.77	20.0
BD05872	Barium, Dissolved	mg/L	-0.0000031	0.00100	0.100	0.110	0.105	0.101	0.0850 to 0.115	94.0	70.0 to 130	4.65	20.0
BD05869	Barium, Total	mg/L	-0.0000258	0.00100	0.100	0.143	0.129	0.0969	0.0850 to 0.115	97.4	70.0 to 130	10.3	20.0
BD05872	Beryllium, Dissolved	mg/L	0.0000000	0.000880	0.100	0.0901	0.0894	0.0998	0.0850 to 0.115	90.1	70.0 to 130	0.780	20.0
BD05869	Beryllium, Total	mg/L	0.0000000	0.000880	0.100	0.0973	0.0942	0.0970	0.0850 to 0.115	97.3	70.0 to 130	3.24	20.0
BD05872	Boron, Dissolved	mg/L	-0.000072	0.0650	1.00	1.08	1.06	0.994	0.850 to 1.15	103	70.0 to 130	1.87	20.0
BD05869	Boron, Total	mg/L	-0.000178	0.0650	1.00	1.12	1.12	1.03	0.850 to 1.15	102	70.0 to 130	0.00	20.0
BD05872	Cadmium, Dissolved	mg/L	0.0000000	0.000147	0.100	0.0907	0.0919	0.101	0.0850 to 0.115	90.7	70.0 to 130	1.31	20.0
BD05869	Cadmium, Total	mg/L	0.0000000	0.000147	0.100	0.0964	0.0876	0.0960	0.0850 to 0.115	96.4	70.0 to 130	9.57	20.0
BD05872	Calcium, Dissolved	mg/L	0.00206	0.152	5.00	12.5	12.7	4.92	4.25 to 5.75	94.0	70.0 to 130	1.59	20.0
BD05869	Calcium, Total	mg/L	0.00772	0.152	5.00	4.98	5.03	4.93	4.25 to 5.75	91.6	70.0 to 130	0.999	20.0
BD05868	Chloride	mg/L	0.0761	1.00	10.0	10.0	10.1	9.82	9.00 to 11.0	100	80.0 to 120	0.995	20.0
BD05872	Chromium, Dissolved	mg/L	-0.0000195	0.000440	0.100	0.0908	0.0882	0.102	0.0850 to 0.115	90.8	70.0 to 130	2.91	20.0
BD05869	Chromium, Total	mg/L	-0.0000978	0.000440	0.100	0.0906	0.0850	0.0966	0.0850 to 0.115	90.3	70.0 to 130	6.38	20.0
BD05872	Cobalt, Dissolved	mg/L	-0.0000142	0.000147	0.100	0.0940	0.0906	0.104	0.0850 to 0.115	94.0	70.0 to 130	3.68	20.0
BD05869	Cobalt, Total	mg/L	-0.0000154	0.000147	0.100	0.0927	0.0869	0.0986	0.0850 to 0.115	92.7	70.0 to 130	6.46	20.0
BD05867	Fluoride	mg/L	0.00143	0.125				2.64	2.25 to 2.75		80.0 to 120		20.0
BD05872	Iron, Dissolved	mg/L	0.000948	0.0176	0.2	0.288	0.281	0.206	0.170 to 0.230	104	70.0 to 130	2.46	20.0
BD05869	Iron, Total	mg/L	-0.00369	0.0176	0.2	0.234	0.233	0.204	0.170 to 0.230	101	70.0 to 130	0.428	20.0

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

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/21/23 13:38
Customer ID:
Delivery Date: 3/23/23 10:14

Description: Gorgas Ash Pond - PZ-22

Laboratory ID Number: BD05864

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD05872	Lead, Dissolved	mg/L	0.0000087	0.000147	0.100	0.0968	0.0911	0.103	0.0850 to 0.115	96.8	70.0 to 130	6.07	20.0
BD05869	Lead, Total	mg/L	0.0000057	0.000147	0.100	0.0965	0.0853	0.0956	0.0850 to 0.115	96.5	70.0 to 130	12.3	20.0
BD05872	Lithium, Dissolved	mg/L	0.000435	0.0154	0.200	0.286	0.289	0.202	0.170 to 0.230	103	70.0 to 130	1.04	20.0
BD05869	Lithium, Total	mg/L	0.00118	0.0154	0.200	0.249	0.249	0.201	0.170 to 0.230	107	70.0 to 130	0.00	20.0
BD05872	Magnesium, Dissolved	mg/L	-0.00332	0.0462	5.00	7.64	7.81	4.91	4.25 to 5.75	95.4	70.0 to 130	2.20	20.0
BD05869	Magnesium, Total	mg/L	-0.0125	0.0462	5.00	5.06	5.14	4.93	4.25 to 5.75	99.0	70.0 to 130	1.57	20.0
BD05872	Manganese, Dissolved	mg/L	0.0000667	0.00033	0.100	0.107	0.103	0.105	0.0850 to 0.115	92.7	70.0 to 130	3.81	20.0
BD05869	Manganese, Total	mg/L	0.0000890	0.00033	0.100	0.0947	0.0895	0.0997	0.0850 to 0.115	93.9	70.0 to 130	5.65	20.0
BD05869	Mercury, Total by CVAA	mg/L	-5.000E-05	0.000500	0.004	0.00401	0.00399	0.00401	0.00340 to 0.00460	100	70.0 to 130	0.500	20.0
BD05872	Molybdenum, Dissolved	mg/L	0.000945	0.0100	0.2	0.225	0.219	0.201	0.170 to 0.230	104	70.0 to 130	2.70	20.0
BD05869	Molybdenum, Total	mg/L	0.000	0.0100	0.2	0.202	0.207	0.204	0.170 to 0.230	101	70.0 to 130	2.44	20.0
BD05872	Potassium, Dissolved	mg/L	0.0435	0.367	10.0	23.3	22.6	10.6	8.50 to 11.5	85.0	70.0 to 130	3.05	20.0
BD05869	Potassium, Total	mg/L	0.00723	0.367	10.0	10.3	9.45	10.1	8.50 to 11.5	99.2	70.0 to 130	8.61	20.0
BD05872	Selenium, Dissolved	mg/L	0.0000397	0.00100	0.100	0.0961	0.0955	0.107	0.0850 to 0.115	96.1	70.0 to 130	0.626	20.0
BD05869	Selenium, Total	mg/L	0.000273	0.00100	0.100	0.0849	0.0792	0.0989	0.0850 to 0.115	84.9	70.0 to 130	6.95	20.0
BD05872	Silicon, Dissolved	mg/L	-0.00163	0.0440	1.00	8.24	8.04	0.997	0.850 to 1.15	117	70.0 to 130	2.46	20.0
BD05869	Silicon, Total	mg/L	0.000711	0.0440	1.00	6.27	6.29	1.01	0.850 to 1.15	102	70.0 to 130	0.318	20.0
BD05872	Sodium, Dissolved	mg/L	0.00324	0.0880	5.00	300	296	4.89	4.25 to 5.75	420	70.0 to 130	1.34	20.0
BD05869	Sodium, Total	mg/L	0.00384	0.0880	5.00	125	125	4.87	4.25 to 5.75	120	70.0 to 130	0.00	20.0
BD05868	Sulfate	mg/L	-0.377	2.0	20.0	20.5	20.0	20.1	18.0 to 22.0	102	80.0 to 120	2.47	20.0
BD05872	Thallium, Dissolved	mg/L	-0.0000089	0.000147	0.100	0.0957	0.0905	0.102	0.0850 to 0.115	95.7	70.0 to 130	5.59	20.0
BD05869	Thallium, Total	mg/L	-0.0000132	0.000147	0.100	0.0979	0.0873	0.0956	0.0850 to 0.115	97.9	70.0 to 130	11.4	20.0
BD05869	Total Organic Carbon	mg/L	0.0312	1.00	10.0	13.3	13.2	10.5		102	80.0 to 120	0.755	20.0

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/21/23 13:38
Customer ID:
Delivery Date: 3/23/23 10:14

Description: Gorgas Ash Pond - PZ-22

Laboratory ID Number: BD05864

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD05872	Alkalinity to pH 4.5	mg CaCO3/L					198	51.0	45.0 to 55.0			1.01	10.0
BD05869	Nitrogen, Nitrate/Nitrite	mg/L as N	0.04	0.200	2.00	1.99	0.025	2.00	1.80 to 2.20	99.5	90.0 to 110	0.00	15.0
BD05871	Solids, Dissolved	mg/L	0.0000	25.0			300	55.0	40.0 to 60.0			1.68	10.0

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

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

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-17

Location Code: WMWGORAP
Collected: 3/22/23 10:28
Customer ID:
Submittal Date: 3/23/23 10:14

Laboratory ID Number: BD05865

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	3/24/23 11:57	3/31/23 11:59		1.015	0.0727	mg/L	0.030000	0.1015	J
* Calcium, Total	3/24/23 11:57	3/31/23 11:59		1.015	2.07	mg/L	0.070035	0.406	
* Iron, Total	3/24/23 11:57	3/31/23 11:59		1.015	0.0737	mg/L	0.008120	0.0406	
* Lithium, Total	3/24/23 11:57	3/31/23 11:59		1.015	0.0586	mg/L	0.007105	0.01999956	
* Magnesium, Total	3/24/23 11:57	3/31/23 11:59		1.015	0.640	mg/L	0.021315	0.406	
* Molybdenum, Total	3/24/23 11:57	3/31/23 11:59		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Total (calc.)	3/24/23 11:57	3/31/23 11:59		1	16.1	mg/L			
* Silicon, Total	3/24/23 11:57	3/31/23 11:59		1.015	7.51	mg/L	0.02030	0.25375	
* Sodium, Total	3/24/23 11:57	3/31/23 14:49		10.15	176	mg/L	0.4060	4.06	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	3/24/23 08:37	3/29/23 12:54		1.015	0.0691	mg/L	0.030000	0.1015	J
* Calcium, Dissolved	3/24/23 08:37	3/29/23 12:54		1.015	1.99	mg/L	0.070035	0.406	
* Iron, Dissolved	3/24/23 08:37	3/29/23 12:54		1.015	0.0541	mg/L	0.008120	0.0406	
* Lithium, Dissolved	3/24/23 08:37	3/29/23 12:54		1.015	0.0580	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	3/24/23 08:37	3/29/23 12:54		1.015	0.641	mg/L	0.021315	0.406	
* Molybdenum, Dissolved	3/24/23 08:37	3/29/23 12:54		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Dissolved (calc.)	3/24/23 08:37	3/29/23 12:54		1	16.1	mg/L			
* Silicon, Dissolved	3/24/23 08:37	3/29/23 12:54		1.015	7.51	mg/L	0.02030	0.25375	
* Sodium, Dissolved	3/24/23 08:37	3/29/23 14:54		10.15	182	mg/L	0.4060	4.06	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/24/23 11:57	3/24/23 15:14		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Total	3/24/23 11:57	3/24/23 15:14		1.015	0.0216	mg/L	0.009135	0.05075	J
* Arsenic, Total	3/24/23 11:57	3/24/23 15:14		1.015	0.000896	mg/L	0.000112	0.000203	
* Barium, Total	3/24/23 11:57	3/24/23 15:14		1.015	0.0835	mg/L	0.000508	0.001015	
* Beryllium, Total	3/24/23 11:57	3/24/23 15:14		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	3/24/23 11:57	3/24/23 15:14		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	3/24/23 11:57	3/24/23 15:14		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	3/24/23 11:57	3/24/23 15:14		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	3/24/23 11:57	3/24/23 15:14		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	3/24/23 11:57	3/24/23 15:14		1.015	0.00406	mg/L	0.000152	0.001015	

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

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

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

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-17

Location Code: WMWGORAP
Collected: 3/22/23 10:28
Customer ID:
Submittal Date: 3/23/23 10:14

Laboratory ID Number: BD05865

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	3/24/23 11:57	3/24/23 15:14		1.015	0.789	mg/L	0.169505	0.5075	
* Selenium, Total	3/24/23 11:57	3/24/23 15:14		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	3/24/23 11:57	3/24/23 15:14		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	3/24/23 08:37	3/24/23 11:07		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	3/24/23 08:37	3/24/23 11:07		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Dissolved	3/24/23 08:37	3/24/23 11:07		1.015	0.000615	mg/L	0.000112	0.000203	
* Barium, Dissolved	3/24/23 08:37	3/24/23 11:07		1.015	0.0833	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	3/24/23 08:37	3/24/23 11:07		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	3/24/23 08:37	3/24/23 11:07		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	3/24/23 08:37	3/24/23 11:07		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	3/24/23 08:37	3/24/23 11:07		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Dissolved	3/24/23 08:37	3/24/23 11:07		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	3/24/23 08:37	3/24/23 11:07		1.015	0.00386	mg/L	0.000152	0.001015	
* Potassium, Dissolved	3/24/23 08:37	3/24/23 11:07		1.015	0.784	mg/L	0.169505	0.5075	
* Selenium, Dissolved	3/24/23 08:37	3/24/23 11:07		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	3/24/23 08:37	3/24/23 11:07		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ELH***								
* Mercury, Total by CVAA	3/27/23 17:52	3/27/23 23:09		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	3/24/23 11:12	3/24/23 11:12		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
* Alkalinity to pH 4.5	4/4/23 15:54	4/4/23 17:47		1	391	mg CaCO3/L		0.10	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	3/24/23 09:08	3/28/23 10:02		1	441	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
* Bicarbonate Alkalinity, (calc.)	4/4/23 15:54	4/4/23 17:47		1	378	mg CaCO3/L		1	
* Carbonate Alkalinity, (calc.)	4/4/23 15:54	4/4/23 17:47		1	13.2	mg CaCO3/L		0.5	
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	3/23/23 20:10	3/23/23 20:10		1	4.99	mg/L	1.00	2	

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

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

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

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-17

Location Code: WMWGORAP
Collected: 3/22/23 10:28
Customer ID:
Submittal Date: 3/23/23 10:14

Laboratory ID Number: BD05865

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: CES***								
* Chloride	3/24/23 11:27	3/24/23 11:27		1	5.96	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: CES***								
* Fluoride	3/28/23 10:52	3/28/23 10:52		1	0.183	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	4/4/23 13:36	4/4/23 13:36		1	7.00	mg/L	0.6	2	
Analytical Method: Field Measurements	***Analyst: AWG***								
Conductivity	3/22/23 10:25	3/22/23 10:25			590.08	uS/cm			FA
pH	3/22/23 10:25	3/22/23 10:25			8.56	SU			FA
Temperature	3/22/23 10:25	3/22/23 10:25			16.90	C			FA
Turbidity	3/22/23 10:25	3/22/23 10:25			2.44	NTU			FA
Sulfide	3/22/23 10:25	3/22/23 10:25			0	mg/L			FA

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

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

Reported: 5/3/2023
Version: 3.5
COA_CCR

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/22/23 10:28
Customer ID:
Delivery Date: 3/23/23 10:14

Description: Gorgas Ash Pond - MW-17

Laboratory ID Number: BD05865

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD05872	Aluminum, Dissolved	mg/L	-0.000280	0.0198	0.100	0.0983	0.0955	0.104	0.0850 to 0.115	98.3	70.0 to 130	2.89	20.0
BD05869	Aluminum, Total	mg/L	0.000318	0.0198	0.100	0.228	0.216	0.0985	0.0850 to 0.115	104	70.0 to 130	5.41	20.0
BD05872	Antimony, Dissolved	mg/L	0.000258	0.00100	0.100	0.0893	0.0859	0.0933	0.0850 to 0.115	89.3	70.0 to 130	3.88	20.0
BD05869	Antimony, Total	mg/L	0.000323	0.00100	0.100	0.0925	0.0829	0.0909	0.0850 to 0.115	92.5	70.0 to 130	10.9	20.0
BD05872	Arsenic, Dissolved	mg/L	-0.0000068	0.000200	0.100	0.0938	0.0933	0.102	0.0850 to 0.115	93.4	70.0 to 130	0.534	20.0
BD05869	Arsenic, Total	mg/L	0.0000036	0.000200	0.100	0.0940	0.0861	0.0969	0.0850 to 0.115	94.0	70.0 to 130	8.77	20.0
BD05872	Barium, Dissolved	mg/L	-0.0000031	0.00100	0.100	0.110	0.105	0.101	0.0850 to 0.115	94.0	70.0 to 130	4.65	20.0
BD05869	Barium, Total	mg/L	-0.0000258	0.00100	0.100	0.143	0.129	0.0969	0.0850 to 0.115	97.4	70.0 to 130	10.3	20.0
BD05872	Beryllium, Dissolved	mg/L	0.0000000	0.000880	0.100	0.0901	0.0894	0.0998	0.0850 to 0.115	90.1	70.0 to 130	0.780	20.0
BD05869	Beryllium, Total	mg/L	0.0000000	0.000880	0.100	0.0973	0.0942	0.0970	0.0850 to 0.115	97.3	70.0 to 130	3.24	20.0
BD05872	Boron, Dissolved	mg/L	-0.000072	0.0650	1.00	1.08	1.06	0.994	0.850 to 1.15	103	70.0 to 130	1.87	20.0
BD05869	Boron, Total	mg/L	-0.000178	0.0650	1.00	1.12	1.12	1.03	0.850 to 1.15	102	70.0 to 130	0.00	20.0
BD05872	Cadmium, Dissolved	mg/L	0.0000000	0.000147	0.100	0.0907	0.0919	0.101	0.0850 to 0.115	90.7	70.0 to 130	1.31	20.0
BD05869	Cadmium, Total	mg/L	0.0000000	0.000147	0.100	0.0964	0.0876	0.0960	0.0850 to 0.115	96.4	70.0 to 130	9.57	20.0
BD05872	Calcium, Dissolved	mg/L	0.00206	0.152	5.00	12.5	12.7	4.92	4.25 to 5.75	94.0	70.0 to 130	1.59	20.0
BD05869	Calcium, Total	mg/L	0.00772	0.152	5.00	4.98	5.03	4.93	4.25 to 5.75	91.6	70.0 to 130	0.999	20.0
BD05868	Chloride	mg/L	0.0761	1.00	10.0	10.0	10.1	9.82	9.00 to 11.0	100	80.0 to 120	0.995	20.0
BD05872	Chromium, Dissolved	mg/L	-0.0000195	0.000440	0.100	0.0908	0.0882	0.102	0.0850 to 0.115	90.8	70.0 to 130	2.91	20.0
BD05869	Chromium, Total	mg/L	-0.0000978	0.000440	0.100	0.0906	0.0850	0.0966	0.0850 to 0.115	90.3	70.0 to 130	6.38	20.0
BD05872	Cobalt, Dissolved	mg/L	-0.0000142	0.000147	0.100	0.0940	0.0906	0.104	0.0850 to 0.115	94.0	70.0 to 130	3.68	20.0
BD05869	Cobalt, Total	mg/L	-0.0000154	0.000147	0.100	0.0927	0.0869	0.0986	0.0850 to 0.115	92.7	70.0 to 130	6.46	20.0
BD05867	Fluoride	mg/L	0.00143	0.125				2.64	2.25 to 2.75		80.0 to 120		20.0
BD05872	Iron, Dissolved	mg/L	0.000948	0.0176	0.2	0.288	0.281	0.206	0.170 to 0.230	104	70.0 to 130	2.46	20.0
BD05869	Iron, Total	mg/L	-0.00369	0.0176	0.2	0.234	0.233	0.204	0.170 to 0.230	101	70.0 to 130	0.428	20.0

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/22/23 10:28
Customer ID:
Delivery Date: 3/23/23 10:14

Description: Gorgas Ash Pond - MW-17

Laboratory ID Number: BD05865

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD05872	Lead, Dissolved	mg/L	0.0000087	0.000147	0.100	0.0968	0.0911	0.103	0.0850 to 0.115	96.8	70.0 to 130	6.07	20.0
BD05869	Lead, Total	mg/L	0.0000057	0.000147	0.100	0.0965	0.0853	0.0956	0.0850 to 0.115	96.5	70.0 to 130	12.3	20.0
BD05872	Lithium, Dissolved	mg/L	0.000435	0.0154	0.200	0.286	0.289	0.202	0.170 to 0.230	103	70.0 to 130	1.04	20.0
BD05869	Lithium, Total	mg/L	0.00118	0.0154	0.200	0.249	0.249	0.201	0.170 to 0.230	107	70.0 to 130	0.00	20.0
BD05872	Magnesium, Dissolved	mg/L	-0.00332	0.0462	5.00	7.64	7.81	4.91	4.25 to 5.75	95.4	70.0 to 130	2.20	20.0
BD05869	Magnesium, Total	mg/L	-0.0125	0.0462	5.00	5.06	5.14	4.93	4.25 to 5.75	99.0	70.0 to 130	1.57	20.0
BD05872	Manganese, Dissolved	mg/L	0.0000667	0.00033	0.100	0.107	0.103	0.105	0.0850 to 0.115	92.7	70.0 to 130	3.81	20.0
BD05869	Manganese, Total	mg/L	0.0000890	0.00033	0.100	0.0947	0.0895	0.0997	0.0850 to 0.115	93.9	70.0 to 130	5.65	20.0
BD05869	Mercury, Total by CVAA	mg/L	-5.000E-05	0.000500	0.004	0.00401	0.00399	0.00401	0.00340 to 0.00460	100	70.0 to 130	0.500	20.0
BD05872	Molybdenum, Dissolved	mg/L	0.000945	0.0100	0.2	0.225	0.219	0.201	0.170 to 0.230	104	70.0 to 130	2.70	20.0
BD05869	Molybdenum, Total	mg/L	0.000	0.0100	0.2	0.202	0.207	0.204	0.170 to 0.230	101	70.0 to 130	2.44	20.0
BD05872	Potassium, Dissolved	mg/L	0.0435	0.367	10.0	23.3	22.6	10.6	8.50 to 11.5	85.0	70.0 to 130	3.05	20.0
BD05869	Potassium, Total	mg/L	0.00723	0.367	10.0	10.3	9.45	10.1	8.50 to 11.5	99.2	70.0 to 130	8.61	20.0
BD05872	Selenium, Dissolved	mg/L	0.0000397	0.00100	0.100	0.0961	0.0955	0.107	0.0850 to 0.115	96.1	70.0 to 130	0.626	20.0
BD05869	Selenium, Total	mg/L	0.000273	0.00100	0.100	0.0849	0.0792	0.0989	0.0850 to 0.115	84.9	70.0 to 130	6.95	20.0
BD05872	Silicon, Dissolved	mg/L	-0.00163	0.0440	1.00	8.24	8.04	0.997	0.850 to 1.15	117	70.0 to 130	2.46	20.0
BD05869	Silicon, Total	mg/L	0.000711	0.0440	1.00	6.27	6.29	1.01	0.850 to 1.15	102	70.0 to 130	0.318	20.0
BD05872	Sodium, Dissolved	mg/L	0.00324	0.0880	5.00	300	296	4.89	4.25 to 5.75	420	70.0 to 130	1.34	20.0
BD05869	Sodium, Total	mg/L	0.00384	0.0880	5.00	125	125	4.87	4.25 to 5.75	120	70.0 to 130	0.00	20.0
BD05868	Sulfate	mg/L	-0.377	2.0	20.0	20.5	20.0	20.1	18.0 to 22.0	102	80.0 to 120	2.47	20.0
BD05872	Thallium, Dissolved	mg/L	-0.0000089	0.000147	0.100	0.0957	0.0905	0.102	0.0850 to 0.115	95.7	70.0 to 130	5.59	20.0
BD05869	Thallium, Total	mg/L	-0.0000132	0.000147	0.100	0.0979	0.0873	0.0956	0.0850 to 0.115	97.9	70.0 to 130	11.4	20.0
BD05869	Total Organic Carbon	mg/L	0.0312	1.00	10.0	13.3	13.2	10.5		102	80.0 to 120	0.755	20.0

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

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/22/23 10:28
Customer ID:
Delivery Date: 3/23/23 10:14

Description: Gorgas Ash Pond - MW-17

Laboratory ID Number: BD05865

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD05875	Alkalinity to pH 4.5	mg CaCO3/L					176	50.6	45.0 to 55.0			1.13	10.0
BD05869	Nitrogen, Nitrate/Nitrite	mg/L as N	0.04	0.200	2.00	1.99	0.025	2.00	1.80 to 2.20	99.5	90.0 to 110	0.00	15.0
BD05871	Solids, Dissolved	mg/L	0.0000	25.0			300	55.0	40.0 to 60.0			1.68	10.0

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

Reported: 5/3/2023
Version: 3.5
COA_CCR

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

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-17 Dup

Location Code: WMWGORAP
Collected: 3/22/23 10:28
Customer ID:
Submittal Date: 3/23/23 10:14

Laboratory ID Number: BD05866

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	3/24/23 11:57	3/31/23 12:02		1.015	0.0721	mg/L	0.030000	0.1015	J
* Calcium, Total	3/24/23 11:57	3/31/23 12:02		1.015	2.10	mg/L	0.070035	0.406	
* Iron, Total	3/24/23 11:57	3/31/23 12:02		1.015	0.0713	mg/L	0.008120	0.0406	
* Lithium, Total	3/24/23 11:57	3/31/23 12:02		1.015	0.0594	mg/L	0.007105	0.01999956	
* Magnesium, Total	3/24/23 11:57	3/31/23 12:02		1.015	0.653	mg/L	0.021315	0.406	
* Molybdenum, Total	3/24/23 11:57	3/31/23 12:02		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Total (calc.)	3/24/23 11:57	3/31/23 12:02		1	16.0	mg/L			
* Silicon, Total	3/24/23 11:57	3/31/23 12:02		1.015	7.49	mg/L	0.02030	0.25375	
* Sodium, Total	3/24/23 11:57	3/31/23 14:53		10.15	176	mg/L	0.4060	4.06	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	3/24/23 08:37	3/29/23 12:57		1.015	0.0703	mg/L	0.030000	0.1015	J
* Calcium, Dissolved	3/24/23 08:37	3/29/23 12:57		1.015	2.04	mg/L	0.070035	0.406	
* Iron, Dissolved	3/24/23 08:37	3/29/23 12:57		1.015	0.0516	mg/L	0.008120	0.0406	
* Lithium, Dissolved	3/24/23 08:37	3/29/23 12:57		1.015	0.0583	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	3/24/23 08:37	3/29/23 12:57		1.015	0.637	mg/L	0.021315	0.406	
* Molybdenum, Dissolved	3/24/23 08:37	3/29/23 12:57		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Dissolved (calc.)	3/24/23 08:37	3/29/23 12:57		1	16.3	mg/L			
* Silicon, Dissolved	3/24/23 08:37	3/29/23 12:57		1.015	7.62	mg/L	0.02030	0.25375	
* Sodium, Dissolved	3/24/23 08:37	3/29/23 14:57		10.15	183	mg/L	0.4060	4.06	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/24/23 11:57	3/24/23 15:18		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Total	3/24/23 11:57	3/24/23 15:18		1.015	0.0219	mg/L	0.009135	0.05075	J
* Arsenic, Total	3/24/23 11:57	3/24/23 15:18		1.015	0.000975	mg/L	0.000112	0.000203	
* Barium, Total	3/24/23 11:57	3/24/23 15:18		1.015	0.0891	mg/L	0.000508	0.001015	
* Beryllium, Total	3/24/23 11:57	3/24/23 15:18		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	3/24/23 11:57	3/24/23 15:18		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	3/24/23 11:57	3/24/23 15:18		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	3/24/23 11:57	3/24/23 15:18		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	3/24/23 11:57	3/24/23 15:18		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	3/24/23 11:57	3/24/23 15:18		1.015	0.00458	mg/L	0.000152	0.001015	

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

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

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-17 Dup

Location Code: WMWGORAP
Collected: 3/22/23 10:28
Customer ID:
Submittal Date: 3/23/23 10:14

Laboratory ID Number: BD05866

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	3/24/23 11:57	3/24/23 15:18		1.015	0.815	mg/L	0.169505	0.5075	
* Selenium, Total	3/24/23 11:57	3/24/23 15:18		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	3/24/23 11:57	3/24/23 15:18		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	3/24/23 08:37	3/24/23 11:10		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	3/24/23 08:37	3/24/23 11:10		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Dissolved	3/24/23 08:37	3/24/23 11:10		1.015	0.000670	mg/L	0.000112	0.000203	
* Barium, Dissolved	3/24/23 08:37	3/24/23 11:10		1.015	0.0870	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	3/24/23 08:37	3/24/23 11:10		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	3/24/23 08:37	3/24/23 11:10		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	3/24/23 08:37	3/24/23 11:10		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	3/24/23 08:37	3/24/23 11:10		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Dissolved	3/24/23 08:37	3/24/23 11:10		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	3/24/23 08:37	3/24/23 11:10		1.015	0.00412	mg/L	0.000152	0.001015	
* Potassium, Dissolved	3/24/23 08:37	3/24/23 11:10		1.015	0.814	mg/L	0.169505	0.5075	
* Selenium, Dissolved	3/24/23 08:37	3/24/23 11:10		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	3/24/23 08:37	3/24/23 11:10		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ELH***								
* Mercury, Total by CVAA	3/27/23 17:52	3/27/23 23:12		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	3/24/23 11:14	3/24/23 11:14		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
* Alkalinity to pH 4.5	4/4/23 15:54	4/4/23 17:47		1	384	mg CaCO3/L		0.10	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	3/24/23 09:08	3/28/23 10:02		1	435	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
* Bicarbonate Alkalinity, (calc.)	4/4/23 15:54	4/4/23 17:47		1	374	mg CaCO3/L		1	
* Carbonate Alkalinity, (calc.)	4/4/23 15:54	4/4/23 17:47		1	10.1	mg CaCO3/L		0.5	
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	3/23/23 20:28	3/23/23 20:28		1	5.03	mg/L	1.00	2	

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

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

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

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-17 Dup

Location Code: WMWGORAP
Collected: 3/22/23 10:28
Customer ID:
Submittal Date: 3/23/23 10:14

Laboratory ID Number: BD05866

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: CES***								
* Chloride	3/24/23 11:28	3/24/23 11:28		1	5.87	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: CES***								
* Fluoride	3/28/23 10:53	3/28/23 10:53		1	0.174	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	4/4/23 13:37	4/4/23 13:37		1	4.78	mg/L	0.6	2	
Analytical Method: Field Measurements	***Analyst: AWG***								
Conductivity	3/22/23 10:25	3/22/23 10:25			590.08	uS/cm			FA
pH	3/22/23 10:25	3/22/23 10:25			8.56	SU			FA
Temperature	3/22/23 10:25	3/22/23 10:25			16.90	C			FA
Turbidity	3/22/23 10:25	3/22/23 10:25			2.44	NTU			FA
Sulfide	3/22/23 10:25	3/22/23 10:25			0	mg/L			FA

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

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

Reported: 5/3/2023
Version: 3.5
COA_CCR

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/22/23 10:28
Customer ID:
Delivery Date: 3/23/23 10:14

Description: Gorgas Ash Pond - MW-17 Dup

Laboratory ID Number: BD05866

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD05872	Aluminum, Dissolved	mg/L	-0.000280	0.0198	0.100	0.0983	0.0955	0.104	0.0850 to 0.115	98.3	70.0 to 130	2.89	20.0
BD05869	Aluminum, Total	mg/L	0.000318	0.0198	0.100	0.228	0.216	0.0985	0.0850 to 0.115	104	70.0 to 130	5.41	20.0
BD05872	Antimony, Dissolved	mg/L	0.000258	0.00100	0.100	0.0893	0.0859	0.0933	0.0850 to 0.115	89.3	70.0 to 130	3.88	20.0
BD05869	Antimony, Total	mg/L	0.000323	0.00100	0.100	0.0925	0.0829	0.0909	0.0850 to 0.115	92.5	70.0 to 130	10.9	20.0
BD05872	Arsenic, Dissolved	mg/L	-0.0000068	0.000200	0.100	0.0938	0.0933	0.102	0.0850 to 0.115	93.4	70.0 to 130	0.534	20.0
BD05869	Arsenic, Total	mg/L	0.0000036	0.000200	0.100	0.0940	0.0861	0.0969	0.0850 to 0.115	94.0	70.0 to 130	8.77	20.0
BD05872	Barium, Dissolved	mg/L	-0.0000031	0.00100	0.100	0.110	0.105	0.101	0.0850 to 0.115	94.0	70.0 to 130	4.65	20.0
BD05869	Barium, Total	mg/L	-0.0000258	0.00100	0.100	0.143	0.129	0.0969	0.0850 to 0.115	97.4	70.0 to 130	10.3	20.0
BD05872	Beryllium, Dissolved	mg/L	0.0000000	0.000880	0.100	0.0901	0.0894	0.0998	0.0850 to 0.115	90.1	70.0 to 130	0.780	20.0
BD05869	Beryllium, Total	mg/L	0.0000000	0.000880	0.100	0.0973	0.0942	0.0970	0.0850 to 0.115	97.3	70.0 to 130	3.24	20.0
BD05872	Boron, Dissolved	mg/L	-0.000072	0.0650	1.00	1.08	1.06	0.994	0.850 to 1.15	103	70.0 to 130	1.87	20.0
BD05869	Boron, Total	mg/L	-0.000178	0.0650	1.00	1.12	1.12	1.03	0.850 to 1.15	102	70.0 to 130	0.00	20.0
BD05872	Cadmium, Dissolved	mg/L	0.0000000	0.000147	0.100	0.0907	0.0919	0.101	0.0850 to 0.115	90.7	70.0 to 130	1.31	20.0
BD05869	Cadmium, Total	mg/L	0.0000000	0.000147	0.100	0.0964	0.0876	0.0960	0.0850 to 0.115	96.4	70.0 to 130	9.57	20.0
BD05872	Calcium, Dissolved	mg/L	0.00206	0.152	5.00	12.5	12.7	4.92	4.25 to 5.75	94.0	70.0 to 130	1.59	20.0
BD05869	Calcium, Total	mg/L	0.00772	0.152	5.00	4.98	5.03	4.93	4.25 to 5.75	91.6	70.0 to 130	0.999	20.0
BD05868	Chloride	mg/L	0.0761	1.00	10.0	10.0	10.1	9.82	9.00 to 11.0	100	80.0 to 120	0.995	20.0
BD05872	Chromium, Dissolved	mg/L	-0.0000195	0.000440	0.100	0.0908	0.0882	0.102	0.0850 to 0.115	90.8	70.0 to 130	2.91	20.0
BD05869	Chromium, Total	mg/L	-0.0000978	0.000440	0.100	0.0906	0.0850	0.0966	0.0850 to 0.115	90.3	70.0 to 130	6.38	20.0
BD05872	Cobalt, Dissolved	mg/L	-0.0000142	0.000147	0.100	0.0940	0.0906	0.104	0.0850 to 0.115	94.0	70.0 to 130	3.68	20.0
BD05869	Cobalt, Total	mg/L	-0.0000154	0.000147	0.100	0.0927	0.0869	0.0986	0.0850 to 0.115	92.7	70.0 to 130	6.46	20.0
BD05867	Fluoride	mg/L	0.00143	0.125				2.64	2.25 to 2.75		80.0 to 120		20.0
BD05872	Iron, Dissolved	mg/L	0.000948	0.0176	0.2	0.288	0.281	0.206	0.170 to 0.230	104	70.0 to 130	2.46	20.0
BD05869	Iron, Total	mg/L	-0.00369	0.0176	0.2	0.234	0.233	0.204	0.170 to 0.230	101	70.0 to 130	0.428	20.0

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

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/22/23 10:28
Customer ID:
Delivery Date: 3/23/23 10:14

Description: Gorgas Ash Pond - MW-17 Dup

Laboratory ID Number: BD05866

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD05872	Lead, Dissolved	mg/L	0.0000087	0.000147	0.100	0.0968	0.0911	0.103	0.0850 to 0.115	96.8	70.0 to 130	6.07	20.0
BD05869	Lead, Total	mg/L	0.0000057	0.000147	0.100	0.0965	0.0853	0.0956	0.0850 to 0.115	96.5	70.0 to 130	12.3	20.0
BD05872	Lithium, Dissolved	mg/L	0.000435	0.0154	0.200	0.286	0.289	0.202	0.170 to 0.230	103	70.0 to 130	1.04	20.0
BD05869	Lithium, Total	mg/L	0.00118	0.0154	0.200	0.249	0.249	0.201	0.170 to 0.230	107	70.0 to 130	0.00	20.0
BD05872	Magnesium, Dissolved	mg/L	-0.00332	0.0462	5.00	7.64	7.81	4.91	4.25 to 5.75	95.4	70.0 to 130	2.20	20.0
BD05869	Magnesium, Total	mg/L	-0.0125	0.0462	5.00	5.06	5.14	4.93	4.25 to 5.75	99.0	70.0 to 130	1.57	20.0
BD05872	Manganese, Dissolved	mg/L	0.0000667	0.00033	0.100	0.107	0.103	0.105	0.0850 to 0.115	92.7	70.0 to 130	3.81	20.0
BD05869	Manganese, Total	mg/L	0.0000890	0.00033	0.100	0.0947	0.0895	0.0997	0.0850 to 0.115	93.9	70.0 to 130	5.65	20.0
BD05869	Mercury, Total by CVAA	mg/L	-5.000E-05	0.000500	0.004	0.00401	0.00399	0.00401	0.00340 to 0.00460	100	70.0 to 130	0.500	20.0
BD05872	Molybdenum, Dissolved	mg/L	0.000945	0.0100	0.2	0.225	0.219	0.201	0.170 to 0.230	104	70.0 to 130	2.70	20.0
BD05869	Molybdenum, Total	mg/L	0.000	0.0100	0.2	0.202	0.207	0.204	0.170 to 0.230	101	70.0 to 130	2.44	20.0
BD05872	Potassium, Dissolved	mg/L	0.0435	0.367	10.0	23.3	22.6	10.6	8.50 to 11.5	85.0	70.0 to 130	3.05	20.0
BD05869	Potassium, Total	mg/L	0.00723	0.367	10.0	10.3	9.45	10.1	8.50 to 11.5	99.2	70.0 to 130	8.61	20.0
BD05872	Selenium, Dissolved	mg/L	0.0000397	0.00100	0.100	0.0961	0.0955	0.107	0.0850 to 0.115	96.1	70.0 to 130	0.626	20.0
BD05869	Selenium, Total	mg/L	0.000273	0.00100	0.100	0.0849	0.0792	0.0989	0.0850 to 0.115	84.9	70.0 to 130	6.95	20.0
BD05872	Silicon, Dissolved	mg/L	-0.00163	0.0440	1.00	8.24	8.04	0.997	0.850 to 1.15	117	70.0 to 130	2.46	20.0
BD05869	Silicon, Total	mg/L	0.000711	0.0440	1.00	6.27	6.29	1.01	0.850 to 1.15	102	70.0 to 130	0.318	20.0
BD05872	Sodium, Dissolved	mg/L	0.00324	0.0880	5.00	300	296	4.89	4.25 to 5.75	420	70.0 to 130	1.34	20.0
BD05869	Sodium, Total	mg/L	0.00384	0.0880	5.00	125	125	4.87	4.25 to 5.75	120	70.0 to 130	0.00	20.0
BD05868	Sulfate	mg/L	-0.377	2.0	20.0	20.5	20.0	20.1	18.0 to 22.0	102	80.0 to 120	2.47	20.0
BD05872	Thallium, Dissolved	mg/L	-0.0000089	0.000147	0.100	0.0957	0.0905	0.102	0.0850 to 0.115	95.7	70.0 to 130	5.59	20.0
BD05869	Thallium, Total	mg/L	-0.0000132	0.000147	0.100	0.0979	0.0873	0.0956	0.0850 to 0.115	97.9	70.0 to 130	11.4	20.0
BD05869	Total Organic Carbon	mg/L	0.0312	1.00	10.0	13.3	13.2	10.5		102	80.0 to 120	0.755	20.0

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

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/22/23 10:28
Customer ID:
Delivery Date: 3/23/23 10:14

Description: Gorgas Ash Pond - MW-17 Dup

Laboratory ID Number: BD05866

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD05875	Alkalinity to pH 4.5	mg CaCO3/L					176	50.6	45.0 to 55.0			1.13	10.0
BD05869	Nitrogen, Nitrate/Nitrite	mg/L as N	0.04	0.200	2.00	1.99	0.025	2.00	1.80 to 2.20	99.5	90.0 to 110	0.00	15.0
BD05871	Solids, Dissolved	mg/L	0.0000	25.0			300	55.0	40.0 to 60.0			1.68	10.0

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

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

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-17V

Location Code: WMWGORAP
Collected: 3/22/23 12:30
Customer ID:
Submittal Date: 3/23/23 10:14

Laboratory ID Number: BD05867

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	3/24/23 11:57	3/31/23 12:05		1.015	0.0379	mg/L	0.030000	0.1015	J
* Calcium, Total	3/24/23 11:57	3/31/23 12:05		1.015	29.6	mg/L	0.070035	0.406	
* Iron, Total	3/24/23 11:57	3/31/23 12:05		1.015	0.828	mg/L	0.008120	0.0406	
* Lithium, Total	3/24/23 11:57	3/31/23 12:05		1.015	0.0507	mg/L	0.007105	0.01999956	
* Magnesium, Total	3/24/23 11:57	3/31/23 12:05		1.015	12.3	mg/L	0.021315	0.406	
* Molybdenum, Total	3/24/23 11:57	3/31/23 12:05		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Total (calc.)	3/24/23 11:57	3/31/23 12:05		1	23.1	mg/L			
* Silicon, Total	3/24/23 11:57	3/31/23 12:05		1.015	10.8	mg/L	0.02030	0.25375	
* Sodium, Total	3/24/23 11:57	3/31/23 14:56		10.15	84.1	mg/L	0.4060	4.06	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	3/24/23 08:37	3/29/23 13:00		1.015	0.0356	mg/L	0.030000	0.1015	J
* Calcium, Dissolved	3/24/23 08:37	3/29/23 13:00		1.015	29.9	mg/L	0.070035	0.406	
* Iron, Dissolved	3/24/23 08:37	3/29/23 13:00		1.015	0.766	mg/L	0.008120	0.0406	
* Lithium, Dissolved	3/24/23 08:37	3/29/23 13:00		1.015	0.0485	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	3/24/23 08:37	3/29/23 13:00		1.015	12.4	mg/L	0.021315	0.406	
* Molybdenum, Dissolved	3/24/23 08:37	3/29/23 13:00		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Dissolved (calc.)	3/24/23 08:37	3/29/23 13:00		1	24.0	mg/L			
* Silicon, Dissolved	3/24/23 08:37	3/29/23 13:00		1.015	11.2	mg/L	0.02030	0.25375	
* Sodium, Dissolved	3/24/23 08:37	3/29/23 15:00		10.15	90.4	mg/L	0.4060	4.06	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/24/23 11:57	3/24/23 15:21		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Total	3/24/23 11:57	3/24/23 15:21		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Total	3/24/23 11:57	3/24/23 15:21		1.015	0.000293	mg/L	0.000112	0.000203	
* Barium, Total	3/24/23 11:57	3/24/23 15:21		1.015	0.289	mg/L	0.000508	0.001015	
* Beryllium, Total	3/24/23 11:57	3/24/23 15:21		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	3/24/23 11:57	3/24/23 15:21		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	3/24/23 11:57	3/24/23 15:21		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	3/24/23 11:57	3/24/23 15:21		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	3/24/23 11:57	3/24/23 15:21		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	3/24/23 11:57	3/24/23 15:21		1.015	0.0237	mg/L	0.000152	0.001015	

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

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

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-17V

Location Code: WMWGORAP
Collected: 3/22/23 12:30
Customer ID:
Submittal Date: 3/23/23 10:14

Laboratory ID Number: BD05867

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	3/24/23 11:57	3/24/23 15:21		1.015	2.03	mg/L	0.169505	0.5075	
* Selenium, Total	3/24/23 11:57	3/24/23 15:21		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	3/24/23 11:57	3/24/23 15:21		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	3/24/23 08:37	3/24/23 11:14		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	3/24/23 08:37	3/24/23 11:14		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Dissolved	3/24/23 08:37	3/24/23 11:14		1.015	0.000233	mg/L	0.000112	0.000203	
* Barium, Dissolved	3/24/23 08:37	3/24/23 11:14		1.015	0.286	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	3/24/23 08:37	3/24/23 11:14		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	3/24/23 08:37	3/24/23 11:14		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	3/24/23 08:37	3/24/23 11:14		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	3/24/23 08:37	3/24/23 11:14		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Dissolved	3/24/23 08:37	3/24/23 11:14		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	3/24/23 08:37	3/24/23 11:14		1.015	0.0226	mg/L	0.000152	0.001015	
* Potassium, Dissolved	3/24/23 08:37	3/24/23 11:14		1.015	1.99	mg/L	0.169505	0.5075	
* Selenium, Dissolved	3/24/23 08:37	3/24/23 11:14		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	3/24/23 08:37	3/24/23 11:14		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ELH***								
* Mercury, Total by CVAA	3/27/23 17:52	3/27/23 23:16		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	3/24/23 11:16	3/24/23 11:16		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
* Alkalinity to pH 4.5	4/4/23 15:54	4/4/23 17:47		1	305	mg CaCO3/L		0.10	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	3/24/23 09:08	3/28/23 10:02		1	344	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
* Bicarbonate Alkalinity, (calc.)	4/4/23 15:54	4/4/23 17:47		1	303	mg CaCO3/L		1	
* Carbonate Alkalinity, (calc.)	4/4/23 15:54	4/4/23 17:47		1	2.21	mg CaCO3/L		0.5	
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	3/23/23 20:43	3/23/23 20:43		1	4.17	mg/L	1.00	2	

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

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

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

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-17V

Location Code: WMWGORAP
Collected: 3/22/23 12:30
Customer ID:
Submittal Date: 3/23/23 10:14

Laboratory ID Number: BD05867

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: CES***								
* Chloride	3/24/23 11:29	3/24/23 11:29		1	2.80	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: CES***								
* Fluoride	3/28/23 10:54	3/28/23 10:54		1	0.198	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	4/4/23 13:38	4/4/23 13:38		1	10.6	mg/L	0.6	2	
Analytical Method: Field Measurements	***Analyst: AWG***								
Conductivity	3/22/23 12:27	3/22/23 12:27			545.07	uS/cm			FA
pH	3/22/23 12:27	3/22/23 12:27			7.61	SU			FA
Temperature	3/22/23 12:27	3/22/23 12:27			18.59	C			FA
Turbidity	3/22/23 12:27	3/22/23 12:27			1.95	NTU			FA
Sulfide	3/22/23 12:27	3/22/23 12:27			0	mg/L			FA

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

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

Reported: 5/3/2023
Version: 3.5
COA_CCR

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/22/23 12:30
Customer ID:
Delivery Date: 3/23/23 10:14

Description: Gorgas Ash Pond - MW-17V

Laboratory ID Number: BD05867

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD05872	Aluminum, Dissolved	mg/L	-0.000280	0.0198	0.100	0.0983	0.0955	0.104	0.0850 to 0.115	98.3	70.0 to 130	2.89	20.0
BD05869	Aluminum, Total	mg/L	0.000318	0.0198	0.100	0.228	0.216	0.0985	0.0850 to 0.115	104	70.0 to 130	5.41	20.0
BD05872	Antimony, Dissolved	mg/L	0.000258	0.00100	0.100	0.0893	0.0859	0.0933	0.0850 to 0.115	89.3	70.0 to 130	3.88	20.0
BD05869	Antimony, Total	mg/L	0.000323	0.00100	0.100	0.0925	0.0829	0.0909	0.0850 to 0.115	92.5	70.0 to 130	10.9	20.0
BD05872	Arsenic, Dissolved	mg/L	-0.0000068	0.000200	0.100	0.0938	0.0933	0.102	0.0850 to 0.115	93.4	70.0 to 130	0.534	20.0
BD05869	Arsenic, Total	mg/L	0.0000036	0.000200	0.100	0.0940	0.0861	0.0969	0.0850 to 0.115	94.0	70.0 to 130	8.77	20.0
BD05872	Barium, Dissolved	mg/L	-0.0000031	0.00100	0.100	0.110	0.105	0.101	0.0850 to 0.115	94.0	70.0 to 130	4.65	20.0
BD05869	Barium, Total	mg/L	-0.0000258	0.00100	0.100	0.143	0.129	0.0969	0.0850 to 0.115	97.4	70.0 to 130	10.3	20.0
BD05872	Beryllium, Dissolved	mg/L	0.0000000	0.000880	0.100	0.0901	0.0894	0.0998	0.0850 to 0.115	90.1	70.0 to 130	0.780	20.0
BD05869	Beryllium, Total	mg/L	0.0000000	0.000880	0.100	0.0973	0.0942	0.0970	0.0850 to 0.115	97.3	70.0 to 130	3.24	20.0
BD05872	Boron, Dissolved	mg/L	-0.000072	0.0650	1.00	1.08	1.06	0.994	0.850 to 1.15	103	70.0 to 130	1.87	20.0
BD05869	Boron, Total	mg/L	-0.000178	0.0650	1.00	1.12	1.12	1.03	0.850 to 1.15	102	70.0 to 130	0.00	20.0
BD05872	Cadmium, Dissolved	mg/L	0.0000000	0.000147	0.100	0.0907	0.0919	0.101	0.0850 to 0.115	90.7	70.0 to 130	1.31	20.0
BD05869	Cadmium, Total	mg/L	0.0000000	0.000147	0.100	0.0964	0.0876	0.0960	0.0850 to 0.115	96.4	70.0 to 130	9.57	20.0
BD05872	Calcium, Dissolved	mg/L	0.00206	0.152	5.00	12.5	12.7	4.92	4.25 to 5.75	94.0	70.0 to 130	1.59	20.0
BD05869	Calcium, Total	mg/L	0.00772	0.152	5.00	4.98	5.03	4.93	4.25 to 5.75	91.6	70.0 to 130	0.999	20.0
BD05868	Chloride	mg/L	0.0761	1.00	10.0	10.0	10.1	9.82	9.00 to 11.0	100	80.0 to 120	0.995	20.0
BD05872	Chromium, Dissolved	mg/L	-0.0000195	0.000440	0.100	0.0908	0.0882	0.102	0.0850 to 0.115	90.8	70.0 to 130	2.91	20.0
BD05869	Chromium, Total	mg/L	-0.0000978	0.000440	0.100	0.0906	0.0850	0.0966	0.0850 to 0.115	90.3	70.0 to 130	6.38	20.0
BD05872	Cobalt, Dissolved	mg/L	-0.0000142	0.000147	0.100	0.0940	0.0906	0.104	0.0850 to 0.115	94.0	70.0 to 130	3.68	20.0
BD05869	Cobalt, Total	mg/L	-0.0000154	0.000147	0.100	0.0927	0.0869	0.0986	0.0850 to 0.115	92.7	70.0 to 130	6.46	20.0
BD05867	Fluoride	mg/L	0.00143	0.125				2.64	2.25 to 2.75		80.0 to 120		20.0
BD05872	Iron, Dissolved	mg/L	0.000948	0.0176	0.2	0.288	0.281	0.206	0.170 to 0.230	104	70.0 to 130	2.46	20.0
BD05869	Iron, Total	mg/L	-0.00369	0.0176	0.2	0.234	0.233	0.204	0.170 to 0.230	101	70.0 to 130	0.428	20.0

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/22/23 12:30
Customer ID:
Delivery Date: 3/23/23 10:14

Description: Gorgas Ash Pond - MW-17V

Laboratory ID Number: BD05867

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD05872	Lead, Dissolved	mg/L	0.0000087	0.000147	0.100	0.0968	0.0911	0.103	0.0850 to 0.115	96.8	70.0 to 130	6.07	20.0
BD05869	Lead, Total	mg/L	0.0000057	0.000147	0.100	0.0965	0.0853	0.0956	0.0850 to 0.115	96.5	70.0 to 130	12.3	20.0
BD05872	Lithium, Dissolved	mg/L	0.000435	0.0154	0.200	0.286	0.289	0.202	0.170 to 0.230	103	70.0 to 130	1.04	20.0
BD05869	Lithium, Total	mg/L	0.00118	0.0154	0.200	0.249	0.249	0.201	0.170 to 0.230	107	70.0 to 130	0.00	20.0
BD05872	Magnesium, Dissolved	mg/L	-0.00332	0.0462	5.00	7.64	7.81	4.91	4.25 to 5.75	95.4	70.0 to 130	2.20	20.0
BD05869	Magnesium, Total	mg/L	-0.0125	0.0462	5.00	5.06	5.14	4.93	4.25 to 5.75	99.0	70.0 to 130	1.57	20.0
BD05872	Manganese, Dissolved	mg/L	0.0000667	0.00033	0.100	0.107	0.103	0.105	0.0850 to 0.115	92.7	70.0 to 130	3.81	20.0
BD05869	Manganese, Total	mg/L	0.0000890	0.00033	0.100	0.0947	0.0895	0.0997	0.0850 to 0.115	93.9	70.0 to 130	5.65	20.0
BD05869	Mercury, Total by CVAA	mg/L	-5.000E-05	0.000500	0.004	0.00401	0.00399	0.00401	0.00340 to 0.00460	100	70.0 to 130	0.500	20.0
BD05872	Molybdenum, Dissolved	mg/L	0.000945	0.0100	0.2	0.225	0.219	0.201	0.170 to 0.230	104	70.0 to 130	2.70	20.0
BD05869	Molybdenum, Total	mg/L	0.000	0.0100	0.2	0.202	0.207	0.204	0.170 to 0.230	101	70.0 to 130	2.44	20.0
BD05872	Potassium, Dissolved	mg/L	0.0435	0.367	10.0	23.3	22.6	10.6	8.50 to 11.5	85.0	70.0 to 130	3.05	20.0
BD05869	Potassium, Total	mg/L	0.00723	0.367	10.0	10.3	9.45	10.1	8.50 to 11.5	99.2	70.0 to 130	8.61	20.0
BD05872	Selenium, Dissolved	mg/L	0.0000397	0.00100	0.100	0.0961	0.0955	0.107	0.0850 to 0.115	96.1	70.0 to 130	0.626	20.0
BD05869	Selenium, Total	mg/L	0.000273	0.00100	0.100	0.0849	0.0792	0.0989	0.0850 to 0.115	84.9	70.0 to 130	6.95	20.0
BD05872	Silicon, Dissolved	mg/L	-0.00163	0.0440	1.00	8.24	8.04	0.997	0.850 to 1.15	117	70.0 to 130	2.46	20.0
BD05869	Silicon, Total	mg/L	0.000711	0.0440	1.00	6.27	6.29	1.01	0.850 to 1.15	102	70.0 to 130	0.318	20.0
BD05872	Sodium, Dissolved	mg/L	0.00324	0.0880	5.00	300	296	4.89	4.25 to 5.75	420	70.0 to 130	1.34	20.0
BD05869	Sodium, Total	mg/L	0.00384	0.0880	5.00	125	125	4.87	4.25 to 5.75	120	70.0 to 130	0.00	20.0
BD05868	Sulfate	mg/L	-0.377	2.0	20.0	20.5	20.0	20.1	18.0 to 22.0	102	80.0 to 120	2.47	20.0
BD05872	Thallium, Dissolved	mg/L	-0.0000089	0.000147	0.100	0.0957	0.0905	0.102	0.0850 to 0.115	95.7	70.0 to 130	5.59	20.0
BD05869	Thallium, Total	mg/L	-0.0000132	0.000147	0.100	0.0979	0.0873	0.0956	0.0850 to 0.115	97.9	70.0 to 130	11.4	20.0
BD05869	Total Organic Carbon	mg/L	0.0312	1.00	10.0	13.3	13.2	10.5		102	80.0 to 120	0.755	20.0

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

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/22/23 12:30
Customer ID:
Delivery Date: 3/23/23 10:14

Description: Gorgas Ash Pond - MW-17V

Laboratory ID Number: BD05867

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD05875	Alkalinity to pH 4.5	mg CaCO3/L					176	50.6	45.0 to 55.0			1.13	10.0
BD05869	Nitrogen, Nitrate/Nitrite	mg/L as N	0.04	0.200	2.00	1.99	0.025	2.00	1.80 to 2.20	99.5	90.0 to 110	0.00	15.0
BD05871	Solids, Dissolved	mg/L	0.0000	25.0			300	55.0	40.0 to 60.0			1.68	10.0

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

Certificate Of Analysis

Description: Gorgas Ash Pond Field Blank-5

Location Code: WMWGORAPFB
Collected: 3/22/23 12:55
Customer ID:
Submittal Date: 3/23/23 10:14

Laboratory ID Number: BD05868

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7		***Analyst: ABB***			***Preparation Method: EPA 1638***				
* Boron, Total	3/24/23 11:57	3/31/23 12:09		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	3/24/23 11:57	3/31/23 12:09		1.015	Not Detected	mg/L	0.070035	0.406	U
* Iron, Total	3/24/23 11:57	3/31/23 12:09		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Total	3/24/23 11:57	3/31/23 12:09		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	3/24/23 11:57	3/31/23 12:09		1.015	Not Detected	mg/L	0.021315	0.406	U
* Molybdenum, Total	3/24/23 11:57	3/31/23 12:09		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Total (calc.)	3/24/23 11:57	3/31/23 12:09		1	Not Detected	mg/L			
* Silicon, Total	3/24/23 11:57	3/31/23 12:09		1.015	Not Detected	mg/L	0.02030	0.25375	U
* Sodium, Total	3/24/23 11:57	4/6/23 10:26		1.015	Not Detected	mg/L	0.04060	0.406	U
Analytical Method: EPA 200.8		***Analyst: DLJ***			***Preparation Method: EPA 1638***				
* Antimony, Total	3/24/23 11:57	3/24/23 15:25		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Total	3/24/23 11:57	3/24/23 15:25		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Total	3/24/23 11:57	3/24/23 15:25		1.015	Not Detected	mg/L	0.000112	0.000203	U
* Barium, Total	3/24/23 11:57	3/24/23 15:25		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Beryllium, Total	3/24/23 11:57	3/24/23 15:25		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	3/24/23 11:57	3/24/23 15:25		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	3/24/23 11:57	3/24/23 15:25		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	3/24/23 11:57	3/24/23 15:25		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	3/24/23 11:57	3/24/23 15:25		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	3/24/23 11:57	3/24/23 15:25		1.015	Not Detected	mg/L	0.000152	0.001015	U
* Potassium, Total	3/24/23 11:57	3/24/23 15:25		1.015	Not Detected	mg/L	0.169505	0.5075	U
* Selenium, Total	3/24/23 11:57	3/24/23 15:25		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	3/24/23 11:57	3/24/23 15:25		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1		***Analyst: ELH***							
* Mercury, Total by CVAA	3/27/23 17:52	3/27/23 23:20		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2		***Analyst: SC***							
* Nitrogen, Nitrate/Nitrite	3/24/23 11:18	3/24/23 11:18		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2540C		***Analyst: CNJ***							
* Solids, Dissolved	3/24/23 09:08	3/28/23 10:02		1	Not Detected	mg/L		25	U

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

Comments:

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

Certificate Of Analysis

Description: Gorgas Ash Pond Field Blank-5

Location Code: WMWGORAPFB
Collected: 3/22/23 12:55
Customer ID:
Submittal Date: 3/23/23 10:14

Laboratory ID Number: BD05868

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	3/23/23 20:59	3/23/23 20:59		1	Not Detected	mg/L	1.00	2	U
Analytical Method: SM4500Cl E	***Analyst: CES***								
* Chloride	3/24/23 11:30	3/24/23 11:30		1	Not Detected	mg/L	0.50	1	U
Analytical Method: SM4500F G 2017	***Analyst: CES***								
* Fluoride	3/28/23 11:35	3/29/23 11:35		1	Not Detected	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	4/4/23 13:39	4/4/23 13:39		1	Not Detected	mg/L	0.6	2	U

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

Comments:

Reported: 5/3/2023
Version: 3.5
COA_CCR

Batch QC Summary

Customer Account: WMWGORAPFB
Sample Date: 3/22/23 12:55
Customer ID:
Delivery Date: 3/23/23 10:14

Description: Gorgas Ash Pond Field Blank-5

Laboratory ID Number: BD05868

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD05869	Aluminum, Total	mg/L	0.000318	0.0198	0.100	0.228	0.216	0.0985	0.0850 to 0.115	104	70.0 to 130	5.41	20.0
BD05869	Antimony, Total	mg/L	0.000323	0.00100	0.100	0.0925	0.0829	0.0909	0.0850 to 0.115	92.5	70.0 to 130	10.9	20.0
BD05869	Arsenic, Total	mg/L	0.0000036	0.000200	0.100	0.0940	0.0861	0.0969	0.0850 to 0.115	94.0	70.0 to 130	8.77	20.0
BD05869	Barium, Total	mg/L	-0.0000258	0.00100	0.100	0.143	0.129	0.0969	0.0850 to 0.115	97.4	70.0 to 130	10.3	20.0
BD05869	Beryllium, Total	mg/L	0.0000000	0.000880	0.100	0.0973	0.0942	0.0970	0.0850 to 0.115	97.3	70.0 to 130	3.24	20.0
BD05869	Boron, Total	mg/L	-0.000178	0.0650	1.00	1.12	1.12	1.03	0.850 to 1.15	102	70.0 to 130	0.00	20.0
BD05869	Cadmium, Total	mg/L	0.0000000	0.000147	0.100	0.0964	0.0876	0.0960	0.0850 to 0.115	96.4	70.0 to 130	9.57	20.0
BD05869	Calcium, Total	mg/L	0.00772	0.152	5.00	4.98	5.03	4.93	4.25 to 5.75	91.6	70.0 to 130	0.999	20.0
BD05868	Chloride	mg/L	0.0761	1.00	10.0	10.0	10.1	9.82	9.00 to 11.0	100	80.0 to 120	0.995	20.0
BD05869	Chromium, Total	mg/L	-0.0000978	0.000440	0.100	0.0906	0.0850	0.0966	0.0850 to 0.115	90.3	70.0 to 130	6.38	20.0
BD05869	Cobalt, Total	mg/L	-0.0000154	0.000147	0.100	0.0927	0.0869	0.0986	0.0850 to 0.115	92.7	70.0 to 130	6.46	20.0
BD05868	Fluoride	mg/L	0.0287	0.125	2.50	2.22	2.45	2.40	2.25 to 2.75	88.8	80.0 to 120	9.85	20.0
BD05869	Iron, Total	mg/L	-0.00369	0.0176	0.2	0.234	0.233	0.204	0.170 to 0.230	101	70.0 to 130	0.428	20.0
BD05869	Lead, Total	mg/L	0.0000057	0.000147	0.100	0.0965	0.0853	0.0956	0.0850 to 0.115	96.5	70.0 to 130	12.3	20.0
BD05869	Lithium, Total	mg/L	0.00118	0.0154	0.200	0.249	0.249	0.201	0.170 to 0.230	107	70.0 to 130	0.00	20.0
BD05869	Magnesium, Total	mg/L	-0.0125	0.0462	5.00	5.06	5.14	4.93	4.25 to 5.75	99.0	70.0 to 130	1.57	20.0
BD05869	Manganese, Total	mg/L	0.0000890	0.00033	0.100	0.0947	0.0895	0.0997	0.0850 to 0.115	93.9	70.0 to 130	5.65	20.0
BD05869	Mercury, Total by CVAA	mg/L	-5.000E-05	0.000500	0.004	0.00401	0.00399	0.00401	0.00340 to 0.00460	100	70.0 to 130	0.500	20.0
BD05869	Molybdenum, Total	mg/L	0.000	0.0100	0.2	0.202	0.207	0.204	0.170 to 0.230	101	70.0 to 130	2.44	20.0
BD05869	Potassium, Total	mg/L	0.00723	0.367	10.0	10.3	9.45	10.1	8.50 to 11.5	99.2	70.0 to 130	8.61	20.0
BD05869	Selenium, Total	mg/L	0.000273	0.00100	0.100	0.0849	0.0792	0.0989	0.0850 to 0.115	84.9	70.0 to 130	6.95	20.0
BD05869	Silicon, Total	mg/L	0.000711	0.0440	1.00	6.27	6.29	1.01	0.850 to 1.15	102	70.0 to 130	0.318	20.0
BD05869	Sodium, Total	mg/L	0.00384	0.0880	5.00	125	125	4.87	4.25 to 5.75	120	70.0 to 130	0.00	20.0
BD05868	Sulfate	mg/L	-0.377	2.0	20.0	20.5	20.0	20.1	18.0 to 22.0	102	80.0 to 120	2.47	20.0

Comments:

Batch QC Summary

Customer Account: WMWGORAPFB
Sample Date: 3/22/23 12:55
Customer ID:
Delivery Date: 3/23/23 10:14

Description: Gorgas Ash Pond Field Blank-5

Laboratory ID Number: BD05868

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD05869	Thallium, Total	mg/L	-0.0000132	0.000147	0.100	0.0979	0.0873	0.0956	0.0850 to 0.115	97.9	70.0 to 130	11.4	20.0
BD05869	Total Organic Carbon	mg/L	0.0312	1.00	10.0	13.3	13.2	10.5		102	80.0 to 120	0.755	20.0

Comments:

Batch QC Summary

Customer Account: WMWGORAPFB
Sample Date: 3/22/23 12:55
Customer ID:
Delivery Date: 3/23/23 10:14

Description: Gorgas Ash Pond Field Blank-5

Laboratory ID Number: BD05868

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD05869	Nitrogen, Nitrate/Nitrite	mg/L as N	0.04	0.200	2.00	1.99	0.025	2.00	1.80 to 2.20	99.5	90.0 to 110	0.00	15.0
BD05871	Solids, Dissolved	mg/L	0.0000	25.0			300	55.0	40.0 to 60.0			1.68	10.0

Comments:

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

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-2

Location Code: WMWGORAP
Collected: 3/22/23 13:58
Customer ID:
Submittal Date: 3/23/23 10:14

Laboratory ID Number: BD05869

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	3/24/23 11:57	3/31/23 12:12		1.015	0.0989	mg/L	0.030000	0.1015	J
* Calcium, Total	3/24/23 11:57	3/31/23 12:12		1.015	0.400	mg/L	0.070035	0.406	J
* Iron, Total	3/24/23 11:57	3/31/23 12:12		1.015	0.0311	mg/L	0.008120	0.0406	J
* Lithium, Total	3/24/23 11:57	3/31/23 12:12		1.015	0.0359	mg/L	0.007105	0.01999956	
* Magnesium, Total	3/24/23 11:57	3/31/23 12:12		1.015	0.111	mg/L	0.021315	0.406	J
* Molybdenum, Total	3/24/23 11:57	3/31/23 12:12		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Total (calc.)	3/24/23 11:57	3/31/23 12:12		1	11.2	mg/L			
* Silicon, Total	3/24/23 11:57	3/31/23 12:12		1.015	5.25	mg/L	0.02030	0.25375	
* Sodium, Total	3/24/23 11:57	3/31/23 14:59		10.15	119	mg/L	0.4060	4.06	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	3/24/23 08:37	3/29/23 13:03		1.015	0.0972	mg/L	0.030000	0.1015	J
* Calcium, Dissolved	3/24/23 08:37	3/29/23 13:03		1.015	0.331	mg/L	0.070035	0.406	J
* Iron, Dissolved	3/24/23 08:37	3/29/23 13:03		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Dissolved	3/24/23 08:37	3/29/23 13:03		1.015	0.0339	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	3/24/23 08:37	3/29/23 13:03		1.015	0.0925	mg/L	0.021315	0.406	J
* Molybdenum, Dissolved	3/24/23 08:37	3/29/23 13:03		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Dissolved (calc.)	3/24/23 08:37	3/29/23 13:03		1	11.0	mg/L			
* Silicon, Dissolved	3/24/23 08:37	3/29/23 13:03		1.015	5.13	mg/L	0.02030	0.25375	
* Sodium, Dissolved	3/24/23 08:37	3/29/23 15:03		10.15	120	mg/L	0.4060	4.06	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/24/23 11:57	3/24/23 15:29		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Total	3/24/23 11:57	3/24/23 15:29		1.015	0.124	mg/L	0.009135	0.05075	
* Arsenic, Total	3/24/23 11:57	3/24/23 15:29		1.015	Not Detected	mg/L	0.000112	0.000203	U
* Barium, Total	3/24/23 11:57	3/24/23 15:29		1.015	0.0456	mg/L	0.000508	0.001015	
* Beryllium, Total	3/24/23 11:57	3/24/23 15:29		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	3/24/23 11:57	3/24/23 15:29		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	3/24/23 11:57	3/24/23 15:29		1.015	0.000254	mg/L	0.000203	0.001015	J
* Cobalt, Total	3/24/23 11:57	3/24/23 15:29		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	3/24/23 11:57	3/24/23 15:29		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	3/24/23 11:57	3/24/23 15:29		1.015	0.000820	mg/L	0.000152	0.001015	J

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

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

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

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-2

Location Code: WMWGORAP
Collected: 3/22/23 13:58
Customer ID:
Submittal Date: 3/23/23 10:14

Laboratory ID Number: BD05869

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	3/24/23 11:57	3/24/23 15:29		1.015	0.382	mg/L	0.169505	0.5075	J
* Selenium, Total	3/24/23 11:57	3/24/23 15:29		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	3/24/23 11:57	3/24/23 15:29		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8		***Analyst: DLJ***							
* Antimony, Dissolved	3/24/23 08:37	3/24/23 11:18		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	3/24/23 08:37	3/24/23 11:18		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Dissolved	3/24/23 08:37	3/24/23 11:18		1.015	Not Detected	mg/L	0.000112	0.000203	U
* Barium, Dissolved	3/24/23 08:37	3/24/23 11:18		1.015	0.0338	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	3/24/23 08:37	3/24/23 11:18		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	3/24/23 08:37	3/24/23 11:18		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	3/24/23 08:37	3/24/23 11:18		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	3/24/23 08:37	3/24/23 11:18		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Dissolved	3/24/23 08:37	3/24/23 11:18		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	3/24/23 08:37	3/24/23 11:18		1.015	0.000715	mg/L	0.000152	0.001015	J
* Potassium, Dissolved	3/24/23 08:37	3/24/23 11:18		1.015	0.389	mg/L	0.169505	0.5075	J
* Selenium, Dissolved	3/24/23 08:37	3/24/23 11:18		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	3/24/23 08:37	3/24/23 11:18		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1		***Analyst: ELH***							
* Mercury, Total by CVAA	3/27/23 17:52	3/27/23 23:24		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2		***Analyst: SC***							
* Nitrogen, Nitrate/Nitrite	3/24/23 11:20	3/24/23 11:20		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B		***Analyst: ALH***							
* Alkalinity to pH 4.5	4/4/23 15:54	4/4/23 17:47		1	247	mg CaCO3/L		0.10	
Analytical Method: SM 2540C		***Analyst: CNJ***							
* Solids, Dissolved	3/24/23 09:08	3/28/23 10:02		1	297	mg/L		25	
Analytical Method: SM 4500CO2 D		***Analyst: ALH***							
* Bicarbonate Alkalinity, (calc.)	4/4/23 15:54	4/4/23 17:47		1	198	mg CaCO3/L		1	
* Carbonate Alkalinity, (calc.)	4/4/23 15:54	4/4/23 17:47		1	47.8	mg CaCO3/L		0.5	
Analytical Method: SM 5310 B		***Analyst: SC***							
* Total Organic Carbon	3/23/23 21:17	3/23/23 21:17		1	3.11	mg/L	1.00	2	

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

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

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

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-2

Location Code: WMWGORAP
Collected: 3/22/23 13:58
Customer ID:
Submittal Date: 3/23/23 10:14

Laboratory ID Number: BD05869

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: CES***								
* Chloride	3/24/23 11:47	3/24/23 11:47		1	4.23	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: CES***								
* Fluoride	3/28/23 11:08	3/28/23 11:08		1	0.720	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	4/4/23 14:00	4/4/23 14:00		1	8.17	mg/L	0.6	2	
Analytical Method: Field Measurements	***Analyst: AWG***								
Conductivity	3/22/23 13:54	3/22/23 13:54			469.80	uS/cm			FA
pH	3/22/23 13:54	3/22/23 13:54			9.27	SU			FA
Temperature	3/22/23 13:54	3/22/23 13:54			17.48	C			FA
Turbidity	3/22/23 13:54	3/22/23 13:54			2.16	NTU			FA
Sulfide	3/22/23 13:54	3/22/23 13:54			1	mg/L			FA

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

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/22/23 13:58
Customer ID:
Delivery Date: 3/23/23 10:14

Description: Gorgas Ash Pond - MW-2

Laboratory ID Number: BD05869

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD05872	Aluminum, Dissolved	mg/L	-0.000280	0.0198	0.100	0.0983	0.0955	0.104	0.0850 to 0.115	98.3	70.0 to 130	2.89	20.0
BD05869	Aluminum, Total	mg/L	0.000318	0.0198	0.100	0.228	0.216	0.0985	0.0850 to 0.115	104	70.0 to 130	5.41	20.0
BD05872	Antimony, Dissolved	mg/L	0.000258	0.00100	0.100	0.0893	0.0859	0.0933	0.0850 to 0.115	89.3	70.0 to 130	3.88	20.0
BD05869	Antimony, Total	mg/L	0.000323	0.00100	0.100	0.0925	0.0829	0.0909	0.0850 to 0.115	92.5	70.0 to 130	10.9	20.0
BD05872	Arsenic, Dissolved	mg/L	-0.0000068	0.000200	0.100	0.0938	0.0933	0.102	0.0850 to 0.115	93.4	70.0 to 130	0.534	20.0
BD05869	Arsenic, Total	mg/L	0.0000036	0.000200	0.100	0.0940	0.0861	0.0969	0.0850 to 0.115	94.0	70.0 to 130	8.77	20.0
BD05872	Barium, Dissolved	mg/L	-0.0000031	0.00100	0.100	0.110	0.105	0.101	0.0850 to 0.115	94.0	70.0 to 130	4.65	20.0
BD05869	Barium, Total	mg/L	-0.0000258	0.00100	0.100	0.143	0.129	0.0969	0.0850 to 0.115	97.4	70.0 to 130	10.3	20.0
BD05872	Beryllium, Dissolved	mg/L	0.0000000	0.000880	0.100	0.0901	0.0894	0.0998	0.0850 to 0.115	90.1	70.0 to 130	0.780	20.0
BD05869	Beryllium, Total	mg/L	0.0000000	0.000880	0.100	0.0973	0.0942	0.0970	0.0850 to 0.115	97.3	70.0 to 130	3.24	20.0
BD05872	Boron, Dissolved	mg/L	-0.000072	0.0650	1.00	1.08	1.06	0.994	0.850 to 1.15	103	70.0 to 130	1.87	20.0
BD05869	Boron, Total	mg/L	-0.000178	0.0650	1.00	1.12	1.12	1.03	0.850 to 1.15	102	70.0 to 130	0.00	20.0
BD05872	Cadmium, Dissolved	mg/L	0.0000000	0.000147	0.100	0.0907	0.0919	0.101	0.0850 to 0.115	90.7	70.0 to 130	1.31	20.0
BD05869	Cadmium, Total	mg/L	0.0000000	0.000147	0.100	0.0964	0.0876	0.0960	0.0850 to 0.115	96.4	70.0 to 130	9.57	20.0
BD05872	Calcium, Dissolved	mg/L	0.00206	0.152	5.00	12.5	12.7	4.92	4.25 to 5.75	94.0	70.0 to 130	1.59	20.0
BD05869	Calcium, Total	mg/L	0.00772	0.152	5.00	4.98	5.03	4.93	4.25 to 5.75	91.6	70.0 to 130	0.999	20.0
BD05876	Chloride	mg/L	0.159	1.00	10.0	10.0	10.1	9.85	9.00 to 11.0	100	80.0 to 120	0.995	20.0
BD05872	Chromium, Dissolved	mg/L	-0.0000195	0.000440	0.100	0.0908	0.0882	0.102	0.0850 to 0.115	90.8	70.0 to 130	2.91	20.0
BD05869	Chromium, Total	mg/L	-0.0000978	0.000440	0.100	0.0906	0.0850	0.0966	0.0850 to 0.115	90.3	70.0 to 130	6.38	20.0
BD05872	Cobalt, Dissolved	mg/L	-0.0000142	0.000147	0.100	0.0940	0.0906	0.104	0.0850 to 0.115	94.0	70.0 to 130	3.68	20.0
BD05869	Cobalt, Total	mg/L	-0.0000154	0.000147	0.100	0.0927	0.0869	0.0986	0.0850 to 0.115	92.7	70.0 to 130	6.46	20.0
BD05876	Fluoride	mg/L	-0.00116	0.125	2.50	2.65	2.67	2.62	2.25 to 2.75	106	80.0 to 120	0.752	20.0
BD05872	Iron, Dissolved	mg/L	0.000948	0.0176	0.2	0.288	0.281	0.206	0.170 to 0.230	104	70.0 to 130	2.46	20.0
BD05869	Iron, Total	mg/L	-0.00369	0.0176	0.2	0.234	0.233	0.204	0.170 to 0.230	101	70.0 to 130	0.428	20.0

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

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/22/23 13:58
Customer ID:
Delivery Date: 3/23/23 10:14

Description: Gorgas Ash Pond - MW-2

Laboratory ID Number: BD05869

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD05872	Lead, Dissolved	mg/L	0.0000087	0.000147	0.100	0.0968	0.0911	0.103	0.0850 to 0.115	96.8	70.0 to 130	6.07	20.0
BD05869	Lead, Total	mg/L	0.0000057	0.000147	0.100	0.0965	0.0853	0.0956	0.0850 to 0.115	96.5	70.0 to 130	12.3	20.0
BD05872	Lithium, Dissolved	mg/L	0.000435	0.0154	0.200	0.286	0.289	0.202	0.170 to 0.230	103	70.0 to 130	1.04	20.0
BD05869	Lithium, Total	mg/L	0.00118	0.0154	0.200	0.249	0.249	0.201	0.170 to 0.230	107	70.0 to 130	0.00	20.0
BD05872	Magnesium, Dissolved	mg/L	-0.00332	0.0462	5.00	7.64	7.81	4.91	4.25 to 5.75	95.4	70.0 to 130	2.20	20.0
BD05869	Magnesium, Total	mg/L	-0.0125	0.0462	5.00	5.06	5.14	4.93	4.25 to 5.75	99.0	70.0 to 130	1.57	20.0
BD05872	Manganese, Dissolved	mg/L	0.0000667	0.00033	0.100	0.107	0.103	0.105	0.0850 to 0.115	92.7	70.0 to 130	3.81	20.0
BD05869	Manganese, Total	mg/L	0.0000890	0.00033	0.100	0.0947	0.0895	0.0997	0.0850 to 0.115	93.9	70.0 to 130	5.65	20.0
BD05869	Mercury, Total by CVAA	mg/L	-5.000E-05	0.000500	0.004	0.00401	0.00399	0.00401	0.00340 to 0.00460	100	70.0 to 130	0.500	20.0
BD05872	Molybdenum, Dissolved	mg/L	0.000945	0.0100	0.2	0.225	0.219	0.201	0.170 to 0.230	104	70.0 to 130	2.70	20.0
BD05869	Molybdenum, Total	mg/L	0.000	0.0100	0.2	0.202	0.207	0.204	0.170 to 0.230	101	70.0 to 130	2.44	20.0
BD05872	Potassium, Dissolved	mg/L	0.0435	0.367	10.0	23.3	22.6	10.6	8.50 to 11.5	85.0	70.0 to 130	3.05	20.0
BD05869	Potassium, Total	mg/L	0.00723	0.367	10.0	10.3	9.45	10.1	8.50 to 11.5	99.2	70.0 to 130	8.61	20.0
BD05872	Selenium, Dissolved	mg/L	0.0000397	0.00100	0.100	0.0961	0.0955	0.107	0.0850 to 0.115	96.1	70.0 to 130	0.626	20.0
BD05869	Selenium, Total	mg/L	0.000273	0.00100	0.100	0.0849	0.0792	0.0989	0.0850 to 0.115	84.9	70.0 to 130	6.95	20.0
BD05872	Silicon, Dissolved	mg/L	-0.00163	0.0440	1.00	8.24	8.04	0.997	0.850 to 1.15	117	70.0 to 130	2.46	20.0
BD05869	Silicon, Total	mg/L	0.000711	0.0440	1.00	6.27	6.29	1.01	0.850 to 1.15	102	70.0 to 130	0.318	20.0
BD05872	Sodium, Dissolved	mg/L	0.00324	0.0880	5.00	300	296	4.89	4.25 to 5.75	420	70.0 to 130	1.34	20.0
BD05869	Sodium, Total	mg/L	0.00384	0.0880	5.00	125	125	4.87	4.25 to 5.75	120	70.0 to 130	0.00	20.0
BD06131	Sulfate	mg/L	0.205	2.0	20.0	37.5	37.1	20.3	18.0 to 22.0	100	80.0 to 120	1.07	20.0
BD05872	Thallium, Dissolved	mg/L	-0.0000089	0.000147	0.100	0.0957	0.0905	0.102	0.0850 to 0.115	95.7	70.0 to 130	5.59	20.0
BD05869	Thallium, Total	mg/L	-0.0000132	0.000147	0.100	0.0979	0.0873	0.0956	0.0850 to 0.115	97.9	70.0 to 130	11.4	20.0
BD05869	Total Organic Carbon	mg/L	0.0312	1.00	10.0	13.3	13.2	10.5		102	80.0 to 120	0.755	20.0

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

Reported: 5/3/2023
Version: 3.5
COA_CCR

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/22/23 13:58
Customer ID:
Delivery Date: 3/23/23 10:14

Description: Gorgas Ash Pond - MW-2

Laboratory ID Number: BD05869

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD05875	Alkalinity to pH 4.5	mg CaCO3/L					176	50.6	45.0 to 55.0			1.13	10.0
BD05869	Nitrogen, Nitrate/Nitrite	mg/L as N	0.04	0.200	2.00	1.99	0.025	2.00	1.80 to 2.20	99.5	90.0 to 110	0.00	15.0
BD05871	Solids, Dissolved	mg/L	0.0000	25.0			300	55.0	40.0 to 60.0			1.68	10.0

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

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

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-05R

Location Code: WMWGORAP
Collected: 3/20/23 14:05
Customer ID:
Submittal Date: 3/23/23 10:14

Laboratory ID Number: BD05870

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	3/24/23 11:57	3/31/23 12:34		1.015	0.0380	mg/L	0.030000	0.1015	J
* Calcium, Total	3/24/23 11:57	3/31/23 15:08		10.15	94.8	mg/L	0.70035	4.06	
* Iron, Total	3/24/23 11:57	3/31/23 12:34		1.015	1.45	mg/L	0.008120	0.0406	
* Lithium, Total	3/24/23 11:57	3/31/23 12:34		1.015	0.0711	mg/L	0.007105	0.01999956	
* Magnesium, Total	3/24/23 11:57	3/31/23 12:34		1.015	37.6	mg/L	0.021315	0.406	
* Molybdenum, Total	3/24/23 11:57	3/31/23 12:34		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Total (calc.)	3/24/23 11:57	3/31/23 12:34		1	24.8	mg/L			
* Silicon, Total	3/24/23 11:57	3/31/23 12:34		1.015	11.6	mg/L	0.02030	0.25375	
* Sodium, Total	3/24/23 11:57	3/31/23 15:08		10.15	94.7	mg/L	0.4060	4.06	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	3/24/23 08:37	3/29/23 13:06		1.015	0.0359	mg/L	0.030000	0.1015	J
* Calcium, Dissolved	3/24/23 08:37	3/29/23 15:06		10.15	95.4	mg/L	0.70035	4.06	
* Iron, Dissolved	3/24/23 08:37	3/29/23 13:06		1.015	1.23	mg/L	0.008120	0.0406	
* Lithium, Dissolved	3/24/23 08:37	3/29/23 13:06		1.015	0.0687	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	3/24/23 08:37	3/29/23 13:06		1.015	36.4	mg/L	0.021315	0.406	
* Molybdenum, Dissolved	3/24/23 08:37	3/29/23 13:06		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Dissolved (calc.)	3/24/23 08:37	3/29/23 13:06		1	24.2	mg/L			
* Silicon, Dissolved	3/24/23 08:37	3/29/23 13:06		1.015	11.3	mg/L	0.02030	0.25375	
* Sodium, Dissolved	3/24/23 08:37	3/29/23 15:06		10.15	93.9	mg/L	0.4060	4.06	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/24/23 11:57	3/27/23 13:17		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Total	3/24/23 11:57	3/27/23 13:17		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Total	3/24/23 11:57	3/27/23 13:17		1.015	0.000194	mg/L	0.000112	0.000203	J
* Barium, Total	3/24/23 11:57	3/27/23 13:17		1.015	0.0567	mg/L	0.000508	0.001015	
* Beryllium, Total	3/24/23 11:57	3/27/23 13:17		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	3/24/23 11:57	3/27/23 13:17		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	3/24/23 11:57	3/27/23 13:17		1.015	0.000222	mg/L	0.000203	0.001015	J
* Cobalt, Total	3/24/23 11:57	3/27/23 13:17		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	3/24/23 11:57	3/27/23 13:17		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	3/24/23 11:57	3/27/23 13:17		1.015	0.133	mg/L	0.000152	0.001015	

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

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

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-05R

Location Code: WMWGORAP
Collected: 3/20/23 14:05
Customer ID:
Submittal Date: 3/23/23 10:14

Laboratory ID Number: BD05870

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	3/24/23 11:57	3/27/23 13:17		1.015	7.06	mg/L	0.169505	0.5075	
* Selenium, Total	3/24/23 11:57	3/27/23 13:17		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	3/24/23 11:57	3/27/23 13:17		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	3/24/23 08:37	3/24/23 11:21		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	3/24/23 08:37	3/24/23 11:21		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Dissolved	3/24/23 08:37	3/24/23 11:21		1.015	0.000114	mg/L	0.000112	0.000203	J
* Barium, Dissolved	3/24/23 08:37	3/24/23 11:21		1.015	0.0482	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	3/24/23 08:37	3/24/23 11:21		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	3/24/23 08:37	3/24/23 11:21		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	3/24/23 08:37	3/24/23 11:21		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	3/24/23 08:37	3/24/23 11:21		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Dissolved	3/24/23 08:37	3/24/23 11:21		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	3/24/23 08:37	3/24/23 11:21		1.015	0.119	mg/L	0.000152	0.001015	
* Potassium, Dissolved	3/24/23 08:37	3/24/23 11:21		1.015	6.44	mg/L	0.169505	0.5075	
* Selenium, Dissolved	3/24/23 08:37	3/24/23 11:21		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	3/24/23 08:37	3/24/23 11:21		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ELH***								
* Mercury, Total by CVAA	3/27/23 17:52	3/27/23 23:52		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	3/24/23 11:29	3/24/23 11:29		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
* Alkalinity to pH 4.5	3/28/23 13:30	3/28/23 15:24		1	246	mg CaCO3/L		0.10	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	3/24/23 09:08	3/28/23 10:02		1	767	mg/L		75.8	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
* Bicarbonate Alkalinity, (calc.)	3/28/23 13:30	3/28/23 15:24		1	246	mg CaCO3/L		1	A
* Carbonate Alkalinity, (calc.)	3/28/23 13:30	3/28/23 15:24		1	Not Detected	mg CaCO3/L		0.5	A
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	3/23/23 22:39	3/23/23 22:39		1	5.93	mg/L	1.00	2	

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

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

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

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-05R

Location Code: WMWGORAP
Collected: 3/20/23 14:05
Customer ID:
Submittal Date: 3/23/23 10:14

Laboratory ID Number: BD05870

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: CES***								
* Chloride	3/24/23 11:59	3/24/23 11:59		8	54.6	mg/L	4.00	8	
Analytical Method: SM4500F G 2017	***Analyst: CES***								
* Fluoride	3/28/23 11:09	3/28/23 11:09		1	0.117	mg/L	0.06	0.125	J
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	4/4/23 14:14	4/4/23 14:14		16	290	mg/L	9.6	32	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	3/20/23 14:02	3/20/23 14:02			1273.03	uS/cm			FA
pH	3/20/23 14:02	3/20/23 14:02			6.80	SU			FA
Temperature	3/20/23 14:02	3/20/23 14:02			17.26	C			FA
Turbidity	3/20/23 14:02	3/20/23 14:02			3.32	NTU			FA
Sulfide	3/20/23 14:02	3/20/23 14:02			0	mg/L			FA

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

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

Reported: 5/3/2023
Version: 3.5
COA_CCR

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/20/23 14:05
Customer ID:
Delivery Date: 3/23/23 10:14

Description: Gorgas Ash Pond - MW-05R

Laboratory ID Number: BD05870

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD05872	Aluminum, Dissolved	mg/L	-0.000280	0.0198	0.100	0.0983	0.0955	0.104	0.0850 to 0.115	98.3	70.0 to 130	2.89	20.0
BD05876	Aluminum, Total	mg/L	0.000166	0.0198	0.100	0.100	0.104	0.0993	0.0850 to 0.115	100	70.0 to 130	3.92	20.0
BD05872	Antimony, Dissolved	mg/L	0.000258	0.00100	0.100	0.0893	0.0859	0.0933	0.0850 to 0.115	89.3	70.0 to 130	3.88	20.0
BD05876	Antimony, Total	mg/L	0.000485	0.00100	0.100	0.0936	0.0939	0.0932	0.0850 to 0.115	93.6	70.0 to 130	0.320	20.0
BD05872	Arsenic, Dissolved	mg/L	-0.0000068	0.000200	0.100	0.0938	0.0933	0.102	0.0850 to 0.115	93.4	70.0 to 130	0.534	20.0
BD05876	Arsenic, Total	mg/L	0.0000429	0.000200	0.100	0.100	0.102	0.101	0.0850 to 0.115	100	70.0 to 130	1.98	20.0
BD05872	Barium, Dissolved	mg/L	-0.0000031	0.00100	0.100	0.110	0.105	0.101	0.0850 to 0.115	94.0	70.0 to 130	4.65	20.0
BD05876	Barium, Total	mg/L	-0.0000188	0.00100	0.100	0.111	0.109	0.109	0.0850 to 0.115	111	70.0 to 130	1.82	20.0
BD05872	Beryllium, Dissolved	mg/L	0.0000000	0.000880	0.100	0.0901	0.0894	0.0998	0.0850 to 0.115	90.1	70.0 to 130	0.780	20.0
BD05876	Beryllium, Total	mg/L	0.0000077	0.000880	0.100	0.102	0.102	0.102	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BD05872	Boron, Dissolved	mg/L	-0.000072	0.0650	1.00	1.08	1.06	0.994	0.850 to 1.15	103	70.0 to 130	1.87	20.0
BD05876	Boron, Total	mg/L	-0.000292	0.0650	1.00	1.01	1.01	1.00	0.850 to 1.15	101	70.0 to 130	0.00	20.0
BD05872	Cadmium, Dissolved	mg/L	0.0000000	0.000147	0.100	0.0907	0.0919	0.101	0.0850 to 0.115	90.7	70.0 to 130	1.31	20.0
BD05876	Cadmium, Total	mg/L	0.0000024	0.000147	0.100	0.0973	0.0957	0.0971	0.0850 to 0.115	97.3	70.0 to 130	1.66	20.0
BD05872	Calcium, Dissolved	mg/L	0.00206	0.152	5.00	12.5	12.7	4.92	4.25 to 5.75	94.0	70.0 to 130	1.59	20.0
BD05876	Calcium, Total	mg/L	0.00446	0.152	5.00	4.75	4.78	4.73	4.25 to 5.75	93.3	70.0 to 130	0.630	20.0
BD05876	Chloride	mg/L	0.159	1.00	10.0	10.0	10.1	9.85	9.00 to 11.0	100	80.0 to 120	0.995	20.0
BD05872	Chromium, Dissolved	mg/L	-0.0000195	0.000440	0.100	0.0908	0.0882	0.102	0.0850 to 0.115	90.8	70.0 to 130	2.91	20.0
BD05876	Chromium, Total	mg/L	-0.0000359	0.000440	0.100	0.102	0.104	0.102	0.0850 to 0.115	102	70.0 to 130	1.94	20.0
BD05872	Cobalt, Dissolved	mg/L	-0.0000142	0.000147	0.100	0.0940	0.0906	0.104	0.0850 to 0.115	94.0	70.0 to 130	3.68	20.0
BD05876	Cobalt, Total	mg/L	-0.000144	0.000147	0.100	0.107	0.108	0.107	0.0850 to 0.115	107	70.0 to 130	0.930	20.0
BD05876	Fluoride	mg/L	-0.00116	0.125	2.50	2.65	2.67	2.62	2.25 to 2.75	106	80.0 to 120	0.752	20.0
BD05872	Iron, Dissolved	mg/L	0.000948	0.0176	0.2	0.288	0.281	0.206	0.170 to 0.230	104	70.0 to 130	2.46	20.0
BD05876	Iron, Total	mg/L	-0.000107	0.0176	0.2	0.200	0.204	0.199	0.170 to 0.230	100	70.0 to 130	1.98	20.0

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/20/23 14:05
Customer ID:
Delivery Date: 3/23/23 10:14

Description: Gorgas Ash Pond - MW-05R

Laboratory ID Number: BD05870

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD05872	Lead, Dissolved	mg/L	0.0000087	0.000147	0.100	0.0968	0.0911	0.103	0.0850 to 0.115	96.8	70.0 to 130	6.07	20.0
BD05876	Lead, Total	mg/L	0.0000025	0.000147	0.100	0.107	0.107	0.105	0.0850 to 0.115	107	70.0 to 130	0.00	20.0
BD05872	Lithium, Dissolved	mg/L	0.000435	0.0154	0.200	0.286	0.289	0.202	0.170 to 0.230	103	70.0 to 130	1.04	20.0
BD05876	Lithium, Total	mg/L	0.00180	0.0154	0.200	0.205	0.202	0.203	0.170 to 0.230	102	70.0 to 130	1.47	20.0
BD05872	Magnesium, Dissolved	mg/L	-0.00332	0.0462	5.00	7.64	7.81	4.91	4.25 to 5.75	95.4	70.0 to 130	2.20	20.0
BD05876	Magnesium, Total	mg/L	0.000812	0.0462	5.00	4.96	4.92	4.93	4.25 to 5.75	98.7	70.0 to 130	0.810	20.0
BD05872	Manganese, Dissolved	mg/L	0.0000667	0.00033	0.100	0.107	0.103	0.105	0.0850 to 0.115	92.7	70.0 to 130	3.81	20.0
BD05876	Manganese, Total	mg/L	0.0000127	0.00033	0.100	0.104	0.107	0.106	0.0850 to 0.115	104	70.0 to 130	2.84	20.0
BD05876	Mercury, Total by CVAA	mg/L	-5.000E-05	0.000500	0.004	0.0039	0.00395	0.00392	0.00340 to 0.00460	97.5	70.0 to 130	1.27	20.0
BD05872	Molybdenum, Dissolved	mg/L	0.000945	0.0100	0.2	0.225	0.219	0.201	0.170 to 0.230	104	70.0 to 130	2.70	20.0
BD05876	Molybdenum, Total	mg/L	0.000	0.0100	0.2	0.202	0.203	0.200	0.170 to 0.230	101	70.0 to 130	0.494	20.0
BD05872	Potassium, Dissolved	mg/L	0.0435	0.367	10.0	23.3	22.6	10.6	8.50 to 11.5	85.0	70.0 to 130	3.05	20.0
BD05876	Potassium, Total	mg/L	0.00835	0.367	10.0	10.1	10.2	9.87	8.50 to 11.5	101	70.0 to 130	0.985	20.0
BD05872	Selenium, Dissolved	mg/L	0.0000397	0.00100	0.100	0.0961	0.0955	0.107	0.0850 to 0.115	96.1	70.0 to 130	0.626	20.0
BD05876	Selenium, Total	mg/L	0.0000090	0.00100	0.100	0.102	0.105	0.103	0.0850 to 0.115	102	70.0 to 130	2.90	20.0
BD05872	Silicon, Dissolved	mg/L	-0.00163	0.0440	1.00	8.24	8.04	0.997	0.850 to 1.15	117	70.0 to 130	2.46	20.0
BD05876	Silicon, Total	mg/L	0.000008	0.0440	1.00	0.983	0.984	0.989	0.850 to 1.15	98.3	70.0 to 130	0.102	20.0
BD05872	Sodium, Dissolved	mg/L	0.00324	0.0880	5.00	300	296	4.89	4.25 to 5.75	420	70.0 to 130	1.34	20.0
BD05876	Sodium, Total	mg/L	-0.000662	0.0880	5.00	4.79	4.77	4.76	4.25 to 5.75	95.8	70.0 to 130	0.418	20.0
BD06131	Sulfate	mg/L	0.205	2.0	20.0	37.5	37.1	20.3	18.0 to 22.0	100	80.0 to 120	1.07	20.0
BD05872	Thallium, Dissolved	mg/L	-0.0000089	0.000147	0.100	0.0957	0.0905	0.102	0.0850 to 0.115	95.7	70.0 to 130	5.59	20.0
BD05876	Thallium, Total	mg/L	-0.000140	0.000147	0.100	0.108	0.107	0.106	0.0850 to 0.115	108	70.0 to 130	0.930	20.0
BD05876	Total Organic Carbon	mg/L	0.0116	1.00	10.0	10.3	10.6	10.1		103	80.0 to 120	2.87	20.0

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

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/20/23 14:05
Customer ID:
Delivery Date: 3/23/23 10:14

Description: Gorgas Ash Pond - MW-05R

Laboratory ID Number: BD05870

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD05870	Alkalinity to pH 4.5	mg CaCO3/L					247	50.3	45.0 to 55.0			0.406	10.0
BD05876	Nitrogen, Nitrate/Nitrite	mg/L as N	0.06	0.200	2.00	2.06	0.039	2.15	1.80 to 2.20	103	90.0 to 110	0.00	15.0
BD05871	Solids, Dissolved	mg/L	0.0000	25.0			300	55.0	40.0 to 60.0			1.68	10.0

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

Reported: 5/3/2023
Version: 3.5
COA_CCR

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

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-3

Location Code: WMWGORAP
Collected: 3/21/23 10:55
Customer ID:
Submittal Date: 3/23/23 10:14

Laboratory ID Number: BD05871

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	3/24/23 11:57	3/31/23 12:37		1.015	0.341	mg/L	0.030000	0.1015	
* Calcium, Total	3/24/23 11:57	3/31/23 12:37		1.015	19.4	mg/L	0.070035	0.406	
* Iron, Total	3/24/23 11:57	3/31/23 12:37		1.015	2.08	mg/L	0.008120	0.0406	
* Lithium, Total	3/24/23 11:57	3/31/23 12:37		1.015	0.0750	mg/L	0.007105	0.01999956	
* Magnesium, Total	3/24/23 11:57	3/31/23 12:37		1.015	8.40	mg/L	0.021315	0.406	
* Molybdenum, Total	3/24/23 11:57	3/31/23 12:37		1.015	0.00847	mg/L	0.005075	0.01015	J
* Silica, Total (calc.)	3/24/23 11:57	3/31/23 12:37		1	11.7	mg/L			
* Silicon, Total	3/24/23 11:57	3/31/23 12:37		1.015	5.48	mg/L	0.02030	0.25375	
* Sodium, Total	3/24/23 11:57	3/31/23 15:11		10.15	74.7	mg/L	0.4060	4.06	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	3/24/23 08:37	3/29/23 13:09		1.015	0.403	mg/L	0.030000	0.1015	
* Calcium, Dissolved	3/24/23 08:37	3/29/23 13:09		1.015	23.8	mg/L	0.070035	0.406	
* Iron, Dissolved	3/24/23 08:37	3/29/23 13:09		1.015	3.00	mg/L	0.008120	0.0406	
* Lithium, Dissolved	3/24/23 08:37	3/29/23 13:09		1.015	0.0767	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	3/24/23 08:37	3/29/23 13:09		1.015	10.3	mg/L	0.021315	0.406	
* Molybdenum, Dissolved	3/24/23 08:37	3/29/23 13:09		1.015	0.0110	mg/L	0.005075	0.01015	
* Silica, Dissolved (calc.)	3/24/23 08:37	3/29/23 13:09		1	12.1	mg/L			
* Silicon, Dissolved	3/24/23 08:37	3/29/23 13:09		1.015	5.64	mg/L	0.02030	0.25375	
* Sodium, Dissolved	3/24/23 08:37	3/29/23 15:10		10.15	70.8	mg/L	0.4060	4.06	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/24/23 11:57	3/27/23 13:21		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Total	3/24/23 11:57	3/27/23 13:21		1.015	0.0196	mg/L	0.009135	0.05075	J
* Arsenic, Total	3/24/23 11:57	3/27/23 13:21		1.015	0.000162	mg/L	0.000112	0.000203	J
* Barium, Total	3/24/23 11:57	3/27/23 13:21		1.015	0.611	mg/L	0.000508	0.001015	
* Beryllium, Total	3/24/23 11:57	3/27/23 13:21		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	3/24/23 11:57	3/27/23 13:21		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	3/24/23 11:57	3/27/23 13:21		1.015	0.000239	mg/L	0.000203	0.001015	J
* Cobalt, Total	3/24/23 11:57	3/27/23 13:21		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	3/24/23 11:57	3/27/23 13:21		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	3/24/23 11:57	3/27/23 13:21		1.015	0.119	mg/L	0.000152	0.001015	

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

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

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

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-3

Location Code: WMWGORAP
Collected: 3/21/23 10:55
Customer ID:
Submittal Date: 3/23/23 10:14

Laboratory ID Number: BD05871

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	3/24/23 11:57	3/27/23 13:21		1.015	1.23	mg/L	0.169505	0.5075	
* Selenium, Total	3/24/23 11:57	3/27/23 13:21		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	3/24/23 11:57	3/27/23 13:21		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	3/24/23 08:37	3/24/23 11:25		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	3/24/23 08:37	3/24/23 11:25		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Dissolved	3/24/23 08:37	3/24/23 11:25		1.015	0.000175	mg/L	0.000112	0.000203	J
* Barium, Dissolved	3/24/23 08:37	3/24/23 11:25		1.015	0.567	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	3/24/23 08:37	3/24/23 11:25		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	3/24/23 08:37	3/24/23 11:25		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	3/24/23 08:37	3/24/23 11:25		1.015	0.000218	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	3/24/23 08:37	3/24/23 11:25		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Dissolved	3/24/23 08:37	3/24/23 11:25		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	3/24/23 08:37	3/24/23 11:25		1.015	0.158	mg/L	0.000152	0.001015	
* Potassium, Dissolved	3/24/23 08:37	3/24/23 11:25		1.015	1.38	mg/L	0.169505	0.5075	
* Selenium, Dissolved	3/24/23 08:37	3/24/23 11:25		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	3/24/23 08:37	3/24/23 11:25		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ELH***								
* Mercury, Total by CVAA	3/27/23 17:52	3/27/23 23:56		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	3/24/23 11:31	3/24/23 11:31		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
* Alkalinity to pH 4.5	3/30/23 10:20	3/30/23 11:10		1	154	mg CaCO3/L		0.10	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	3/24/23 09:08	3/28/23 10:02		1	295	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
* Bicarbonate Alkalinity, (calc.)	3/30/23 10:20	3/30/23 11:10		1	153	mg CaCO3/L		1	
* Carbonate Alkalinity, (calc.)	3/30/23 10:20	3/30/23 11:10		1	1.25	mg CaCO3/L		0.5	
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	3/23/23 22:54	3/23/23 22:54		1	2.49	mg/L	1.00	2	

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

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

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

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-3

Location Code: WMWGORAP
Collected: 3/21/23 10:55
Customer ID:
Submittal Date: 3/23/23 10:14

Laboratory ID Number: BD05871

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: CES***								
* Chloride	3/24/23 11:49	3/24/23 11:49		1	16.0	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: CES***								
* Fluoride	3/28/23 11:10	3/28/23 11:10		1	0.0689	mg/L	0.06	0.125	J
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	4/4/23 14:15	4/4/23 14:15		3	83.1	mg/L	1.8	6	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	3/21/23 10:50	3/21/23 10:50			468.36	uS/cm			FA
pH	3/21/23 10:50	3/21/23 10:50			8.19	SU			FA
Temperature	3/21/23 10:50	3/21/23 10:50			16.43	C			FA
Turbidity	3/21/23 10:50	3/21/23 10:50			1.02	NTU			FA
Sulfide	3/21/23 10:50	3/21/23 10:50			0	mg/L			FA

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

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

Reported: 5/3/2023
Version: 3.5
COA_CCR

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/21/23 10:55
Customer ID:
Delivery Date: 3/23/23 10:14

Description: Gorgas Ash Pond - MW-3

Laboratory ID Number: BD05871

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD05872	Aluminum, Dissolved	mg/L	-0.000280	0.0198	0.100	0.0983	0.0955	0.104	0.0850 to 0.115	98.3	70.0 to 130	2.89	20.0
BD05876	Aluminum, Total	mg/L	0.000166	0.0198	0.100	0.100	0.104	0.0993	0.0850 to 0.115	100	70.0 to 130	3.92	20.0
BD05872	Antimony, Dissolved	mg/L	0.000258	0.00100	0.100	0.0893	0.0859	0.0933	0.0850 to 0.115	89.3	70.0 to 130	3.88	20.0
BD05876	Antimony, Total	mg/L	0.000485	0.00100	0.100	0.0936	0.0939	0.0932	0.0850 to 0.115	93.6	70.0 to 130	0.320	20.0
BD05872	Arsenic, Dissolved	mg/L	-0.0000068	0.000200	0.100	0.0938	0.0933	0.102	0.0850 to 0.115	93.4	70.0 to 130	0.534	20.0
BD05876	Arsenic, Total	mg/L	0.0000429	0.000200	0.100	0.100	0.102	0.101	0.0850 to 0.115	100	70.0 to 130	1.98	20.0
BD05872	Barium, Dissolved	mg/L	-0.0000031	0.00100	0.100	0.110	0.105	0.101	0.0850 to 0.115	94.0	70.0 to 130	4.65	20.0
BD05876	Barium, Total	mg/L	-0.0000188	0.00100	0.100	0.111	0.109	0.109	0.0850 to 0.115	111	70.0 to 130	1.82	20.0
BD05872	Beryllium, Dissolved	mg/L	0.0000000	0.000880	0.100	0.0901	0.0894	0.0998	0.0850 to 0.115	90.1	70.0 to 130	0.780	20.0
BD05876	Beryllium, Total	mg/L	0.0000077	0.000880	0.100	0.102	0.102	0.102	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BD05872	Boron, Dissolved	mg/L	-0.000072	0.0650	1.00	1.08	1.06	0.994	0.850 to 1.15	103	70.0 to 130	1.87	20.0
BD05876	Boron, Total	mg/L	-0.000292	0.0650	1.00	1.01	1.01	1.00	0.850 to 1.15	101	70.0 to 130	0.00	20.0
BD05872	Cadmium, Dissolved	mg/L	0.0000000	0.000147	0.100	0.0907	0.0919	0.101	0.0850 to 0.115	90.7	70.0 to 130	1.31	20.0
BD05876	Cadmium, Total	mg/L	0.0000024	0.000147	0.100	0.0973	0.0957	0.0971	0.0850 to 0.115	97.3	70.0 to 130	1.66	20.0
BD05872	Calcium, Dissolved	mg/L	0.00206	0.152	5.00	12.5	12.7	4.92	4.25 to 5.75	94.0	70.0 to 130	1.59	20.0
BD05876	Calcium, Total	mg/L	0.00446	0.152	5.00	4.75	4.78	4.73	4.25 to 5.75	93.3	70.0 to 130	0.630	20.0
BD05876	Chloride	mg/L	0.159	1.00	10.0	10.0	10.1	9.85	9.00 to 11.0	100	80.0 to 120	0.995	20.0
BD05872	Chromium, Dissolved	mg/L	-0.0000195	0.000440	0.100	0.0908	0.0882	0.102	0.0850 to 0.115	90.8	70.0 to 130	2.91	20.0
BD05876	Chromium, Total	mg/L	-0.0000359	0.000440	0.100	0.102	0.104	0.102	0.0850 to 0.115	102	70.0 to 130	1.94	20.0
BD05872	Cobalt, Dissolved	mg/L	-0.0000142	0.000147	0.100	0.0940	0.0906	0.104	0.0850 to 0.115	94.0	70.0 to 130	3.68	20.0
BD05876	Cobalt, Total	mg/L	-0.000144	0.000147	0.100	0.107	0.108	0.107	0.0850 to 0.115	107	70.0 to 130	0.930	20.0
BD05876	Fluoride	mg/L	-0.00116	0.125	2.50	2.65	2.67	2.62	2.25 to 2.75	106	80.0 to 120	0.752	20.0
BD05872	Iron, Dissolved	mg/L	0.000948	0.0176	0.2	0.288	0.281	0.206	0.170 to 0.230	104	70.0 to 130	2.46	20.0
BD05876	Iron, Total	mg/L	-0.000107	0.0176	0.2	0.200	0.204	0.199	0.170 to 0.230	100	70.0 to 130	1.98	20.0

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

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/21/23 10:55
Customer ID:
Delivery Date: 3/23/23 10:14

Description: Gorgas Ash Pond - MW-3

Laboratory ID Number: BD05871

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD05872	Lead, Dissolved	mg/L	0.0000087	0.000147	0.100	0.0968	0.0911	0.103	0.0850 to 0.115	96.8	70.0 to 130	6.07	20.0
BD05876	Lead, Total	mg/L	0.0000025	0.000147	0.100	0.107	0.107	0.105	0.0850 to 0.115	107	70.0 to 130	0.00	20.0
BD05872	Lithium, Dissolved	mg/L	0.000435	0.0154	0.200	0.286	0.289	0.202	0.170 to 0.230	103	70.0 to 130	1.04	20.0
BD05876	Lithium, Total	mg/L	0.00180	0.0154	0.200	0.205	0.202	0.203	0.170 to 0.230	102	70.0 to 130	1.47	20.0
BD05872	Magnesium, Dissolved	mg/L	-0.00332	0.0462	5.00	7.64	7.81	4.91	4.25 to 5.75	95.4	70.0 to 130	2.20	20.0
BD05876	Magnesium, Total	mg/L	0.000812	0.0462	5.00	4.96	4.92	4.93	4.25 to 5.75	98.7	70.0 to 130	0.810	20.0
BD05872	Manganese, Dissolved	mg/L	0.0000667	0.00033	0.100	0.107	0.103	0.105	0.0850 to 0.115	92.7	70.0 to 130	3.81	20.0
BD05876	Manganese, Total	mg/L	0.0000127	0.00033	0.100	0.104	0.107	0.106	0.0850 to 0.115	104	70.0 to 130	2.84	20.0
BD05876	Mercury, Total by CVAA	mg/L	-5.000E-05	0.000500	0.004	0.0039	0.00395	0.00392	0.00340 to 0.00460	97.5	70.0 to 130	1.27	20.0
BD05872	Molybdenum, Dissolved	mg/L	0.000945	0.0100	0.2	0.225	0.219	0.201	0.170 to 0.230	104	70.0 to 130	2.70	20.0
BD05876	Molybdenum, Total	mg/L	0.000	0.0100	0.2	0.202	0.203	0.200	0.170 to 0.230	101	70.0 to 130	0.494	20.0
BD05872	Potassium, Dissolved	mg/L	0.0435	0.367	10.0	23.3	22.6	10.6	8.50 to 11.5	85.0	70.0 to 130	3.05	20.0
BD05876	Potassium, Total	mg/L	0.00835	0.367	10.0	10.1	10.2	9.87	8.50 to 11.5	101	70.0 to 130	0.985	20.0
BD05872	Selenium, Dissolved	mg/L	0.0000397	0.00100	0.100	0.0961	0.0955	0.107	0.0850 to 0.115	96.1	70.0 to 130	0.626	20.0
BD05876	Selenium, Total	mg/L	0.0000090	0.00100	0.100	0.102	0.105	0.103	0.0850 to 0.115	102	70.0 to 130	2.90	20.0
BD05872	Silicon, Dissolved	mg/L	-0.00163	0.0440	1.00	8.24	8.04	0.997	0.850 to 1.15	117	70.0 to 130	2.46	20.0
BD05876	Silicon, Total	mg/L	0.000008	0.0440	1.00	0.983	0.984	0.989	0.850 to 1.15	98.3	70.0 to 130	0.102	20.0
BD05872	Sodium, Dissolved	mg/L	0.00324	0.0880	5.00	300	296	4.89	4.25 to 5.75	420	70.0 to 130	1.34	20.0
BD05876	Sodium, Total	mg/L	-0.000662	0.0880	5.00	4.79	4.77	4.76	4.25 to 5.75	95.8	70.0 to 130	0.418	20.0
BD06131	Sulfate	mg/L	0.205	2.0	20.0	37.5	37.1	20.3	18.0 to 22.0	100	80.0 to 120	1.07	20.0
BD05872	Thallium, Dissolved	mg/L	-0.0000089	0.000147	0.100	0.0957	0.0905	0.102	0.0850 to 0.115	95.7	70.0 to 130	5.59	20.0
BD05876	Thallium, Total	mg/L	-0.000140	0.000147	0.100	0.108	0.107	0.106	0.0850 to 0.115	108	70.0 to 130	0.930	20.0
BD05876	Total Organic Carbon	mg/L	0.0116	1.00	10.0	10.3	10.6	10.1		103	80.0 to 120	2.87	20.0

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

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/21/23 10:55
Customer ID:
Delivery Date: 3/23/23 10:14

Description: Gorgas Ash Pond - MW-3

Laboratory ID Number: BD05871

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD05872	Alkalinity to pH 4.5	mg CaCO3/L					198	51.0	45.0 to 55.0			1.01	10.0
BD05876	Nitrogen, Nitrate/Nitrite	mg/L as N	0.06	0.200	2.00	2.06	0.039	2.15	1.80 to 2.20	103	90.0 to 110	0.00	15.0
BD05871	Solids, Dissolved	mg/L	0.0000	25.0			300	55.0	40.0 to 60.0			1.68	10.0

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

Reported: 5/3/2023
Version: 3.5
COA_CCR

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

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-03V

Location Code: WMWGORAP
Collected: 3/21/23 14:25
Customer ID:
Submittal Date: 3/23/23 10:14

Laboratory ID Number: BD05872

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	3/24/23 11:57	3/31/23 12:40		1.015	0.0528	mg/L	0.030000	0.1015	J
* Calcium, Total	3/24/23 11:57	3/31/23 12:40		1.015	9.04	mg/L	0.070035	0.406	
* Iron, Total	3/24/23 11:57	3/31/23 12:40		1.015	0.225	mg/L	0.008120	0.0406	
* Lithium, Total	3/24/23 11:57	3/31/23 12:40		1.015	0.0825	mg/L	0.007105	0.01999956	
* Magnesium, Total	3/24/23 11:57	3/31/23 12:40		1.015	3.37	mg/L	0.021315	0.406	
* Molybdenum, Total	3/24/23 11:57	3/31/23 12:40		1.015	0.0200	mg/L	0.005075	0.01015	
* Silica, Total (calc.)	3/24/23 11:57	3/31/23 12:40		1	15.1	mg/L			
* Silicon, Total	3/24/23 11:57	3/31/23 12:40		1.015	7.07	mg/L	0.02030	0.25375	
* Sodium, Total	3/24/23 11:57	3/31/23 15:15		10.15	288	mg/L	0.4060	4.06	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	3/24/23 08:37	3/29/23 13:13		1.015	0.0491	mg/L	0.030000	0.1015	J
* Calcium, Dissolved	3/24/23 08:37	3/29/23 13:13		1.015	7.80	mg/L	0.070035	0.406	
* Iron, Dissolved	3/24/23 08:37	3/29/23 13:13		1.015	0.0796	mg/L	0.008120	0.0406	
* Lithium, Dissolved	3/24/23 08:37	3/29/23 13:13		1.015	0.0801	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	3/24/23 08:37	3/29/23 13:13		1.015	2.87	mg/L	0.021315	0.406	
* Molybdenum, Dissolved	3/24/23 08:37	3/29/23 13:13		1.015	0.0170	mg/L	0.005075	0.01015	
* Silica, Dissolved (calc.)	3/24/23 08:37	3/29/23 13:13		1	15.1	mg/L			
* Silicon, Dissolved	3/24/23 08:37	3/29/23 13:13		1.015	7.07	mg/L	0.02030	0.25375	
* Sodium, Dissolved	3/24/23 08:37	3/29/23 15:13		10.15	279	mg/L	0.4060	4.06	RA
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/24/23 11:57	3/27/23 13:25		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Total	3/24/23 11:57	3/27/23 13:25		1.015	0.0107	mg/L	0.009135	0.05075	J
* Arsenic, Total	3/24/23 11:57	3/27/23 13:25		1.015	0.000654	mg/L	0.000112	0.000203	
* Barium, Total	3/24/23 11:57	3/27/23 13:25		1.015	0.0197	mg/L	0.000508	0.001015	
* Beryllium, Total	3/24/23 11:57	3/27/23 13:25		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	3/24/23 11:57	3/27/23 13:25		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	3/24/23 11:57	3/27/23 13:25		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	3/24/23 11:57	3/27/23 13:25		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	3/24/23 11:57	3/27/23 13:25		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	3/24/23 11:57	3/27/23 13:25		1.015	0.0164	mg/L	0.000152	0.001015	

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

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

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-03V

Location Code: WMWGORAP
Collected: 3/21/23 14:25
Customer ID:
Submittal Date: 3/23/23 10:14

Laboratory ID Number: BD05872

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	3/24/23 11:57	3/27/23 13:25		1.015	16.4	mg/L	0.169505	0.5075	
* Selenium, Total	3/24/23 11:57	3/27/23 13:25		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	3/24/23 11:57	3/27/23 13:25		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	3/24/23 08:37	3/24/23 11:29		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	3/24/23 08:37	3/24/23 11:29		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Dissolved	3/24/23 08:37	3/24/23 11:29		1.015	0.000366	mg/L	0.000112	0.000203	
* Barium, Dissolved	3/24/23 08:37	3/24/23 11:29		1.015	0.0160	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	3/24/23 08:37	3/24/23 11:29		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	3/24/23 08:37	3/24/23 11:29		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	3/24/23 08:37	3/24/23 11:29		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	3/24/23 08:37	3/24/23 11:29		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Dissolved	3/24/23 08:37	3/24/23 11:29		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	3/24/23 08:37	3/24/23 11:29		1.015	0.0143	mg/L	0.000152	0.001015	
* Potassium, Dissolved	3/24/23 08:37	3/24/23 11:29		1.015	14.8	mg/L	0.169505	0.5075	
* Selenium, Dissolved	3/24/23 08:37	3/24/23 11:29		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	3/24/23 08:37	3/24/23 11:29		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ELH***								
* Mercury, Total by CVAA	3/27/23 17:52	3/28/23 00:00		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	3/24/23 11:33	3/24/23 11:33		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
* Alkalinity to pH 4.5	3/30/23 10:20	3/30/23 11:10		1	200	mg CaCO3/L		0.10	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	3/24/23 09:08	3/28/23 10:02		1	942	mg/L		75.8	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
* Bicarbonate Alkalinity, (calc.)	3/30/23 10:20	3/30/23 11:10		1	198	mg CaCO3/L		1	A
* Carbonate Alkalinity, (calc.)	3/30/23 10:20	3/30/23 11:10		1	1.66	mg CaCO3/L		0.5	A
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	3/23/23 23:07	3/23/23 23:07		1	4.85	mg/L	1.00	2	

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

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

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

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-03V

Location Code: WMWGORAP
Collected: 3/21/23 14:25
Customer ID:
Submittal Date: 3/23/23 10:14

Laboratory ID Number: BD05872

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: CES***								
* Chloride	3/24/23 12:00	3/24/23 12:00		16	212	mg/L	8.00	16	
Analytical Method: SM4500F G 2017	***Analyst: CES***								
* Fluoride	3/28/23 11:11	3/28/23 11:11		1	0.161	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	4/4/23 14:17	4/4/23 14:17		20	330	mg/L	12.0	40	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	3/21/23 14:21	3/21/23 14:21			1483.23	uS/cm			FA
pH	3/21/23 14:21	3/21/23 14:21			7.71	SU			FA
Temperature	3/21/23 14:21	3/21/23 14:21			17.53	C			FA
Turbidity	3/21/23 14:21	3/21/23 14:21			1.26	NTU			FA
Sulfide	3/21/23 14:21	3/21/23 14:21			0	mg/L			FA

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

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

Reported: 5/3/2023
Version: 3.5
COA_CCR

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/21/23 14:25
Customer ID:
Delivery Date: 3/23/23 10:14

Description: Gorgas Ash Pond - MW-03V

Laboratory ID Number: BD05872

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD05872	Aluminum, Dissolved	mg/L	-0.000280	0.0198	0.100	0.0983	0.0955	0.104	0.0850 to 0.115	98.3	70.0 to 130	2.89	20.0
BD05876	Aluminum, Total	mg/L	0.000166	0.0198	0.100	0.100	0.104	0.0993	0.0850 to 0.115	100	70.0 to 130	3.92	20.0
BD05872	Antimony, Dissolved	mg/L	0.000258	0.00100	0.100	0.0893	0.0859	0.0933	0.0850 to 0.115	89.3	70.0 to 130	3.88	20.0
BD05876	Antimony, Total	mg/L	0.000485	0.00100	0.100	0.0936	0.0939	0.0932	0.0850 to 0.115	93.6	70.0 to 130	0.320	20.0
BD05872	Arsenic, Dissolved	mg/L	-0.0000068	0.000200	0.100	0.0938	0.0933	0.102	0.0850 to 0.115	93.4	70.0 to 130	0.534	20.0
BD05876	Arsenic, Total	mg/L	0.0000429	0.000200	0.100	0.100	0.102	0.101	0.0850 to 0.115	100	70.0 to 130	1.98	20.0
BD05872	Barium, Dissolved	mg/L	-0.0000031	0.00100	0.100	0.110	0.105	0.101	0.0850 to 0.115	94.0	70.0 to 130	4.65	20.0
BD05876	Barium, Total	mg/L	-0.0000188	0.00100	0.100	0.111	0.109	0.109	0.0850 to 0.115	111	70.0 to 130	1.82	20.0
BD05872	Beryllium, Dissolved	mg/L	0.0000000	0.000880	0.100	0.0901	0.0894	0.0998	0.0850 to 0.115	90.1	70.0 to 130	0.780	20.0
BD05876	Beryllium, Total	mg/L	0.0000077	0.000880	0.100	0.102	0.102	0.102	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BD05872	Boron, Dissolved	mg/L	-0.000072	0.0650	1.00	1.08	1.06	0.994	0.850 to 1.15	103	70.0 to 130	1.87	20.0
BD05876	Boron, Total	mg/L	-0.000292	0.0650	1.00	1.01	1.01	1.00	0.850 to 1.15	101	70.0 to 130	0.00	20.0
BD05872	Cadmium, Dissolved	mg/L	0.0000000	0.000147	0.100	0.0907	0.0919	0.101	0.0850 to 0.115	90.7	70.0 to 130	1.31	20.0
BD05876	Cadmium, Total	mg/L	0.0000024	0.000147	0.100	0.0973	0.0957	0.0971	0.0850 to 0.115	97.3	70.0 to 130	1.66	20.0
BD05872	Calcium, Dissolved	mg/L	0.00206	0.152	5.00	12.5	12.7	4.92	4.25 to 5.75	94.0	70.0 to 130	1.59	20.0
BD05876	Calcium, Total	mg/L	0.00446	0.152	5.00	4.75	4.78	4.73	4.25 to 5.75	93.3	70.0 to 130	0.630	20.0
BD05876	Chloride	mg/L	0.159	1.00	10.0	10.0	10.1	9.85	9.00 to 11.0	100	80.0 to 120	0.995	20.0
BD05872	Chromium, Dissolved	mg/L	-0.0000195	0.000440	0.100	0.0908	0.0882	0.102	0.0850 to 0.115	90.8	70.0 to 130	2.91	20.0
BD05876	Chromium, Total	mg/L	-0.0000359	0.000440	0.100	0.102	0.104	0.102	0.0850 to 0.115	102	70.0 to 130	1.94	20.0
BD05872	Cobalt, Dissolved	mg/L	-0.0000142	0.000147	0.100	0.0940	0.0906	0.104	0.0850 to 0.115	94.0	70.0 to 130	3.68	20.0
BD05876	Cobalt, Total	mg/L	-0.000144	0.000147	0.100	0.107	0.108	0.107	0.0850 to 0.115	107	70.0 to 130	0.930	20.0
BD05876	Fluoride	mg/L	-0.00116	0.125	2.50	2.65	2.67	2.62	2.25 to 2.75	106	80.0 to 120	0.752	20.0
BD05872	Iron, Dissolved	mg/L	0.000948	0.0176	0.2	0.288	0.281	0.206	0.170 to 0.230	104	70.0 to 130	2.46	20.0
BD05876	Iron, Total	mg/L	-0.000107	0.0176	0.2	0.200	0.204	0.199	0.170 to 0.230	100	70.0 to 130	1.98	20.0

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

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/21/23 14:25
Customer ID:
Delivery Date: 3/23/23 10:14

Description: Gorgas Ash Pond - MW-03V

Laboratory ID Number: BD05872

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD05872	Lead, Dissolved	mg/L	0.0000087	0.000147	0.100	0.0968	0.0911	0.103	0.0850 to 0.115	96.8	70.0 to 130	6.07	20.0
BD05876	Lead, Total	mg/L	0.0000025	0.000147	0.100	0.107	0.107	0.105	0.0850 to 0.115	107	70.0 to 130	0.00	20.0
BD05872	Lithium, Dissolved	mg/L	0.000435	0.0154	0.200	0.286	0.289	0.202	0.170 to 0.230	103	70.0 to 130	1.04	20.0
BD05876	Lithium, Total	mg/L	0.00180	0.0154	0.200	0.205	0.202	0.203	0.170 to 0.230	102	70.0 to 130	1.47	20.0
BD05872	Magnesium, Dissolved	mg/L	-0.00332	0.0462	5.00	7.64	7.81	4.91	4.25 to 5.75	95.4	70.0 to 130	2.20	20.0
BD05876	Magnesium, Total	mg/L	0.000812	0.0462	5.00	4.96	4.92	4.93	4.25 to 5.75	98.7	70.0 to 130	0.810	20.0
BD05872	Manganese, Dissolved	mg/L	0.0000667	0.00033	0.100	0.107	0.103	0.105	0.0850 to 0.115	92.7	70.0 to 130	3.81	20.0
BD05876	Manganese, Total	mg/L	0.0000127	0.00033	0.100	0.104	0.107	0.106	0.0850 to 0.115	104	70.0 to 130	2.84	20.0
BD05876	Mercury, Total by CVAA	mg/L	-5.000E-05	0.000500	0.004	0.0039	0.00395	0.00392	0.00340 to 0.00460	97.5	70.0 to 130	1.27	20.0
BD05872	Molybdenum, Dissolved	mg/L	0.000945	0.0100	0.2	0.225	0.219	0.201	0.170 to 0.230	104	70.0 to 130	2.70	20.0
BD05876	Molybdenum, Total	mg/L	0.000	0.0100	0.2	0.202	0.203	0.200	0.170 to 0.230	101	70.0 to 130	0.494	20.0
BD05872	Potassium, Dissolved	mg/L	0.0435	0.367	10.0	23.3	22.6	10.6	8.50 to 11.5	85.0	70.0 to 130	3.05	20.0
BD05876	Potassium, Total	mg/L	0.00835	0.367	10.0	10.1	10.2	9.87	8.50 to 11.5	101	70.0 to 130	0.985	20.0
BD05872	Selenium, Dissolved	mg/L	0.0000397	0.00100	0.100	0.0961	0.0955	0.107	0.0850 to 0.115	96.1	70.0 to 130	0.626	20.0
BD05876	Selenium, Total	mg/L	0.0000090	0.00100	0.100	0.102	0.105	0.103	0.0850 to 0.115	102	70.0 to 130	2.90	20.0
BD05872	Silicon, Dissolved	mg/L	-0.00163	0.0440	1.00	8.24	8.04	0.997	0.850 to 1.15	117	70.0 to 130	2.46	20.0
BD05876	Silicon, Total	mg/L	0.000008	0.0440	1.00	0.983	0.984	0.989	0.850 to 1.15	98.3	70.0 to 130	0.102	20.0
BD05872	Sodium, Dissolved	mg/L	0.00324	0.0880	5.00	300	296	4.89	4.25 to 5.75	420	70.0 to 130	1.34	20.0
BD05876	Sodium, Total	mg/L	-0.000662	0.0880	5.00	4.79	4.77	4.76	4.25 to 5.75	95.8	70.0 to 130	0.418	20.0
BD06131	Sulfate	mg/L	0.205	2.0	20.0	37.5	37.1	20.3	18.0 to 22.0	100	80.0 to 120	1.07	20.0
BD05872	Thallium, Dissolved	mg/L	-0.0000089	0.000147	0.100	0.0957	0.0905	0.102	0.0850 to 0.115	95.7	70.0 to 130	5.59	20.0
BD05876	Thallium, Total	mg/L	-0.000140	0.000147	0.100	0.108	0.107	0.106	0.0850 to 0.115	108	70.0 to 130	0.930	20.0
BD05876	Total Organic Carbon	mg/L	0.0116	1.00	10.0	10.3	10.6	10.1		103	80.0 to 120	2.87	20.0

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

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/21/23 14:25
Customer ID:
Delivery Date: 3/23/23 10:14

Description: Gorgas Ash Pond - MW-03V

Laboratory ID Number: BD05872

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD05872	Alkalinity to pH 4.5	mg CaCO3/L					198	51.0	45.0 to 55.0			1.01	10.0
BD05876	Nitrogen, Nitrate/Nitrite	mg/L as N	0.06	0.200	2.00	2.06	0.039	2.15	1.80 to 2.20	103	90.0 to 110	0.00	15.0
BD05871	Solids, Dissolved	mg/L	0.0000	25.0			300	55.0	40.0 to 60.0			1.68	10.0

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

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

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-12V

Location Code: WMWGORAP
Collected: 3/22/23 10:53
Customer ID:
Submittal Date: 3/23/23 10:14

Laboratory ID Number: BD05873

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7		***Analyst: ABB***			***Preparation Method: EPA 1638***				
* Boron, Total	3/24/23 11:57	3/31/23 12:43		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	3/24/23 11:57	3/31/23 12:43		1.015	38.0	mg/L	0.070035	0.406	
* Iron, Total	3/24/23 11:57	3/31/23 12:43		1.015	0.426	mg/L	0.008120	0.0406	
* Lithium, Total	3/24/23 11:57	3/31/23 12:43		1.015	0.0304	mg/L	0.007105	0.01999956	
* Magnesium, Total	3/24/23 11:57	3/31/23 12:43		1.015	9.41	mg/L	0.021315	0.406	
* Molybdenum, Total	3/24/23 11:57	3/31/23 12:43		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Total (calc.)	3/24/23 11:57	3/31/23 12:43		1	24.6	mg/L			
* Silicon, Total	3/24/23 11:57	3/31/23 12:43		1.015	11.5	mg/L	0.02030	0.25375	
* Sodium, Total	3/24/23 11:57	4/6/23 10:36		1.015	16.3	mg/L	0.04060	0.406	
Analytical Method: EPA 200.7		***Analyst: ABB***							
* Boron, Dissolved	3/24/23 08:37	3/29/23 13:35		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Dissolved	3/24/23 08:37	3/29/23 13:35		1.015	38.4	mg/L	0.070035	0.406	
* Iron, Dissolved	3/24/23 08:37	3/29/23 13:35		1.015	0.0815	mg/L	0.008120	0.0406	
* Lithium, Dissolved	3/24/23 08:37	3/29/23 13:35		1.015	0.0281	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	3/24/23 08:37	3/29/23 13:35		1.015	9.68	mg/L	0.021315	0.406	
* Molybdenum, Dissolved	3/24/23 08:37	3/29/23 13:35		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Dissolved (calc.)	3/24/23 08:37	3/29/23 13:35		1	25.0	mg/L			
* Silicon, Dissolved	3/24/23 08:37	3/29/23 13:35		1.015	11.7	mg/L	0.02030	0.25375	
* Sodium, Dissolved	3/24/23 08:37	3/29/23 13:35		1.015	16.4	mg/L	0.04060	0.406	
Analytical Method: EPA 200.8		***Analyst: DLJ***			***Preparation Method: EPA 1638***				
* Antimony, Total	3/24/23 11:57	3/27/23 13:28		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Total	3/24/23 11:57	3/27/23 13:28		1.015	0.0613	mg/L	0.009135	0.05075	
* Arsenic, Total	3/24/23 11:57	3/27/23 13:28		1.015	0.000929	mg/L	0.000112	0.000203	
* Barium, Total	3/24/23 11:57	3/27/23 13:28		1.015	1.24	mg/L	0.000508	0.001015	
* Beryllium, Total	3/24/23 11:57	3/27/23 13:28		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	3/24/23 11:57	3/27/23 13:28		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	3/24/23 11:57	3/27/23 13:28		1.015	0.000396	mg/L	0.000203	0.001015	J
* Cobalt, Total	3/24/23 11:57	3/27/23 13:28		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	3/24/23 11:57	3/27/23 13:28		1.015	0.0000897	mg/L	0.000068	0.000203	J
* Manganese, Total	3/24/23 11:57	3/27/23 13:28		1.015	0.0195	mg/L	0.000152	0.001015	

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

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

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

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-12V

Location Code: WMWGORAP
Collected: 3/22/23 10:53
Customer ID:
Submittal Date: 3/23/23 10:14

Laboratory ID Number: BD05873

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	3/24/23 11:57	3/27/23 13:28		1.015	2.40	mg/L	0.169505	0.5075	
* Selenium, Total	3/24/23 11:57	3/27/23 13:28		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	3/24/23 11:57	3/27/23 13:28		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	3/24/23 08:37	3/24/23 11:57		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	3/24/23 08:37	3/24/23 11:57		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Dissolved	3/24/23 08:37	3/24/23 11:57		1.015	0.000837	mg/L	0.000112	0.000203	
* Barium, Dissolved	3/24/23 08:37	3/24/23 11:57		1.015	1.11	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	3/24/23 08:37	3/24/23 11:57		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	3/24/23 08:37	3/24/23 11:57		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	3/24/23 08:37	3/24/23 11:57		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	3/24/23 08:37	3/24/23 11:57		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Dissolved	3/24/23 08:37	3/24/23 11:57		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	3/24/23 08:37	3/24/23 11:57		1.015	0.0219	mg/L	0.000152	0.001015	
* Potassium, Dissolved	3/24/23 08:37	3/24/23 11:57		1.015	2.28	mg/L	0.169505	0.5075	
* Selenium, Dissolved	3/24/23 08:37	3/24/23 11:57		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	3/24/23 08:37	3/24/23 11:57		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ELH***								
* Mercury, Total by CVAA	3/27/23 17:52	3/28/23 00:04		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	3/24/23 11:34	3/24/23 11:34		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
* Alkalinity to pH 4.5	4/4/23 15:54	4/4/23 17:47		1	165	mg CaCO3/L		0.10	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	3/24/23 09:08	3/28/23 10:02		1	182	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
* Bicarbonate Alkalinity, (calc.)	4/4/23 15:54	4/4/23 17:47		1	162	mg CaCO3/L		1	
* Carbonate Alkalinity, (calc.)	4/4/23 15:54	4/4/23 17:47		1	3.25	mg CaCO3/L		0.5	
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	3/23/23 23:23	3/23/23 23:23		1	3.87	mg/L	1.00	2	

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

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

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

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-12V

Location Code: WMWGORAP
Collected: 3/22/23 10:53
Customer ID:
Submittal Date: 3/23/23 10:14

Laboratory ID Number: BD05873

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: CES***								
* Chloride	3/24/23 11:51	3/24/23 11:51		1	3.77	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: CES***								
* Fluoride	3/28/23 11:13	3/28/23 11:13		1	0.138	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	4/4/23 14:05	4/4/23 14:05		1	1.52	mg/L	0.6	2	J
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	3/22/23 10:50	3/22/23 10:50			253.08	uS/cm			FA
pH	3/22/23 10:50	3/22/23 10:50			9.00	SU			FA
Temperature	3/22/23 10:50	3/22/23 10:50			17.61	C			FA
Turbidity	3/22/23 10:50	3/22/23 10:50			8.44	NTU			FA
Sulfide	3/22/23 10:50	3/22/23 10:50			0	mg/L			FA

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

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

Reported: 5/3/2023
Version: 3.5
COA_CCR

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/22/23 10:53
Customer ID:
Delivery Date: 3/23/23 10:14

Description: Gorgas Ash Pond - MW-12V

Laboratory ID Number: BD05873

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD05875	Aluminum, Dissolved	mg/L	-0.0000282	0.0198	0.100	0.0988	0.0991	0.0958	0.0850 to 0.115	98.8	70.0 to 130	0.303	20.0
BD05876	Aluminum, Total	mg/L	0.000166	0.0198	0.100	0.100	0.104	0.0993	0.0850 to 0.115	100	70.0 to 130	3.92	20.0
BD05875	Antimony, Dissolved	mg/L	0.000252	0.00100	0.100	0.0903	0.0913	0.0896	0.0850 to 0.115	90.3	70.0 to 130	1.10	20.0
BD05876	Antimony, Total	mg/L	0.000485	0.00100	0.100	0.0936	0.0939	0.0932	0.0850 to 0.115	93.6	70.0 to 130	0.320	20.0
BD05875	Arsenic, Dissolved	mg/L	-0.0000037	0.000200	0.100	0.0951	0.0984	0.0944	0.0850 to 0.115	94.2	70.0 to 130	3.41	20.0
BD05876	Arsenic, Total	mg/L	0.0000429	0.000200	0.100	0.100	0.102	0.101	0.0850 to 0.115	100	70.0 to 130	1.98	20.0
BD05875	Barium, Dissolved	mg/L	-0.0000258	0.00100	0.100	0.205	0.204	0.0950	0.0850 to 0.115	95.0	70.0 to 130	0.489	20.0
BD05876	Barium, Total	mg/L	-0.0000188	0.00100	0.100	0.111	0.109	0.109	0.0850 to 0.115	111	70.0 to 130	1.82	20.0
BD05875	Beryllium, Dissolved	mg/L	0.0000000	0.000880	0.100	0.0894	0.0914	0.0891	0.0850 to 0.115	89.4	70.0 to 130	2.21	20.0
BD05876	Beryllium, Total	mg/L	0.0000077	0.000880	0.100	0.102	0.102	0.102	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BD05875	Boron, Dissolved	mg/L	-0.00023	0.0650	1.00	1.14	1.15	0.980	0.850 to 1.15	101	70.0 to 130	0.873	20.0
BD05876	Boron, Total	mg/L	-0.000292	0.0650	1.00	1.01	1.01	1.00	0.850 to 1.15	101	70.0 to 130	0.00	20.0
BD05875	Cadmium, Dissolved	mg/L	0.0000000	0.000147	0.100	0.0964	0.0977	0.0974	0.0850 to 0.115	96.4	70.0 to 130	1.34	20.0
BD05876	Cadmium, Total	mg/L	0.0000024	0.000147	0.100	0.0973	0.0957	0.0971	0.0850 to 0.115	97.3	70.0 to 130	1.66	20.0
BD05875	Calcium, Dissolved	mg/L	-0.0125	0.152	5.00	52.0	49.1	4.73	4.25 to 5.75	0.00	70.0 to 130	5.74	20.0
BD05876	Calcium, Total	mg/L	0.00446	0.152	5.00	4.75	4.78	4.73	4.25 to 5.75	93.3	70.0 to 130	0.630	20.0
BD05876	Chloride	mg/L	0.159	1.00	10.0	10.0	10.1	9.85	9.00 to 11.0	100	80.0 to 120	0.995	20.0
BD05875	Chromium, Dissolved	mg/L	-0.0000337	0.000440	0.100	0.0957	0.0966	0.0957	0.0850 to 0.115	95.7	70.0 to 130	0.936	20.0
BD05876	Chromium, Total	mg/L	-0.0000359	0.000440	0.100	0.102	0.104	0.102	0.0850 to 0.115	102	70.0 to 130	1.94	20.0
BD05875	Cobalt, Dissolved	mg/L	-0.0000117	0.000147	0.100	0.0959	0.0970	0.0963	0.0850 to 0.115	95.9	70.0 to 130	1.14	20.0
BD05876	Cobalt, Total	mg/L	-0.000144	0.000147	0.100	0.107	0.108	0.107	0.0850 to 0.115	107	70.0 to 130	0.930	20.0
BD05876	Fluoride	mg/L	-0.00116	0.125	2.50	2.65	2.67	2.62	2.25 to 2.75	106	80.0 to 120	0.752	20.0
BD05875	Iron, Dissolved	mg/L	0.00104	0.0176	0.2	1.59	1.60	0.204	0.170 to 0.230	95.0	70.0 to 130	0.627	20.0
BD05876	Iron, Total	mg/L	-0.000107	0.0176	0.2	0.200	0.204	0.199	0.170 to 0.230	100	70.0 to 130	1.98	20.0

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

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/22/23 10:53
Customer ID:
Delivery Date: 3/23/23 10:14

Description: Gorgas Ash Pond - MW-12V

Laboratory ID Number: BD05873

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD05875	Lead, Dissolved	mg/L	0.0000024	0.000147	0.100	0.0960	0.101	0.0980	0.0850 to 0.115	95.9	70.0 to 130	5.08	20.0
BD05876	Lead, Total	mg/L	0.0000025	0.000147	0.100	0.107	0.107	0.105	0.0850 to 0.115	107	70.0 to 130	0.00	20.0
BD05875	Lithium, Dissolved	mg/L	-0.000051	0.0154	0.200	0.234	0.235	0.204	0.170 to 0.230	102	70.0 to 130	0.426	20.0
BD05876	Lithium, Total	mg/L	0.00180	0.0154	0.200	0.205	0.202	0.203	0.170 to 0.230	102	70.0 to 130	1.47	20.0
BD05875	Magnesium, Dissolved	mg/L	0.00788	0.0462	5.00	22.4	22.6	4.91	4.25 to 5.75	100	70.0 to 130	0.889	20.0
BD05876	Magnesium, Total	mg/L	0.000812	0.0462	5.00	4.96	4.92	4.93	4.25 to 5.75	98.7	70.0 to 130	0.810	20.0
BD05875	Manganese, Dissolved	mg/L	0.0000601	0.00033	0.100	0.171	0.173	0.0980	0.0850 to 0.115	98.1	70.0 to 130	1.16	20.0
BD05876	Manganese, Total	mg/L	0.0000127	0.00033	0.100	0.104	0.107	0.106	0.0850 to 0.115	104	70.0 to 130	2.84	20.0
BD05876	Mercury, Total by CVAA	mg/L	-5.000E-05	0.000500	0.004	0.0039	0.00395	0.00392	0.00340 to 0.00460	97.5	70.0 to 130	1.27	20.0
BD05875	Molybdenum, Dissolved	mg/L	0.000261	0.0100	0.2	0.200	0.203	0.200	0.170 to 0.230	100	70.0 to 130	1.49	20.0
BD05876	Molybdenum, Total	mg/L	0.000	0.0100	0.2	0.202	0.203	0.200	0.170 to 0.230	101	70.0 to 130	0.494	20.0
BD05875	Potassium, Dissolved	mg/L	0.0321	0.367	10.0	11.4	11.5	9.95	8.50 to 11.5	101	70.0 to 130	0.873	20.0
BD05876	Potassium, Total	mg/L	0.00835	0.367	10.0	10.1	10.2	9.87	8.50 to 11.5	101	70.0 to 130	0.985	20.0
BD05875	Selenium, Dissolved	mg/L	0.000109	0.00100	0.100	0.0990	0.0982	0.100	0.0850 to 0.115	99.0	70.0 to 130	0.811	20.0
BD05876	Selenium, Total	mg/L	0.0000090	0.00100	0.100	0.102	0.105	0.103	0.0850 to 0.115	102	70.0 to 130	2.90	20.0
BD05875	Silicon, Dissolved	mg/L	-0.00143	0.0440	1.00	15.6	15.7	0.978	0.850 to 1.15	80.0	70.0 to 130	0.639	20.0
BD05876	Silicon, Total	mg/L	0.000008	0.0440	1.00	0.983	0.984	0.989	0.850 to 1.15	98.3	70.0 to 130	0.102	20.0
BD05875	Sodium, Dissolved	mg/L	0.0110	0.0880	5.00	20.0	20.2	4.88	4.25 to 5.75	98.0	70.0 to 130	0.995	20.0
BD05876	Sodium, Total	mg/L	-0.000662	0.0880	5.00	4.79	4.77	4.76	4.25 to 5.75	95.8	70.0 to 130	0.418	20.0
BD06131	Sulfate	mg/L	0.205	2.0	20.0	37.5	37.1	20.3	18.0 to 22.0	100	80.0 to 120	1.07	20.0
BD05875	Thallium, Dissolved	mg/L	-0.0000089	0.000147	0.100	0.0959	0.102	0.0982	0.0850 to 0.115	95.9	70.0 to 130	6.16	20.0
BD05876	Thallium, Total	mg/L	-0.000140	0.000147	0.100	0.108	0.107	0.106	0.0850 to 0.115	108	70.0 to 130	0.930	20.0
BD05876	Total Organic Carbon	mg/L	0.0116	1.00	10.0	10.3	10.6	10.1		103	80.0 to 120	2.87	20.0

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

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/22/23 10:53
Customer ID:
Delivery Date: 3/23/23 10:14

Description: Gorgas Ash Pond - MW-12V

Laboratory ID Number: BD05873

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD05875	Alkalinity to pH 4.5	mg CaCO3/L					176	50.6	45.0 to 55.0			1.13	10.0
BD05876	Nitrogen, Nitrate/Nitrite	mg/L as N	0.06	0.200	2.00	2.06	0.039	2.15	1.80 to 2.20	103	90.0 to 110	0.00	15.0
BD05875	Solids, Dissolved	mg/L	0.0000	25.0			276	55.0	40.0 to 60.0			0.362	10.0

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

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

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-12

Location Code: WMWGORAP
Collected: 3/22/23 13:00
Customer ID:
Submittal Date: 3/23/23 10:14

Laboratory ID Number: BD05874

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	3/24/23 11:57	3/31/23 12:47		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	3/24/23 11:57	3/31/23 12:47		1.015	36.4	mg/L	0.070035	0.406	
* Iron, Total	3/24/23 11:57	3/31/23 12:47		1.015	0.227	mg/L	0.008120	0.0406	
* Lithium, Total	3/24/23 11:57	3/31/23 12:47		1.015	0.0468	mg/L	0.007105	0.01999956	
* Magnesium, Total	3/24/23 11:57	3/31/23 12:47		1.015	10.9	mg/L	0.021315	0.406	
* Molybdenum, Total	3/24/23 11:57	3/31/23 12:47		1.015	0.00512	mg/L	0.005075	0.01015	J
* Silica, Total (calc.)	3/24/23 11:57	3/31/23 12:47		1	19.9	mg/L			
* Silicon, Total	3/24/23 11:57	3/31/23 12:47		1.015	9.31	mg/L	0.02030	0.25375	
* Sodium, Total	3/24/23 11:57	4/6/23 10:39		1.015	18.8	mg/L	0.04060	0.406	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	3/24/23 08:37	3/29/23 13:38		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Dissolved	3/24/23 08:37	3/29/23 13:38		1.015	38.4	mg/L	0.070035	0.406	
* Iron, Dissolved	3/24/23 08:37	3/29/23 13:38		1.015	0.189	mg/L	0.008120	0.0406	
* Lithium, Dissolved	3/24/23 08:37	3/29/23 13:38		1.015	0.0404	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	3/24/23 08:37	3/29/23 13:38		1.015	11.5	mg/L	0.021315	0.406	
* Molybdenum, Dissolved	3/24/23 08:37	3/29/23 13:38		1.015	0.00644	mg/L	0.005075	0.01015	J
* Silica, Dissolved (calc.)	3/24/23 08:37	3/29/23 13:38		1	19.7	mg/L			
* Silicon, Dissolved	3/24/23 08:37	3/29/23 13:38		1.015	9.21	mg/L	0.02030	0.25375	
* Sodium, Dissolved	3/24/23 08:37	3/29/23 13:38		1.015	18.4	mg/L	0.04060	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/24/23 11:57	3/27/23 13:32		1.015	0.00257	mg/L	0.000710	0.001015	
* Aluminum, Total	3/24/23 11:57	3/27/23 13:32		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Total	3/24/23 11:57	3/27/23 13:32		1.015	0.00135	mg/L	0.000112	0.000203	
* Barium, Total	3/24/23 11:57	3/27/23 13:32		1.015	0.220	mg/L	0.000508	0.001015	
* Beryllium, Total	3/24/23 11:57	3/27/23 13:32		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	3/24/23 11:57	3/27/23 13:32		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	3/24/23 11:57	3/27/23 13:32		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	3/24/23 11:57	3/27/23 13:32		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	3/24/23 11:57	3/27/23 13:32		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	3/24/23 11:57	3/27/23 13:32		1.015	0.0301	mg/L	0.000152	0.001015	

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

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

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

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-12

Location Code: WMWGORAP
Collected: 3/22/23 13:00
Customer ID:
Submittal Date: 3/23/23 10:14

Laboratory ID Number: BD05874

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	3/24/23 11:57	3/27/23 13:32		1.015	1.73	mg/L	0.169505	0.5075	
* Selenium, Total	3/24/23 11:57	3/27/23 13:32		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	3/24/23 11:57	3/27/23 13:32		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	3/24/23 08:37	3/24/23 12:01		1.015	0.00174	mg/L	0.000710	0.001015	
* Aluminum, Dissolved	3/24/23 08:37	3/24/23 12:01		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Dissolved	3/24/23 08:37	3/24/23 12:01		1.015	0.00201	mg/L	0.000112	0.000203	
* Barium, Dissolved	3/24/23 08:37	3/24/23 12:01		1.015	0.202	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	3/24/23 08:37	3/24/23 12:01		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	3/24/23 08:37	3/24/23 12:01		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	3/24/23 08:37	3/24/23 12:01		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	3/24/23 08:37	3/24/23 12:01		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Dissolved	3/24/23 08:37	3/24/23 12:01		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	3/24/23 08:37	3/24/23 12:01		1.015	0.0314	mg/L	0.000152	0.001015	
* Potassium, Dissolved	3/24/23 08:37	3/24/23 12:01		1.015	1.67	mg/L	0.169505	0.5075	
* Selenium, Dissolved	3/24/23 08:37	3/24/23 12:01		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	3/24/23 08:37	3/24/23 12:01		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ELH***								
* Mercury, Total by CVAA	3/27/23 17:52	3/28/23 00:07		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	3/24/23 11:35	3/24/23 11:35		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
* Alkalinity to pH 4.5	4/4/23 15:54	4/4/23 17:47		1	165	mg CaCO3/L		0.10	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	3/24/23 09:08	3/28/23 10:02		1	203	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
* Bicarbonate Alkalinity, (calc.)	4/4/23 15:54	4/4/23 17:47		1	162	mg CaCO3/L		1	
* Carbonate Alkalinity, (calc.)	4/4/23 15:54	4/4/23 17:47		1	2.71	mg CaCO3/L		0.5	
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	3/23/23 23:41	3/23/23 23:41		1	2.75	mg/L	1.00	2	

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

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

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

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-12

Location Code: WMWGORAP
Collected: 3/22/23 13:00
Customer ID:
Submittal Date: 3/23/23 10:14

Laboratory ID Number: BD05874

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: CES***								
* Chloride	3/24/23 11:53	3/24/23 11:53		1	2.73	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: CES***								
* Fluoride	3/28/23 11:14	3/28/23 11:14		1	0.0941	mg/L	0.06	0.125	J
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	4/4/23 14:06	4/4/23 14:06		1	18.3	mg/L	0.6	2	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	3/22/23 12:57	3/22/23 12:57			339.15	uS/cm			FA
pH	3/22/23 12:57	3/22/23 12:57			8.15	SU			FA
Temperature	3/22/23 12:57	3/22/23 12:57			18.59	C			FA
Turbidity	3/22/23 12:57	3/22/23 12:57			0.73	NTU			FA
Sulfide	3/22/23 12:57	3/22/23 12:57			0	mg/L			FA

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

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

Reported: 5/3/2023
Version: 3.5
COA_CCR

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/22/23 13:00
Customer ID:
Delivery Date: 3/23/23 10:14

Description: Gorgas Ash Pond - MW-12

Laboratory ID Number: BD05874

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD05875	Aluminum, Dissolved	mg/L	-0.0000282	0.0198	0.100	0.0988	0.0991	0.0958	0.0850 to 0.115	98.8	70.0 to 130	0.303	20.0
BD05876	Aluminum, Total	mg/L	0.000166	0.0198	0.100	0.100	0.104	0.0993	0.0850 to 0.115	100	70.0 to 130	3.92	20.0
BD05875	Antimony, Dissolved	mg/L	0.000252	0.00100	0.100	0.0903	0.0913	0.0896	0.0850 to 0.115	90.3	70.0 to 130	1.10	20.0
BD05876	Antimony, Total	mg/L	0.000485	0.00100	0.100	0.0936	0.0939	0.0932	0.0850 to 0.115	93.6	70.0 to 130	0.320	20.0
BD05875	Arsenic, Dissolved	mg/L	-0.0000037	0.000200	0.100	0.0951	0.0984	0.0944	0.0850 to 0.115	94.2	70.0 to 130	3.41	20.0
BD05876	Arsenic, Total	mg/L	0.0000429	0.000200	0.100	0.100	0.102	0.101	0.0850 to 0.115	100	70.0 to 130	1.98	20.0
BD05875	Barium, Dissolved	mg/L	-0.0000258	0.00100	0.100	0.205	0.204	0.0950	0.0850 to 0.115	95.0	70.0 to 130	0.489	20.0
BD05876	Barium, Total	mg/L	-0.0000188	0.00100	0.100	0.111	0.109	0.109	0.0850 to 0.115	111	70.0 to 130	1.82	20.0
BD05875	Beryllium, Dissolved	mg/L	0.0000000	0.000880	0.100	0.0894	0.0914	0.0891	0.0850 to 0.115	89.4	70.0 to 130	2.21	20.0
BD05876	Beryllium, Total	mg/L	0.0000077	0.000880	0.100	0.102	0.102	0.102	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BD05875	Boron, Dissolved	mg/L	-0.00023	0.0650	1.00	1.14	1.15	0.980	0.850 to 1.15	101	70.0 to 130	0.873	20.0
BD05876	Boron, Total	mg/L	-0.000292	0.0650	1.00	1.01	1.01	1.00	0.850 to 1.15	101	70.0 to 130	0.00	20.0
BD05875	Cadmium, Dissolved	mg/L	0.0000000	0.000147	0.100	0.0964	0.0977	0.0974	0.0850 to 0.115	96.4	70.0 to 130	1.34	20.0
BD05876	Cadmium, Total	mg/L	0.0000024	0.000147	0.100	0.0973	0.0957	0.0971	0.0850 to 0.115	97.3	70.0 to 130	1.66	20.0
BD05875	Calcium, Dissolved	mg/L	-0.0125	0.152	5.00	52.0	49.1	4.73	4.25 to 5.75	0.00	70.0 to 130	5.74	20.0
BD05876	Calcium, Total	mg/L	0.00446	0.152	5.00	4.75	4.78	4.73	4.25 to 5.75	93.3	70.0 to 130	0.630	20.0
BD05876	Chloride	mg/L	0.159	1.00	10.0	10.0	10.1	9.85	9.00 to 11.0	100	80.0 to 120	0.995	20.0
BD05875	Chromium, Dissolved	mg/L	-0.0000337	0.000440	0.100	0.0957	0.0966	0.0957	0.0850 to 0.115	95.7	70.0 to 130	0.936	20.0
BD05876	Chromium, Total	mg/L	-0.0000359	0.000440	0.100	0.102	0.104	0.102	0.0850 to 0.115	102	70.0 to 130	1.94	20.0
BD05875	Cobalt, Dissolved	mg/L	-0.0000117	0.000147	0.100	0.0959	0.0970	0.0963	0.0850 to 0.115	95.9	70.0 to 130	1.14	20.0
BD05876	Cobalt, Total	mg/L	-0.000144	0.000147	0.100	0.107	0.108	0.107	0.0850 to 0.115	107	70.0 to 130	0.930	20.0
BD05876	Fluoride	mg/L	-0.00116	0.125	2.50	2.65	2.67	2.62	2.25 to 2.75	106	80.0 to 120	0.752	20.0
BD05875	Iron, Dissolved	mg/L	0.00104	0.0176	0.2	1.59	1.60	0.204	0.170 to 0.230	95.0	70.0 to 130	0.627	20.0
BD05876	Iron, Total	mg/L	-0.000107	0.0176	0.2	0.200	0.204	0.199	0.170 to 0.230	100	70.0 to 130	1.98	20.0

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/22/23 13:00
Customer ID:
Delivery Date: 3/23/23 10:14

Description: Gorgas Ash Pond - MW-12

Laboratory ID Number: BD05874

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD05875	Lead, Dissolved	mg/L	0.0000024	0.000147	0.100	0.0960	0.101	0.0980	0.0850 to 0.115	95.9	70.0 to 130	5.08	20.0
BD05876	Lead, Total	mg/L	0.0000025	0.000147	0.100	0.107	0.107	0.105	0.0850 to 0.115	107	70.0 to 130	0.00	20.0
BD05875	Lithium, Dissolved	mg/L	-0.000051	0.0154	0.200	0.234	0.235	0.204	0.170 to 0.230	102	70.0 to 130	0.426	20.0
BD05876	Lithium, Total	mg/L	0.00180	0.0154	0.200	0.205	0.202	0.203	0.170 to 0.230	102	70.0 to 130	1.47	20.0
BD05875	Magnesium, Dissolved	mg/L	0.00788	0.0462	5.00	22.4	22.6	4.91	4.25 to 5.75	100	70.0 to 130	0.889	20.0
BD05876	Magnesium, Total	mg/L	0.000812	0.0462	5.00	4.96	4.92	4.93	4.25 to 5.75	98.7	70.0 to 130	0.810	20.0
BD05875	Manganese, Dissolved	mg/L	0.0000601	0.00033	0.100	0.171	0.173	0.0980	0.0850 to 0.115	98.1	70.0 to 130	1.16	20.0
BD05876	Manganese, Total	mg/L	0.0000127	0.00033	0.100	0.104	0.107	0.106	0.0850 to 0.115	104	70.0 to 130	2.84	20.0
BD05876	Mercury, Total by CVAA	mg/L	-5.000E-05	0.000500	0.004	0.0039	0.00395	0.00392	0.00340 to 0.00460	97.5	70.0 to 130	1.27	20.0
BD05875	Molybdenum, Dissolved	mg/L	0.000261	0.0100	0.2	0.200	0.203	0.200	0.170 to 0.230	100	70.0 to 130	1.49	20.0
BD05876	Molybdenum, Total	mg/L	0.000	0.0100	0.2	0.202	0.203	0.200	0.170 to 0.230	101	70.0 to 130	0.494	20.0
BD05875	Potassium, Dissolved	mg/L	0.0321	0.367	10.0	11.4	11.5	9.95	8.50 to 11.5	101	70.0 to 130	0.873	20.0
BD05876	Potassium, Total	mg/L	0.00835	0.367	10.0	10.1	10.2	9.87	8.50 to 11.5	101	70.0 to 130	0.985	20.0
BD05875	Selenium, Dissolved	mg/L	0.000109	0.00100	0.100	0.0990	0.0982	0.100	0.0850 to 0.115	99.0	70.0 to 130	0.811	20.0
BD05876	Selenium, Total	mg/L	0.0000090	0.00100	0.100	0.102	0.105	0.103	0.0850 to 0.115	102	70.0 to 130	2.90	20.0
BD05875	Silicon, Dissolved	mg/L	-0.00143	0.0440	1.00	15.6	15.7	0.978	0.850 to 1.15	80.0	70.0 to 130	0.639	20.0
BD05876	Silicon, Total	mg/L	0.000008	0.0440	1.00	0.983	0.984	0.989	0.850 to 1.15	98.3	70.0 to 130	0.102	20.0
BD05875	Sodium, Dissolved	mg/L	0.0110	0.0880	5.00	20.0	20.2	4.88	4.25 to 5.75	98.0	70.0 to 130	0.995	20.0
BD05876	Sodium, Total	mg/L	-0.000662	0.0880	5.00	4.79	4.77	4.76	4.25 to 5.75	95.8	70.0 to 130	0.418	20.0
BD06131	Sulfate	mg/L	0.205	2.0	20.0	37.5	37.1	20.3	18.0 to 22.0	100	80.0 to 120	1.07	20.0
BD05875	Thallium, Dissolved	mg/L	-0.0000089	0.000147	0.100	0.0959	0.102	0.0982	0.0850 to 0.115	95.9	70.0 to 130	6.16	20.0
BD05876	Thallium, Total	mg/L	-0.000140	0.000147	0.100	0.108	0.107	0.106	0.0850 to 0.115	108	70.0 to 130	0.930	20.0
BD05876	Total Organic Carbon	mg/L	0.0116	1.00	10.0	10.3	10.6	10.1		103	80.0 to 120	2.87	20.0

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

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/22/23 13:00
Customer ID:
Delivery Date: 3/23/23 10:14

Description: Gorgas Ash Pond - MW-12

Laboratory ID Number: BD05874

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD05875	Alkalinity to pH 4.5	mg CaCO3/L					176	50.6	45.0 to 55.0			1.13	10.0
BD05876	Nitrogen, Nitrate/Nitrite	mg/L as N	0.06	0.200	2.00	2.06	0.039	2.15	1.80 to 2.20	103	90.0 to 110	0.00	15.0
BD05875	Solids, Dissolved	mg/L	0.0000	25.0			276	55.0	40.0 to 60.0			0.362	10.0

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

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

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-11R

Location Code: WMWGORAP
Collected: 3/22/23 14:55
Customer ID:
Submittal Date: 3/23/23 10:14

Laboratory ID Number: BD05875

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	3/24/23 11:57	3/31/23 12:50		1.015	0.130	mg/L	0.030000	0.1015	
* Calcium, Total	3/24/23 11:57	3/31/23 15:18		10.15	52.0	mg/L	0.70035	4.06	
* Iron, Total	3/24/23 11:57	3/31/23 12:50		1.015	2.19	mg/L	0.008120	0.0406	
* Lithium, Total	3/24/23 11:57	3/31/23 12:50		1.015	0.0317	mg/L	0.007105	0.01999956	
* Magnesium, Total	3/24/23 11:57	3/31/23 12:50		1.015	17.7	mg/L	0.021315	0.406	
* Molybdenum, Total	3/24/23 11:57	3/31/23 12:50		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Total (calc.)	3/24/23 11:57	3/31/23 12:50		1	31.7	mg/L			
* Silicon, Total	3/24/23 11:57	3/31/23 12:50		1.015	14.8	mg/L	0.02030	0.25375	
* Sodium, Total	3/24/23 11:57	4/6/23 10:42		1.015	14.7	mg/L	0.04060	0.406	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	3/24/23 08:37	3/29/23 13:41		1.015	0.129	mg/L	0.030000	0.1015	
* Calcium, Dissolved	3/24/23 08:37	3/29/23 15:29		10.15	52.0	mg/L	0.70035	4.06	RA
* Iron, Dissolved	3/24/23 08:37	3/29/23 13:41		1.015	1.40	mg/L	0.008120	0.0406	
* Lithium, Dissolved	3/24/23 08:37	3/29/23 13:41		1.015	0.0304	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	3/24/23 08:37	3/29/23 13:41		1.015	17.4	mg/L	0.021315	0.406	
* Molybdenum, Dissolved	3/24/23 08:37	3/29/23 13:41		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Dissolved (calc.)	3/24/23 08:37	3/29/23 13:41		1	31.7	mg/L			
* Silicon, Dissolved	3/24/23 08:37	3/29/23 13:41		1.015	14.8	mg/L	0.02030	0.25375	
* Sodium, Dissolved	3/24/23 08:37	3/29/23 13:41		1.015	15.1	mg/L	0.04060	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/24/23 11:57	3/30/23 09:14		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Total	3/24/23 11:57	3/27/23 13:35		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Total	3/24/23 11:57	3/27/23 13:35		1.015	0.00148	mg/L	0.000112	0.000203	
* Barium, Total	3/24/23 11:57	3/30/23 09:14		1.015	0.120	mg/L	0.000508	0.001015	
* Beryllium, Total	3/24/23 11:57	3/27/23 13:35		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	3/24/23 11:57	3/30/23 09:14		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	3/24/23 11:57	3/27/23 13:35		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	3/24/23 11:57	3/27/23 13:35		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	3/24/23 11:57	3/27/23 13:35		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	3/24/23 11:57	3/27/23 13:35		1.015	0.0787	mg/L	0.000152	0.001015	

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

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

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

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-11R

Location Code: WMWGORAP
Collected: 3/22/23 14:55
Customer ID:
Submittal Date: 3/23/23 10:14

Laboratory ID Number: BD05875

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	3/24/23 11:57	3/27/23 13:35		1.015	1.29	mg/L	0.169505	0.5075	
* Selenium, Total	3/24/23 11:57	3/27/23 13:35		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	3/24/23 11:57	3/27/23 13:35		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	3/24/23 08:37	3/24/23 12:05		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	3/24/23 08:37	3/24/23 12:05		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Dissolved	3/24/23 08:37	3/24/23 12:05		1.015	0.000911	mg/L	0.000112	0.000203	
* Barium, Dissolved	3/24/23 08:37	3/24/23 12:05		1.015	0.110	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	3/24/23 08:37	3/24/23 12:05		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	3/24/23 08:37	3/24/23 12:05		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	3/24/23 08:37	3/24/23 12:05		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	3/24/23 08:37	3/24/23 12:05		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Dissolved	3/24/23 08:37	3/24/23 12:05		1.015	0.0000786	mg/L	0.000068	0.000203	J
* Manganese, Dissolved	3/24/23 08:37	3/24/23 12:05		1.015	0.0729	mg/L	0.000152	0.001015	
* Potassium, Dissolved	3/24/23 08:37	3/24/23 12:05		1.015	1.32	mg/L	0.169505	0.5075	
* Selenium, Dissolved	3/24/23 08:37	3/24/23 12:05		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	3/24/23 08:37	3/24/23 12:05		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ELH***								
* Mercury, Total by CVAA	3/27/23 17:52	3/28/23 00:11		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	3/24/23 11:35	3/24/23 11:35		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
* Alkalinity to pH 4.5	4/4/23 15:54	4/4/23 17:47		1	178	mg CaCO3/L		0.10	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	3/24/23 09:08	3/28/23 10:02		1	277	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
* Bicarbonate Alkalinity, (calc.)	4/4/23 15:54	4/4/23 17:47		1	178	mg CaCO3/L		1	
* Carbonate Alkalinity, (calc.)	4/4/23 15:54	4/4/23 17:47		1	Not Detected	mg CaCO3/L		0.5	
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	3/23/23 23:56	3/23/23 23:56		1	3.34	mg/L	1.00	2	

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

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

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

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-11R

Location Code: WMWGORAP
Collected: 3/22/23 14:55
Customer ID:
Submittal Date: 3/23/23 10:14

Laboratory ID Number: BD05875

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: CES***								
* Chloride	3/24/23 11:54	3/24/23 11:54		1	4.39	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: CES***								
* Fluoride	3/28/23 11:15	3/28/23 11:15		1	0.0999	mg/L	0.06	0.125	J
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	4/4/23 14:18	4/4/23 14:18		2	45.6	mg/L	1.2	4	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	3/22/23 14:50	3/22/23 14:50			431.37	uS/cm			FA
pH	3/22/23 14:50	3/22/23 14:50			6.69	SU			FA
Temperature	3/22/23 14:50	3/22/23 14:50			17.52	C			FA
Turbidity	3/22/23 14:50	3/22/23 14:50			9.9	NTU			FA
Sulfide	3/22/23 14:50	3/22/23 14:50			0	mg/L			FA

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

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

Reported: 5/3/2023
Version: 3.5
COA_CCR

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/22/23 14:55
Customer ID:
Delivery Date: 3/23/23 10:14

Description: Gorgas Ash Pond - MW-11R

Laboratory ID Number: BD05875

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD05875	Aluminum, Dissolved	mg/L	-0.0000282	0.0198	0.100	0.0988	0.0991	0.0958	0.0850 to 0.115	98.8	70.0 to 130	0.303	20.0
BD05876	Aluminum, Total	mg/L	0.000166	0.0198	0.100	0.100	0.104	0.0993	0.0850 to 0.115	100	70.0 to 130	3.92	20.0
BD05875	Antimony, Dissolved	mg/L	0.000252	0.00100	0.100	0.0903	0.0913	0.0896	0.0850 to 0.115	90.3	70.0 to 130	1.10	20.0
BD05876	Antimony, Total	mg/L	0.000485	0.00100	0.100	0.0936	0.0939	0.0932	0.0850 to 0.115	93.6	70.0 to 130	0.320	20.0
BD05875	Arsenic, Dissolved	mg/L	-0.0000037	0.000200	0.100	0.0951	0.0984	0.0944	0.0850 to 0.115	94.2	70.0 to 130	3.41	20.0
BD05876	Arsenic, Total	mg/L	0.0000429	0.000200	0.100	0.100	0.102	0.101	0.0850 to 0.115	100	70.0 to 130	1.98	20.0
BD05875	Barium, Dissolved	mg/L	-0.0000258	0.00100	0.100	0.205	0.204	0.0950	0.0850 to 0.115	95.0	70.0 to 130	0.489	20.0
BD05876	Barium, Total	mg/L	-0.0000188	0.00100	0.100	0.111	0.109	0.109	0.0850 to 0.115	111	70.0 to 130	1.82	20.0
BD05875	Beryllium, Dissolved	mg/L	0.0000000	0.000880	0.100	0.0894	0.0914	0.0891	0.0850 to 0.115	89.4	70.0 to 130	2.21	20.0
BD05876	Beryllium, Total	mg/L	0.0000077	0.000880	0.100	0.102	0.102	0.102	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BD05875	Boron, Dissolved	mg/L	-0.00023	0.0650	1.00	1.14	1.15	0.980	0.850 to 1.15	101	70.0 to 130	0.873	20.0
BD05876	Boron, Total	mg/L	-0.000292	0.0650	1.00	1.01	1.01	1.00	0.850 to 1.15	101	70.0 to 130	0.00	20.0
BD05875	Cadmium, Dissolved	mg/L	0.0000000	0.000147	0.100	0.0964	0.0977	0.0974	0.0850 to 0.115	96.4	70.0 to 130	1.34	20.0
BD05876	Cadmium, Total	mg/L	0.0000024	0.000147	0.100	0.0973	0.0957	0.0971	0.0850 to 0.115	97.3	70.0 to 130	1.66	20.0
BD05875	Calcium, Dissolved	mg/L	-0.0125	0.152	5.00	52.0	49.1	4.73	4.25 to 5.75	0.00	70.0 to 130	5.74	20.0
BD05876	Calcium, Total	mg/L	0.00446	0.152	5.00	4.75	4.78	4.73	4.25 to 5.75	93.3	70.0 to 130	0.630	20.0
BD05876	Chloride	mg/L	0.159	1.00	10.0	10.0	10.1	9.85	9.00 to 11.0	100	80.0 to 120	0.995	20.0
BD05875	Chromium, Dissolved	mg/L	-0.0000337	0.000440	0.100	0.0957	0.0966	0.0957	0.0850 to 0.115	95.7	70.0 to 130	0.936	20.0
BD05876	Chromium, Total	mg/L	-0.0000359	0.000440	0.100	0.102	0.104	0.102	0.0850 to 0.115	102	70.0 to 130	1.94	20.0
BD05875	Cobalt, Dissolved	mg/L	-0.0000117	0.000147	0.100	0.0959	0.0970	0.0963	0.0850 to 0.115	95.9	70.0 to 130	1.14	20.0
BD05876	Cobalt, Total	mg/L	-0.000144	0.000147	0.100	0.107	0.108	0.107	0.0850 to 0.115	107	70.0 to 130	0.930	20.0
BD05876	Fluoride	mg/L	-0.00116	0.125	2.50	2.65	2.67	2.62	2.25 to 2.75	106	80.0 to 120	0.752	20.0
BD05875	Iron, Dissolved	mg/L	0.00104	0.0176	0.2	1.59	1.60	0.204	0.170 to 0.230	95.0	70.0 to 130	0.627	20.0
BD05876	Iron, Total	mg/L	-0.000107	0.0176	0.2	0.200	0.204	0.199	0.170 to 0.230	100	70.0 to 130	1.98	20.0

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

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/22/23 14:55
Customer ID:
Delivery Date: 3/23/23 10:14

Description: Gorgas Ash Pond - MW-11R

Laboratory ID Number: BD05875

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD05875	Lead, Dissolved	mg/L	0.0000024	0.000147	0.100	0.0960	0.101	0.0980	0.0850 to 0.115	95.9	70.0 to 130	5.08	20.0
BD05876	Lead, Total	mg/L	0.0000025	0.000147	0.100	0.107	0.107	0.105	0.0850 to 0.115	107	70.0 to 130	0.00	20.0
BD05875	Lithium, Dissolved	mg/L	-0.000051	0.0154	0.200	0.234	0.235	0.204	0.170 to 0.230	102	70.0 to 130	0.426	20.0
BD05876	Lithium, Total	mg/L	0.00180	0.0154	0.200	0.205	0.202	0.203	0.170 to 0.230	102	70.0 to 130	1.47	20.0
BD05875	Magnesium, Dissolved	mg/L	0.00788	0.0462	5.00	22.4	22.6	4.91	4.25 to 5.75	100	70.0 to 130	0.889	20.0
BD05876	Magnesium, Total	mg/L	0.000812	0.0462	5.00	4.96	4.92	4.93	4.25 to 5.75	98.7	70.0 to 130	0.810	20.0
BD05875	Manganese, Dissolved	mg/L	0.0000601	0.00033	0.100	0.171	0.173	0.0980	0.0850 to 0.115	98.1	70.0 to 130	1.16	20.0
BD05876	Manganese, Total	mg/L	0.0000127	0.00033	0.100	0.104	0.107	0.106	0.0850 to 0.115	104	70.0 to 130	2.84	20.0
BD05876	Mercury, Total by CVAA	mg/L	-5.000E-05	0.000500	0.004	0.0039	0.00395	0.00392	0.00340 to 0.00460	97.5	70.0 to 130	1.27	20.0
BD05875	Molybdenum, Dissolved	mg/L	0.000261	0.0100	0.2	0.200	0.203	0.200	0.170 to 0.230	100	70.0 to 130	1.49	20.0
BD05876	Molybdenum, Total	mg/L	0.000	0.0100	0.2	0.202	0.203	0.200	0.170 to 0.230	101	70.0 to 130	0.494	20.0
BD05875	Potassium, Dissolved	mg/L	0.0321	0.367	10.0	11.4	11.5	9.95	8.50 to 11.5	101	70.0 to 130	0.873	20.0
BD05876	Potassium, Total	mg/L	0.00835	0.367	10.0	10.1	10.2	9.87	8.50 to 11.5	101	70.0 to 130	0.985	20.0
BD05875	Selenium, Dissolved	mg/L	0.000109	0.00100	0.100	0.0990	0.0982	0.100	0.0850 to 0.115	99.0	70.0 to 130	0.811	20.0
BD05876	Selenium, Total	mg/L	0.0000090	0.00100	0.100	0.102	0.105	0.103	0.0850 to 0.115	102	70.0 to 130	2.90	20.0
BD05875	Silicon, Dissolved	mg/L	-0.00143	0.0440	1.00	15.6	15.7	0.978	0.850 to 1.15	80.0	70.0 to 130	0.639	20.0
BD05876	Silicon, Total	mg/L	0.000008	0.0440	1.00	0.983	0.984	0.989	0.850 to 1.15	98.3	70.0 to 130	0.102	20.0
BD05875	Sodium, Dissolved	mg/L	0.0110	0.0880	5.00	20.0	20.2	4.88	4.25 to 5.75	98.0	70.0 to 130	0.995	20.0
BD05876	Sodium, Total	mg/L	-0.000662	0.0880	5.00	4.79	4.77	4.76	4.25 to 5.75	95.8	70.0 to 130	0.418	20.0
BD06131	Sulfate	mg/L	0.205	2.0	20.0	37.5	37.1	20.3	18.0 to 22.0	100	80.0 to 120	1.07	20.0
BD05875	Thallium, Dissolved	mg/L	-0.0000089	0.000147	0.100	0.0959	0.102	0.0982	0.0850 to 0.115	95.9	70.0 to 130	6.16	20.0
BD05876	Thallium, Total	mg/L	-0.000140	0.000147	0.100	0.108	0.107	0.106	0.0850 to 0.115	108	70.0 to 130	0.930	20.0
BD05876	Total Organic Carbon	mg/L	0.0116	1.00	10.0	10.3	10.6	10.1		103	80.0 to 120	2.87	20.0

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

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/22/23 14:55
Customer ID:
Delivery Date: 3/23/23 10:14

Description: Gorgas Ash Pond - MW-11R

Laboratory ID Number: BD05875

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD05875	Alkalinity to pH 4.5	mg CaCO3/L					176	50.6	45.0 to 55.0			1.13	10.0
BD05876	Nitrogen, Nitrate/Nitrite	mg/L as N	0.06	0.200	2.00	2.06	0.039	2.15	1.80 to 2.20	103	90.0 to 110	0.00	15.0
BD05875	Solids, Dissolved	mg/L	0.0000	25.0			276	55.0	40.0 to 60.0			0.362	10.0

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

Reported: 5/3/2023
Version: 3.5
COA_CCR

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

Certificate Of Analysis

Description: Gorgas Ash Pond Field Blank-4

Location Code: WMWGORAPFB
Collected: 3/22/23 15:20
Customer ID:
Submittal Date: 3/23/23 10:14

Laboratory ID Number: BD05876

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7		***Analyst: ABB***			***Preparation Method: EPA 1638***				
* Boron, Total	3/24/23 11:57	3/31/23 12:53		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	3/24/23 11:57	3/31/23 12:53		1.015	0.0832	mg/L	0.070035	0.406	J
* Iron, Total	3/24/23 11:57	3/31/23 12:53		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Total	3/24/23 11:57	3/31/23 12:53		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	3/24/23 11:57	3/31/23 12:53		1.015	0.0248	mg/L	0.021315	0.406	J
* Molybdenum, Total	3/24/23 11:57	3/31/23 12:53		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Total (calc.)	3/24/23 11:57	3/31/23 12:53		1	Not Detected	mg/L			
* Silicon, Total	3/24/23 11:57	3/31/23 12:53		1.015	Not Detected	mg/L	0.02030	0.25375	U
* Sodium, Total	3/24/23 11:57	4/6/23 10:45		1.015	Not Detected	mg/L	0.04060	0.406	U
Analytical Method: EPA 200.8		***Analyst: DLJ***			***Preparation Method: EPA 1638***				
* Antimony, Total	3/24/23 11:57	3/30/23 09:18		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Total	3/24/23 11:57	3/27/23 13:39		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Total	3/24/23 11:57	3/27/23 13:39		1.015	Not Detected	mg/L	0.000112	0.000203	U
* Barium, Total	3/24/23 11:57	3/30/23 09:18		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Beryllium, Total	3/24/23 11:57	3/27/23 13:39		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	3/24/23 11:57	3/30/23 09:18		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	3/24/23 11:57	3/27/23 13:39		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	3/24/23 11:57	3/27/23 13:39		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	3/24/23 11:57	3/27/23 13:39		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	3/24/23 11:57	3/27/23 13:39		1.015	Not Detected	mg/L	0.000152	0.001015	U
* Potassium, Total	3/24/23 11:57	3/27/23 13:39		1.015	Not Detected	mg/L	0.169505	0.5075	U
* Selenium, Total	3/24/23 11:57	3/27/23 13:39		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	3/24/23 11:57	3/27/23 13:39		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1		***Analyst: ELH***							
* Mercury, Total by CVAA	3/27/23 17:52	3/28/23 00:15		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2		***Analyst: SC***							
* Nitrogen, Nitrate/Nitrite	3/24/23 11:36	3/24/23 11:36		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2540C		***Analyst: CNJ***							
* Solids, Dissolved	3/24/23 09:08	3/28/23 10:02		1	Not Detected	mg/L		25	U

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

Comments:

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

Certificate Of Analysis

Description: Gorgas Ash Pond Field Blank-4

Location Code: WMWGORAPFB
Collected: 3/22/23 15:20
Customer ID:
Submittal Date: 3/23/23 10:14

Laboratory ID Number: BD05876

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	3/24/23 00:12	3/24/23 00:12		1	Not Detected	mg/L	1.00	2	U
Analytical Method: SM4500Cl E	***Analyst: CES***								
* Chloride	3/24/23 11:55	3/24/23 11:55		1	Not Detected	mg/L	0.50	1	U
Analytical Method: SM4500F G 2017	***Analyst: CES***								
* Fluoride	3/28/23 11:16	3/28/23 11:16		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	4/4/23 14:08	4/4/23 14:08		1	Not Detected	mg/L	0.6	2	U

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

Comments:

Reported: 5/3/2023
Version: 3.5
COA_CCR

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

Batch QC Summary

Customer Account: WMWGORAPFB
Sample Date: 3/22/23 15:20
Customer ID:
Delivery Date: 3/23/23 10:14

Description: Gorgas Ash Pond Field Blank-4

Laboratory ID Number: BD05876

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD05876	Aluminum, Total	mg/L	0.000166	0.0198	0.100	0.100	0.104	0.0993	0.0850 to 0.115	100	70.0 to 130	3.92	20.0
BD05876	Antimony, Total	mg/L	0.000485	0.00100	0.100	0.0936	0.0939	0.0932	0.0850 to 0.115	93.6	70.0 to 130	0.320	20.0
BD05876	Arsenic, Total	mg/L	0.0000429	0.000200	0.100	0.100	0.102	0.101	0.0850 to 0.115	100	70.0 to 130	1.98	20.0
BD05876	Barium, Total	mg/L	-0.0000188	0.00100	0.100	0.111	0.109	0.109	0.0850 to 0.115	111	70.0 to 130	1.82	20.0
BD05876	Beryllium, Total	mg/L	0.0000077	0.000880	0.100	0.102	0.102	0.102	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BD05876	Boron, Total	mg/L	-0.000292	0.0650	1.00	1.01	1.01	1.00	0.850 to 1.15	101	70.0 to 130	0.00	20.0
BD05876	Cadmium, Total	mg/L	0.0000024	0.000147	0.100	0.0973	0.0957	0.0971	0.0850 to 0.115	97.3	70.0 to 130	1.66	20.0
BD05876	Calcium, Total	mg/L	0.00446	0.152	5.00	4.75	4.78	4.73	4.25 to 5.75	93.3	70.0 to 130	0.630	20.0
BD05876	Chloride	mg/L	0.159	1.00	10.0	10.0	10.1	9.85	9.00 to 11.0	100	80.0 to 120	0.995	20.0
BD05876	Chromium, Total	mg/L	-0.0000359	0.000440	0.100	0.102	0.104	0.102	0.0850 to 0.115	102	70.0 to 130	1.94	20.0
BD05876	Cobalt, Total	mg/L	-0.000144	0.000147	0.100	0.107	0.108	0.107	0.0850 to 0.115	107	70.0 to 130	0.930	20.0
BD05876	Fluoride	mg/L	-0.00116	0.125	2.50	2.65	2.67	2.62	2.25 to 2.75	106	80.0 to 120	0.752	20.0
BD05876	Iron, Total	mg/L	-0.000107	0.0176	0.2	0.200	0.204	0.199	0.170 to 0.230	100	70.0 to 130	1.98	20.0
BD05876	Lead, Total	mg/L	0.0000025	0.000147	0.100	0.107	0.107	0.105	0.0850 to 0.115	107	70.0 to 130	0.00	20.0
BD05876	Lithium, Total	mg/L	0.00180	0.0154	0.200	0.205	0.202	0.203	0.170 to 0.230	102	70.0 to 130	1.47	20.0
BD05876	Magnesium, Total	mg/L	0.000812	0.0462	5.00	4.96	4.92	4.93	4.25 to 5.75	98.7	70.0 to 130	0.810	20.0
BD05876	Manganese, Total	mg/L	0.0000127	0.00033	0.100	0.104	0.107	0.106	0.0850 to 0.115	104	70.0 to 130	2.84	20.0
BD05876	Mercury, Total by CVAA	mg/L	-5.000E-05	0.000500	0.004	0.0039	0.00395	0.00392	0.00340 to 0.00460	97.5	70.0 to 130	1.27	20.0
BD05876	Molybdenum, Total	mg/L	0.000	0.0100	0.2	0.202	0.203	0.200	0.170 to 0.230	101	70.0 to 130	0.494	20.0
BD05876	Potassium, Total	mg/L	0.00835	0.367	10.0	10.1	10.2	9.87	8.50 to 11.5	101	70.0 to 130	0.985	20.0
BD05876	Selenium, Total	mg/L	0.0000090	0.00100	0.100	0.102	0.105	0.103	0.0850 to 0.115	102	70.0 to 130	2.90	20.0
BD05876	Silicon, Total	mg/L	0.000008	0.0440	1.00	0.983	0.984	0.989	0.850 to 1.15	98.3	70.0 to 130	0.102	20.0
BD05876	Sodium, Total	mg/L	-0.000662	0.0880	5.00	4.79	4.77	4.76	4.25 to 5.75	95.8	70.0 to 130	0.418	20.0
BD06131	Sulfate	mg/L	0.205	2.0	20.0	37.5	37.1	20.3	18.0 to 22.0	100	80.0 to 120	1.07	20.0

Comments:

Reported: 5/3/2023
Version: 3.5
COA_CCR

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

Batch QC Summary

Customer Account: WMWGORAPFB
Sample Date: 3/22/23 15:20
Customer ID:
Delivery Date: 3/23/23 10:14

Description: Gorgas Ash Pond Field Blank-4

Laboratory ID Number: BD05876

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD05876	Thallium, Total	mg/L	-0.000140	0.000147	0.100	0.108	0.107	0.106	0.0850 to 0.115	108	70.0 to 130	0.930	20.0
BD05876	Total Organic Carbon	mg/L	0.0116	1.00	10.0	10.3	10.6	10.1		103	80.0 to 120	2.87	20.0

Comments:

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

Batch QC Summary

Customer Account: WMWGORAPFB
Sample Date: 3/22/23 15:20
Customer ID:
Delivery Date: 3/23/23 10:14

Description: Gorgas Ash Pond Field Blank-4

Laboratory ID Number: BD05876

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD05876	Nitrogen, Nitrate/Nitrite	mg/L as N	0.06	0.200	2.00	2.06	0.039	2.15	1.80 to 2.20	103	90.0 to 110	0.00	15.0
BD05875	Solids, Dissolved	mg/L	0.0000	25.0			276	55.0	40.0 to 60.0			0.362	10.0

Comments:

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

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-13R

Location Code: WMWGORAP
Collected: 3/27/23 12:05
Customer ID:
Submittal Date: 3/29/23 09:41

Laboratory ID Number: BD06130

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	3/31/23 06:13	4/4/23 12:05		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	3/31/23 06:13	4/4/23 12:05		1.015	32.1	mg/L	0.070035	0.406	
* Iron, Total	3/31/23 06:13	4/4/23 12:05		1.015	3.07	mg/L	0.008120	0.0406	
* Lithium, Total	3/31/23 06:13	4/4/23 12:05		1.015	0.0261	mg/L	0.007105	0.01999956	
* Magnesium, Total	3/31/23 06:13	4/4/23 12:05		1.015	13.2	mg/L	0.021315	0.406	
* Molybdenum, Total	3/31/23 06:13	4/4/23 12:05		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Total (calc.)	3/31/23 06:13	4/4/23 12:05		1	26.8	mg/L			
* Silicon, Total	3/31/23 06:13	4/4/23 12:05		1.015	12.5	mg/L	0.02030	0.25375	
* Sodium, Total	3/31/23 06:13	4/4/23 12:05		1.015	14.2	mg/L	0.04060	0.406	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	3/30/23 10:59	4/3/23 10:45		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Dissolved	3/30/23 10:59	4/3/23 10:45		1.015	32.6	mg/L	0.070035	0.406	
* Iron, Dissolved	3/30/23 10:59	4/3/23 10:45		1.015	1.03	mg/L	0.008120	0.0406	
* Lithium, Dissolved	3/30/23 10:59	4/3/23 10:45		1.015	0.0269	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	3/30/23 10:59	4/3/23 10:45		1.015	13.5	mg/L	0.021315	0.406	
* Molybdenum, Dissolved	3/30/23 10:59	4/3/23 10:45		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Dissolved (calc.)	3/30/23 10:59	4/3/23 10:45		1	26.5	mg/L			
* Silicon, Dissolved	3/30/23 10:59	4/3/23 10:45		1.015	12.4	mg/L	0.02030	0.25375	
* Sodium, Dissolved	3/30/23 10:59	4/3/23 10:45		1.015	15.2	mg/L	0.04060	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/31/23 06:13	3/31/23 13:03		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Total	3/31/23 06:13	3/31/23 13:03		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Total	3/31/23 06:13	3/31/23 13:03		1.015	0.0340	mg/L	0.000112	0.000203	
* Barium, Total	3/31/23 06:13	4/4/23 14:17		1.015	0.0685	mg/L	0.000508	0.001015	
* Beryllium, Total	3/31/23 06:13	3/31/23 13:03		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	3/31/23 06:13	3/31/23 13:03		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	3/31/23 06:13	3/31/23 13:03		1.015	0.000246	mg/L	0.000203	0.001015	J
* Cobalt, Total	3/31/23 06:13	3/31/23 13:03		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	3/31/23 06:13	3/31/23 13:03		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	3/31/23 06:13	3/31/23 13:03		1.015	0.0452	mg/L	0.000152	0.001015	

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

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

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

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-13R

Location Code: WMWGORAP
Collected: 3/27/23 12:05
Customer ID:
Submittal Date: 3/29/23 09:41

Laboratory ID Number: BD06130

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	3/31/23 06:13	3/31/23 13:03		1.015	1.33	mg/L	0.169505	0.5075	
* Selenium, Total	3/31/23 06:13	3/31/23 13:03		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	3/31/23 06:13	3/31/23 13:03		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	3/30/23 10:59	3/31/23 11:13		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	3/30/23 10:59	3/31/23 11:13		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Dissolved	3/30/23 10:59	3/31/23 11:13		1.015	0.0119	mg/L	0.000112	0.000203	
* Barium, Dissolved	3/30/23 10:59	4/4/23 12:26		1.015	0.0676	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	3/30/23 10:59	3/31/23 11:13		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	3/30/23 10:59	3/31/23 11:13		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	3/30/23 10:59	3/31/23 11:13		1.015	0.000225	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	3/30/23 10:59	3/31/23 11:13		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Dissolved	3/30/23 10:59	3/31/23 11:13		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	3/30/23 10:59	3/31/23 11:13		1.015	0.0455	mg/L	0.000152	0.001015	
* Potassium, Dissolved	3/30/23 10:59	3/31/23 11:13		1.015	1.32	mg/L	0.169505	0.5075	
* Selenium, Dissolved	3/30/23 10:59	3/31/23 11:13		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	3/30/23 10:59	3/31/23 11:13		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ELH***								
* Mercury, Total by CVAA	4/3/23 15:06	4/3/23 19:30		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	3/30/23 13:23	3/30/23 13:23		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
* Alkalinity to pH 4.5	4/7/23 12:25	4/7/23 15:29		1	117	mg CaCO3/L		0.10	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	3/29/23 12:30	3/30/23 13:47		1	200	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
* Bicarbonate Alkalinity, (calc.)	4/7/23 12:25	4/7/23 15:29		1	117	mg CaCO3/L		1	
* Carbonate Alkalinity, (calc.)	4/7/23 12:25	4/7/23 15:29		1	Not Detected	mg CaCO3/L		0.5	
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	4/3/23 14:48	4/3/23 14:48		1	Not Detected	mg/L	1.00	2	U

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

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

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

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-13R

Location Code: WMWGORAP
Collected: 3/27/23 12:05
Customer ID:
Submittal Date: 3/29/23 09:41

Laboratory ID Number: BD06130

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	3/30/23 11:33	3/30/23 11:33		1	11.4	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: CES***								
* Fluoride	3/30/23 14:40	3/30/23 14:40		1	0.180	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	4/4/23 14:09	4/4/23 14:09		1	33.1	mg/L	0.6	2	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	3/27/23 12:02	3/27/23 12:02			311.29	uS/cm			FA
pH	3/27/23 12:02	3/27/23 12:02			6.47	SU			FA
Temperature	3/27/23 12:02	3/27/23 12:02			20.13	C			FA
Turbidity	3/27/23 12:02	3/27/23 12:02			7.66	NTU			FA
Sulfide	3/27/23 12:02	3/27/23 12:02			0	mg/L			FA

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

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

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/27/23 12:05
Customer ID:
Delivery Date: 3/29/23 09:41

Description: Gorgas Ash Pond - MW-13R

Laboratory ID Number: BD06130

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD06140	Aluminum, Dissolved	mg/L	0.000167	0.0198	0.100	0.107	0.107	0.101	0.0850 to 0.115	107	70.0 to 130	0.00	20.0
BD06139	Aluminum, Total	mg/L	0.000866	0.0198	0.100	0.123	0.122	0.103	0.0850 to 0.115	101	70.0 to 130	0.816	20.0
BD06140	Antimony, Dissolved	mg/L	0.000464	0.00100	0.100	0.106	0.107	0.0983	0.0850 to 0.115	106	70.0 to 130	0.939	20.0
BD06139	Antimony, Total	mg/L	0.000272	0.00100	0.100	0.0988	0.0971	0.0970	0.0850 to 0.115	98.8	70.0 to 130	1.74	20.0
BD06140	Arsenic, Dissolved	mg/L	0.0000011	0.000200	0.100	0.104	0.104	0.0994	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BD06139	Arsenic, Total	mg/L	0.0000131	0.000200	0.100	0.0998	0.101	0.101	0.0850 to 0.115	99.6	70.0 to 130	1.20	20.0
BD06140	Barium, Dissolved	mg/L	0.0000037	0.00100	0.100	0.280	0.279	0.0988	0.0850 to 0.115	99.0	70.0 to 130	0.358	20.0
BD06139	Barium, Total	mg/L	0.0000151	0.00100	0.100	0.224	0.225	0.0998	0.0850 to 0.115	101	70.0 to 130	0.445	20.0
BD06140	Beryllium, Dissolved	mg/L	0.0000069	0.000880	0.100	0.103	0.103	0.103	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BD06139	Beryllium, Total	mg/L	0.0000208	0.000880	0.100	0.104	0.103	0.103	0.0850 to 0.115	104	70.0 to 130	0.966	20.0
BD06140	Boron, Dissolved	mg/L	-0.00131	0.0650	1.00	1.11	1.11	1.03	0.850 to 1.15	107	70.0 to 130	0.00	20.0
BD06139	Boron, Total	mg/L	-0.000121	0.0650	1.00	1.06	1.06	1.02	0.850 to 1.15	106	70.0 to 130	0.00	20.0
BD06140	Cadmium, Dissolved	mg/L	0.0000029	0.000147	0.100	0.110	0.109	0.110	0.0850 to 0.115	110	70.0 to 130	0.913	20.0
BD06139	Cadmium, Total	mg/L	0.0000055	0.000147	0.100	0.111	0.112	0.111	0.0850 to 0.115	111	70.0 to 130	0.897	20.0
BD06140	Calcium, Dissolved	mg/L	-0.0111	0.152	5.00	16.0	16.0	4.94	4.25 to 5.75	98.0	70.0 to 130	0.00	20.0
BD06139	Calcium, Total	mg/L	0.0239	0.152	5.00	8.69	8.79	5.03	4.25 to 5.75	95.8	70.0 to 130	1.14	20.0
BD06139	Chloride	mg/L	0.108	1.00	10.0	27.0	26.9	9.64	9.00 to 11.0	86.0	80.0 to 120	0.371	20.0
BD06140	Chromium, Dissolved	mg/L	-0.0000058	0.000440	0.100	0.103	0.101	0.0995	0.0850 to 0.115	103	70.0 to 130	1.96	20.0
BD06139	Chromium, Total	mg/L	0.0000641	0.000440	0.100	0.100	0.0993	0.102	0.0850 to 0.115	99.8	70.0 to 130	0.702	20.0
BD06140	Cobalt, Dissolved	mg/L	-0.0000184	0.000147	0.100	0.106	0.106	0.104	0.0850 to 0.115	106	70.0 to 130	0.00	20.0
BD06139	Cobalt, Total	mg/L	-0.0000182	0.000147	0.100	0.104	0.103	0.107	0.0850 to 0.115	104	70.0 to 130	0.966	20.0
BD06139	Fluoride	mg/L	-0.00208	0.125	2.50	2.81	2.84	2.71	2.25 to 2.75	106	80.0 to 120	1.06	20.0
BD06140	Iron, Dissolved	mg/L	-0.000147	0.0176	0.2	0.214	0.213	0.201	0.170 to 0.230	101	70.0 to 130	0.468	20.0
BD06139	Iron, Total	mg/L	-0.000394	0.0176	0.2	0.210	0.209	0.203	0.170 to 0.230	101	70.0 to 130	0.477	20.0

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

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/27/23 12:05
Customer ID:
Delivery Date: 3/29/23 09:41

Description: Gorgas Ash Pond - MW-13R

Laboratory ID Number: BD06130

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD06140	Lead, Dissolved	mg/L	0.0000079	0.000147	0.100	0.104	0.105	0.101	0.0850 to 0.115	104	70.0 to 130	0.957	20.0
BD06139	Lead, Total	mg/L	0.0000027	0.000147	0.100	0.102	0.101	0.105	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BD06140	Lithium, Dissolved	mg/L	0.000402	0.0154	0.200	0.264	0.261	0.199	0.170 to 0.230	107	70.0 to 130	1.14	20.0
BD06139	Lithium, Total	mg/L	0.000053	0.0154	0.200	0.248	0.247	0.199	0.170 to 0.230	102	70.0 to 130	0.404	20.0
BD06140	Magnesium, Dissolved	mg/L	0.000819	0.0462	5.00	8.76	8.75	4.93	4.25 to 5.75	99.2	70.0 to 130	0.114	20.0
BD06139	Magnesium, Total	mg/L	0.00266	0.0462	5.00	6.41	6.42	4.99	4.25 to 5.75	98.0	70.0 to 130	0.156	20.0
BD06140	Manganese, Dissolved	mg/L	0.0000691	0.00033	0.100	0.125	0.126	0.102	0.0850 to 0.115	102	70.0 to 130	0.797	20.0
BD06139	Manganese, Total	mg/L	0.0000240	0.00033	0.100	0.108	0.108	0.104	0.0850 to 0.115	100	70.0 to 130	0.00	20.0
BD06139	Mercury, Total by CVAA	mg/L	2.000E-05	0.000500	0.004	0.00389	0.00395	0.00395	0.00340 to 0.00460	97.2	70.0 to 130	1.53	20.0
BD06140	Molybdenum, Dissolved	mg/L	-0.000343	0.0100	0.2	0.229	0.230	0.200	0.170 to 0.230	101	70.0 to 130	0.436	20.0
BD06139	Molybdenum, Total	mg/L	0.000	0.0100	0.2	0.204	0.202	0.204	0.170 to 0.230	102	70.0 to 130	0.985	20.0
BD06140	Potassium, Dissolved	mg/L	0.0207	0.367	10.0	27.3	27.8	9.88	8.50 to 11.5	99.0	70.0 to 130	1.81	20.0
BD06139	Potassium, Total	mg/L	0.0175	0.367	10.0	10.8	10.9	10.1	8.50 to 11.5	94.9	70.0 to 130	0.922	20.0
BD06140	Selenium, Dissolved	mg/L	0.000215	0.00100	0.100	0.102	0.102	0.101	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BD06139	Selenium, Total	mg/L	0.0000690	0.00100	0.100	0.0442	0.0448	0.101	0.0850 to 0.115	44.2	70.0 to 130	1.35	20.0
BD06140	Silicon, Dissolved	mg/L	0.000678	0.0440	1.00	6.60	6.57	1.00	0.850 to 1.15	105	70.0 to 130	0.456	20.0
BD06139	Silicon, Total	mg/L	0.000389	0.0440	1.00	8.44	8.45	1.01	0.850 to 1.15	108	70.0 to 130	0.118	20.0
BD06140	Sodium, Dissolved	mg/L	0.000478	0.0880	5.00	324	347	4.79	4.25 to 5.75	-80.0	70.0 to 130	6.86	20.0
BD06139	Sodium, Total	mg/L	0.00674	0.0880	5.00	146	163	4.81	4.25 to 5.75	-100	70.0 to 130	11.0	20.0
BD06131	Sulfate	mg/L	0.205	2.0	20.0	37.5	37.1	20.3	18.0 to 22.0	100	80.0 to 120	1.07	20.0
BD06140	Thallium, Dissolved	mg/L	-0.0000325	0.000147	0.100	0.104	0.105	0.106	0.0850 to 0.115	104	70.0 to 130	0.957	20.0
BD06139	Thallium, Total	mg/L	-0.0000162	0.000147	0.100	0.0996	0.0969	0.102	0.0850 to 0.115	99.6	70.0 to 130	2.75	20.0
BD06130	Total Organic Carbon	mg/L	0.0814	1.00	10.0	10.2	10.7	24.6		102	80.0 to 120	4.78	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/27/23 12:05
Customer ID:
Delivery Date: 3/29/23 09:41

Description: Gorgas Ash Pond - MW-13R

Laboratory ID Number: BD06130

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD06144	Alkalinity to pH 4.5	mg CaCO3/L					207	50.8	45.0 to 55.0			0.962	10.0
BD06139	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.02	0.200	2.00	1.97	0.076	2.04	1.80 to 2.20	98.5	90.0 to 110	0.00	15.0
BD06136	Solids, Dissolved	mg/L	1.00	25.0			544	50.0	40.0 to 60.0			1.82	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-10R

Location Code: WMWGORAP
Collected: 3/27/23 14:07
Customer ID:
Submittal Date: 3/29/23 09:41

Laboratory ID Number: BD06131

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	3/31/23 06:13	4/4/23 12:08		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	3/31/23 06:13	4/4/23 15:30		10.15	45.3	mg/L	0.70035	4.06	
* Iron, Total	3/31/23 06:13	4/4/23 12:08		1.015	1.64	mg/L	0.008120	0.0406	
* Lithium, Total	3/31/23 06:13	4/4/23 12:08		1.015	0.0362	mg/L	0.007105	0.01999956	
* Magnesium, Total	3/31/23 06:13	4/4/23 12:08		1.015	16.0	mg/L	0.021315	0.406	
* Molybdenum, Total	3/31/23 06:13	4/4/23 12:08		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Total (calc.)	3/31/23 06:13	4/4/23 12:08		1	26.1	mg/L			
* Silicon, Total	3/31/23 06:13	4/4/23 12:08		1.015	12.2	mg/L	0.02030	0.25375	
* Sodium, Total	3/31/23 06:13	4/4/23 12:08		1.015	32.4	mg/L	0.04060	0.406	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	3/30/23 10:59	4/3/23 10:48		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Dissolved	3/30/23 10:59	4/3/23 12:51		10.15	41.9	mg/L	0.70035	4.06	
* Iron, Dissolved	3/30/23 10:59	4/3/23 10:48		1.015	0.370	mg/L	0.008120	0.0406	
* Lithium, Dissolved	3/30/23 10:59	4/3/23 10:48		1.015	0.0368	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	3/30/23 10:59	4/3/23 10:48		1.015	16.1	mg/L	0.021315	0.406	
* Molybdenum, Dissolved	3/30/23 10:59	4/3/23 10:48		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Dissolved (calc.)	3/30/23 10:59	4/3/23 10:48		1	25.9	mg/L			
* Silicon, Dissolved	3/30/23 10:59	4/3/23 10:48		1.015	12.1	mg/L	0.02030	0.25375	
* Sodium, Dissolved	3/30/23 10:59	4/3/23 10:48		1.015	33.2	mg/L	0.04060	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/31/23 06:13	3/31/23 13:06		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Total	3/31/23 06:13	3/31/23 13:06		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Total	3/31/23 06:13	3/31/23 13:06		1.015	0.00277	mg/L	0.000112	0.000203	
* Barium, Total	3/31/23 06:13	4/4/23 14:20		1.015	0.587	mg/L	0.000508	0.001015	
* Beryllium, Total	3/31/23 06:13	3/31/23 13:06		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	3/31/23 06:13	3/31/23 13:06		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	3/31/23 06:13	3/31/23 13:06		1.015	0.000235	mg/L	0.000203	0.001015	J
* Cobalt, Total	3/31/23 06:13	3/31/23 13:06		1.015	0.000682	mg/L	0.000068	0.000203	
* Lead, Total	3/31/23 06:13	3/31/23 13:06		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	3/31/23 06:13	3/31/23 13:06		1.015	0.115	mg/L	0.000152	0.001015	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-10R

Location Code: WMWGORAP
Collected: 3/27/23 14:07
Customer ID:
Submittal Date: 3/29/23 09:41

Laboratory ID Number: BD06131

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	3/31/23 06:13	3/31/23 13:06		1.015	5.88	mg/L	0.169505	0.5075	
* Selenium, Total	3/31/23 06:13	3/31/23 13:06		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	3/31/23 06:13	3/31/23 13:06		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	3/30/23 10:59	3/31/23 11:16		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	3/30/23 10:59	3/31/23 11:16		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Dissolved	3/30/23 10:59	3/31/23 11:16		1.015	0.000225	mg/L	0.000112	0.000203	
* Barium, Dissolved	3/30/23 10:59	4/4/23 12:30		1.015	0.539	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	3/30/23 10:59	3/31/23 11:16		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	3/30/23 10:59	3/31/23 11:16		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	3/30/23 10:59	3/31/23 11:16		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	3/30/23 10:59	3/31/23 11:16		1.015	0.000230	mg/L	0.000068	0.000203	
* Lead, Dissolved	3/30/23 10:59	3/31/23 11:16		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	3/30/23 10:59	3/31/23 11:16		1.015	0.0629	mg/L	0.000152	0.001015	
* Potassium, Dissolved	3/30/23 10:59	3/31/23 11:16		1.015	5.94	mg/L	0.169505	0.5075	
* Selenium, Dissolved	3/30/23 10:59	3/31/23 11:16		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	3/30/23 10:59	3/31/23 11:16		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ELH***								
* Mercury, Total by CVAA	4/3/23 15:06	4/3/23 19:34		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	3/30/23 13:25	3/30/23 13:25		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
* Alkalinity to pH 4.5	4/7/23 12:25	4/7/23 15:29		1	197	mg CaCO3/L		0.10	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	3/29/23 12:30	3/30/23 13:47		1	266	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
* Bicarbonate Alkalinity, (calc.)	4/7/23 12:25	4/7/23 15:29		1	196	mg CaCO3/L		1	
* Carbonate Alkalinity, (calc.)	4/7/23 12:25	4/7/23 15:29		1	0.533	mg CaCO3/L		0.5	
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	4/3/23 12:29	4/3/23 12:29		1	Not Detected	mg/L	1.00	2	U

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-10R

Location Code: WMWGORAP
Collected: 3/27/23 14:07
Customer ID:
Submittal Date: 3/29/23 09:41

Laboratory ID Number: BD06131

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	3/30/23 11:34	3/30/23 11:34		1	19.3	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: CES***								
* Fluoride	3/30/23 14:41	3/30/23 14:41		1	0.283	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	4/4/23 14:11	4/4/23 14:11		1	17.5	mg/L	0.6	2	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	3/27/23 14:04	3/27/23 14:04			459.61	uS/cm			FA
pH	3/27/23 14:04	3/27/23 14:04			6.68	SU			FA
Temperature	3/27/23 14:04	3/27/23 14:04			19.48	C			FA
Turbidity	3/27/23 14:04	3/27/23 14:04			3.52	NTU			FA
Sulfide	3/27/23 14:04	3/27/23 14:04			0	mg/L			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 5/3/2023
Version: 3.5
COA_CCR

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/27/23 14:07
Customer ID:
Delivery Date: 3/29/23 09:41

Description: Gorgas Ash Pond - MW-10R

Laboratory ID Number: BD06131

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD06140	Aluminum, Dissolved	mg/L	0.000167	0.0198	0.100	0.107	0.107	0.101	0.0850 to 0.115	107	70.0 to 130	0.00	20.0
BD06139	Aluminum, Total	mg/L	0.000866	0.0198	0.100	0.123	0.122	0.103	0.0850 to 0.115	101	70.0 to 130	0.816	20.0
BD06140	Antimony, Dissolved	mg/L	0.000464	0.00100	0.100	0.106	0.107	0.0983	0.0850 to 0.115	106	70.0 to 130	0.939	20.0
BD06139	Antimony, Total	mg/L	0.000272	0.00100	0.100	0.0988	0.0971	0.0970	0.0850 to 0.115	98.8	70.0 to 130	1.74	20.0
BD06140	Arsenic, Dissolved	mg/L	0.0000011	0.000200	0.100	0.104	0.104	0.0994	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BD06139	Arsenic, Total	mg/L	0.0000131	0.000200	0.100	0.0998	0.101	0.101	0.0850 to 0.115	99.6	70.0 to 130	1.20	20.0
BD06140	Barium, Dissolved	mg/L	0.0000037	0.00100	0.100	0.280	0.279	0.0988	0.0850 to 0.115	99.0	70.0 to 130	0.358	20.0
BD06139	Barium, Total	mg/L	0.0000151	0.00100	0.100	0.224	0.225	0.0998	0.0850 to 0.115	101	70.0 to 130	0.445	20.0
BD06140	Beryllium, Dissolved	mg/L	0.0000069	0.000880	0.100	0.103	0.103	0.103	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BD06139	Beryllium, Total	mg/L	0.0000208	0.000880	0.100	0.104	0.103	0.103	0.0850 to 0.115	104	70.0 to 130	0.966	20.0
BD06140	Boron, Dissolved	mg/L	-0.00131	0.0650	1.00	1.11	1.11	1.03	0.850 to 1.15	107	70.0 to 130	0.00	20.0
BD06139	Boron, Total	mg/L	-0.000121	0.0650	1.00	1.06	1.06	1.02	0.850 to 1.15	106	70.0 to 130	0.00	20.0
BD06140	Cadmium, Dissolved	mg/L	0.0000029	0.000147	0.100	0.110	0.109	0.110	0.0850 to 0.115	110	70.0 to 130	0.913	20.0
BD06139	Cadmium, Total	mg/L	0.0000055	0.000147	0.100	0.111	0.112	0.111	0.0850 to 0.115	111	70.0 to 130	0.897	20.0
BD06140	Calcium, Dissolved	mg/L	-0.0111	0.152	5.00	16.0	16.0	4.94	4.25 to 5.75	98.0	70.0 to 130	0.00	20.0
BD06139	Calcium, Total	mg/L	0.0239	0.152	5.00	8.69	8.79	5.03	4.25 to 5.75	95.8	70.0 to 130	1.14	20.0
BD06139	Chloride	mg/L	0.108	1.00	10.0	27.0	26.9	9.64	9.00 to 11.0	86.0	80.0 to 120	0.371	20.0
BD06140	Chromium, Dissolved	mg/L	-0.0000058	0.000440	0.100	0.103	0.101	0.0995	0.0850 to 0.115	103	70.0 to 130	1.96	20.0
BD06139	Chromium, Total	mg/L	0.0000641	0.000440	0.100	0.100	0.0993	0.102	0.0850 to 0.115	99.8	70.0 to 130	0.702	20.0
BD06140	Cobalt, Dissolved	mg/L	-0.0000184	0.000147	0.100	0.106	0.106	0.104	0.0850 to 0.115	106	70.0 to 130	0.00	20.0
BD06139	Cobalt, Total	mg/L	-0.0000182	0.000147	0.100	0.104	0.103	0.107	0.0850 to 0.115	104	70.0 to 130	0.966	20.0
BD06139	Fluoride	mg/L	-0.00208	0.125	2.50	2.81	2.84	2.71	2.25 to 2.75	106	80.0 to 120	1.06	20.0
BD06140	Iron, Dissolved	mg/L	-0.000147	0.0176	0.2	0.214	0.213	0.201	0.170 to 0.230	101	70.0 to 130	0.468	20.0
BD06139	Iron, Total	mg/L	-0.000394	0.0176	0.2	0.210	0.209	0.203	0.170 to 0.230	101	70.0 to 130	0.477	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/27/23 14:07
Customer ID:
Delivery Date: 3/29/23 09:41

Description: Gorgas Ash Pond - MW-10R

Laboratory ID Number: BD06131

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD06140	Lead, Dissolved	mg/L	0.0000079	0.000147	0.100	0.104	0.105	0.101	0.0850 to 0.115	104	70.0 to 130	0.957	20.0
BD06139	Lead, Total	mg/L	0.0000027	0.000147	0.100	0.102	0.101	0.105	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BD06140	Lithium, Dissolved	mg/L	0.000402	0.0154	0.200	0.264	0.261	0.199	0.170 to 0.230	107	70.0 to 130	1.14	20.0
BD06139	Lithium, Total	mg/L	0.000053	0.0154	0.200	0.248	0.247	0.199	0.170 to 0.230	102	70.0 to 130	0.404	20.0
BD06140	Magnesium, Dissolved	mg/L	0.000819	0.0462	5.00	8.76	8.75	4.93	4.25 to 5.75	99.2	70.0 to 130	0.114	20.0
BD06139	Magnesium, Total	mg/L	0.00266	0.0462	5.00	6.41	6.42	4.99	4.25 to 5.75	98.0	70.0 to 130	0.156	20.0
BD06140	Manganese, Dissolved	mg/L	0.0000691	0.00033	0.100	0.125	0.126	0.102	0.0850 to 0.115	102	70.0 to 130	0.797	20.0
BD06139	Manganese, Total	mg/L	0.0000240	0.00033	0.100	0.108	0.108	0.104	0.0850 to 0.115	100	70.0 to 130	0.00	20.0
BD06139	Mercury, Total by CVAA	mg/L	2.000E-05	0.000500	0.004	0.00389	0.00395	0.00395	0.00340 to 0.00460	97.2	70.0 to 130	1.53	20.0
BD06140	Molybdenum, Dissolved	mg/L	-0.000343	0.0100	0.2	0.229	0.230	0.200	0.170 to 0.230	101	70.0 to 130	0.436	20.0
BD06139	Molybdenum, Total	mg/L	0.000	0.0100	0.2	0.204	0.202	0.204	0.170 to 0.230	102	70.0 to 130	0.985	20.0
BD06140	Potassium, Dissolved	mg/L	0.0207	0.367	10.0	27.3	27.8	9.88	8.50 to 11.5	99.0	70.0 to 130	1.81	20.0
BD06139	Potassium, Total	mg/L	0.0175	0.367	10.0	10.8	10.9	10.1	8.50 to 11.5	94.9	70.0 to 130	0.922	20.0
BD06140	Selenium, Dissolved	mg/L	0.000215	0.00100	0.100	0.102	0.102	0.101	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BD06139	Selenium, Total	mg/L	0.0000690	0.00100	0.100	0.0442	0.0448	0.101	0.0850 to 0.115	44.2	70.0 to 130	1.35	20.0
BD06140	Silicon, Dissolved	mg/L	0.000678	0.0440	1.00	6.60	6.57	1.00	0.850 to 1.15	105	70.0 to 130	0.456	20.0
BD06139	Silicon, Total	mg/L	0.000389	0.0440	1.00	8.44	8.45	1.01	0.850 to 1.15	108	70.0 to 130	0.118	20.0
BD06140	Sodium, Dissolved	mg/L	0.000478	0.0880	5.00	324	347	4.79	4.25 to 5.75	-80.0	70.0 to 130	6.86	20.0
BD06139	Sodium, Total	mg/L	0.00674	0.0880	5.00	146	163	4.81	4.25 to 5.75	-100	70.0 to 130	11.0	20.0
BD06131	Sulfate	mg/L	0.205	2.0	20.0	37.5	37.1	20.3	18.0 to 22.0	100	80.0 to 120	1.07	20.0
BD06140	Thallium, Dissolved	mg/L	-0.0000325	0.000147	0.100	0.104	0.105	0.106	0.0850 to 0.115	104	70.0 to 130	0.957	20.0
BD06139	Thallium, Total	mg/L	-0.0000162	0.000147	0.100	0.0996	0.0969	0.102	0.0850 to 0.115	99.6	70.0 to 130	2.75	20.0
BD06130	Total Organic Carbon	mg/L	0.0814	1.00	10.0	10.2	10.7	24.6		102	80.0 to 120	4.78	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/27/23 14:07
Customer ID:
Delivery Date: 3/29/23 09:41

Description: Gorgas Ash Pond - MW-10R

Laboratory ID Number: BD06131

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD06144	Alkalinity to pH 4.5	mg CaCO3/L					207	50.8	45.0 to 55.0			0.962	10.0
BD06139	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.02	0.200	2.00	1.97	0.076	2.04	1.80 to 2.20	98.5	90.0 to 110	0.00	15.0
BD06136	Solids, Dissolved	mg/L	1.00	25.0			544	50.0	40.0 to 60.0			1.82	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 5/3/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-18VR

Location Code: WMWGORAP
Collected: 3/27/23 15:31
Customer ID:
Submittal Date: 3/29/23 09:41

Laboratory ID Number: BD06132

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	3/31/23 06:13	4/4/23 12:11		1.015	0.0477	mg/L	0.030000	0.1015	J
* Calcium, Total	3/31/23 06:13	4/4/23 12:11		1.015	2.12	mg/L	0.070035	0.406	
* Iron, Total	3/31/23 06:13	4/4/23 12:11		1.015	0.0830	mg/L	0.008120	0.0406	
* Lithium, Total	3/31/23 06:13	4/4/23 12:11		1.015	0.0536	mg/L	0.007105	0.01999956	
* Magnesium, Total	3/31/23 06:13	4/4/23 12:11		1.015	0.714	mg/L	0.021315	0.406	
* Molybdenum, Total	3/31/23 06:13	4/4/23 12:11		1.015	0.0495	mg/L	0.005075	0.01015	
* Silica, Total (calc.)	3/31/23 06:13	4/4/23 12:11		1	11.7	mg/L			
* Silicon, Total	3/31/23 06:13	4/4/23 12:11		1.015	5.45	mg/L	0.02030	0.25375	
* Sodium, Total	3/31/23 06:13	4/4/23 15:33		10.15	101	mg/L	0.4060	4.06	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	3/30/23 10:59	4/3/23 10:51		1.015	0.0475	mg/L	0.030000	0.1015	J
* Calcium, Dissolved	3/30/23 10:59	4/3/23 10:51		1.015	2.21	mg/L	0.070035	0.406	
* Iron, Dissolved	3/30/23 10:59	4/3/23 10:51		1.015	0.0857	mg/L	0.008120	0.0406	
* Lithium, Dissolved	3/30/23 10:59	4/3/23 10:51		1.015	0.0529	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	3/30/23 10:59	4/3/23 10:51		1.015	0.693	mg/L	0.021315	0.406	
* Molybdenum, Dissolved	3/30/23 10:59	4/3/23 10:51		1.015	0.0488	mg/L	0.005075	0.01015	
* Silica, Dissolved (calc.)	3/30/23 10:59	4/3/23 10:51		1	11.7	mg/L			
* Silicon, Dissolved	3/30/23 10:59	4/3/23 10:51		1.015	5.46	mg/L	0.02030	0.25375	
* Sodium, Dissolved	3/30/23 10:59	4/3/23 12:54		10.15	110	mg/L	0.4060	4.06	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/31/23 06:13	3/31/23 13:10		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Total	3/31/23 06:13	3/31/23 13:10		1.015	0.0115	mg/L	0.009135	0.05075	J
* Arsenic, Total	3/31/23 06:13	3/31/23 13:10		1.015	0.000422	mg/L	0.000112	0.000203	
* Barium, Total	3/31/23 06:13	4/4/23 14:24		1.015	0.115	mg/L	0.000508	0.001015	
* Beryllium, Total	3/31/23 06:13	3/31/23 13:10		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	3/31/23 06:13	3/31/23 13:10		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	3/31/23 06:13	3/31/23 13:10		1.015	0.000272	mg/L	0.000203	0.001015	J
* Cobalt, Total	3/31/23 06:13	3/31/23 13:10		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	3/31/23 06:13	3/31/23 13:10		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	3/31/23 06:13	3/31/23 13:10		1.015	0.00395	mg/L	0.000152	0.001015	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-18VR

Laboratory ID Number: BD06132

Location Code: WMWGORAP
Collected: 3/27/23 15:31
Customer ID:
Submittal Date: 3/29/23 09:41

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	3/31/23 06:13	3/31/23 13:10		1.015	0.918	mg/L	0.169505	0.5075	
* Selenium, Total	3/31/23 06:13	3/31/23 13:10		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	3/31/23 06:13	3/31/23 13:10		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	3/30/23 10:59	3/31/23 11:20		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	3/30/23 10:59	3/31/23 11:20		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Dissolved	3/30/23 10:59	3/31/23 11:20		1.015	0.000513	mg/L	0.000112	0.000203	
* Barium, Dissolved	3/30/23 10:59	4/4/23 12:33		1.015	0.114	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	3/30/23 10:59	3/31/23 11:20		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	3/30/23 10:59	3/31/23 11:20		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	3/30/23 10:59	3/31/23 11:20		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	3/30/23 10:59	3/31/23 11:20		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Dissolved	3/30/23 10:59	3/31/23 11:20		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	3/30/23 10:59	3/31/23 11:20		1.015	0.00405	mg/L	0.000152	0.001015	
* Potassium, Dissolved	3/30/23 10:59	3/31/23 11:20		1.015	0.961	mg/L	0.169505	0.5075	
* Selenium, Dissolved	3/30/23 10:59	3/31/23 11:20		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	3/30/23 10:59	3/31/23 11:20		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ELH***								
* Mercury, Total by CVAA	4/3/23 15:06	4/3/23 19:38		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	3/30/23 13:27	3/30/23 13:27		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
* Alkalinity to pH 4.5	4/7/23 12:25	4/7/23 15:29		1	223	mg CaCO3/L		0.10	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	3/29/23 12:30	3/30/23 13:47		1	256	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
* Bicarbonate Alkalinity, (calc.)	4/7/23 12:25	4/7/23 15:29		1	218	mg CaCO3/L		1	
* Carbonate Alkalinity, (calc.)	4/7/23 12:25	4/7/23 15:29		1	4.49	mg CaCO3/L		0.5	
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	4/3/23 12:46	4/3/23 12:46		1	Not Detected	mg/L	1.00	2	U

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-18VR

Location Code: WMWGORAP
Collected: 3/27/23 15:31
Customer ID:
Submittal Date: 3/29/23 09:41

Laboratory ID Number: BD06132

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	3/30/23 11:35	3/30/23 11:35		1	3.45	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: CES***								
* Fluoride	3/30/23 14:42	3/30/23 14:42		1	0.182	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	4/4/23 14:27	4/4/23 14:27		1	1.61	mg/L	0.6	2	J
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	3/27/23 15:28	3/27/23 15:28			408.93	uS/cm			FA
pH	3/27/23 15:28	3/27/23 15:28			8.03	SU			FA
Temperature	3/27/23 15:28	3/27/23 15:28			18.03	C			FA
Turbidity	3/27/23 15:28	3/27/23 15:28			2.25	NTU			FA
Sulfide	3/27/23 15:28	3/27/23 15:28			0	mg/L			FA

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 5/3/2023
Version: 3.5
COA_CCR

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/27/23 15:31
Customer ID:
Delivery Date: 3/29/23 09:41

Description: Gorgas Ash Pond - MW-18VR

Laboratory ID Number: BD06132

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD06140	Aluminum, Dissolved	mg/L	0.000167	0.0198	0.100	0.107	0.107	0.101	0.0850 to 0.115	107	70.0 to 130	0.00	20.0
BD06139	Aluminum, Total	mg/L	0.000866	0.0198	0.100	0.123	0.122	0.103	0.0850 to 0.115	101	70.0 to 130	0.816	20.0
BD06140	Antimony, Dissolved	mg/L	0.000464	0.00100	0.100	0.106	0.107	0.0983	0.0850 to 0.115	106	70.0 to 130	0.939	20.0
BD06139	Antimony, Total	mg/L	0.000272	0.00100	0.100	0.0988	0.0971	0.0970	0.0850 to 0.115	98.8	70.0 to 130	1.74	20.0
BD06140	Arsenic, Dissolved	mg/L	0.0000011	0.000200	0.100	0.104	0.104	0.0994	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BD06139	Arsenic, Total	mg/L	0.0000131	0.000200	0.100	0.0998	0.101	0.101	0.0850 to 0.115	99.6	70.0 to 130	1.20	20.0
BD06140	Barium, Dissolved	mg/L	0.0000037	0.00100	0.100	0.280	0.279	0.0988	0.0850 to 0.115	99.0	70.0 to 130	0.358	20.0
BD06139	Barium, Total	mg/L	0.0000151	0.00100	0.100	0.224	0.225	0.0998	0.0850 to 0.115	101	70.0 to 130	0.445	20.0
BD06140	Beryllium, Dissolved	mg/L	0.0000069	0.000880	0.100	0.103	0.103	0.103	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BD06139	Beryllium, Total	mg/L	0.0000208	0.000880	0.100	0.104	0.103	0.103	0.0850 to 0.115	104	70.0 to 130	0.966	20.0
BD06140	Boron, Dissolved	mg/L	-0.00131	0.0650	1.00	1.11	1.11	1.03	0.850 to 1.15	107	70.0 to 130	0.00	20.0
BD06139	Boron, Total	mg/L	-0.000121	0.0650	1.00	1.06	1.06	1.02	0.850 to 1.15	106	70.0 to 130	0.00	20.0
BD06140	Cadmium, Dissolved	mg/L	0.0000029	0.000147	0.100	0.110	0.109	0.110	0.0850 to 0.115	110	70.0 to 130	0.913	20.0
BD06139	Cadmium, Total	mg/L	0.0000055	0.000147	0.100	0.111	0.112	0.111	0.0850 to 0.115	111	70.0 to 130	0.897	20.0
BD06140	Calcium, Dissolved	mg/L	-0.0111	0.152	5.00	16.0	16.0	4.94	4.25 to 5.75	98.0	70.0 to 130	0.00	20.0
BD06139	Calcium, Total	mg/L	0.0239	0.152	5.00	8.69	8.79	5.03	4.25 to 5.75	95.8	70.0 to 130	1.14	20.0
BD06139	Chloride	mg/L	0.108	1.00	10.0	27.0	26.9	9.64	9.00 to 11.0	86.0	80.0 to 120	0.371	20.0
BD06140	Chromium, Dissolved	mg/L	-0.0000058	0.000440	0.100	0.103	0.101	0.0995	0.0850 to 0.115	103	70.0 to 130	1.96	20.0
BD06139	Chromium, Total	mg/L	0.0000641	0.000440	0.100	0.100	0.0993	0.102	0.0850 to 0.115	99.8	70.0 to 130	0.702	20.0
BD06140	Cobalt, Dissolved	mg/L	-0.0000184	0.000147	0.100	0.106	0.106	0.104	0.0850 to 0.115	106	70.0 to 130	0.00	20.0
BD06139	Cobalt, Total	mg/L	-0.0000182	0.000147	0.100	0.104	0.103	0.107	0.0850 to 0.115	104	70.0 to 130	0.966	20.0
BD06139	Fluoride	mg/L	-0.00208	0.125	2.50	2.81	2.84	2.71	2.25 to 2.75	106	80.0 to 120	1.06	20.0
BD06140	Iron, Dissolved	mg/L	-0.000147	0.0176	0.2	0.214	0.213	0.201	0.170 to 0.230	101	70.0 to 130	0.468	20.0
BD06139	Iron, Total	mg/L	-0.000394	0.0176	0.2	0.210	0.209	0.203	0.170 to 0.230	101	70.0 to 130	0.477	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/27/23 15:31
Customer ID:
Delivery Date: 3/29/23 09:41

Description: Gorgas Ash Pond - MW-18VR

Laboratory ID Number: BD06132

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD06140	Lead, Dissolved	mg/L	0.0000079	0.000147	0.100	0.104	0.105	0.101	0.0850 to 0.115	104	70.0 to 130	0.957	20.0
BD06139	Lead, Total	mg/L	0.0000027	0.000147	0.100	0.102	0.101	0.105	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BD06140	Lithium, Dissolved	mg/L	0.000402	0.0154	0.200	0.264	0.261	0.199	0.170 to 0.230	107	70.0 to 130	1.14	20.0
BD06139	Lithium, Total	mg/L	0.000053	0.0154	0.200	0.248	0.247	0.199	0.170 to 0.230	102	70.0 to 130	0.404	20.0
BD06140	Magnesium, Dissolved	mg/L	0.000819	0.0462	5.00	8.76	8.75	4.93	4.25 to 5.75	99.2	70.0 to 130	0.114	20.0
BD06139	Magnesium, Total	mg/L	0.00266	0.0462	5.00	6.41	6.42	4.99	4.25 to 5.75	98.0	70.0 to 130	0.156	20.0
BD06140	Manganese, Dissolved	mg/L	0.0000691	0.00033	0.100	0.125	0.126	0.102	0.0850 to 0.115	102	70.0 to 130	0.797	20.0
BD06139	Manganese, Total	mg/L	0.0000240	0.00033	0.100	0.108	0.108	0.104	0.0850 to 0.115	100	70.0 to 130	0.00	20.0
BD06139	Mercury, Total by CVAA	mg/L	2.000E-05	0.000500	0.004	0.00389	0.00395	0.00395	0.00340 to 0.00460	97.2	70.0 to 130	1.53	20.0
BD06140	Molybdenum, Dissolved	mg/L	-0.000343	0.0100	0.2	0.229	0.230	0.200	0.170 to 0.230	101	70.0 to 130	0.436	20.0
BD06139	Molybdenum, Total	mg/L	0.000	0.0100	0.2	0.204	0.202	0.204	0.170 to 0.230	102	70.0 to 130	0.985	20.0
BD06140	Potassium, Dissolved	mg/L	0.0207	0.367	10.0	27.3	27.8	9.88	8.50 to 11.5	99.0	70.0 to 130	1.81	20.0
BD06139	Potassium, Total	mg/L	0.0175	0.367	10.0	10.8	10.9	10.1	8.50 to 11.5	94.9	70.0 to 130	0.922	20.0
BD06140	Selenium, Dissolved	mg/L	0.000215	0.00100	0.100	0.102	0.102	0.101	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BD06139	Selenium, Total	mg/L	0.0000690	0.00100	0.100	0.0442	0.0448	0.101	0.0850 to 0.115	44.2	70.0 to 130	1.35	20.0
BD06140	Silicon, Dissolved	mg/L	0.000678	0.0440	1.00	6.60	6.57	1.00	0.850 to 1.15	105	70.0 to 130	0.456	20.0
BD06139	Silicon, Total	mg/L	0.000389	0.0440	1.00	8.44	8.45	1.01	0.850 to 1.15	108	70.0 to 130	0.118	20.0
BD06140	Sodium, Dissolved	mg/L	0.000478	0.0880	5.00	324	347	4.79	4.25 to 5.75	-80.0	70.0 to 130	6.86	20.0
BD06139	Sodium, Total	mg/L	0.00674	0.0880	5.00	146	163	4.81	4.25 to 5.75	-100	70.0 to 130	11.0	20.0
BD06141	Sulfate	mg/L	0.233	2.0	20.0	45.3	45.3	20.2	18.0 to 22.0	90.0	80.0 to 120	0.00	20.0
BD06140	Thallium, Dissolved	mg/L	-0.0000325	0.000147	0.100	0.104	0.105	0.106	0.0850 to 0.115	104	70.0 to 130	0.957	20.0
BD06139	Thallium, Total	mg/L	-0.0000162	0.000147	0.100	0.0996	0.0969	0.102	0.0850 to 0.115	99.6	70.0 to 130	2.75	20.0
BD06130	Total Organic Carbon	mg/L	0.0814	1.00	10.0	10.2	10.7	24.6		102	80.0 to 120	4.78	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/27/23 15:31
Customer ID:
Delivery Date: 3/29/23 09:41

Description: Gorgas Ash Pond - MW-18VR

Laboratory ID Number: BD06132

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD06144	Alkalinity to pH 4.5	mg CaCO3/L					207	50.8	45.0 to 55.0			0.962	10.0
BD06139	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.02	0.200	2.00	1.97	0.076	2.04	1.80 to 2.20	98.5	90.0 to 110	0.00	15.0
BD06136	Solids, Dissolved	mg/L	1.00	25.0			544	50.0	40.0 to 60.0			1.82	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond Equipment Blank-1

Location Code: WMWGORAPEB
Collected: 3/27/23 16:00
Customer ID:
Submittal Date: 3/29/23 09:41

Laboratory ID Number: BD06133

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7		***Analyst: ABB***			***Preparation Method: EPA 1638***				
* Boron, Total	3/31/23 06:13	4/4/23 12:15		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	3/31/23 06:13	4/4/23 12:15		1.015	Not Detected	mg/L	0.070035	0.406	U
* Iron, Total	3/31/23 06:13	4/4/23 12:15		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Total	3/31/23 06:13	4/4/23 12:15		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	3/31/23 06:13	4/4/23 12:15		1.015	Not Detected	mg/L	0.021315	0.406	U
* Molybdenum, Total	3/31/23 06:13	4/4/23 12:15		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Total (calc.)	3/31/23 06:13	4/4/23 12:15		1	Not Detected	mg/L			
* Silicon, Total	3/31/23 06:13	4/4/23 12:15		1.015	Not Detected	mg/L	0.02030	0.25375	U
* Sodium, Total	3/31/23 06:13	4/4/23 12:15		1.015	0.0408	mg/L	0.04060	0.406	J
Analytical Method: EPA 200.8		***Analyst: DLJ***			***Preparation Method: EPA 1638***				
* Antimony, Total	3/31/23 06:13	3/31/23 13:13		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Total	3/31/23 06:13	3/31/23 13:13		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Total	3/31/23 06:13	3/31/23 13:13		1.015	Not Detected	mg/L	0.000112	0.000203	U
* Barium, Total	3/31/23 06:13	4/4/23 14:27		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Beryllium, Total	3/31/23 06:13	3/31/23 13:13		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	3/31/23 06:13	3/31/23 13:13		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	3/31/23 06:13	3/31/23 13:13		1.015	0.000248	mg/L	0.000203	0.001015	J
* Cobalt, Total	3/31/23 06:13	3/31/23 13:13		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	3/31/23 06:13	3/31/23 13:13		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	3/31/23 06:13	3/31/23 13:13		1.015	Not Detected	mg/L	0.000152	0.001015	U
* Potassium, Total	3/31/23 06:13	3/31/23 13:13		1.015	Not Detected	mg/L	0.169505	0.5075	U
* Selenium, Total	3/31/23 06:13	3/31/23 13:13		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	3/31/23 06:13	3/31/23 13:13		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1		***Analyst: ELH***							
* Mercury, Total by CVAA	4/3/23 15:06	4/3/23 19:42		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2		***Analyst: SC***							
* Nitrogen, Nitrate/Nitrite	3/30/23 13:29	3/30/23 13:29		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2540C		***Analyst: CNJ***							
* Solids, Dissolved	3/29/23 12:30	3/30/23 13:47		1	Not Detected	mg/L		25	U

MDL's and RL's are adjusted for sample dilution, as applicable

Comments:

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond Equipment Blank-1

Location Code: WMWGORAPEB
Collected: 3/27/23 16:00
Customer ID:
Submittal Date: 3/29/23 09:41

Laboratory ID Number: BD06133

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	4/3/23 13:01	4/3/23 13:01		1	Not Detected	mg/L	1.00	2	U
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	3/30/23 11:36	3/30/23 11:36		1	Not Detected	mg/L	0.50	1	U
Analytical Method: SM4500F G 2017	***Analyst: CES***								
* Fluoride	3/30/23 14:43	3/30/23 14:43		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	4/4/23 14:28	4/4/23 14:28		1	Not Detected	mg/L	0.6	2	U

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments:

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAPEB
Sample Date: 3/27/23 16:00
Customer ID:
Delivery Date: 3/29/23 09:41

Description: Gorgas Ash Pond Equipment Blank-1

Laboratory ID Number: BD06133

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD06139	Aluminum, Total	mg/L	0.000866	0.0198	0.100	0.123	0.122	0.103	0.0850 to 0.115	101	70.0 to 130	0.816	20.0
BD06139	Antimony, Total	mg/L	0.000272	0.00100	0.100	0.0988	0.0971	0.0970	0.0850 to 0.115	98.8	70.0 to 130	1.74	20.0
BD06139	Arsenic, Total	mg/L	0.0000131	0.000200	0.100	0.0998	0.101	0.101	0.0850 to 0.115	99.6	70.0 to 130	1.20	20.0
BD06139	Barium, Total	mg/L	0.0000151	0.00100	0.100	0.224	0.225	0.0998	0.0850 to 0.115	101	70.0 to 130	0.445	20.0
BD06139	Beryllium, Total	mg/L	0.0000208	0.000880	0.100	0.104	0.103	0.103	0.0850 to 0.115	104	70.0 to 130	0.966	20.0
BD06139	Boron, Total	mg/L	-0.000121	0.0650	1.00	1.06	1.06	1.02	0.850 to 1.15	106	70.0 to 130	0.00	20.0
BD06139	Cadmium, Total	mg/L	0.0000055	0.000147	0.100	0.111	0.112	0.111	0.0850 to 0.115	111	70.0 to 130	0.897	20.0
BD06139	Calcium, Total	mg/L	0.0239	0.152	5.00	8.69	8.79	5.03	4.25 to 5.75	95.8	70.0 to 130	1.14	20.0
BD06139	Chloride	mg/L	0.108	1.00	10.0	27.0	26.9	9.64	9.00 to 11.0	86.0	80.0 to 120	0.371	20.0
BD06139	Chromium, Total	mg/L	0.0000641	0.000440	0.100	0.100	0.0993	0.102	0.0850 to 0.115	99.8	70.0 to 130	0.702	20.0
BD06139	Cobalt, Total	mg/L	-0.0000182	0.000147	0.100	0.104	0.103	0.107	0.0850 to 0.115	104	70.0 to 130	0.966	20.0
BD06139	Fluoride	mg/L	-0.00208	0.125	2.50	2.81	2.84	2.71	2.25 to 2.75	106	80.0 to 120	1.06	20.0
BD06139	Iron, Total	mg/L	-0.000394	0.0176	0.2	0.210	0.209	0.203	0.170 to 0.230	101	70.0 to 130	0.477	20.0
BD06139	Lead, Total	mg/L	0.0000027	0.000147	0.100	0.102	0.101	0.105	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BD06139	Lithium, Total	mg/L	0.000053	0.0154	0.200	0.248	0.247	0.199	0.170 to 0.230	102	70.0 to 130	0.404	20.0
BD06139	Magnesium, Total	mg/L	0.00266	0.0462	5.00	6.41	6.42	4.99	4.25 to 5.75	98.0	70.0 to 130	0.156	20.0
BD06139	Manganese, Total	mg/L	0.0000240	0.00033	0.100	0.108	0.108	0.104	0.0850 to 0.115	100	70.0 to 130	0.00	20.0
BD06139	Mercury, Total by CVAA	mg/L	2.000E-05	0.000500	0.004	0.00389	0.00395	0.00395	0.00340 to 0.00460	97.2	70.0 to 130	1.53	20.0
BD06139	Molybdenum, Total	mg/L	0.000	0.0100	0.2	0.204	0.202	0.204	0.170 to 0.230	102	70.0 to 130	0.985	20.0
BD06139	Potassium, Total	mg/L	0.0175	0.367	10.0	10.8	10.9	10.1	8.50 to 11.5	94.9	70.0 to 130	0.922	20.0
BD06139	Selenium, Total	mg/L	0.0000690	0.00100	0.100	0.0442	0.0448	0.101	0.0850 to 0.115	44.2	70.0 to 130	1.35	20.0
BD06139	Silicon, Total	mg/L	0.000389	0.0440	1.00	8.44	8.45	1.01	0.850 to 1.15	108	70.0 to 130	0.118	20.0
BD06139	Sodium, Total	mg/L	0.00674	0.0880	5.00	146	163	4.81	4.25 to 5.75	-100	70.0 to 130	11.0	20.0
BD06141	Sulfate	mg/L	0.233	2.0	20.0	45.3	45.3	20.2	18.0 to 22.0	90.0	80.0 to 120	0.00	20.0

Comments:

Batch QC Summary

Customer Account: WMWGORAPEB
Sample Date: 3/27/23 16:00
Customer ID:
Delivery Date: 3/29/23 09:41

Description: Gorgas Ash Pond Equipment Blank-1

Laboratory ID Number: BD06133

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD06139	Thallium, Total	mg/L	-0.0000162	0.000147	0.100	0.0996	0.0969	0.102	0.0850 to 0.115	99.6	70.0 to 130	2.75	20.0
BD06130	Total Organic Carbon	mg/L	0.0814	1.00	10.0	10.2	10.7	24.6		102	80.0 to 120	4.78	20.0

Comments:

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAPEB
Sample Date: 3/27/23 16:00
Customer ID:
Delivery Date: 3/29/23 09:41

Description: Gorgas Ash Pond Equipment Blank-1

Laboratory ID Number: BD06133

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD06139	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.02	0.200	2.00	1.97	0.076	2.04	1.80 to 2.20	98.5	90.0 to 110	0.00	15.0
BD06136	Solids, Dissolved	mg/L	1.00	25.0			544	50.0	40.0 to 60.0			1.82	10.0

Comments:

Reported: 5/3/2023
Version: 3.5
COA_CCR

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-45V

Location Code: WMWGORAP
Collected: 3/28/23 08:55
Customer ID:
Submittal Date: 3/29/23 09:41

Laboratory ID Number: BD06134

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	3/31/23 06:13	4/4/23 12:18		1.015	0.0582	mg/L	0.030000	0.1015	J
* Calcium, Total	3/31/23 06:13	4/4/23 12:18		1.015	19.0	mg/L	0.070035	0.406	
* Iron, Total	3/31/23 06:13	4/4/23 12:18		1.015	0.361	mg/L	0.008120	0.0406	
* Lithium, Total	3/31/23 06:13	4/4/23 12:18		1.015	0.0531	mg/L	0.007105	0.01999956	
* Magnesium, Total	3/31/23 06:13	4/4/23 12:18		1.015	6.37	mg/L	0.021315	0.406	
* Molybdenum, Total	3/31/23 06:13	4/4/23 12:18		1.015	0.0123	mg/L	0.005075	0.01015	
* Silica, Total (calc.)	3/31/23 06:13	4/4/23 12:18		1	12.0	mg/L			
* Silicon, Total	3/31/23 06:13	4/4/23 12:18		1.015	5.63	mg/L	0.02030	0.25375	
* Sodium, Total	3/31/23 06:13	4/4/23 15:36		101.5	404	mg/L	4.060	40.6	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	3/30/23 10:59	4/3/23 10:54		1.015	0.0540	mg/L	0.030000	0.1015	J
* Calcium, Dissolved	3/30/23 10:59	4/3/23 10:54		1.015	15.9	mg/L	0.070035	0.406	
* Iron, Dissolved	3/30/23 10:59	4/3/23 10:54		1.015	0.116	mg/L	0.008120	0.0406	
* Lithium, Dissolved	3/30/23 10:59	4/3/23 10:54		1.015	0.0513	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	3/30/23 10:59	4/3/23 10:54		1.015	5.32	mg/L	0.021315	0.406	
* Molybdenum, Dissolved	3/30/23 10:59	4/3/23 10:54		1.015	0.00959	mg/L	0.005075	0.01015	J
* Silica, Dissolved (calc.)	3/30/23 10:59	4/3/23 10:54		1	12.1	mg/L			
* Silicon, Dissolved	3/30/23 10:59	4/3/23 10:54		1.015	5.65	mg/L	0.02030	0.25375	
* Sodium, Dissolved	3/30/23 10:59	4/3/23 13:04		101.5	388	mg/L	4.060	40.6	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/31/23 06:13	3/31/23 13:17		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Total	3/31/23 06:13	3/31/23 13:17		1.015	0.0251	mg/L	0.009135	0.05075	J
* Arsenic, Total	3/31/23 06:13	3/31/23 13:17		1.015	0.00130	mg/L	0.000112	0.000203	
* Barium, Total	3/31/23 06:13	4/4/23 14:31		1.015	0.0730	mg/L	0.000508	0.001015	
* Beryllium, Total	3/31/23 06:13	3/31/23 13:17		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	3/31/23 06:13	3/31/23 13:17		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	3/31/23 06:13	3/31/23 13:17		1.015	0.000479	mg/L	0.000203	0.001015	J
* Cobalt, Total	3/31/23 06:13	3/31/23 13:17		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	3/31/23 06:13	3/31/23 13:17		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	3/31/23 06:13	3/31/23 13:17		1.015	0.0511	mg/L	0.000152	0.001015	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-45V

Location Code: WMWGORAP
Collected: 3/28/23 08:55
Customer ID:
Submittal Date: 3/29/23 09:41

Laboratory ID Number: BD06134

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	3/31/23 06:13	3/31/23 13:17		1.015	28.6	mg/L	0.169505	0.5075	
* Selenium, Total	3/31/23 06:13	3/31/23 13:17		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	3/31/23 06:13	3/31/23 13:17		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	3/30/23 10:59	3/31/23 11:23		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	3/30/23 10:59	3/31/23 11:23		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Dissolved	3/30/23 10:59	3/31/23 11:23		1.015	0.000730	mg/L	0.000112	0.000203	
* Barium, Dissolved	3/30/23 10:59	4/4/23 12:37		1.015	0.0607	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	3/30/23 10:59	3/31/23 11:23		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	3/30/23 10:59	3/31/23 11:23		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	3/30/23 10:59	3/31/23 11:23		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	3/30/23 10:59	3/31/23 11:23		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Dissolved	3/30/23 10:59	3/31/23 11:23		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	3/30/23 10:59	3/31/23 11:23		1.015	0.0419	mg/L	0.000152	0.001015	
* Potassium, Dissolved	3/30/23 10:59	3/31/23 11:23		1.015	22.3	mg/L	0.169505	0.5075	
* Selenium, Dissolved	3/30/23 10:59	3/31/23 11:23		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	3/30/23 10:59	3/31/23 11:23		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ELH***								
* Mercury, Total by CVAA	4/3/23 15:06	4/3/23 19:46		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	3/30/23 13:31	3/30/23 13:31		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
* Alkalinity to pH 4.5	4/7/23 12:25	4/7/23 15:29		1	216	mg CaCO3/L		0.10	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	3/29/23 12:30	3/30/23 13:47		1	1310	mg/L		147.1	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
* Bicarbonate Alkalinity, (calc.)	4/7/23 12:25	4/7/23 15:29		1	215	mg CaCO3/L		1	A
* Carbonate Alkalinity, (calc.)	4/7/23 12:25	4/7/23 15:29		1	1.36	mg CaCO3/L		0.5	A
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	4/3/23 13:15	4/3/23 13:15		1	5.97	mg/L	1.00	2	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-45V

Location Code: WMWGORAP
Collected: 3/28/23 08:55
Customer ID:
Submittal Date: 3/29/23 09:41

Laboratory ID Number: BD06134

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	3/30/23 11:47	3/30/23 11:47		32	209	mg/L	16.00	32	
Analytical Method: SM4500F G 2017	***Analyst: CES***								
* Fluoride	3/30/23 14:45	3/30/23 14:45		1	0.249	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	4/4/23 14:42	4/4/23 14:42		25	489	mg/L	15.0	50	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	3/28/23 08:52	3/28/23 08:52			2649.80	uS/cm			FA
pH	3/28/23 08:52	3/28/23 08:52			7.47	SU			FA
Temperature	3/28/23 08:52	3/28/23 08:52			16.77	C			FA
Turbidity	3/28/23 08:52	3/28/23 08:52			1.21	NTU			FA
Sulfide	3/28/23 08:52	3/28/23 08:52			4.0	mg/L			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 5/3/2023
Version: 3.5
COA_CCR

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/28/23 08:55
Customer ID:
Delivery Date: 3/29/23 09:41

Description: Gorgas Ash Pond - MW-45V

Laboratory ID Number: BD06134

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD06140	Aluminum, Dissolved	mg/L	0.000167	0.0198	0.100	0.107	0.107	0.101	0.0850 to 0.115	107	70.0 to 130	0.00	20.0
BD06139	Aluminum, Total	mg/L	0.000866	0.0198	0.100	0.123	0.122	0.103	0.0850 to 0.115	101	70.0 to 130	0.816	20.0
BD06140	Antimony, Dissolved	mg/L	0.000464	0.00100	0.100	0.106	0.107	0.0983	0.0850 to 0.115	106	70.0 to 130	0.939	20.0
BD06139	Antimony, Total	mg/L	0.000272	0.00100	0.100	0.0988	0.0971	0.0970	0.0850 to 0.115	98.8	70.0 to 130	1.74	20.0
BD06140	Arsenic, Dissolved	mg/L	0.0000011	0.000200	0.100	0.104	0.104	0.0994	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BD06139	Arsenic, Total	mg/L	0.0000131	0.000200	0.100	0.0998	0.101	0.101	0.0850 to 0.115	99.6	70.0 to 130	1.20	20.0
BD06140	Barium, Dissolved	mg/L	0.0000037	0.00100	0.100	0.280	0.279	0.0988	0.0850 to 0.115	99.0	70.0 to 130	0.358	20.0
BD06139	Barium, Total	mg/L	0.0000151	0.00100	0.100	0.224	0.225	0.0998	0.0850 to 0.115	101	70.0 to 130	0.445	20.0
BD06140	Beryllium, Dissolved	mg/L	0.0000069	0.000880	0.100	0.103	0.103	0.103	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BD06139	Beryllium, Total	mg/L	0.0000208	0.000880	0.100	0.104	0.103	0.103	0.0850 to 0.115	104	70.0 to 130	0.966	20.0
BD06140	Boron, Dissolved	mg/L	-0.00131	0.0650	1.00	1.11	1.11	1.03	0.850 to 1.15	107	70.0 to 130	0.00	20.0
BD06139	Boron, Total	mg/L	-0.000121	0.0650	1.00	1.06	1.06	1.02	0.850 to 1.15	106	70.0 to 130	0.00	20.0
BD06140	Cadmium, Dissolved	mg/L	0.0000029	0.000147	0.100	0.110	0.109	0.110	0.0850 to 0.115	110	70.0 to 130	0.913	20.0
BD06139	Cadmium, Total	mg/L	0.0000055	0.000147	0.100	0.111	0.112	0.111	0.0850 to 0.115	111	70.0 to 130	0.897	20.0
BD06140	Calcium, Dissolved	mg/L	-0.0111	0.152	5.00	16.0	16.0	4.94	4.25 to 5.75	98.0	70.0 to 130	0.00	20.0
BD06139	Calcium, Total	mg/L	0.0239	0.152	5.00	8.69	8.79	5.03	4.25 to 5.75	95.8	70.0 to 130	1.14	20.0
BD06139	Chloride	mg/L	0.108	1.00	10.0	27.0	26.9	9.64	9.00 to 11.0	86.0	80.0 to 120	0.371	20.0
BD06140	Chromium, Dissolved	mg/L	-0.0000058	0.000440	0.100	0.103	0.101	0.0995	0.0850 to 0.115	103	70.0 to 130	1.96	20.0
BD06139	Chromium, Total	mg/L	0.0000641	0.000440	0.100	0.100	0.0993	0.102	0.0850 to 0.115	99.8	70.0 to 130	0.702	20.0
BD06140	Cobalt, Dissolved	mg/L	-0.0000184	0.000147	0.100	0.106	0.106	0.104	0.0850 to 0.115	106	70.0 to 130	0.00	20.0
BD06139	Cobalt, Total	mg/L	-0.0000182	0.000147	0.100	0.104	0.103	0.107	0.0850 to 0.115	104	70.0 to 130	0.966	20.0
BD06139	Fluoride	mg/L	-0.00208	0.125	2.50	2.81	2.84	2.71	2.25 to 2.75	106	80.0 to 120	1.06	20.0
BD06140	Iron, Dissolved	mg/L	-0.000147	0.0176	0.2	0.214	0.213	0.201	0.170 to 0.230	101	70.0 to 130	0.468	20.0
BD06139	Iron, Total	mg/L	-0.000394	0.0176	0.2	0.210	0.209	0.203	0.170 to 0.230	101	70.0 to 130	0.477	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/28/23 08:55
Customer ID:
Delivery Date: 3/29/23 09:41

Description: Gorgas Ash Pond - MW-45V

Laboratory ID Number: BD06134

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD06140	Lead, Dissolved	mg/L	0.0000079	0.000147	0.100	0.104	0.105	0.101	0.0850 to 0.115	104	70.0 to 130	0.957	20.0
BD06139	Lead, Total	mg/L	0.0000027	0.000147	0.100	0.102	0.101	0.105	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BD06140	Lithium, Dissolved	mg/L	0.000402	0.0154	0.200	0.264	0.261	0.199	0.170 to 0.230	107	70.0 to 130	1.14	20.0
BD06139	Lithium, Total	mg/L	0.000053	0.0154	0.200	0.248	0.247	0.199	0.170 to 0.230	102	70.0 to 130	0.404	20.0
BD06140	Magnesium, Dissolved	mg/L	0.000819	0.0462	5.00	8.76	8.75	4.93	4.25 to 5.75	99.2	70.0 to 130	0.114	20.0
BD06139	Magnesium, Total	mg/L	0.00266	0.0462	5.00	6.41	6.42	4.99	4.25 to 5.75	98.0	70.0 to 130	0.156	20.0
BD06140	Manganese, Dissolved	mg/L	0.0000691	0.00033	0.100	0.125	0.126	0.102	0.0850 to 0.115	102	70.0 to 130	0.797	20.0
BD06139	Manganese, Total	mg/L	0.0000240	0.00033	0.100	0.108	0.108	0.104	0.0850 to 0.115	100	70.0 to 130	0.00	20.0
BD06139	Mercury, Total by CVAA	mg/L	2.000E-05	0.000500	0.004	0.00389	0.00395	0.00395	0.00340 to 0.00460	97.2	70.0 to 130	1.53	20.0
BD06140	Molybdenum, Dissolved	mg/L	-0.000343	0.0100	0.2	0.229	0.230	0.200	0.170 to 0.230	101	70.0 to 130	0.436	20.0
BD06139	Molybdenum, Total	mg/L	0.000	0.0100	0.2	0.204	0.202	0.204	0.170 to 0.230	102	70.0 to 130	0.985	20.0
BD06140	Potassium, Dissolved	mg/L	0.0207	0.367	10.0	27.3	27.8	9.88	8.50 to 11.5	99.0	70.0 to 130	1.81	20.0
BD06139	Potassium, Total	mg/L	0.0175	0.367	10.0	10.8	10.9	10.1	8.50 to 11.5	94.9	70.0 to 130	0.922	20.0
BD06140	Selenium, Dissolved	mg/L	0.000215	0.00100	0.100	0.102	0.102	0.101	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BD06139	Selenium, Total	mg/L	0.0000690	0.00100	0.100	0.0442	0.0448	0.101	0.0850 to 0.115	44.2	70.0 to 130	1.35	20.0
BD06140	Silicon, Dissolved	mg/L	0.000678	0.0440	1.00	6.60	6.57	1.00	0.850 to 1.15	105	70.0 to 130	0.456	20.0
BD06139	Silicon, Total	mg/L	0.000389	0.0440	1.00	8.44	8.45	1.01	0.850 to 1.15	108	70.0 to 130	0.118	20.0
BD06140	Sodium, Dissolved	mg/L	0.000478	0.0880	5.00	324	347	4.79	4.25 to 5.75	-80.0	70.0 to 130	6.86	20.0
BD06139	Sodium, Total	mg/L	0.00674	0.0880	5.00	146	163	4.81	4.25 to 5.75	-100	70.0 to 130	11.0	20.0
BD06141	Sulfate	mg/L	0.233	2.0	20.0	45.3	45.3	20.2	18.0 to 22.0	90.0	80.0 to 120	0.00	20.0
BD06140	Thallium, Dissolved	mg/L	-0.0000325	0.000147	0.100	0.104	0.105	0.106	0.0850 to 0.115	104	70.0 to 130	0.957	20.0
BD06139	Thallium, Total	mg/L	-0.0000162	0.000147	0.100	0.0996	0.0969	0.102	0.0850 to 0.115	99.6	70.0 to 130	2.75	20.0
BD06130	Total Organic Carbon	mg/L	0.0814	1.00	10.0	10.2	10.7	24.6		102	80.0 to 120	4.78	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/28/23 08:55
Customer ID:
Delivery Date: 3/29/23 09:41

Description: Gorgas Ash Pond - MW-45V

Laboratory ID Number: BD06134

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD06144	Alkalinity to pH 4.5	mg CaCO3/L					207	50.8	45.0 to 55.0			0.962	10.0
BD06139	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.02	0.200	2.00	1.97	0.076	2.04	1.80 to 2.20	98.5	90.0 to 110	0.00	15.0
BD06136	Solids, Dissolved	mg/L	1.00	25.0			544	50.0	40.0 to 60.0			1.82	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-43H

Location Code: WMWGORAP
Collected: 3/28/23 10:03
Customer ID:
Submittal Date: 3/29/23 09:41

Laboratory ID Number: BD06135

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	3/31/23 06:13	4/4/23 12:21		1.015	0.157	mg/L	0.030000	0.1015	
* Calcium, Total	3/31/23 06:13	4/4/23 12:21		1.015	17.4	mg/L	0.070035	0.406	
* Iron, Total	3/31/23 06:13	4/4/23 12:21		1.015	0.0176	mg/L	0.008120	0.0406	J
* Lithium, Total	3/31/23 06:13	4/4/23 12:21		1.015	0.0686	mg/L	0.007105	0.01999956	
* Magnesium, Total	3/31/23 06:13	4/4/23 12:21		1.015	5.87	mg/L	0.021315	0.406	
* Molybdenum, Total	3/31/23 06:13	4/4/23 12:21		1.015	0.00740	mg/L	0.005075	0.01015	J
* Silica, Total (calc.)	3/31/23 06:13	4/4/23 12:21		1	12.1	mg/L			
* Silicon, Total	3/31/23 06:13	4/4/23 12:21		1.015	5.64	mg/L	0.02030	0.25375	
* Sodium, Total	3/31/23 06:13	4/4/23 15:39		101.5	397	mg/L	4.060	40.6	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	3/30/23 10:59	4/3/23 10:58		1.015	0.157	mg/L	0.030000	0.1015	
* Calcium, Dissolved	3/30/23 10:59	4/3/23 10:58		1.015	16.7	mg/L	0.070035	0.406	
* Iron, Dissolved	3/30/23 10:59	4/3/23 10:58		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Dissolved	3/30/23 10:59	4/3/23 10:58		1.015	0.0681	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	3/30/23 10:59	4/3/23 10:58		1.015	5.59	mg/L	0.021315	0.406	
* Molybdenum, Dissolved	3/30/23 10:59	4/3/23 10:58		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Dissolved (calc.)	3/30/23 10:59	4/3/23 10:58		1	12.0	mg/L			
* Silicon, Dissolved	3/30/23 10:59	4/3/23 10:58		1.015	5.62	mg/L	0.02030	0.25375	
* Sodium, Dissolved	3/30/23 10:59	4/3/23 13:07		101.5	408	mg/L	4.060	40.6	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/31/23 06:13	3/31/23 13:20		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Total	3/31/23 06:13	3/31/23 13:20		1.015	0.0286	mg/L	0.009135	0.05075	J
* Arsenic, Total	3/31/23 06:13	3/31/23 13:20		1.015	0.000779	mg/L	0.000112	0.000203	
* Barium, Total	3/31/23 06:13	4/4/23 14:34		1.015	0.180	mg/L	0.000508	0.001015	
* Beryllium, Total	3/31/23 06:13	3/31/23 13:20		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	3/31/23 06:13	3/31/23 13:20		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	3/31/23 06:13	3/31/23 13:20		1.015	0.000229	mg/L	0.000203	0.001015	J
* Cobalt, Total	3/31/23 06:13	3/31/23 13:20		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	3/31/23 06:13	3/31/23 13:20		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	3/31/23 06:13	3/31/23 13:20		1.015	0.0510	mg/L	0.000152	0.001015	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-43H

Location Code: WMWGORAP
Collected: 3/28/23 10:03
Customer ID:
Submittal Date: 3/29/23 09:41

Laboratory ID Number: BD06135

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	3/31/23 06:13	3/31/23 13:20		1.015	29.4	mg/L	0.169505	0.5075	
* Selenium, Total	3/31/23 06:13	3/31/23 13:20		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	3/31/23 06:13	3/31/23 13:20		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8		***Analyst: DLJ***							
* Antimony, Dissolved	3/30/23 10:59	3/31/23 11:27		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	3/30/23 10:59	3/31/23 11:27		1.015	0.0117	mg/L	0.009135	0.05075	J
* Arsenic, Dissolved	3/30/23 10:59	3/31/23 11:27		1.015	0.000626	mg/L	0.000112	0.000203	
* Barium, Dissolved	3/30/23 10:59	4/4/23 12:40		1.015	0.184	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	3/30/23 10:59	3/31/23 11:27		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	3/30/23 10:59	3/31/23 11:27		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	3/30/23 10:59	3/31/23 11:27		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	3/30/23 10:59	3/31/23 11:27		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Dissolved	3/30/23 10:59	3/31/23 11:27		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	3/30/23 10:59	3/31/23 11:27		1.015	0.0476	mg/L	0.000152	0.001015	
* Potassium, Dissolved	3/30/23 10:59	3/31/23 11:27		1.015	28.3	mg/L	0.169505	0.5075	
* Selenium, Dissolved	3/30/23 10:59	3/31/23 11:27		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	3/30/23 10:59	3/31/23 11:27		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1		***Analyst: ELH***							
* Mercury, Total by CVAA	4/3/23 15:06	4/3/23 19:50		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2		***Analyst: SC***							
* Nitrogen, Nitrate/Nitrite	3/30/23 13:32	3/30/23 13:32		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B		***Analyst: ALH***							
* Alkalinity to pH 4.5	4/7/23 12:25	4/7/23 15:29		1	390	mg CaCO3/L		0.10	
Analytical Method: SM 2540C		***Analyst: CNJ***							
* Solids, Dissolved	3/29/23 12:30	3/30/23 13:47		1	1280	mg/L		125	
Analytical Method: SM 4500CO2 D		***Analyst: ALH***							
* Bicarbonate Alkalinity, (calc.)	4/7/23 12:25	4/7/23 15:29		1	386	mg CaCO3/L		1	A
* Carbonate Alkalinity, (calc.)	4/7/23 12:25	4/7/23 15:29		1	3.47	mg CaCO3/L		0.5	A
Analytical Method: SM 5310 B		***Analyst: SC***							
* Total Organic Carbon	4/3/23 13:28	4/3/23 13:28		1	5.11	mg/L	1.00	2	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-43H

Location Code: WMWGORAP
Collected: 3/28/23 10:03
Customer ID:
Submittal Date: 3/29/23 09:41

Laboratory ID Number: BD06135

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	3/30/23 11:48	3/30/23 11:48		32	228	mg/L	16.00	32	
Analytical Method: SM4500F G 2017	***Analyst: CES***								
* Fluoride	3/30/23 14:46	3/30/23 14:46		1	0.239	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	4/4/23 14:43	4/4/23 14:43		16	322	mg/L	9.6	32	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	3/28/23 10:00	3/28/23 10:00			2166.36	uS/cm			FA
pH	3/28/23 10:00	3/28/23 10:00			7.92	SU			FA
Temperature	3/28/23 10:00	3/28/23 10:00			17.27	C			FA
Turbidity	3/28/23 10:00	3/28/23 10:00			5.98	NTU			FA
Sulfide	3/28/23 10:00	3/28/23 10:00			9.0	mg/L			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/28/23 10:03
Customer ID:
Delivery Date: 3/29/23 09:41

Description: Gorgas Ash Pond - MW-43H

Laboratory ID Number: BD06135

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD06140	Aluminum, Dissolved	mg/L	0.000167	0.0198	0.100	0.107	0.107	0.101	0.0850 to 0.115	107	70.0 to 130	0.00	20.0
BD06139	Aluminum, Total	mg/L	0.000866	0.0198	0.100	0.123	0.122	0.103	0.0850 to 0.115	101	70.0 to 130	0.816	20.0
BD06140	Antimony, Dissolved	mg/L	0.000464	0.00100	0.100	0.106	0.107	0.0983	0.0850 to 0.115	106	70.0 to 130	0.939	20.0
BD06139	Antimony, Total	mg/L	0.000272	0.00100	0.100	0.0988	0.0971	0.0970	0.0850 to 0.115	98.8	70.0 to 130	1.74	20.0
BD06140	Arsenic, Dissolved	mg/L	0.0000011	0.000200	0.100	0.104	0.104	0.0994	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BD06139	Arsenic, Total	mg/L	0.0000131	0.000200	0.100	0.0998	0.101	0.101	0.0850 to 0.115	99.6	70.0 to 130	1.20	20.0
BD06140	Barium, Dissolved	mg/L	0.0000037	0.00100	0.100	0.280	0.279	0.0988	0.0850 to 0.115	99.0	70.0 to 130	0.358	20.0
BD06139	Barium, Total	mg/L	0.0000151	0.00100	0.100	0.224	0.225	0.0998	0.0850 to 0.115	101	70.0 to 130	0.445	20.0
BD06140	Beryllium, Dissolved	mg/L	0.0000069	0.000880	0.100	0.103	0.103	0.103	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BD06139	Beryllium, Total	mg/L	0.0000208	0.000880	0.100	0.104	0.103	0.103	0.0850 to 0.115	104	70.0 to 130	0.966	20.0
BD06140	Boron, Dissolved	mg/L	-0.00131	0.0650	1.00	1.11	1.11	1.03	0.850 to 1.15	107	70.0 to 130	0.00	20.0
BD06139	Boron, Total	mg/L	-0.000121	0.0650	1.00	1.06	1.06	1.02	0.850 to 1.15	106	70.0 to 130	0.00	20.0
BD06140	Cadmium, Dissolved	mg/L	0.0000029	0.000147	0.100	0.110	0.109	0.110	0.0850 to 0.115	110	70.0 to 130	0.913	20.0
BD06139	Cadmium, Total	mg/L	0.0000055	0.000147	0.100	0.111	0.112	0.111	0.0850 to 0.115	111	70.0 to 130	0.897	20.0
BD06140	Calcium, Dissolved	mg/L	-0.0111	0.152	5.00	16.0	16.0	4.94	4.25 to 5.75	98.0	70.0 to 130	0.00	20.0
BD06139	Calcium, Total	mg/L	0.0239	0.152	5.00	8.69	8.79	5.03	4.25 to 5.75	95.8	70.0 to 130	1.14	20.0
BD06139	Chloride	mg/L	0.108	1.00	10.0	27.0	26.9	9.64	9.00 to 11.0	86.0	80.0 to 120	0.371	20.0
BD06140	Chromium, Dissolved	mg/L	-0.0000058	0.000440	0.100	0.103	0.101	0.0995	0.0850 to 0.115	103	70.0 to 130	1.96	20.0
BD06139	Chromium, Total	mg/L	0.0000641	0.000440	0.100	0.100	0.0993	0.102	0.0850 to 0.115	99.8	70.0 to 130	0.702	20.0
BD06140	Cobalt, Dissolved	mg/L	-0.0000184	0.000147	0.100	0.106	0.106	0.104	0.0850 to 0.115	106	70.0 to 130	0.00	20.0
BD06139	Cobalt, Total	mg/L	-0.0000182	0.000147	0.100	0.104	0.103	0.107	0.0850 to 0.115	104	70.0 to 130	0.966	20.0
BD06139	Fluoride	mg/L	-0.00208	0.125	2.50	2.81	2.84	2.71	2.25 to 2.75	106	80.0 to 120	1.06	20.0
BD06140	Iron, Dissolved	mg/L	-0.000147	0.0176	0.2	0.214	0.213	0.201	0.170 to 0.230	101	70.0 to 130	0.468	20.0
BD06139	Iron, Total	mg/L	-0.000394	0.0176	0.2	0.210	0.209	0.203	0.170 to 0.230	101	70.0 to 130	0.477	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/28/23 10:03
Customer ID:
Delivery Date: 3/29/23 09:41

Description: Gorgas Ash Pond - MW-43H

Laboratory ID Number: BD06135

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD06140	Lead, Dissolved	mg/L	0.0000079	0.000147	0.100	0.104	0.105	0.101	0.0850 to 0.115	104	70.0 to 130	0.957	20.0
BD06139	Lead, Total	mg/L	0.0000027	0.000147	0.100	0.102	0.101	0.105	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BD06140	Lithium, Dissolved	mg/L	0.000402	0.0154	0.200	0.264	0.261	0.199	0.170 to 0.230	107	70.0 to 130	1.14	20.0
BD06139	Lithium, Total	mg/L	0.000053	0.0154	0.200	0.248	0.247	0.199	0.170 to 0.230	102	70.0 to 130	0.404	20.0
BD06140	Magnesium, Dissolved	mg/L	0.000819	0.0462	5.00	8.76	8.75	4.93	4.25 to 5.75	99.2	70.0 to 130	0.114	20.0
BD06139	Magnesium, Total	mg/L	0.00266	0.0462	5.00	6.41	6.42	4.99	4.25 to 5.75	98.0	70.0 to 130	0.156	20.0
BD06140	Manganese, Dissolved	mg/L	0.0000691	0.00033	0.100	0.125	0.126	0.102	0.0850 to 0.115	102	70.0 to 130	0.797	20.0
BD06139	Manganese, Total	mg/L	0.0000240	0.00033	0.100	0.108	0.108	0.104	0.0850 to 0.115	100	70.0 to 130	0.00	20.0
BD06139	Mercury, Total by CVAA	mg/L	2.000E-05	0.000500	0.004	0.00389	0.00395	0.00395	0.00340 to 0.00460	97.2	70.0 to 130	1.53	20.0
BD06140	Molybdenum, Dissolved	mg/L	-0.000343	0.0100	0.2	0.229	0.230	0.200	0.170 to 0.230	101	70.0 to 130	0.436	20.0
BD06139	Molybdenum, Total	mg/L	0.000	0.0100	0.2	0.204	0.202	0.204	0.170 to 0.230	102	70.0 to 130	0.985	20.0
BD06140	Potassium, Dissolved	mg/L	0.0207	0.367	10.0	27.3	27.8	9.88	8.50 to 11.5	99.0	70.0 to 130	1.81	20.0
BD06139	Potassium, Total	mg/L	0.0175	0.367	10.0	10.8	10.9	10.1	8.50 to 11.5	94.9	70.0 to 130	0.922	20.0
BD06140	Selenium, Dissolved	mg/L	0.000215	0.00100	0.100	0.102	0.102	0.101	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BD06139	Selenium, Total	mg/L	0.0000690	0.00100	0.100	0.0442	0.0448	0.101	0.0850 to 0.115	44.2	70.0 to 130	1.35	20.0
BD06140	Silicon, Dissolved	mg/L	0.000678	0.0440	1.00	6.60	6.57	1.00	0.850 to 1.15	105	70.0 to 130	0.456	20.0
BD06139	Silicon, Total	mg/L	0.000389	0.0440	1.00	8.44	8.45	1.01	0.850 to 1.15	108	70.0 to 130	0.118	20.0
BD06140	Sodium, Dissolved	mg/L	0.000478	0.0880	5.00	324	347	4.79	4.25 to 5.75	-80.0	70.0 to 130	6.86	20.0
BD06139	Sodium, Total	mg/L	0.00674	0.0880	5.00	146	163	4.81	4.25 to 5.75	-100	70.0 to 130	11.0	20.0
BD06141	Sulfate	mg/L	0.233	2.0	20.0	45.3	45.3	20.2	18.0 to 22.0	90.0	80.0 to 120	0.00	20.0
BD06140	Thallium, Dissolved	mg/L	-0.0000325	0.000147	0.100	0.104	0.105	0.106	0.0850 to 0.115	104	70.0 to 130	0.957	20.0
BD06139	Thallium, Total	mg/L	-0.0000162	0.000147	0.100	0.0996	0.0969	0.102	0.0850 to 0.115	99.6	70.0 to 130	2.75	20.0
BD06130	Total Organic Carbon	mg/L	0.0814	1.00	10.0	10.2	10.7	24.6		102	80.0 to 120	4.78	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/28/23 10:03
Customer ID:
Delivery Date: 3/29/23 09:41

Description: Gorgas Ash Pond - MW-43H

Laboratory ID Number: BD06135

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD06144	Alkalinity to pH 4.5	mg CaCO3/L					207	50.8	45.0 to 55.0			0.962	10.0
BD06139	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.02	0.200	2.00	1.97	0.076	2.04	1.80 to 2.20	98.5	90.0 to 110	0.00	15.0
BD06136	Solids, Dissolved	mg/L	1.00	25.0			544	50.0	40.0 to 60.0			1.82	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-46

Location Code: WMWGORAP
Collected: 3/27/23 10:45
Customer ID:
Submittal Date: 3/29/23 09:41

Laboratory ID Number: BD06136

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	3/31/23 06:13	4/4/23 12:24		1.015	0.886	mg/L	0.030000	0.1015	
* Calcium, Total	3/31/23 06:13	4/4/23 12:24		1.015	0.975	mg/L	0.070035	0.406	
* Iron, Total	3/31/23 06:13	4/4/23 12:24		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Total	3/31/23 06:13	4/4/23 12:24		1.015	0.0593	mg/L	0.007105	0.01999956	
* Magnesium, Total	3/31/23 06:13	4/4/23 12:24		1.015	0.317	mg/L	0.021315	0.406	J
* Molybdenum, Total	3/31/23 06:13	4/4/23 12:24		1.015	0.0114	mg/L	0.005075	0.01015	
* Silica, Total (calc.)	3/31/23 06:13	4/4/23 12:24		1	9.95	mg/L			
* Silicon, Total	3/31/23 06:13	4/4/23 12:24		1.015	4.65	mg/L	0.02030	0.25375	
* Sodium, Total	3/31/23 06:13	4/4/23 15:43		10.15	213	mg/L	0.4060	4.06	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	3/30/23 10:59	4/3/23 11:01		1.015	0.908	mg/L	0.030000	0.1015	
* Calcium, Dissolved	3/30/23 10:59	4/3/23 11:01		1.015	0.980	mg/L	0.070035	0.406	
* Iron, Dissolved	3/30/23 10:59	4/3/23 11:01		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Dissolved	3/30/23 10:59	4/3/23 11:01		1.015	0.0595	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	3/30/23 10:59	4/3/23 11:01		1.015	0.296	mg/L	0.021315	0.406	J
* Molybdenum, Dissolved	3/30/23 10:59	4/3/23 11:01		1.015	0.0104	mg/L	0.005075	0.01015	
* Silica, Dissolved (calc.)	3/30/23 10:59	4/3/23 11:01		1	10.0	mg/L			
* Silicon, Dissolved	3/30/23 10:59	4/3/23 11:01		1.015	4.69	mg/L	0.02030	0.25375	
* Sodium, Dissolved	3/30/23 10:59	4/3/23 13:11		10.15	207	mg/L	0.4060	4.06	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/31/23 06:13	3/31/23 13:24		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Total	3/31/23 06:13	3/31/23 13:24		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Total	3/31/23 06:13	3/31/23 13:24		1.015	0.0955	mg/L	0.000112	0.000203	
* Barium, Total	3/31/23 06:13	4/4/23 14:38		1.015	0.0655	mg/L	0.000508	0.001015	
* Beryllium, Total	3/31/23 06:13	3/31/23 13:24		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	3/31/23 06:13	3/31/23 13:24		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	3/31/23 06:13	3/31/23 13:24		1.015	0.000222	mg/L	0.000203	0.001015	J
* Cobalt, Total	3/31/23 06:13	3/31/23 13:24		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	3/31/23 06:13	3/31/23 13:24		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	3/31/23 06:13	3/31/23 13:24		1.015	0.000846	mg/L	0.000152	0.001015	J

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-46

Location Code: WMWGORAP
Collected: 3/27/23 10:45
Customer ID:
Submittal Date: 3/29/23 09:41

Laboratory ID Number: BD06136

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	3/31/23 06:13	3/31/23 13:24		1.015	0.569	mg/L	0.169505	0.5075	
* Selenium, Total	3/31/23 06:13	3/31/23 13:24		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	3/31/23 06:13	3/31/23 13:24		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	3/30/23 10:59	3/31/23 11:30		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	3/30/23 10:59	3/31/23 11:30		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Dissolved	3/30/23 10:59	3/31/23 11:30		1.015	0.0898	mg/L	0.000112	0.000203	
* Barium, Dissolved	3/30/23 10:59	4/4/23 12:44		1.015	0.0629	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	3/30/23 10:59	3/31/23 11:30		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	3/30/23 10:59	3/31/23 11:30		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	3/30/23 10:59	3/31/23 11:30		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	3/30/23 10:59	3/31/23 11:30		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Dissolved	3/30/23 10:59	3/31/23 11:30		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	3/30/23 10:59	3/31/23 11:30		1.015	0.000815	mg/L	0.000152	0.001015	J
* Potassium, Dissolved	3/30/23 10:59	3/31/23 11:30		1.015	0.573	mg/L	0.169505	0.5075	
* Selenium, Dissolved	3/30/23 10:59	3/31/23 11:30		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	3/30/23 10:59	3/31/23 11:30		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ELH***								
* Mercury, Total by CVAA	4/3/23 15:06	4/3/23 19:54		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	3/30/23 13:34	3/30/23 13:34		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
* Alkalinity to pH 4.5	4/7/23 12:25	4/7/23 15:29		1	212	mg CaCO3/L		0.10	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	3/29/23 12:30	3/30/23 13:47		1	554	mg/L		50	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
* Bicarbonate Alkalinity, (calc.)	4/7/23 12:25	4/7/23 15:29		1	208	mg CaCO3/L		1	A
* Carbonate Alkalinity, (calc.)	4/7/23 12:25	4/7/23 15:29		1	3.65	mg CaCO3/L		0.5	A
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	4/3/23 13:44	4/3/23 13:44		1	1.38	mg/L	1.00	2	J

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-46

Location Code: WMWGORAP
Collected: 3/27/23 10:45
Customer ID:
Submittal Date: 3/29/23 09:41

Laboratory ID Number: BD06136

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	3/30/23 11:50	3/30/23 11:50		8	30.2	mg/L	4.00	8	
Analytical Method: SM4500F G 2017	***Analyst: CES***								
* Fluoride	3/30/23 14:47	3/30/23 14:47		1	0.271	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	4/4/23 14:44	4/4/23 14:44		8	168	mg/L	4.8	16	
Analytical Method: Field Measurements	***Analyst: AWG***								
Conductivity	3/27/23 10:41	3/27/23 10:41			862.06	uS/cm			FA
pH	3/27/23 10:41	3/27/23 10:41			8.81	SU			FA
Temperature	3/27/23 10:41	3/27/23 10:41			17.93	C			FA
Turbidity	3/27/23 10:41	3/27/23 10:41			1.4	NTU			FA
Sulfide	3/27/23 10:41	3/27/23 10:41			3	mg/L			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 5/3/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/27/23 10:45
Customer ID:
Delivery Date: 3/29/23 09:41

Description: Gorgas Ash Pond - MW-46

Laboratory ID Number: BD06136

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD06140	Aluminum, Dissolved	mg/L	0.000167	0.0198	0.100	0.107	0.107	0.101	0.0850 to 0.115	107	70.0 to 130	0.00	20.0
BD06139	Aluminum, Total	mg/L	0.000866	0.0198	0.100	0.123	0.122	0.103	0.0850 to 0.115	101	70.0 to 130	0.816	20.0
BD06140	Antimony, Dissolved	mg/L	0.000464	0.00100	0.100	0.106	0.107	0.0983	0.0850 to 0.115	106	70.0 to 130	0.939	20.0
BD06139	Antimony, Total	mg/L	0.000272	0.00100	0.100	0.0988	0.0971	0.0970	0.0850 to 0.115	98.8	70.0 to 130	1.74	20.0
BD06140	Arsenic, Dissolved	mg/L	0.0000011	0.000200	0.100	0.104	0.104	0.0994	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BD06139	Arsenic, Total	mg/L	0.0000131	0.000200	0.100	0.0998	0.101	0.101	0.0850 to 0.115	99.6	70.0 to 130	1.20	20.0
BD06140	Barium, Dissolved	mg/L	0.0000037	0.00100	0.100	0.280	0.279	0.0988	0.0850 to 0.115	99.0	70.0 to 130	0.358	20.0
BD06139	Barium, Total	mg/L	0.0000151	0.00100	0.100	0.224	0.225	0.0998	0.0850 to 0.115	101	70.0 to 130	0.445	20.0
BD06140	Beryllium, Dissolved	mg/L	0.0000069	0.000880	0.100	0.103	0.103	0.103	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BD06139	Beryllium, Total	mg/L	0.0000208	0.000880	0.100	0.104	0.103	0.103	0.0850 to 0.115	104	70.0 to 130	0.966	20.0
BD06140	Boron, Dissolved	mg/L	-0.00131	0.0650	1.00	1.11	1.11	1.03	0.850 to 1.15	107	70.0 to 130	0.00	20.0
BD06139	Boron, Total	mg/L	-0.000121	0.0650	1.00	1.06	1.06	1.02	0.850 to 1.15	106	70.0 to 130	0.00	20.0
BD06140	Cadmium, Dissolved	mg/L	0.0000029	0.000147	0.100	0.110	0.109	0.110	0.0850 to 0.115	110	70.0 to 130	0.913	20.0
BD06139	Cadmium, Total	mg/L	0.0000055	0.000147	0.100	0.111	0.112	0.111	0.0850 to 0.115	111	70.0 to 130	0.897	20.0
BD06140	Calcium, Dissolved	mg/L	-0.0111	0.152	5.00	16.0	16.0	4.94	4.25 to 5.75	98.0	70.0 to 130	0.00	20.0
BD06139	Calcium, Total	mg/L	0.0239	0.152	5.00	8.69	8.79	5.03	4.25 to 5.75	95.8	70.0 to 130	1.14	20.0
BD06139	Chloride	mg/L	0.108	1.00	10.0	27.0	26.9	9.64	9.00 to 11.0	86.0	80.0 to 120	0.371	20.0
BD06140	Chromium, Dissolved	mg/L	-0.0000058	0.000440	0.100	0.103	0.101	0.0995	0.0850 to 0.115	103	70.0 to 130	1.96	20.0
BD06139	Chromium, Total	mg/L	0.0000641	0.000440	0.100	0.100	0.0993	0.102	0.0850 to 0.115	99.8	70.0 to 130	0.702	20.0
BD06140	Cobalt, Dissolved	mg/L	-0.0000184	0.000147	0.100	0.106	0.106	0.104	0.0850 to 0.115	106	70.0 to 130	0.00	20.0
BD06139	Cobalt, Total	mg/L	-0.0000182	0.000147	0.100	0.104	0.103	0.107	0.0850 to 0.115	104	70.0 to 130	0.966	20.0
BD06139	Fluoride	mg/L	-0.00208	0.125	2.50	2.81	2.84	2.71	2.25 to 2.75	106	80.0 to 120	1.06	20.0
BD06140	Iron, Dissolved	mg/L	-0.000147	0.0176	0.2	0.214	0.213	0.201	0.170 to 0.230	101	70.0 to 130	0.468	20.0
BD06139	Iron, Total	mg/L	-0.000394	0.0176	0.2	0.210	0.209	0.203	0.170 to 0.230	101	70.0 to 130	0.477	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/27/23 10:45
Customer ID:
Delivery Date: 3/29/23 09:41

Description: Gorgas Ash Pond - MW-46

Laboratory ID Number: BD06136

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD06140	Lead, Dissolved	mg/L	0.0000079	0.000147	0.100	0.104	0.105	0.101	0.0850 to 0.115	104	70.0 to 130	0.957	20.0
BD06139	Lead, Total	mg/L	0.0000027	0.000147	0.100	0.102	0.101	0.105	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BD06140	Lithium, Dissolved	mg/L	0.000402	0.0154	0.200	0.264	0.261	0.199	0.170 to 0.230	107	70.0 to 130	1.14	20.0
BD06139	Lithium, Total	mg/L	0.000053	0.0154	0.200	0.248	0.247	0.199	0.170 to 0.230	102	70.0 to 130	0.404	20.0
BD06140	Magnesium, Dissolved	mg/L	0.000819	0.0462	5.00	8.76	8.75	4.93	4.25 to 5.75	99.2	70.0 to 130	0.114	20.0
BD06139	Magnesium, Total	mg/L	0.00266	0.0462	5.00	6.41	6.42	4.99	4.25 to 5.75	98.0	70.0 to 130	0.156	20.0
BD06140	Manganese, Dissolved	mg/L	0.0000691	0.00033	0.100	0.125	0.126	0.102	0.0850 to 0.115	102	70.0 to 130	0.797	20.0
BD06139	Manganese, Total	mg/L	0.0000240	0.00033	0.100	0.108	0.108	0.104	0.0850 to 0.115	100	70.0 to 130	0.00	20.0
BD06139	Mercury, Total by CVAA	mg/L	2.000E-05	0.000500	0.004	0.00389	0.00395	0.00395	0.00340 to 0.00460	97.2	70.0 to 130	1.53	20.0
BD06140	Molybdenum, Dissolved	mg/L	-0.000343	0.0100	0.2	0.229	0.230	0.200	0.170 to 0.230	101	70.0 to 130	0.436	20.0
BD06139	Molybdenum, Total	mg/L	0.000	0.0100	0.2	0.204	0.202	0.204	0.170 to 0.230	102	70.0 to 130	0.985	20.0
BD06140	Potassium, Dissolved	mg/L	0.0207	0.367	10.0	27.3	27.8	9.88	8.50 to 11.5	99.0	70.0 to 130	1.81	20.0
BD06139	Potassium, Total	mg/L	0.0175	0.367	10.0	10.8	10.9	10.1	8.50 to 11.5	94.9	70.0 to 130	0.922	20.0
BD06140	Selenium, Dissolved	mg/L	0.000215	0.00100	0.100	0.102	0.102	0.101	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BD06139	Selenium, Total	mg/L	0.0000690	0.00100	0.100	0.0442	0.0448	0.101	0.0850 to 0.115	44.2	70.0 to 130	1.35	20.0
BD06140	Silicon, Dissolved	mg/L	0.000678	0.0440	1.00	6.60	6.57	1.00	0.850 to 1.15	105	70.0 to 130	0.456	20.0
BD06139	Silicon, Total	mg/L	0.000389	0.0440	1.00	8.44	8.45	1.01	0.850 to 1.15	108	70.0 to 130	0.118	20.0
BD06140	Sodium, Dissolved	mg/L	0.000478	0.0880	5.00	324	347	4.79	4.25 to 5.75	-80.0	70.0 to 130	6.86	20.0
BD06139	Sodium, Total	mg/L	0.00674	0.0880	5.00	146	163	4.81	4.25 to 5.75	-100	70.0 to 130	11.0	20.0
BD06141	Sulfate	mg/L	0.233	2.0	20.0	45.3	45.3	20.2	18.0 to 22.0	90.0	80.0 to 120	0.00	20.0
BD06140	Thallium, Dissolved	mg/L	-0.0000325	0.000147	0.100	0.104	0.105	0.106	0.0850 to 0.115	104	70.0 to 130	0.957	20.0
BD06139	Thallium, Total	mg/L	-0.0000162	0.000147	0.100	0.0996	0.0969	0.102	0.0850 to 0.115	99.6	70.0 to 130	2.75	20.0
BD06130	Total Organic Carbon	mg/L	0.0814	1.00	10.0	10.2	10.7	24.6		102	80.0 to 120	4.78	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/27/23 10:45
Customer ID:
Delivery Date: 3/29/23 09:41

Description: Gorgas Ash Pond - MW-46

Laboratory ID Number: BD06136

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD06144	Alkalinity to pH 4.5	mg CaCO3/L					207	50.8	45.0 to 55.0			0.962	10.0
BD06139	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.02	0.200	2.00	1.97	0.076	2.04	1.80 to 2.20	98.5	90.0 to 110	0.00	15.0
BD06136	Solids, Dissolved	mg/L	1.00	25.0			544	50.0	40.0 to 60.0			1.82	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 5/3/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-46 Dup

Location Code: WMWGORAP
Collected: 3/27/23 10:45
Customer ID:
Submittal Date: 3/29/23 09:41

Laboratory ID Number: BD06137

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	3/31/23 06:13	4/4/23 12:27		1.015	0.881	mg/L	0.030000	0.1015	
* Calcium, Total	3/31/23 06:13	4/4/23 12:27		1.015	0.957	mg/L	0.070035	0.406	
* Iron, Total	3/31/23 06:13	4/4/23 12:27		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Total	3/31/23 06:13	4/4/23 12:27		1.015	0.0593	mg/L	0.007105	0.01999956	
* Magnesium, Total	3/31/23 06:13	4/4/23 12:27		1.015	0.306	mg/L	0.021315	0.406	J
* Molybdenum, Total	3/31/23 06:13	4/4/23 12:27		1.015	0.0114	mg/L	0.005075	0.01015	
* Silica, Total (calc.)	3/31/23 06:13	4/4/23 12:27		1	9.95	mg/L			
* Silicon, Total	3/31/23 06:13	4/4/23 12:27		1.015	4.65	mg/L	0.02030	0.25375	
* Sodium, Total	3/31/23 06:13	4/4/23 15:46		10.15	202	mg/L	0.4060	4.06	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	3/30/23 10:59	4/3/23 11:04		1.015	0.900	mg/L	0.030000	0.1015	
* Calcium, Dissolved	3/30/23 10:59	4/3/23 11:04		1.015	0.954	mg/L	0.070035	0.406	
* Iron, Dissolved	3/30/23 10:59	4/3/23 11:04		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Dissolved	3/30/23 10:59	4/3/23 11:04		1.015	0.0608	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	3/30/23 10:59	4/3/23 11:04		1.015	0.288	mg/L	0.021315	0.406	J
* Molybdenum, Dissolved	3/30/23 10:59	4/3/23 11:04		1.015	0.00860	mg/L	0.005075	0.01015	J
* Silica, Dissolved (calc.)	3/30/23 10:59	4/3/23 11:04		1	10.0	mg/L			
* Silicon, Dissolved	3/30/23 10:59	4/3/23 11:04		1.015	4.68	mg/L	0.02030	0.25375	
* Sodium, Dissolved	3/30/23 10:59	4/3/23 13:14		10.15	203	mg/L	0.4060	4.06	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/31/23 06:13	3/31/23 13:28		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Total	3/31/23 06:13	3/31/23 13:28		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Total	3/31/23 06:13	3/31/23 13:28		1.015	0.0920	mg/L	0.000112	0.000203	
* Barium, Total	3/31/23 06:13	4/4/23 14:42		1.015	0.0639	mg/L	0.000508	0.001015	
* Beryllium, Total	3/31/23 06:13	3/31/23 13:28		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	3/31/23 06:13	3/31/23 13:28		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	3/31/23 06:13	3/31/23 13:28		1.015	0.000208	mg/L	0.000203	0.001015	J
* Cobalt, Total	3/31/23 06:13	3/31/23 13:28		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	3/31/23 06:13	3/31/23 13:28		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	3/31/23 06:13	3/31/23 13:28		1.015	0.000835	mg/L	0.000152	0.001015	J

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 5/3/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-46 Dup

Location Code: WMWGORAP
Collected: 3/27/23 10:45
Customer ID:
Submittal Date: 3/29/23 09:41

Laboratory ID Number: BD06137

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	3/31/23 06:13	3/31/23 13:28		1.015	0.578	mg/L	0.169505	0.5075	
* Selenium, Total	3/31/23 06:13	3/31/23 13:28		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	3/31/23 06:13	3/31/23 13:28		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	3/30/23 10:59	3/31/23 11:34		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	3/30/23 10:59	3/31/23 11:34		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Dissolved	3/30/23 10:59	3/31/23 11:34		1.015	0.0802	mg/L	0.000112	0.000203	
* Barium, Dissolved	3/30/23 10:59	4/4/23 12:48		1.015	0.0677	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	3/30/23 10:59	3/31/23 11:34		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	3/30/23 10:59	3/31/23 11:34		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	3/30/23 10:59	3/31/23 11:34		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	3/30/23 10:59	3/31/23 11:34		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Dissolved	3/30/23 10:59	3/31/23 11:34		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	3/30/23 10:59	3/31/23 11:34		1.015	0.000828	mg/L	0.000152	0.001015	J
* Potassium, Dissolved	3/30/23 10:59	3/31/23 11:34		1.015	0.583	mg/L	0.169505	0.5075	
* Selenium, Dissolved	3/30/23 10:59	3/31/23 11:34		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	3/30/23 10:59	3/31/23 11:34		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ELH***								
* Mercury, Total by CVAA	4/3/23 15:06	4/3/23 19:58		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	3/30/23 13:36	3/30/23 13:36		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
* Alkalinity to pH 4.5	4/7/23 12:25	4/7/23 15:29		1	212	mg CaCO3/L		0.10	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	3/29/23 12:30	3/30/23 13:47		1	544	mg/L		50	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
* Bicarbonate Alkalinity, (calc.)	4/7/23 12:25	4/7/23 15:29		1	207	mg CaCO3/L		1	A
* Carbonate Alkalinity, (calc.)	4/7/23 12:25	4/7/23 15:29		1	4.47	mg CaCO3/L		0.5	A
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	4/3/23 14:02	4/3/23 14:02		1	1.38	mg/L	1.00	2	J

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-46 Dup

Location Code: WMWGORAP
Collected: 3/27/23 10:45
Customer ID:
Submittal Date: 3/29/23 09:41

Laboratory ID Number: BD06137

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	3/30/23 11:51	3/30/23 11:51		8	30.4	mg/L	4.00	8	
Analytical Method: SM4500F G 2017	***Analyst: CES***								
* Fluoride	3/30/23 14:48	3/30/23 14:48		1	0.267	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	4/4/23 14:45	4/4/23 14:45		8	177	mg/L	4.8	16	
Analytical Method: Field Measurements	***Analyst: AWG***								
Conductivity	3/27/23 10:41	3/27/23 10:41			862.06	uS/cm			FA
pH	3/27/23 10:41	3/27/23 10:41			8.81	SU			FA
Temperature	3/27/23 10:41	3/27/23 10:41			17.93	C			FA
Turbidity	3/27/23 10:41	3/27/23 10:41			1.4	NTU			FA
Sulfide	3/27/23 10:41	3/27/23 10:41			3	mg/L			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 5/3/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/27/23 10:45
Customer ID:
Delivery Date: 3/29/23 09:41

Description: Gorgas Ash Pond - MW-46 Dup

Laboratory ID Number: BD06137

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD06140	Aluminum, Dissolved	mg/L	0.000167	0.0198	0.100	0.107	0.107	0.101	0.0850 to 0.115	107	70.0 to 130	0.00	20.0
BD06139	Aluminum, Total	mg/L	0.000866	0.0198	0.100	0.123	0.122	0.103	0.0850 to 0.115	101	70.0 to 130	0.816	20.0
BD06140	Antimony, Dissolved	mg/L	0.000464	0.00100	0.100	0.106	0.107	0.0983	0.0850 to 0.115	106	70.0 to 130	0.939	20.0
BD06139	Antimony, Total	mg/L	0.000272	0.00100	0.100	0.0988	0.0971	0.0970	0.0850 to 0.115	98.8	70.0 to 130	1.74	20.0
BD06140	Arsenic, Dissolved	mg/L	0.0000011	0.000200	0.100	0.104	0.104	0.0994	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BD06139	Arsenic, Total	mg/L	0.0000131	0.000200	0.100	0.0998	0.101	0.101	0.0850 to 0.115	99.6	70.0 to 130	1.20	20.0
BD06140	Barium, Dissolved	mg/L	0.0000037	0.00100	0.100	0.280	0.279	0.0988	0.0850 to 0.115	99.0	70.0 to 130	0.358	20.0
BD06139	Barium, Total	mg/L	0.0000151	0.00100	0.100	0.224	0.225	0.0998	0.0850 to 0.115	101	70.0 to 130	0.445	20.0
BD06140	Beryllium, Dissolved	mg/L	0.0000069	0.000880	0.100	0.103	0.103	0.103	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BD06139	Beryllium, Total	mg/L	0.0000208	0.000880	0.100	0.104	0.103	0.103	0.0850 to 0.115	104	70.0 to 130	0.966	20.0
BD06140	Boron, Dissolved	mg/L	-0.00131	0.0650	1.00	1.11	1.11	1.03	0.850 to 1.15	107	70.0 to 130	0.00	20.0
BD06139	Boron, Total	mg/L	-0.000121	0.0650	1.00	1.06	1.06	1.02	0.850 to 1.15	106	70.0 to 130	0.00	20.0
BD06140	Cadmium, Dissolved	mg/L	0.0000029	0.000147	0.100	0.110	0.109	0.110	0.0850 to 0.115	110	70.0 to 130	0.913	20.0
BD06139	Cadmium, Total	mg/L	0.0000055	0.000147	0.100	0.111	0.112	0.111	0.0850 to 0.115	111	70.0 to 130	0.897	20.0
BD06140	Calcium, Dissolved	mg/L	-0.0111	0.152	5.00	16.0	16.0	4.94	4.25 to 5.75	98.0	70.0 to 130	0.00	20.0
BD06139	Calcium, Total	mg/L	0.0239	0.152	5.00	8.69	8.79	5.03	4.25 to 5.75	95.8	70.0 to 130	1.14	20.0
BD06139	Chloride	mg/L	0.108	1.00	10.0	27.0	26.9	9.64	9.00 to 11.0	86.0	80.0 to 120	0.371	20.0
BD06140	Chromium, Dissolved	mg/L	-0.0000058	0.000440	0.100	0.103	0.101	0.0995	0.0850 to 0.115	103	70.0 to 130	1.96	20.0
BD06139	Chromium, Total	mg/L	0.0000641	0.000440	0.100	0.100	0.0993	0.102	0.0850 to 0.115	99.8	70.0 to 130	0.702	20.0
BD06140	Cobalt, Dissolved	mg/L	-0.0000184	0.000147	0.100	0.106	0.106	0.104	0.0850 to 0.115	106	70.0 to 130	0.00	20.0
BD06139	Cobalt, Total	mg/L	-0.0000182	0.000147	0.100	0.104	0.103	0.107	0.0850 to 0.115	104	70.0 to 130	0.966	20.0
BD06139	Fluoride	mg/L	-0.00208	0.125	2.50	2.81	2.84	2.71	2.25 to 2.75	106	80.0 to 120	1.06	20.0
BD06140	Iron, Dissolved	mg/L	-0.000147	0.0176	0.2	0.214	0.213	0.201	0.170 to 0.230	101	70.0 to 130	0.468	20.0
BD06139	Iron, Total	mg/L	-0.000394	0.0176	0.2	0.210	0.209	0.203	0.170 to 0.230	101	70.0 to 130	0.477	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/27/23 10:45
Customer ID:
Delivery Date: 3/29/23 09:41

Description: Gorgas Ash Pond - MW-46 Dup

Laboratory ID Number: BD06137

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD06140	Lead, Dissolved	mg/L	0.0000079	0.000147	0.100	0.104	0.105	0.101	0.0850 to 0.115	104	70.0 to 130	0.957	20.0
BD06139	Lead, Total	mg/L	0.0000027	0.000147	0.100	0.102	0.101	0.105	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BD06140	Lithium, Dissolved	mg/L	0.000402	0.0154	0.200	0.264	0.261	0.199	0.170 to 0.230	107	70.0 to 130	1.14	20.0
BD06139	Lithium, Total	mg/L	0.000053	0.0154	0.200	0.248	0.247	0.199	0.170 to 0.230	102	70.0 to 130	0.404	20.0
BD06140	Magnesium, Dissolved	mg/L	0.000819	0.0462	5.00	8.76	8.75	4.93	4.25 to 5.75	99.2	70.0 to 130	0.114	20.0
BD06139	Magnesium, Total	mg/L	0.00266	0.0462	5.00	6.41	6.42	4.99	4.25 to 5.75	98.0	70.0 to 130	0.156	20.0
BD06140	Manganese, Dissolved	mg/L	0.0000691	0.00033	0.100	0.125	0.126	0.102	0.0850 to 0.115	102	70.0 to 130	0.797	20.0
BD06139	Manganese, Total	mg/L	0.0000240	0.00033	0.100	0.108	0.108	0.104	0.0850 to 0.115	100	70.0 to 130	0.00	20.0
BD06139	Mercury, Total by CVAA	mg/L	2.000E-05	0.000500	0.004	0.00389	0.00395	0.00395	0.00340 to 0.00460	97.2	70.0 to 130	1.53	20.0
BD06140	Molybdenum, Dissolved	mg/L	-0.000343	0.0100	0.2	0.229	0.230	0.200	0.170 to 0.230	101	70.0 to 130	0.436	20.0
BD06139	Molybdenum, Total	mg/L	0.000	0.0100	0.2	0.204	0.202	0.204	0.170 to 0.230	102	70.0 to 130	0.985	20.0
BD06140	Potassium, Dissolved	mg/L	0.0207	0.367	10.0	27.3	27.8	9.88	8.50 to 11.5	99.0	70.0 to 130	1.81	20.0
BD06139	Potassium, Total	mg/L	0.0175	0.367	10.0	10.8	10.9	10.1	8.50 to 11.5	94.9	70.0 to 130	0.922	20.0
BD06140	Selenium, Dissolved	mg/L	0.000215	0.00100	0.100	0.102	0.102	0.101	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BD06139	Selenium, Total	mg/L	0.0000690	0.00100	0.100	0.0442	0.0448	0.101	0.0850 to 0.115	44.2	70.0 to 130	1.35	20.0
BD06140	Silicon, Dissolved	mg/L	0.000678	0.0440	1.00	6.60	6.57	1.00	0.850 to 1.15	105	70.0 to 130	0.456	20.0
BD06139	Silicon, Total	mg/L	0.000389	0.0440	1.00	8.44	8.45	1.01	0.850 to 1.15	108	70.0 to 130	0.118	20.0
BD06140	Sodium, Dissolved	mg/L	0.000478	0.0880	5.00	324	347	4.79	4.25 to 5.75	-80.0	70.0 to 130	6.86	20.0
BD06139	Sodium, Total	mg/L	0.00674	0.0880	5.00	146	163	4.81	4.25 to 5.75	-100	70.0 to 130	11.0	20.0
BD06141	Sulfate	mg/L	0.233	2.0	20.0	45.3	45.3	20.2	18.0 to 22.0	90.0	80.0 to 120	0.00	20.0
BD06140	Thallium, Dissolved	mg/L	-0.0000325	0.000147	0.100	0.104	0.105	0.106	0.0850 to 0.115	104	70.0 to 130	0.957	20.0
BD06139	Thallium, Total	mg/L	-0.0000162	0.000147	0.100	0.0996	0.0969	0.102	0.0850 to 0.115	99.6	70.0 to 130	2.75	20.0
BD06130	Total Organic Carbon	mg/L	0.0814	1.00	10.0	10.2	10.7	24.6		102	80.0 to 120	4.78	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/27/23 10:45
Customer ID:
Delivery Date: 3/29/23 09:41

Description: Gorgas Ash Pond - MW-46 Dup

Laboratory ID Number: BD06137

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD06144	Alkalinity to pH 4.5	mg CaCO3/L					207	50.8	45.0 to 55.0			0.962	10.0
BD06139	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.02	0.200	2.00	1.97	0.076	2.04	1.80 to 2.20	98.5	90.0 to 110	0.00	15.0
BD06146	Solids, Dissolved	mg/L	1.00	25.0			302	50.0	40.0 to 60.0			0.988	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-01R

Location Code: WMWGORAP
Collected: 3/27/23 13:02
Customer ID:
Submittal Date: 3/29/23 09:41

Laboratory ID Number: BD06138

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	3/31/23 06:13	4/4/23 12:30		1.015	0.0603	mg/L	0.030000	0.1015	J
* Calcium, Total	3/31/23 06:13	4/4/23 12:30		1.015	0.838	mg/L	0.070035	0.406	
* Iron, Total	3/31/23 06:13	4/4/23 12:30		1.015	0.138	mg/L	0.008120	0.0406	
* Lithium, Total	3/31/23 06:13	4/4/23 12:30		1.015	0.0319	mg/L	0.007105	0.01999956	
* Magnesium, Total	3/31/23 06:13	4/4/23 12:30		1.015	0.236	mg/L	0.021315	0.406	J
* Molybdenum, Total	3/31/23 06:13	4/4/23 12:30		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Total (calc.)	3/31/23 06:13	4/4/23 12:30		1	9.59	mg/L			
* Silicon, Total	3/31/23 06:13	4/4/23 12:30		1.015	4.48	mg/L	0.02030	0.25375	
* Sodium, Total	3/31/23 06:13	4/4/23 15:49		10.15	129	mg/L	0.4060	4.06	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	3/30/23 10:59	4/3/23 11:07		1.015	0.0608	mg/L	0.030000	0.1015	J
* Calcium, Dissolved	3/30/23 10:59	4/3/23 11:07		1.015	0.630	mg/L	0.070035	0.406	
* Iron, Dissolved	3/30/23 10:59	4/3/23 11:07		1.015	0.0103	mg/L	0.008120	0.0406	J
* Lithium, Dissolved	3/30/23 10:59	4/3/23 11:07		1.015	0.0325	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	3/30/23 10:59	4/3/23 11:07		1.015	0.165	mg/L	0.021315	0.406	J
* Molybdenum, Dissolved	3/30/23 10:59	4/3/23 11:07		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Dissolved (calc.)	3/30/23 10:59	4/3/23 11:07		1	9.33	mg/L			
* Silicon, Dissolved	3/30/23 10:59	4/3/23 11:07		1.015	4.36	mg/L	0.02030	0.25375	
* Sodium, Dissolved	3/30/23 10:59	4/3/23 13:17		10.15	132	mg/L	0.4060	4.06	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/31/23 06:13	3/31/23 13:31		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Total	3/31/23 06:13	3/31/23 13:31		1.015	0.151	mg/L	0.009135	0.05075	
* Arsenic, Total	3/31/23 06:13	3/31/23 13:31		1.015	0.000248	mg/L	0.000112	0.000203	
* Barium, Total	3/31/23 06:13	4/4/23 14:45		1.015	0.0647	mg/L	0.000508	0.001015	
* Beryllium, Total	3/31/23 06:13	3/31/23 13:31		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	3/31/23 06:13	3/31/23 13:31		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	3/31/23 06:13	3/31/23 13:31		1.015	0.000404	mg/L	0.000203	0.001015	J
* Cobalt, Total	3/31/23 06:13	3/31/23 13:31		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	3/31/23 06:13	3/31/23 13:31		1.015	0.000134	mg/L	0.000068	0.000203	J
* Manganese, Total	3/31/23 06:13	3/31/23 13:31		1.015	0.00274	mg/L	0.000152	0.001015	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-01R

Location Code: WMWGORAP
Collected: 3/27/23 13:02
Customer ID:
Submittal Date: 3/29/23 09:41

Laboratory ID Number: BD06138

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	3/31/23 06:13	3/31/23 13:31		1.015	0.463	mg/L	0.169505	0.5075	J
* Selenium, Total	3/31/23 06:13	3/31/23 13:31		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	3/31/23 06:13	3/31/23 13:31		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8		***Analyst: DLJ***							
* Antimony, Dissolved	3/30/23 10:59	3/31/23 11:37		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	3/30/23 10:59	3/31/23 11:37		1.015	0.0114	mg/L	0.009135	0.05075	J
* Arsenic, Dissolved	3/30/23 10:59	3/31/23 11:37		1.015	0.000340	mg/L	0.000112	0.000203	
* Barium, Dissolved	3/30/23 10:59	4/4/23 12:51		1.015	0.0483	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	3/30/23 10:59	3/31/23 11:37		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	3/30/23 10:59	3/31/23 11:37		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	3/30/23 10:59	3/31/23 11:37		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	3/30/23 10:59	3/31/23 11:37		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Dissolved	3/30/23 10:59	3/31/23 11:37		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	3/30/23 10:59	3/31/23 11:37		1.015	0.00137	mg/L	0.000152	0.001015	
* Potassium, Dissolved	3/30/23 10:59	3/31/23 11:37		1.015	0.447	mg/L	0.169505	0.5075	J
* Selenium, Dissolved	3/30/23 10:59	3/31/23 11:37		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	3/30/23 10:59	3/31/23 11:37		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1		***Analyst: ELH***							
* Mercury, Total by CVAA	4/3/23 15:06	4/3/23 20:02		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2		***Analyst: SC***							
* Nitrogen, Nitrate/Nitrite	3/30/23 13:38	3/30/23 13:38		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B		***Analyst: ALH***							
* Alkalinity to pH 4.5	4/7/23 12:25	4/7/23 15:29		1	265	mg CaCO3/L		0.10	
Analytical Method: SM 2540C		***Analyst: CNJ***							
* Solids, Dissolved	3/29/23 12:30	3/30/23 13:47		1	314	mg/L		25	
Analytical Method: SM 4500CO2 D		***Analyst: ALH***							
* Bicarbonate Alkalinity, (calc.)	4/7/23 12:25	4/7/23 15:29		1	251	mg CaCO3/L		1	
* Carbonate Alkalinity, (calc.)	4/7/23 12:25	4/7/23 15:29		1	13.9	mg CaCO3/L		0.5	
Analytical Method: SM 5310 B		***Analyst: SC***							
* Total Organic Carbon	4/3/23 14:16	4/3/23 14:16		1	Not Detected	mg/L	1.00	2	U

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-01R

Location Code: WMWGORAP
Collected: 3/27/23 13:02
Customer ID:
Submittal Date: 3/29/23 09:41

Laboratory ID Number: BD06138

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	3/30/23 11:42	3/30/23 11:42		1	7.49	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: CES***								
* Fluoride	3/30/23 14:49	3/30/23 14:49		1	0.234	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	4/4/23 14:34	4/4/23 14:34		1	5.43	mg/L	0.6	2	
Analytical Method: Field Measurements	***Analyst: AWG***								
Conductivity	3/27/23 13:00	3/27/23 13:00			510.66	uS/cm			FA
pH	3/27/23 13:00	3/27/23 13:00			8.84	SU			FA
Temperature	3/27/23 13:00	3/27/23 13:00			19.20	C			FA
Turbidity	3/27/23 13:00	3/27/23 13:00			7.14	NTU			FA
Sulfide	3/27/23 13:00	3/27/23 13:00			0	mg/L			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 5/3/2023
Version: 3.5
COA_CCR

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/27/23 13:02
Customer ID:
Delivery Date: 3/29/23 09:41

Description: Gorgas Ash Pond - MW-01R

Laboratory ID Number: BD06138

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD06140	Aluminum, Dissolved	mg/L	0.000167	0.0198	0.100	0.107	0.107	0.101	0.0850 to 0.115	107	70.0 to 130	0.00	20.0
BD06139	Aluminum, Total	mg/L	0.000866	0.0198	0.100	0.123	0.122	0.103	0.0850 to 0.115	101	70.0 to 130	0.816	20.0
BD06140	Antimony, Dissolved	mg/L	0.000464	0.00100	0.100	0.106	0.107	0.0983	0.0850 to 0.115	106	70.0 to 130	0.939	20.0
BD06139	Antimony, Total	mg/L	0.000272	0.00100	0.100	0.0988	0.0971	0.0970	0.0850 to 0.115	98.8	70.0 to 130	1.74	20.0
BD06140	Arsenic, Dissolved	mg/L	0.0000011	0.000200	0.100	0.104	0.104	0.0994	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BD06139	Arsenic, Total	mg/L	0.0000131	0.000200	0.100	0.0998	0.101	0.101	0.0850 to 0.115	99.6	70.0 to 130	1.20	20.0
BD06140	Barium, Dissolved	mg/L	0.0000037	0.00100	0.100	0.280	0.279	0.0988	0.0850 to 0.115	99.0	70.0 to 130	0.358	20.0
BD06139	Barium, Total	mg/L	0.0000151	0.00100	0.100	0.224	0.225	0.0998	0.0850 to 0.115	101	70.0 to 130	0.445	20.0
BD06140	Beryllium, Dissolved	mg/L	0.0000069	0.000880	0.100	0.103	0.103	0.103	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BD06139	Beryllium, Total	mg/L	0.0000208	0.000880	0.100	0.104	0.103	0.103	0.0850 to 0.115	104	70.0 to 130	0.966	20.0
BD06140	Boron, Dissolved	mg/L	-0.00131	0.0650	1.00	1.11	1.11	1.03	0.850 to 1.15	107	70.0 to 130	0.00	20.0
BD06139	Boron, Total	mg/L	-0.000121	0.0650	1.00	1.06	1.06	1.02	0.850 to 1.15	106	70.0 to 130	0.00	20.0
BD06140	Cadmium, Dissolved	mg/L	0.0000029	0.000147	0.100	0.110	0.109	0.110	0.0850 to 0.115	110	70.0 to 130	0.913	20.0
BD06139	Cadmium, Total	mg/L	0.0000055	0.000147	0.100	0.111	0.112	0.111	0.0850 to 0.115	111	70.0 to 130	0.897	20.0
BD06140	Calcium, Dissolved	mg/L	-0.0111	0.152	5.00	16.0	16.0	4.94	4.25 to 5.75	98.0	70.0 to 130	0.00	20.0
BD06139	Calcium, Total	mg/L	0.0239	0.152	5.00	8.69	8.79	5.03	4.25 to 5.75	95.8	70.0 to 130	1.14	20.0
BD06139	Chloride	mg/L	0.108	1.00	10.0	27.0	26.9	9.64	9.00 to 11.0	86.0	80.0 to 120	0.371	20.0
BD06140	Chromium, Dissolved	mg/L	-0.0000058	0.000440	0.100	0.103	0.101	0.0995	0.0850 to 0.115	103	70.0 to 130	1.96	20.0
BD06139	Chromium, Total	mg/L	0.0000641	0.000440	0.100	0.100	0.0993	0.102	0.0850 to 0.115	99.8	70.0 to 130	0.702	20.0
BD06140	Cobalt, Dissolved	mg/L	-0.0000184	0.000147	0.100	0.106	0.106	0.104	0.0850 to 0.115	106	70.0 to 130	0.00	20.0
BD06139	Cobalt, Total	mg/L	-0.0000182	0.000147	0.100	0.104	0.103	0.107	0.0850 to 0.115	104	70.0 to 130	0.966	20.0
BD06139	Fluoride	mg/L	-0.00208	0.125	2.50	2.81	2.84	2.71	2.25 to 2.75	106	80.0 to 120	1.06	20.0
BD06140	Iron, Dissolved	mg/L	-0.000147	0.0176	0.2	0.214	0.213	0.201	0.170 to 0.230	101	70.0 to 130	0.468	20.0
BD06139	Iron, Total	mg/L	-0.000394	0.0176	0.2	0.210	0.209	0.203	0.170 to 0.230	101	70.0 to 130	0.477	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/27/23 13:02
Customer ID:
Delivery Date: 3/29/23 09:41

Description: Gorgas Ash Pond - MW-01R

Laboratory ID Number: BD06138

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD06140	Lead, Dissolved	mg/L	0.0000079	0.000147	0.100	0.104	0.105	0.101	0.0850 to 0.115	104	70.0 to 130	0.957	20.0
BD06139	Lead, Total	mg/L	0.0000027	0.000147	0.100	0.102	0.101	0.105	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BD06140	Lithium, Dissolved	mg/L	0.000402	0.0154	0.200	0.264	0.261	0.199	0.170 to 0.230	107	70.0 to 130	1.14	20.0
BD06139	Lithium, Total	mg/L	0.000053	0.0154	0.200	0.248	0.247	0.199	0.170 to 0.230	102	70.0 to 130	0.404	20.0
BD06140	Magnesium, Dissolved	mg/L	0.000819	0.0462	5.00	8.76	8.75	4.93	4.25 to 5.75	99.2	70.0 to 130	0.114	20.0
BD06139	Magnesium, Total	mg/L	0.00266	0.0462	5.00	6.41	6.42	4.99	4.25 to 5.75	98.0	70.0 to 130	0.156	20.0
BD06140	Manganese, Dissolved	mg/L	0.0000691	0.00033	0.100	0.125	0.126	0.102	0.0850 to 0.115	102	70.0 to 130	0.797	20.0
BD06139	Manganese, Total	mg/L	0.0000240	0.00033	0.100	0.108	0.108	0.104	0.0850 to 0.115	100	70.0 to 130	0.00	20.0
BD06139	Mercury, Total by CVAA	mg/L	2.000E-05	0.000500	0.004	0.00389	0.00395	0.00395	0.00340 to 0.00460	97.2	70.0 to 130	1.53	20.0
BD06140	Molybdenum, Dissolved	mg/L	-0.000343	0.0100	0.2	0.229	0.230	0.200	0.170 to 0.230	101	70.0 to 130	0.436	20.0
BD06139	Molybdenum, Total	mg/L	0.000	0.0100	0.2	0.204	0.202	0.204	0.170 to 0.230	102	70.0 to 130	0.985	20.0
BD06140	Potassium, Dissolved	mg/L	0.0207	0.367	10.0	27.3	27.8	9.88	8.50 to 11.5	99.0	70.0 to 130	1.81	20.0
BD06139	Potassium, Total	mg/L	0.0175	0.367	10.0	10.8	10.9	10.1	8.50 to 11.5	94.9	70.0 to 130	0.922	20.0
BD06140	Selenium, Dissolved	mg/L	0.000215	0.00100	0.100	0.102	0.102	0.101	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BD06139	Selenium, Total	mg/L	0.0000690	0.00100	0.100	0.0442	0.0448	0.101	0.0850 to 0.115	44.2	70.0 to 130	1.35	20.0
BD06140	Silicon, Dissolved	mg/L	0.000678	0.0440	1.00	6.60	6.57	1.00	0.850 to 1.15	105	70.0 to 130	0.456	20.0
BD06139	Silicon, Total	mg/L	0.000389	0.0440	1.00	8.44	8.45	1.01	0.850 to 1.15	108	70.0 to 130	0.118	20.0
BD06140	Sodium, Dissolved	mg/L	0.000478	0.0880	5.00	324	347	4.79	4.25 to 5.75	-80.0	70.0 to 130	6.86	20.0
BD06139	Sodium, Total	mg/L	0.00674	0.0880	5.00	146	163	4.81	4.25 to 5.75	-100	70.0 to 130	11.0	20.0
BD06141	Sulfate	mg/L	0.233	2.0	20.0	45.3	45.3	20.2	18.0 to 22.0	90.0	80.0 to 120	0.00	20.0
BD06140	Thallium, Dissolved	mg/L	-0.0000325	0.000147	0.100	0.104	0.105	0.106	0.0850 to 0.115	104	70.0 to 130	0.957	20.0
BD06139	Thallium, Total	mg/L	-0.0000162	0.000147	0.100	0.0996	0.0969	0.102	0.0850 to 0.115	99.6	70.0 to 130	2.75	20.0
BD06130	Total Organic Carbon	mg/L	0.0814	1.00	10.0	10.2	10.7	24.6		102	80.0 to 120	4.78	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/27/23 13:02
Customer ID:
Delivery Date: 3/29/23 09:41

Description: Gorgas Ash Pond - MW-01R

Laboratory ID Number: BD06138

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD06144	Alkalinity to pH 4.5	mg CaCO3/L					207	50.8	45.0 to 55.0			0.962	10.0
BD06139	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.02	0.200	2.00	1.97	0.076	2.04	1.80 to 2.20	98.5	90.0 to 110	0.00	15.0
BD06146	Solids, Dissolved	mg/L	1.00	25.0			302	50.0	40.0 to 60.0			0.988	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-31H

Location Code: WMWGORAP
Collected: 3/27/23 15:00
Customer ID:
Submittal Date: 3/29/23 09:41

Laboratory ID Number: BD06139

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	3/31/23 06:13	4/4/23 12:34		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	3/31/23 06:13	4/4/23 12:34		1.015	3.90	mg/L	0.070035	0.406	
* Iron, Total	3/31/23 06:13	4/4/23 12:34		1.015	0.00848	mg/L	0.008120	0.0406	J
* Lithium, Total	3/31/23 06:13	4/4/23 12:34		1.015	0.0435	mg/L	0.007105	0.01999956	
* Magnesium, Total	3/31/23 06:13	4/4/23 12:34		1.015	1.51	mg/L	0.021315	0.406	
* Molybdenum, Total	3/31/23 06:13	4/4/23 12:34		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Total (calc.)	3/31/23 06:13	4/4/23 12:34		1	15.8	mg/L			
* Silicon, Total	3/31/23 06:13	4/4/23 12:34		1.015	7.36	mg/L	0.02030	0.25375	
* Sodium, Total	3/31/23 06:13	4/4/23 15:52		10.15	151	mg/L	0.4060	4.06	RA
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	3/30/23 10:59	4/3/23 11:10		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Dissolved	3/30/23 10:59	4/3/23 11:10		1.015	3.82	mg/L	0.070035	0.406	
* Iron, Dissolved	3/30/23 10:59	4/3/23 11:10		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Dissolved	3/30/23 10:59	4/3/23 11:10		1.015	0.0437	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	3/30/23 10:59	4/3/23 11:10		1.015	1.45	mg/L	0.021315	0.406	
* Molybdenum, Dissolved	3/30/23 10:59	4/3/23 11:10		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Dissolved (calc.)	3/30/23 10:59	4/3/23 11:10		1	15.7	mg/L			
* Silicon, Dissolved	3/30/23 10:59	4/3/23 11:10		1.015	7.33	mg/L	0.02030	0.25375	
* Sodium, Dissolved	3/30/23 10:59	4/3/23 13:20		10.15	154	mg/L	0.4060	4.06	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/31/23 06:13	3/31/23 13:35		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Total	3/31/23 06:13	3/31/23 13:35		1.015	0.0219	mg/L	0.009135	0.05075	J
* Arsenic, Total	3/31/23 06:13	3/31/23 13:35		1.015	0.000160	mg/L	0.000112	0.000203	J
* Barium, Total	3/31/23 06:13	4/4/23 14:49		1.015	0.123	mg/L	0.000508	0.001015	
* Beryllium, Total	3/31/23 06:13	3/31/23 13:35		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	3/31/23 06:13	3/31/23 13:35		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	3/31/23 06:13	3/31/23 13:35		1.015	0.000232	mg/L	0.000203	0.001015	J
* Cobalt, Total	3/31/23 06:13	3/31/23 13:35		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	3/31/23 06:13	3/31/23 13:35		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	3/31/23 06:13	3/31/23 13:35		1.015	0.00753	mg/L	0.000152	0.001015	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
Total Selenium matrix spike recovery and/or matrix spike duplicate recovery is outside of specification limit.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-31H

Location Code: WMWGORAP
Collected: 3/27/23 15:00
Customer ID:
Submittal Date: 3/29/23 09:41

Laboratory ID Number: BD06139

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	3/31/23 06:13	3/31/23 13:35		1.015	1.31	mg/L	0.169505	0.5075	
* Selenium, Total	3/31/23 06:13	3/31/23 13:35		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	3/31/23 06:13	3/31/23 13:35		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	3/30/23 10:59	3/31/23 11:41		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	3/30/23 10:59	3/31/23 11:41		1.015	0.0146	mg/L	0.009135	0.05075	J
* Arsenic, Dissolved	3/30/23 10:59	3/31/23 11:41		1.015	Not Detected	mg/L	0.000112	0.000203	U
* Barium, Dissolved	3/30/23 10:59	4/4/23 12:55		1.015	0.131	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	3/30/23 10:59	3/31/23 11:41		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	3/30/23 10:59	3/31/23 11:41		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	3/30/23 10:59	3/31/23 11:41		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	3/30/23 10:59	3/31/23 11:41		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Dissolved	3/30/23 10:59	3/31/23 11:41		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	3/30/23 10:59	3/31/23 11:41		1.015	0.00684	mg/L	0.000152	0.001015	
* Potassium, Dissolved	3/30/23 10:59	3/31/23 11:41		1.015	1.31	mg/L	0.169505	0.5075	
* Selenium, Dissolved	3/30/23 10:59	3/31/23 11:41		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	3/30/23 10:59	3/31/23 11:41		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ELH***								
* Mercury, Total by CVAA	4/3/23 15:06	4/3/23 20:06		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	3/30/23 13:40	3/30/23 13:40		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
* Alkalinity to pH 4.5	4/7/23 12:25	4/7/23 15:29		1	302	mg CaCO3/L		0.10	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	3/29/23 12:30	3/30/23 13:47		1	373	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
* Bicarbonate Alkalinity, (calc.)	4/7/23 12:25	4/7/23 15:29		1	288	mg CaCO3/L		1	
* Carbonate Alkalinity, (calc.)	4/7/23 12:25	4/7/23 15:29		1	13.3	mg CaCO3/L		0.5	
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	4/3/23 14:33	4/3/23 14:33		1	Not Detected	mg/L	1.00	2	U

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
Total Selenium matrix spike recovery and/or matrix spike duplicate recovery is outside of specification limit.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-31H

Location Code: WMWGORAP
Collected: 3/27/23 15:00
Customer ID:
Submittal Date: 3/29/23 09:41

Laboratory ID Number: BD06139

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	3/30/23 11:44	3/30/23 11:44		1	18.4	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: CES***								
* Fluoride	3/30/23 14:51	3/30/23 14:51		1	0.155	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	4/4/23 14:36	4/4/23 14:36		1	8.13	mg/L	0.6	2	
Analytical Method: Field Measurements	***Analyst: AWG***								
Conductivity	3/27/23 14:58	3/27/23 14:58			641.31	uS/cm			FA
pH	3/27/23 14:58	3/27/23 14:58			8.86	SU			FA
Temperature	3/27/23 14:58	3/27/23 14:58			19.58	C			FA
Turbidity	3/27/23 14:58	3/27/23 14:58			2.13	NTU			FA
Sulfide	3/27/23 14:58	3/27/23 14:58			2	mg/L			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
Total Selenium matrix spike recovery and/or matrix spike duplicate recovery is outside of specification limit.

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/27/23 15:00
Customer ID:
Delivery Date: 3/29/23 09:41

Description: Gorgas Ash Pond - MW-31H

Laboratory ID Number: BD06139

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD06140	Aluminum, Dissolved	mg/L	0.000167	0.0198	0.100	0.107	0.107	0.101	0.0850 to 0.115	107	70.0 to 130	0.00	20.0
BD06139	Aluminum, Total	mg/L	0.000866	0.0198	0.100	0.123	0.122	0.103	0.0850 to 0.115	101	70.0 to 130	0.816	20.0
BD06140	Antimony, Dissolved	mg/L	0.000464	0.00100	0.100	0.106	0.107	0.0983	0.0850 to 0.115	106	70.0 to 130	0.939	20.0
BD06139	Antimony, Total	mg/L	0.000272	0.00100	0.100	0.0988	0.0971	0.0970	0.0850 to 0.115	98.8	70.0 to 130	1.74	20.0
BD06140	Arsenic, Dissolved	mg/L	0.0000011	0.000200	0.100	0.104	0.104	0.0994	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BD06139	Arsenic, Total	mg/L	0.0000131	0.000200	0.100	0.0998	0.101	0.101	0.0850 to 0.115	99.6	70.0 to 130	1.20	20.0
BD06140	Barium, Dissolved	mg/L	0.0000037	0.00100	0.100	0.280	0.279	0.0988	0.0850 to 0.115	99.0	70.0 to 130	0.358	20.0
BD06139	Barium, Total	mg/L	0.0000151	0.00100	0.100	0.224	0.225	0.0998	0.0850 to 0.115	101	70.0 to 130	0.445	20.0
BD06140	Beryllium, Dissolved	mg/L	0.0000069	0.000880	0.100	0.103	0.103	0.103	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BD06139	Beryllium, Total	mg/L	0.0000208	0.000880	0.100	0.104	0.103	0.103	0.0850 to 0.115	104	70.0 to 130	0.966	20.0
BD06140	Boron, Dissolved	mg/L	-0.00131	0.0650	1.00	1.11	1.11	1.03	0.850 to 1.15	107	70.0 to 130	0.00	20.0
BD06139	Boron, Total	mg/L	-0.000121	0.0650	1.00	1.06	1.06	1.02	0.850 to 1.15	106	70.0 to 130	0.00	20.0
BD06140	Cadmium, Dissolved	mg/L	0.0000029	0.000147	0.100	0.110	0.109	0.110	0.0850 to 0.115	110	70.0 to 130	0.913	20.0
BD06139	Cadmium, Total	mg/L	0.0000055	0.000147	0.100	0.111	0.112	0.111	0.0850 to 0.115	111	70.0 to 130	0.897	20.0
BD06140	Calcium, Dissolved	mg/L	-0.0111	0.152	5.00	16.0	16.0	4.94	4.25 to 5.75	98.0	70.0 to 130	0.00	20.0
BD06139	Calcium, Total	mg/L	0.0239	0.152	5.00	8.69	8.79	5.03	4.25 to 5.75	95.8	70.0 to 130	1.14	20.0
BD06139	Chloride	mg/L	0.108	1.00	10.0	27.0	26.9	9.64	9.00 to 11.0	86.0	80.0 to 120	0.371	20.0
BD06140	Chromium, Dissolved	mg/L	-0.0000058	0.000440	0.100	0.103	0.101	0.0995	0.0850 to 0.115	103	70.0 to 130	1.96	20.0
BD06139	Chromium, Total	mg/L	0.0000641	0.000440	0.100	0.100	0.0993	0.102	0.0850 to 0.115	99.8	70.0 to 130	0.702	20.0
BD06140	Cobalt, Dissolved	mg/L	-0.0000184	0.000147	0.100	0.106	0.106	0.104	0.0850 to 0.115	106	70.0 to 130	0.00	20.0
BD06139	Cobalt, Total	mg/L	-0.0000182	0.000147	0.100	0.104	0.103	0.107	0.0850 to 0.115	104	70.0 to 130	0.966	20.0
BD06139	Fluoride	mg/L	-0.00208	0.125	2.50	2.81	2.84	2.71	2.25 to 2.75	106	80.0 to 120	1.06	20.0
BD06140	Iron, Dissolved	mg/L	-0.000147	0.0176	0.2	0.214	0.213	0.201	0.170 to 0.230	101	70.0 to 130	0.468	20.0
BD06139	Iron, Total	mg/L	-0.000394	0.0176	0.2	0.210	0.209	0.203	0.170 to 0.230	101	70.0 to 130	0.477	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
Total Selenium matrix spike recovery and/or matrix spike duplicate recovery is outside of specification limit.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/27/23 15:00
Customer ID:
Delivery Date: 3/29/23 09:41

Description: Gorgas Ash Pond - MW-31H

Laboratory ID Number: BD06139

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD06140	Lead, Dissolved	mg/L	0.0000079	0.000147	0.100	0.104	0.105	0.101	0.0850 to 0.115	104	70.0 to 130	0.957	20.0
BD06139	Lead, Total	mg/L	0.0000027	0.000147	0.100	0.102	0.101	0.105	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BD06140	Lithium, Dissolved	mg/L	0.000402	0.0154	0.200	0.264	0.261	0.199	0.170 to 0.230	107	70.0 to 130	1.14	20.0
BD06139	Lithium, Total	mg/L	0.000053	0.0154	0.200	0.248	0.247	0.199	0.170 to 0.230	102	70.0 to 130	0.404	20.0
BD06140	Magnesium, Dissolved	mg/L	0.000819	0.0462	5.00	8.76	8.75	4.93	4.25 to 5.75	99.2	70.0 to 130	0.114	20.0
BD06139	Magnesium, Total	mg/L	0.00266	0.0462	5.00	6.41	6.42	4.99	4.25 to 5.75	98.0	70.0 to 130	0.156	20.0
BD06140	Manganese, Dissolved	mg/L	0.0000691	0.00033	0.100	0.125	0.126	0.102	0.0850 to 0.115	102	70.0 to 130	0.797	20.0
BD06139	Manganese, Total	mg/L	0.0000240	0.00033	0.100	0.108	0.108	0.104	0.0850 to 0.115	100	70.0 to 130	0.00	20.0
BD06139	Mercury, Total by CVAA	mg/L	2.000E-05	0.000500	0.004	0.00389	0.00395	0.00395	0.00340 to 0.00460	97.2	70.0 to 130	1.53	20.0
BD06140	Molybdenum, Dissolved	mg/L	-0.000343	0.0100	0.2	0.229	0.230	0.200	0.170 to 0.230	101	70.0 to 130	0.436	20.0
BD06139	Molybdenum, Total	mg/L	0.000	0.0100	0.2	0.204	0.202	0.204	0.170 to 0.230	102	70.0 to 130	0.985	20.0
BD06140	Potassium, Dissolved	mg/L	0.0207	0.367	10.0	27.3	27.8	9.88	8.50 to 11.5	99.0	70.0 to 130	1.81	20.0
BD06139	Potassium, Total	mg/L	0.0175	0.367	10.0	10.8	10.9	10.1	8.50 to 11.5	94.9	70.0 to 130	0.922	20.0
BD06140	Selenium, Dissolved	mg/L	0.000215	0.00100	0.100	0.102	0.102	0.101	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BD06139	Selenium, Total	mg/L	0.0000690	0.00100	0.100	0.0442	0.0448	0.101	0.0850 to 0.115	44.2	70.0 to 130	1.35	20.0
BD06140	Silicon, Dissolved	mg/L	0.000678	0.0440	1.00	6.60	6.57	1.00	0.850 to 1.15	105	70.0 to 130	0.456	20.0
BD06139	Silicon, Total	mg/L	0.000389	0.0440	1.00	8.44	8.45	1.01	0.850 to 1.15	108	70.0 to 130	0.118	20.0
BD06140	Sodium, Dissolved	mg/L	0.000478	0.0880	5.00	324	347	4.79	4.25 to 5.75	-80.0	70.0 to 130	6.86	20.0
BD06139	Sodium, Total	mg/L	0.00674	0.0880	5.00	146	163	4.81	4.25 to 5.75	-100	70.0 to 130	11.0	20.0
BD06141	Sulfate	mg/L	0.233	2.0	20.0	45.3	45.3	20.2	18.0 to 22.0	90.0	80.0 to 120	0.00	20.0
BD06140	Thallium, Dissolved	mg/L	-0.0000325	0.000147	0.100	0.104	0.105	0.106	0.0850 to 0.115	104	70.0 to 130	0.957	20.0
BD06139	Thallium, Total	mg/L	-0.0000162	0.000147	0.100	0.0996	0.0969	0.102	0.0850 to 0.115	99.6	70.0 to 130	2.75	20.0
BD06130	Total Organic Carbon	mg/L	0.0814	1.00	10.0	10.2	10.7	24.6		102	80.0 to 120	4.78	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
Total Selenium matrix spike recovery and/or matrix spike duplicate recovery is outside of specification limit.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/27/23 15:00
Customer ID:
Delivery Date: 3/29/23 09:41

Description: Gorgas Ash Pond - MW-31H

Laboratory ID Number: BD06139

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD06144	Alkalinity to pH 4.5	mg CaCO3/L					207	50.8	45.0 to 55.0			0.962	10.0
BD06139	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.02	0.200	2.00	1.97	0.076	2.04	1.80 to 2.20	98.5	90.0 to 110	0.00	15.0
BD06146	Solids, Dissolved	mg/L	1.00	25.0			302	50.0	40.0 to 60.0			0.988	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
Total Selenium matrix spike recovery and/or matrix spike duplicate recovery is outside of specification limit.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-31V

Location Code: WMWGORAP
Collected: 3/27/23 16:37
Customer ID:
Submittal Date: 3/29/23 09:41

Laboratory ID Number: BD06140

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7		***Analyst: ABB***			***Preparation Method: EPA 1638***				
* Boron, Total	3/31/23 06:13	4/4/23 12:49		1.015	0.0480	mg/L	0.030000	0.1015	J
* Calcium, Total	3/31/23 06:13	4/4/23 12:49		1.015	16.4	mg/L	0.070035	0.406	
* Iron, Total	3/31/23 06:13	4/4/23 12:49		1.015	0.0299	mg/L	0.008120	0.0406	J
* Lithium, Total	3/31/23 06:13	4/4/23 12:49		1.015	0.0508	mg/L	0.007105	0.01999956	
* Magnesium, Total	3/31/23 06:13	4/4/23 12:49		1.015	5.67	mg/L	0.021315	0.406	
* Molybdenum, Total	3/31/23 06:13	4/4/23 12:49		1.015	0.0409	mg/L	0.005075	0.01015	
* Silica, Total (calc.)	3/31/23 06:13	4/4/23 12:49		1	12.0	mg/L			
* Silicon, Total	3/31/23 06:13	4/4/23 12:49		1.015	5.59	mg/L	0.02030	0.25375	
* Sodium, Total	3/31/23 06:13	4/4/23 16:01		101.5	369	mg/L	4.060	40.6	
Analytical Method: EPA 200.7		***Analyst: ABB***							
* Boron, Dissolved	3/30/23 10:59	4/3/23 11:13		1.015	0.0429	mg/L	0.030000	0.1015	J
* Calcium, Dissolved	3/30/23 10:59	4/3/23 11:13		1.015	11.1	mg/L	0.070035	0.406	
* Iron, Dissolved	3/30/23 10:59	4/3/23 11:13		1.015	0.0116	mg/L	0.008120	0.0406	J
* Lithium, Dissolved	3/30/23 10:59	4/3/23 11:13		1.015	0.0494	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	3/30/23 10:59	4/3/23 11:13		1.015	3.80	mg/L	0.021315	0.406	
* Molybdenum, Dissolved	3/30/23 10:59	4/3/23 11:13		1.015	0.0264	mg/L	0.005075	0.01015	
* Silica, Dissolved (calc.)	3/30/23 10:59	4/3/23 11:13		1	11.9	mg/L			
* Silicon, Dissolved	3/30/23 10:59	4/3/23 11:13		1.015	5.55	mg/L	0.02030	0.25375	
* Sodium, Dissolved	3/30/23 10:59	4/3/23 13:23		10.15	328	mg/L	0.4060	4.06	RA
Analytical Method: EPA 200.8		***Analyst: DLJ***			***Preparation Method: EPA 1638***				
* Antimony, Total	3/31/23 06:13	3/31/23 13:56		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Total	3/31/23 06:13	3/31/23 13:56		1.015	0.0243	mg/L	0.009135	0.05075	J
* Arsenic, Total	3/31/23 06:13	3/31/23 13:56		1.015	0.00166	mg/L	0.000112	0.000203	
* Barium, Total	3/31/23 06:13	4/4/23 15:10		1.015	0.253	mg/L	0.000508	0.001015	
* Beryllium, Total	3/31/23 06:13	3/31/23 13:56		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	3/31/23 06:13	3/31/23 13:56		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	3/31/23 06:13	3/31/23 13:56		1.015	0.000368	mg/L	0.000203	0.001015	J
* Cobalt, Total	3/31/23 06:13	3/31/23 13:56		1.015	0.0000682	mg/L	0.000068	0.000203	J
* Lead, Total	3/31/23 06:13	3/31/23 13:56		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	3/31/23 06:13	3/31/23 13:56		1.015	0.0337	mg/L	0.000152	0.001015	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-31V

Location Code: WMWGORAP
Collected: 3/27/23 16:37
Customer ID:
Submittal Date: 3/29/23 09:41

Laboratory ID Number: BD06140

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	3/31/23 06:13	3/31/23 13:56		1.015	27.3	mg/L	0.169505	0.5075	
* Selenium, Total	3/31/23 06:13	3/31/23 13:56		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	3/31/23 06:13	3/31/23 13:56		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	3/30/23 10:59	3/31/23 11:45		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	3/30/23 10:59	3/31/23 11:45		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Dissolved	3/30/23 10:59	3/31/23 11:45		1.015	0.00123	mg/L	0.000112	0.000203	
* Barium, Dissolved	3/30/23 10:59	4/4/23 12:58		1.015	0.181	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	3/30/23 10:59	3/31/23 11:45		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	3/30/23 10:59	3/31/23 11:45		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	3/30/23 10:59	3/31/23 11:45		1.015	0.000210	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	3/30/23 10:59	3/31/23 11:45		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Dissolved	3/30/23 10:59	3/31/23 11:45		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	3/30/23 10:59	3/31/23 11:45		1.015	0.0233	mg/L	0.000152	0.001015	
* Potassium, Dissolved	3/30/23 10:59	3/31/23 11:45		1.015	17.4	mg/L	0.169505	0.5075	
* Selenium, Dissolved	3/30/23 10:59	3/31/23 11:45		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	3/30/23 10:59	3/31/23 11:45		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ELH***								
* Mercury, Total by CVAA	4/3/23 15:06	4/3/23 20:33		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	3/30/23 13:49	3/30/23 13:49		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
* Alkalinity to pH 4.5	4/7/23 12:25	4/7/23 15:29		1	350	mg CaCO3/L		0.10	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	3/29/23 12:30	3/30/23 13:47		1	1010	mg/L		125	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
* Bicarbonate Alkalinity, (calc.)	4/7/23 12:25	4/7/23 15:29		1	345	mg CaCO3/L		1	A
* Carbonate Alkalinity, (calc.)	4/7/23 12:25	4/7/23 15:29		1	4.69	mg CaCO3/L		0.5	A
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	4/3/23 18:15	4/3/23 18:15		1	3.17	mg/L	1.00	2	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-31V

Location Code: WMWGORAP
Collected: 3/27/23 16:37
Customer ID:
Submittal Date: 3/29/23 09:41

Laboratory ID Number: BD06140

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	3/30/23 12:21	3/30/23 12:21		25	196	mg/L	12.50	25	
Analytical Method: SM4500F G 2017	***Analyst: CES***								
* Fluoride	4/3/23 14:17	4/3/23 14:17		1	0.309	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	4/4/23 14:47	4/4/23 14:47		10	214	mg/L	6.0	20	
Analytical Method: Field Measurements	***Analyst: AWG***								
Conductivity	3/27/23 16:33	3/27/23 16:33			2054.74	uS/cm			FA
pH	3/27/23 16:33	3/27/23 16:33			7.80	SU			FA
Temperature	3/27/23 16:33	3/27/23 16:33			19.20	C			FA
Turbidity	3/27/23 16:33	3/27/23 16:33			3.45	NTU			FA
Sulfide	3/27/23 16:33	3/27/23 16:33			0	mg/L			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/27/23 16:37
Customer ID:
Delivery Date: 3/29/23 09:41

Description: Gorgas Ash Pond - MW-31V

Laboratory ID Number: BD06140

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD06140	Aluminum, Dissolved	mg/L	0.000167	0.0198	0.100	0.107	0.107	0.101	0.0850 to 0.115	107	70.0 to 130	0.00	20.0
BD06149	Aluminum, Total	mg/L	0.000866	0.0198	0.100	0.125	0.125	0.103	0.0850 to 0.115	105	70.0 to 130	0.00	20.0
BD06140	Antimony, Dissolved	mg/L	0.000464	0.00100	0.100	0.106	0.107	0.0983	0.0850 to 0.115	106	70.0 to 130	0.939	20.0
BD06149	Antimony, Total	mg/L	0.000272	0.00100	0.100	0.0989	0.0971	0.0970	0.0850 to 0.115	98.9	70.0 to 130	1.84	20.0
BD06140	Arsenic, Dissolved	mg/L	0.0000011	0.000200	0.100	0.104	0.104	0.0994	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BD06149	Arsenic, Total	mg/L	0.0000131	0.000200	0.100	0.104	0.104	0.101	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BD06140	Barium, Dissolved	mg/L	0.0000037	0.00100	0.100	0.280	0.279	0.0988	0.0850 to 0.115	99.0	70.0 to 130	0.358	20.0
BD06149	Barium, Total	mg/L	0.0000151	0.00100	0.100	0.358	0.361	0.0998	0.0850 to 0.115	94.0	70.0 to 130	0.834	20.0
BD06140	Beryllium, Dissolved	mg/L	0.0000069	0.000880	0.100	0.103	0.103	0.103	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BD06149	Beryllium, Total	mg/L	0.0000208	0.000880	0.100	0.106	0.109	0.103	0.0850 to 0.115	106	70.0 to 130	2.79	20.0
BD06140	Boron, Dissolved	mg/L	-0.00131	0.0650	1.00	1.11	1.11	1.03	0.850 to 1.15	107	70.0 to 130	0.00	20.0
BD06149	Boron, Total	mg/L	-0.000121	0.0650	1.00	1.07	1.07	1.02	0.850 to 1.15	102	70.0 to 130	0.00	20.0
BD06140	Cadmium, Dissolved	mg/L	0.0000029	0.000147	0.100	0.110	0.109	0.110	0.0850 to 0.115	110	70.0 to 130	0.913	20.0
BD06149	Cadmium, Total	mg/L	0.0000055	0.000147	0.100	0.111	0.109	0.111	0.0850 to 0.115	111	70.0 to 130	1.82	20.0
BD06140	Calcium, Dissolved	mg/L	-0.0111	0.152	5.00	16.0	16.0	4.94	4.25 to 5.75	98.0	70.0 to 130	0.00	20.0
BD06149	Calcium, Total	mg/L	0.0239	0.152	5.00	17.9	17.8	5.03	4.25 to 5.75	90.0	70.0 to 130	0.560	20.0
BD06149	Chloride	mg/L	0.100	1.00	80.0	130	136	9.72	9.00 to 11.0	105	80.0 to 120	4.51	20.0
BD06140	Chromium, Dissolved	mg/L	-0.0000058	0.000440	0.100	0.103	0.101	0.0995	0.0850 to 0.115	103	70.0 to 130	1.96	20.0
BD06149	Chromium, Total	mg/L	0.0000641	0.000440	0.100	0.101	0.101	0.102	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BD06140	Cobalt, Dissolved	mg/L	-0.0000184	0.000147	0.100	0.106	0.106	0.104	0.0850 to 0.115	106	70.0 to 130	0.00	20.0
BD06149	Cobalt, Total	mg/L	-0.0000182	0.000147	0.100	0.104	0.104	0.107	0.0850 to 0.115	104	70.0 to 130	0.00	20.0
BD06149	Fluoride	mg/L	0.0131	0.125	2.50	2.93	2.98	2.66	2.25 to 2.75	107	80.0 to 120	1.69	20.0
BD06140	Iron, Dissolved	mg/L	-0.000147	0.0176	0.2	0.214	0.213	0.201	0.170 to 0.230	101	70.0 to 130	0.468	20.0
BD06149	Iron, Total	mg/L	-0.000394	0.0176	0.2	0.265	0.264	0.203	0.170 to 0.230	100	70.0 to 130	0.378	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/27/23 16:37
Customer ID:
Delivery Date: 3/29/23 09:41

Description: Gorgas Ash Pond - MW-31V

Laboratory ID Number: BD06140

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD06140	Lead, Dissolved	mg/L	0.0000079	0.000147	0.100	0.104	0.105	0.101	0.0850 to 0.115	104	70.0 to 130	0.957	20.0
BD06149	Lead, Total	mg/L	0.0000027	0.000147	0.100	0.102	0.100	0.105	0.0850 to 0.115	102	70.0 to 130	1.98	20.0
BD06140	Lithium, Dissolved	mg/L	0.000402	0.0154	0.200	0.264	0.261	0.199	0.170 to 0.230	107	70.0 to 130	1.14	20.0
BD06149	Lithium, Total	mg/L	0.000053	0.0154	0.200	0.265	0.265	0.199	0.170 to 0.230	102	70.0 to 130	0.00	20.0
BD06140	Magnesium, Dissolved	mg/L	0.000819	0.0462	5.00	8.76	8.75	4.93	4.25 to 5.75	99.2	70.0 to 130	0.114	20.0
BD06149	Magnesium, Total	mg/L	0.00266	0.0462	5.00	9.29	9.29	4.99	4.25 to 5.75	97.4	70.0 to 130	0.00	20.0
BD06140	Manganese, Dissolved	mg/L	0.0000691	0.00033	0.100	0.125	0.126	0.102	0.0850 to 0.115	102	70.0 to 130	0.797	20.0
BD06149	Manganese, Total	mg/L	0.0000240	0.00033	0.100	0.129	0.129	0.104	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BD06149	Mercury, Total by CVAA	mg/L	-2.000E-05	0.000500	0.004	0.00389	0.00392	0.0039	0.00340 to 0.00460	97.2	70.0 to 130	0.768	20.0
BD06140	Molybdenum, Dissolved	mg/L	-0.000343	0.0100	0.2	0.229	0.230	0.200	0.170 to 0.230	101	70.0 to 130	0.436	20.0
BD06149	Molybdenum, Total	mg/L	0.000	0.0100	0.2	0.203	0.202	0.204	0.170 to 0.230	102	70.0 to 130	0.494	20.0
BD06140	Potassium, Dissolved	mg/L	0.0207	0.367	10.0	27.3	27.8	9.88	8.50 to 11.5	99.0	70.0 to 130	1.81	20.0
BD06149	Potassium, Total	mg/L	0.0175	0.367	10.0	16.0	16.1	10.1	8.50 to 11.5	96.8	70.0 to 130	0.623	20.0
BD06140	Selenium, Dissolved	mg/L	0.000215	0.00100	0.100	0.102	0.102	0.101	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BD06149	Selenium, Total	mg/L	0.0000690	0.00100	0.100	0.101	0.0994	0.101	0.0850 to 0.115	101	70.0 to 130	1.60	20.0
BD06140	Silicon, Dissolved	mg/L	0.000678	0.0440	1.00	6.60	6.57	1.00	0.850 to 1.15	105	70.0 to 130	0.456	20.0
BD06149	Silicon, Total	mg/L	0.000389	0.0440	1.00	8.38	8.39	1.01	0.850 to 1.15	101	70.0 to 130	0.119	20.0
BD06140	Sodium, Dissolved	mg/L	0.000478	0.0880	5.00	324	347	4.79	4.25 to 5.75	-80.0	70.0 to 130	6.86	20.0
BD06149	Sodium, Total	mg/L	0.00674	0.0880	5.00	150	142	4.81	4.25 to 5.75	240	70.0 to 130	5.48	20.0
BD06141	Sulfate	mg/L	0.233	2.0	20.0	45.3	45.3	20.2	18.0 to 22.0	90.0	80.0 to 120	0.00	20.0
BD06140	Thallium, Dissolved	mg/L	-0.0000325	0.000147	0.100	0.104	0.105	0.106	0.0850 to 0.115	104	70.0 to 130	0.957	20.0
BD06149	Thallium, Total	mg/L	-0.0000162	0.000147	0.100	0.0996	0.0976	0.102	0.0850 to 0.115	99.6	70.0 to 130	2.03	20.0
BD06140	Total Organic Carbon	mg/L	0.0950	1.00	10.0	12.1	12.0	24.9		89.3	80.0 to 120	0.830	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/27/23 16:37
Customer ID:
Delivery Date: 3/29/23 09:41

Description: Gorgas Ash Pond - MW-31V

Laboratory ID Number: BD06140

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD06144	Alkalinity to pH 4.5	mg CaCO3/L					207	50.8	45.0 to 55.0			0.962	10.0
BD06149	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.04	0.200	2.00	2.05	-0.039	1.99	1.80 to 2.20	102	90.0 to 110	0.00	15.0
BD06146	Solids, Dissolved	mg/L	1.00	25.0			302	50.0	40.0 to 60.0			0.988	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-29H

Location Code: WMWGORAP
Collected: 3/28/23 09:30
Customer ID:
Submittal Date: 3/29/23 09:41

Laboratory ID Number: BD06141

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	3/31/23 06:13	4/4/23 12:53		1.015	0.360	mg/L	0.030000	0.1015	
* Calcium, Total	3/31/23 06:13	4/4/23 12:53		1.015	12.2	mg/L	0.070035	0.406	
* Iron, Total	3/31/23 06:13	4/4/23 12:53		1.015	0.161	mg/L	0.008120	0.0406	
* Lithium, Total	3/31/23 06:13	4/4/23 12:53		1.015	0.0656	mg/L	0.007105	0.01999956	
* Magnesium, Total	3/31/23 06:13	4/4/23 12:53		1.015	4.20	mg/L	0.021315	0.406	
* Molybdenum, Total	3/31/23 06:13	4/4/23 12:53		1.015	0.0333	mg/L	0.005075	0.01015	
* Silica, Total (calc.)	3/31/23 06:13	4/4/23 12:53		1	19.8	mg/L			
* Silicon, Total	3/31/23 06:13	4/4/23 12:53		1.015	9.23	mg/L	0.02030	0.25375	
* Sodium, Total	3/31/23 06:13	4/4/23 16:05		10.15	135	mg/L	0.4060	4.06	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	3/30/23 10:59	4/3/23 11:29		1.015	0.364	mg/L	0.030000	0.1015	
* Calcium, Dissolved	3/30/23 10:59	4/3/23 11:29		1.015	12.4	mg/L	0.070035	0.406	
* Iron, Dissolved	3/30/23 10:59	4/3/23 11:29		1.015	0.128	mg/L	0.008120	0.0406	
* Lithium, Dissolved	3/30/23 10:59	4/3/23 11:29		1.015	0.0678	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	3/30/23 10:59	4/3/23 11:29		1.015	4.29	mg/L	0.021315	0.406	
* Molybdenum, Dissolved	3/30/23 10:59	4/3/23 11:29		1.015	0.0324	mg/L	0.005075	0.01015	
* Silica, Dissolved (calc.)	3/30/23 10:59	4/3/23 11:29		1	19.9	mg/L			
* Silicon, Dissolved	3/30/23 10:59	4/3/23 11:29		1.015	9.29	mg/L	0.02030	0.25375	
* Sodium, Dissolved	3/30/23 10:59	4/3/23 13:33		10.15	142	mg/L	0.4060	4.06	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/31/23 06:13	3/31/23 14:00		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Total	3/31/23 06:13	3/31/23 14:00		1.015	0.00936	mg/L	0.009135	0.05075	J
* Arsenic, Total	3/31/23 06:13	3/31/23 14:00		1.015	0.00221	mg/L	0.000112	0.000203	
* Barium, Total	3/31/23 06:13	4/4/23 15:14		1.015	0.263	mg/L	0.000508	0.001015	
* Beryllium, Total	3/31/23 06:13	3/31/23 14:00		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	3/31/23 06:13	3/31/23 14:00		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	3/31/23 06:13	3/31/23 14:00		1.015	0.000258	mg/L	0.000203	0.001015	J
* Cobalt, Total	3/31/23 06:13	3/31/23 14:00		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	3/31/23 06:13	3/31/23 14:00		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	3/31/23 06:13	3/31/23 14:00		1.015	0.00773	mg/L	0.000152	0.001015	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-29H

Location Code: WMWGORAP
Collected: 3/28/23 09:30
Customer ID:
Submittal Date: 3/29/23 09:41

Laboratory ID Number: BD06141

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	3/31/23 06:13	3/31/23 14:00		1.015	1.35	mg/L	0.169505	0.5075	
* Selenium, Total	3/31/23 06:13	3/31/23 14:00		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	3/31/23 06:13	3/31/23 14:00		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	3/30/23 10:59	3/31/23 12:06		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	3/30/23 10:59	3/31/23 12:06		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Dissolved	3/30/23 10:59	3/31/23 12:06		1.015	0.00192	mg/L	0.000112	0.000203	
* Barium, Dissolved	3/30/23 10:59	4/4/23 13:20		1.015	0.259	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	3/30/23 10:59	3/31/23 12:06		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	3/30/23 10:59	3/31/23 12:06		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	3/30/23 10:59	3/31/23 12:06		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	3/30/23 10:59	3/31/23 12:06		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Dissolved	3/30/23 10:59	3/31/23 12:06		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	3/30/23 10:59	3/31/23 12:06		1.015	0.00750	mg/L	0.000152	0.001015	
* Potassium, Dissolved	3/30/23 10:59	3/31/23 12:06		1.015	1.33	mg/L	0.169505	0.5075	
* Selenium, Dissolved	3/30/23 10:59	3/31/23 12:06		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	3/30/23 10:59	3/31/23 12:06		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ELH***								
* Mercury, Total by CVAA	4/3/23 15:06	4/3/23 20:37		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	3/30/23 13:51	3/30/23 13:51		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
* Alkalinity to pH 4.5	4/7/23 12:25	4/7/23 15:29		1	295	mg CaCO3/L		0.10	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	3/29/23 12:30	3/30/23 13:47		1	373	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
* Bicarbonate Alkalinity, (calc.)	4/7/23 12:25	4/7/23 15:29		1	292	mg CaCO3/L		1	
* Carbonate Alkalinity, (calc.)	4/7/23 12:25	4/7/23 15:29		1	3.01	mg CaCO3/L		0.5	
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	4/3/23 16:01	4/3/23 16:01		1	Not Detected	mg/L	1.00	2	U

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-29H

Location Code: WMWGORAP
Collected: 3/28/23 09:30
Customer ID:
Submittal Date: 3/29/23 09:41

Laboratory ID Number: BD06141

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	3/30/23 12:08	3/30/23 12:08		1	5.09	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: CES***								
* Fluoride	4/3/23 14:18	4/3/23 14:18		1	0.388	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	4/4/23 14:38	4/4/23 14:38		1	27.3	mg/L	0.6	2	
Analytical Method: Field Measurements	***Analyst: AWG***								
Conductivity	3/28/23 09:26	3/28/23 09:26			610.00	uS/cm			FA
pH	3/28/23 09:26	3/28/23 09:26			7.82	SU			FA
Temperature	3/28/23 09:26	3/28/23 09:26			16.94	C			FA
Turbidity	3/28/23 09:26	3/28/23 09:26			1.99	NTU			FA
Sulfide	3/28/23 09:26	3/28/23 09:26			0	mg/L			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 5/3/2023
Version: 3.5
COA_CCR

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/28/23 09:30
Customer ID:
Delivery Date: 3/29/23 09:41

Description: Gorgas Ash Pond - MW-29H

Laboratory ID Number: BD06141

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD06149	Aluminum, Dissolved	mg/L	0.000167	0.0198	0.100	0.104	0.104	0.101	0.0850 to 0.115	104	70.0 to 130	0.00	20.0
BD06149	Aluminum, Total	mg/L	0.000866	0.0198	0.100	0.125	0.125	0.103	0.0850 to 0.115	105	70.0 to 130	0.00	20.0
BD06149	Antimony, Dissolved	mg/L	0.000464	0.00100	0.100	0.107	0.107	0.0983	0.0850 to 0.115	107	70.0 to 130	0.00	20.0
BD06149	Antimony, Total	mg/L	0.000272	0.00100	0.100	0.0989	0.0971	0.0970	0.0850 to 0.115	98.9	70.0 to 130	1.84	20.0
BD06149	Arsenic, Dissolved	mg/L	0.0000011	0.000200	0.100	0.104	0.105	0.0994	0.0850 to 0.115	102	70.0 to 130	0.957	20.0
BD06149	Arsenic, Total	mg/L	0.0000131	0.000200	0.100	0.104	0.104	0.101	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BD06149	Barium, Dissolved	mg/L	0.0000037	0.00100	0.100	0.353	0.349	0.0988	0.0850 to 0.115	104	70.0 to 130	1.14	20.0
BD06149	Barium, Total	mg/L	0.0000151	0.00100	0.100	0.358	0.361	0.0998	0.0850 to 0.115	94.0	70.0 to 130	0.834	20.0
BD06149	Beryllium, Dissolved	mg/L	0.0000069	0.000880	0.100	0.0995	0.0984	0.103	0.0850 to 0.115	99.5	70.0 to 130	1.11	20.0
BD06149	Beryllium, Total	mg/L	0.0000208	0.000880	0.100	0.106	0.109	0.103	0.0850 to 0.115	106	70.0 to 130	2.79	20.0
BD06149	Boron, Dissolved	mg/L	-0.00131	0.0650	1.00	1.12	1.10	1.03	0.850 to 1.15	107	70.0 to 130	1.80	20.0
BD06149	Boron, Total	mg/L	-0.000121	0.0650	1.00	1.07	1.07	1.02	0.850 to 1.15	102	70.0 to 130	0.00	20.0
BD06149	Cadmium, Dissolved	mg/L	0.0000029	0.000147	0.100	0.112	0.111	0.110	0.0850 to 0.115	112	70.0 to 130	0.897	20.0
BD06149	Cadmium, Total	mg/L	0.0000055	0.000147	0.100	0.111	0.109	0.111	0.0850 to 0.115	111	70.0 to 130	1.82	20.0
BD06149	Calcium, Dissolved	mg/L	-0.0111	0.152	5.00	16.2	15.9	4.94	4.25 to 5.75	98.0	70.0 to 130	1.87	20.0
BD06149	Calcium, Total	mg/L	0.0239	0.152	5.00	17.9	17.8	5.03	4.25 to 5.75	90.0	70.0 to 130	0.560	20.0
BD06149	Chloride	mg/L	0.100	1.00	80.0	130	136	9.72	9.00 to 11.0	105	80.0 to 120	4.51	20.0
BD06149	Chromium, Dissolved	mg/L	-0.0000058	0.000440	0.100	0.100	0.101	0.0995	0.0850 to 0.115	99.8	70.0 to 130	0.995	20.0
BD06149	Chromium, Total	mg/L	0.0000641	0.000440	0.100	0.101	0.101	0.102	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BD06149	Cobalt, Dissolved	mg/L	-0.0000184	0.000147	0.100	0.103	0.105	0.104	0.0850 to 0.115	103	70.0 to 130	1.92	20.0
BD06149	Cobalt, Total	mg/L	-0.0000182	0.000147	0.100	0.104	0.104	0.107	0.0850 to 0.115	104	70.0 to 130	0.00	20.0
BD06149	Fluoride	mg/L	0.0131	0.125	2.50	2.93	2.98	2.66	2.25 to 2.75	107	80.0 to 120	1.69	20.0
BD06149	Iron, Dissolved	mg/L	-0.000147	0.0176	0.2	0.252	0.244	0.201	0.170 to 0.230	103	70.0 to 130	3.23	20.0
BD06149	Iron, Total	mg/L	-0.000394	0.0176	0.2	0.265	0.264	0.203	0.170 to 0.230	100	70.0 to 130	0.378	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/28/23 09:30
Customer ID:
Delivery Date: 3/29/23 09:41

Description: Gorgas Ash Pond - MW-29H

Laboratory ID Number: BD06141

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD06149	Lead, Dissolved	mg/L	0.0000079	0.000147	0.100	0.103	0.105	0.101	0.0850 to 0.115	103	70.0 to 130	1.92	20.0
BD06149	Lead, Total	mg/L	0.0000027	0.000147	0.100	0.102	0.100	0.105	0.0850 to 0.115	102	70.0 to 130	1.98	20.0
BD06149	Lithium, Dissolved	mg/L	0.000402	0.0154	0.200	0.273	0.268	0.199	0.170 to 0.230	106	70.0 to 130	1.85	20.0
BD06149	Lithium, Total	mg/L	0.000053	0.0154	0.200	0.265	0.265	0.199	0.170 to 0.230	102	70.0 to 130	0.00	20.0
BD06149	Magnesium, Dissolved	mg/L	0.000819	0.0462	5.00	8.79	8.65	4.93	4.25 to 5.75	101	70.0 to 130	1.61	20.0
BD06149	Magnesium, Total	mg/L	0.00266	0.0462	5.00	9.29	9.29	4.99	4.25 to 5.75	97.4	70.0 to 130	0.00	20.0
BD06149	Manganese, Dissolved	mg/L	0.0000691	0.00033	0.100	0.124	0.124	0.102	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BD06149	Manganese, Total	mg/L	0.0000240	0.00033	0.100	0.129	0.129	0.104	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BD06149	Mercury, Total by CVAA	mg/L	-2.000E-05	0.000500	0.004	0.00389	0.00392	0.0039	0.00340 to 0.00460	97.2	70.0 to 130	0.768	20.0
BD06149	Molybdenum, Dissolved	mg/L	-0.000343	0.0100	0.2	0.205	0.203	0.200	0.170 to 0.230	102	70.0 to 130	0.980	20.0
BD06149	Molybdenum, Total	mg/L	0.000	0.0100	0.2	0.203	0.202	0.204	0.170 to 0.230	102	70.0 to 130	0.494	20.0
BD06149	Potassium, Dissolved	mg/L	0.0207	0.367	10.0	14.3	14.4	9.88	8.50 to 11.5	96.4	70.0 to 130	0.697	20.0
BD06149	Potassium, Total	mg/L	0.0175	0.367	10.0	16.0	16.1	10.1	8.50 to 11.5	96.8	70.0 to 130	0.623	20.0
BD06149	Selenium, Dissolved	mg/L	0.000215	0.00100	0.100	0.102	0.100	0.101	0.0850 to 0.115	102	70.0 to 130	1.98	20.0
BD06149	Selenium, Total	mg/L	0.0000690	0.00100	0.100	0.101	0.0994	0.101	0.0850 to 0.115	101	70.0 to 130	1.60	20.0
BD06149	Silicon, Dissolved	mg/L	0.000678	0.0440	1.00	8.53	8.49	1.00	0.850 to 1.15	107	70.0 to 130	0.470	20.0
BD06149	Silicon, Total	mg/L	0.000389	0.0440	1.00	8.38	8.39	1.01	0.850 to 1.15	101	70.0 to 130	0.119	20.0
BD06149	Sodium, Dissolved	mg/L	0.000478	0.0880	5.00	123	124	4.79	4.25 to 5.75	0.00	70.0 to 130	0.810	20.0
BD06149	Sodium, Total	mg/L	0.00674	0.0880	5.00	150	142	4.81	4.25 to 5.75	240	70.0 to 130	5.48	20.0
BD06141	Sulfate	mg/L	0.233	2.0	20.0	45.3	45.3	20.2	18.0 to 22.0	90.0	80.0 to 120	0.00	20.0
BD06149	Thallium, Dissolved	mg/L	-0.0000325	0.000147	0.100	0.103	0.105	0.106	0.0850 to 0.115	103	70.0 to 130	1.92	20.0
BD06149	Thallium, Total	mg/L	-0.0000162	0.000147	0.100	0.0996	0.0976	0.102	0.0850 to 0.115	99.6	70.0 to 130	2.03	20.0
BD06140	Total Organic Carbon	mg/L	0.0950	1.00	10.0	12.1	12.0	24.9		89.3	80.0 to 120	0.830	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/28/23 09:30
Customer ID:
Delivery Date: 3/29/23 09:41

Description: Gorgas Ash Pond - MW-29H

Laboratory ID Number: BD06141

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD06144	Alkalinity to pH 4.5	mg CaCO3/L					207	50.8	45.0 to 55.0			0.962	10.0
BD06149	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.04	0.200	2.00	2.05	-0.039	1.99	1.80 to 2.20	102	90.0 to 110	0.00	15.0
BD06146	Solids, Dissolved	mg/L	1.00	25.0			302	50.0	40.0 to 60.0			0.988	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-8

Laboratory ID Number: BD06142

Location Code: WMWGORAP
Collected: 3/27/23 12:35
Customer ID:
Submittal Date: 3/29/23 09:42

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	3/31/23 06:13	4/4/23 12:56		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	3/31/23 06:13	4/4/23 12:56		1.015	4.77	mg/L	0.070035	0.406	
* Iron, Total	3/31/23 06:13	4/4/23 12:56		1.015	0.251	mg/L	0.008120	0.0406	
* Lithium, Total	3/31/23 06:13	4/4/23 12:56		1.015	0.00968	mg/L	0.007105	0.01999956	J
* Magnesium, Total	3/31/23 06:13	4/4/23 12:56		1.015	8.34	mg/L	0.021315	0.406	
* Molybdenum, Total	3/31/23 06:13	4/4/23 12:56		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Total (calc.)	3/31/23 06:13	4/4/23 12:56		1	37.2	mg/L			
* Silicon, Total	3/31/23 06:13	4/4/23 12:56		1.015	17.4	mg/L	0.02030	0.25375	
* Sodium, Total	3/31/23 06:13	4/4/23 12:56		1.015	11.2	mg/L	0.04060	0.406	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	3/30/23 10:59	4/3/23 11:32		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Dissolved	3/30/23 10:59	4/3/23 11:32		1.015	4.88	mg/L	0.070035	0.406	
* Iron, Dissolved	3/30/23 10:59	4/3/23 11:32		1.015	0.0432	mg/L	0.008120	0.0406	
* Lithium, Dissolved	3/30/23 10:59	4/3/23 11:32		1.015	0.00997	mg/L	0.007105	0.01999956	J
* Magnesium, Dissolved	3/30/23 10:59	4/3/23 11:32		1.015	8.46	mg/L	0.021315	0.406	
* Molybdenum, Dissolved	3/30/23 10:59	4/3/23 11:32		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Dissolved (calc.)	3/30/23 10:59	4/3/23 11:32		1	37.4	mg/L			
* Silicon, Dissolved	3/30/23 10:59	4/3/23 11:32		1.015	17.5	mg/L	0.02030	0.25375	
* Sodium, Dissolved	3/30/23 10:59	4/3/23 11:32		1.015	11.7	mg/L	0.04060	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/31/23 06:13	3/31/23 14:03		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Total	3/31/23 06:13	3/31/23 14:03		1.015	0.0409	mg/L	0.009135	0.05075	J
* Arsenic, Total	3/31/23 06:13	3/31/23 14:03		1.015	0.000162	mg/L	0.000112	0.000203	J
* Barium, Total	3/31/23 06:13	4/4/23 15:17		1.015	0.00644	mg/L	0.000508	0.001015	
* Beryllium, Total	3/31/23 06:13	3/31/23 14:03		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	3/31/23 06:13	3/31/23 14:03		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	3/31/23 06:13	3/31/23 14:03		1.015	0.000761	mg/L	0.000203	0.001015	J
* Cobalt, Total	3/31/23 06:13	3/31/23 14:03		1.015	0.000254	mg/L	0.000068	0.000203	
* Lead, Total	3/31/23 06:13	3/31/23 14:03		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	3/31/23 06:13	3/31/23 14:03		1.015	0.0617	mg/L	0.000152	0.001015	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-8

Location Code: WMWGORAP
Collected: 3/27/23 12:35
Customer ID:
Submittal Date: 3/29/23 09:42

Laboratory ID Number: BD06142

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	3/31/23 06:13	3/31/23 14:03		1.015	0.801	mg/L	0.169505	0.5075	
* Selenium, Total	3/31/23 06:13	3/31/23 14:03		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	3/31/23 06:13	3/31/23 14:03		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	3/30/23 10:59	3/31/23 12:09		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	3/30/23 10:59	3/31/23 12:09		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Dissolved	3/30/23 10:59	3/31/23 12:09		1.015	Not Detected	mg/L	0.000112	0.000203	U
* Barium, Dissolved	3/30/23 10:59	4/4/23 13:23		1.015	0.00623	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	3/30/23 10:59	3/31/23 12:09		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	3/30/23 10:59	3/31/23 12:09		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	3/30/23 10:59	3/31/23 12:09		1.015	0.000266	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	3/30/23 10:59	3/31/23 12:09		1.015	0.000247	mg/L	0.000068	0.000203	
* Lead, Dissolved	3/30/23 10:59	3/31/23 12:09		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	3/30/23 10:59	3/31/23 12:09		1.015	0.0576	mg/L	0.000152	0.001015	
* Potassium, Dissolved	3/30/23 10:59	3/31/23 12:09		1.015	0.820	mg/L	0.169505	0.5075	
* Selenium, Dissolved	3/30/23 10:59	3/31/23 12:09		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	3/30/23 10:59	3/31/23 12:09		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ELH***								
* Mercury, Total by CVAA	4/3/23 15:06	4/3/23 20:41		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	3/30/23 13:53	3/30/23 13:53		1	0.221	mg/L as N	0.20	0.3	J
Analytical Method: SM 2320 B	***Analyst: ALH***								
* Alkalinity to pH 4.5	4/7/23 12:25	4/7/23 15:29		1	60.9	mg CaCO3/L		0.10	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	3/29/23 12:30	3/30/23 13:47		1	100	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
* Bicarbonate Alkalinity, (calc.)	4/7/23 12:25	4/7/23 15:29		1	60.9	mg CaCO3/L		1	
* Carbonate Alkalinity, (calc.)	4/7/23 12:25	4/7/23 15:29		1	Not Detected	mg CaCO3/L		0.5	
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	4/3/23 16:15	4/3/23 16:15		1	Not Detected	mg/L	1.00	2	U

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-8

Location Code: WMWGORAP
Collected: 3/27/23 12:35
Customer ID:
Submittal Date: 3/29/23 09:42

Laboratory ID Number: BD06142

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	3/30/23 12:09	3/30/23 12:09		1	4.17	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: CES***								
* Fluoride	4/3/23 14:20	4/3/23 14:20		1	0.112	mg/L	0.06	0.125	J
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	4/4/23 14:57	4/4/23 14:57		1	4.41	mg/L	0.6	2	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	3/27/23 12:28	3/27/23 12:28			130.02	uS/cm			FA
pH	3/27/23 12:28	3/27/23 12:28			5.82	SU			FA
Temperature	3/27/23 12:28	3/27/23 12:28			22.43	C			FA
Turbidity	3/27/23 12:28	3/27/23 12:28			1.1	NTU			FA
Sulfide	3/27/23 12:28	3/27/23 12:28			0	mg/L			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 5/3/2023
Version: 3.5
COA_CCR

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/27/23 12:35
Customer ID:
Delivery Date: 3/29/23 09:42

Description: Gorgas Ash Pond - MW-8

Laboratory ID Number: BD06142

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD06149	Aluminum, Dissolved	mg/L	0.000167	0.0198	0.100	0.104	0.104	0.101	0.0850 to 0.115	104	70.0 to 130	0.00	20.0
BD06149	Aluminum, Total	mg/L	0.000866	0.0198	0.100	0.125	0.125	0.103	0.0850 to 0.115	105	70.0 to 130	0.00	20.0
BD06149	Antimony, Dissolved	mg/L	0.000464	0.00100	0.100	0.107	0.107	0.0983	0.0850 to 0.115	107	70.0 to 130	0.00	20.0
BD06149	Antimony, Total	mg/L	0.000272	0.00100	0.100	0.0989	0.0971	0.0970	0.0850 to 0.115	98.9	70.0 to 130	1.84	20.0
BD06149	Arsenic, Dissolved	mg/L	0.0000011	0.000200	0.100	0.104	0.105	0.0994	0.0850 to 0.115	102	70.0 to 130	0.957	20.0
BD06149	Arsenic, Total	mg/L	0.0000131	0.000200	0.100	0.104	0.104	0.101	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BD06149	Barium, Dissolved	mg/L	0.0000037	0.00100	0.100	0.353	0.349	0.0988	0.0850 to 0.115	104	70.0 to 130	1.14	20.0
BD06149	Barium, Total	mg/L	0.0000151	0.00100	0.100	0.358	0.361	0.0998	0.0850 to 0.115	94.0	70.0 to 130	0.834	20.0
BD06149	Beryllium, Dissolved	mg/L	0.0000069	0.000880	0.100	0.0995	0.0984	0.103	0.0850 to 0.115	99.5	70.0 to 130	1.11	20.0
BD06149	Beryllium, Total	mg/L	0.0000208	0.000880	0.100	0.106	0.109	0.103	0.0850 to 0.115	106	70.0 to 130	2.79	20.0
BD06149	Boron, Dissolved	mg/L	-0.00131	0.0650	1.00	1.12	1.10	1.03	0.850 to 1.15	107	70.0 to 130	1.80	20.0
BD06149	Boron, Total	mg/L	-0.000121	0.0650	1.00	1.07	1.07	1.02	0.850 to 1.15	102	70.0 to 130	0.00	20.0
BD06149	Cadmium, Dissolved	mg/L	0.0000029	0.000147	0.100	0.112	0.111	0.110	0.0850 to 0.115	112	70.0 to 130	0.897	20.0
BD06149	Cadmium, Total	mg/L	0.0000055	0.000147	0.100	0.111	0.109	0.111	0.0850 to 0.115	111	70.0 to 130	1.82	20.0
BD06149	Calcium, Dissolved	mg/L	-0.0111	0.152	5.00	16.2	15.9	4.94	4.25 to 5.75	98.0	70.0 to 130	1.87	20.0
BD06149	Calcium, Total	mg/L	0.0239	0.152	5.00	17.9	17.8	5.03	4.25 to 5.75	90.0	70.0 to 130	0.560	20.0
BD06149	Chloride	mg/L	0.100	1.00	80.0	130	136	9.72	9.00 to 11.0	105	80.0 to 120	4.51	20.0
BD06149	Chromium, Dissolved	mg/L	-0.0000058	0.000440	0.100	0.100	0.101	0.0995	0.0850 to 0.115	99.8	70.0 to 130	0.995	20.0
BD06149	Chromium, Total	mg/L	0.0000641	0.000440	0.100	0.101	0.101	0.102	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BD06149	Cobalt, Dissolved	mg/L	-0.0000184	0.000147	0.100	0.103	0.105	0.104	0.0850 to 0.115	103	70.0 to 130	1.92	20.0
BD06149	Cobalt, Total	mg/L	-0.0000182	0.000147	0.100	0.104	0.104	0.107	0.0850 to 0.115	104	70.0 to 130	0.00	20.0
BD06149	Fluoride	mg/L	0.0131	0.125	2.50	2.93	2.98	2.66	2.25 to 2.75	107	80.0 to 120	1.69	20.0
BD06149	Iron, Dissolved	mg/L	-0.000147	0.0176	0.2	0.252	0.244	0.201	0.170 to 0.230	103	70.0 to 130	3.23	20.0
BD06149	Iron, Total	mg/L	-0.000394	0.0176	0.2	0.265	0.264	0.203	0.170 to 0.230	100	70.0 to 130	0.378	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/27/23 12:35
Customer ID:
Delivery Date: 3/29/23 09:42

Description: Gorgas Ash Pond - MW-8

Laboratory ID Number: BD06142

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD06149	Lead, Dissolved	mg/L	0.0000079	0.000147	0.100	0.103	0.105	0.101	0.0850 to 0.115	103	70.0 to 130	1.92	20.0
BD06149	Lead, Total	mg/L	0.0000027	0.000147	0.100	0.102	0.100	0.105	0.0850 to 0.115	102	70.0 to 130	1.98	20.0
BD06149	Lithium, Dissolved	mg/L	0.000402	0.0154	0.200	0.273	0.268	0.199	0.170 to 0.230	106	70.0 to 130	1.85	20.0
BD06149	Lithium, Total	mg/L	0.000053	0.0154	0.200	0.265	0.265	0.199	0.170 to 0.230	102	70.0 to 130	0.00	20.0
BD06149	Magnesium, Dissolved	mg/L	0.000819	0.0462	5.00	8.79	8.65	4.93	4.25 to 5.75	101	70.0 to 130	1.61	20.0
BD06149	Magnesium, Total	mg/L	0.00266	0.0462	5.00	9.29	9.29	4.99	4.25 to 5.75	97.4	70.0 to 130	0.00	20.0
BD06149	Manganese, Dissolved	mg/L	0.0000691	0.00033	0.100	0.124	0.124	0.102	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BD06149	Manganese, Total	mg/L	0.0000240	0.00033	0.100	0.129	0.129	0.104	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BD06149	Mercury, Total by CVAA	mg/L	-2.000E-05	0.000500	0.004	0.00389	0.00392	0.0039	0.00340 to 0.00460	97.2	70.0 to 130	0.768	20.0
BD06149	Molybdenum, Dissolved	mg/L	-0.000343	0.0100	0.2	0.205	0.203	0.200	0.170 to 0.230	102	70.0 to 130	0.980	20.0
BD06149	Molybdenum, Total	mg/L	0.000	0.0100	0.2	0.203	0.202	0.204	0.170 to 0.230	102	70.0 to 130	0.494	20.0
BD06149	Potassium, Dissolved	mg/L	0.0207	0.367	10.0	14.3	14.4	9.88	8.50 to 11.5	96.4	70.0 to 130	0.697	20.0
BD06149	Potassium, Total	mg/L	0.0175	0.367	10.0	16.0	16.1	10.1	8.50 to 11.5	96.8	70.0 to 130	0.623	20.0
BD06149	Selenium, Dissolved	mg/L	0.000215	0.00100	0.100	0.102	0.100	0.101	0.0850 to 0.115	102	70.0 to 130	1.98	20.0
BD06149	Selenium, Total	mg/L	0.0000690	0.00100	0.100	0.101	0.0994	0.101	0.0850 to 0.115	101	70.0 to 130	1.60	20.0
BD06149	Silicon, Dissolved	mg/L	0.000678	0.0440	1.00	8.53	8.49	1.00	0.850 to 1.15	107	70.0 to 130	0.470	20.0
BD06149	Silicon, Total	mg/L	0.000389	0.0440	1.00	8.38	8.39	1.01	0.850 to 1.15	101	70.0 to 130	0.119	20.0
BD06149	Sodium, Dissolved	mg/L	0.000478	0.0880	5.00	123	124	4.79	4.25 to 5.75	0.00	70.0 to 130	0.810	20.0
BD06149	Sodium, Total	mg/L	0.00674	0.0880	5.00	150	142	4.81	4.25 to 5.75	240	70.0 to 130	5.48	20.0
BD06150	Sulfate	mg/L	0.260	2.0	20.0	20.5	20.3	20.3	18.0 to 22.0	102	80.0 to 120	0.980	20.0
BD06149	Thallium, Dissolved	mg/L	-0.0000325	0.000147	0.100	0.103	0.105	0.106	0.0850 to 0.115	103	70.0 to 130	1.92	20.0
BD06149	Thallium, Total	mg/L	-0.0000162	0.000147	0.100	0.0996	0.0976	0.102	0.0850 to 0.115	99.6	70.0 to 130	2.03	20.0
BD06140	Total Organic Carbon	mg/L	0.0950	1.00	10.0	12.1	12.0	24.9		89.3	80.0 to 120	0.830	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/27/23 12:35
Customer ID:
Delivery Date: 3/29/23 09:42

Description: Gorgas Ash Pond - MW-8

Laboratory ID Number: BD06142

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD06144	Alkalinity to pH 4.5	mg CaCO3/L					207	50.8	45.0 to 55.0			0.962	10.0
BD06149	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.04	0.200	2.00	2.05	-0.039	1.99	1.80 to 2.20	102	90.0 to 110	0.00	15.0
BD06146	Solids, Dissolved	mg/L	1.00	25.0			302	50.0	40.0 to 60.0			0.988	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-09R

Location Code: WMWGORAP
Collected: 3/27/23 14:40
Customer ID:
Submittal Date: 3/29/23 09:42

Laboratory ID Number: BD06143

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7		***Analyst: ABB***			***Preparation Method: EPA 1638***				
* Boron, Total	3/31/23 06:13	4/4/23 12:59		1.015	0.152	mg/L	0.030000	0.1015	
* Calcium, Total	3/31/23 06:13	4/4/23 16:14		10.15	43.0	mg/L	0.70035	4.06	
* Iron, Total	3/31/23 06:13	4/4/23 12:59		1.015	1.64	mg/L	0.008120	0.0406	
* Lithium, Total	3/31/23 06:13	4/4/23 12:59		1.015	0.0351	mg/L	0.007105	0.01999956	
* Magnesium, Total	3/31/23 06:13	4/4/23 12:59		1.015	18.8	mg/L	0.021315	0.406	
* Molybdenum, Total	3/31/23 06:13	4/4/23 12:59		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Total (calc.)	3/31/23 06:13	4/4/23 12:59		1	29.7	mg/L			
* Silicon, Total	3/31/23 06:13	4/4/23 12:59		1.015	13.9	mg/L	0.02030	0.25375	
* Sodium, Total	3/31/23 06:13	4/4/23 12:59		1.015	20.9	mg/L	0.04060	0.406	
Analytical Method: EPA 200.7		***Analyst: ABB***							
* Boron, Dissolved	3/30/23 10:59	4/3/23 11:36		1.015	0.154	mg/L	0.030000	0.1015	
* Calcium, Dissolved	3/30/23 10:59	4/3/23 13:42		10.15	41.2	mg/L	0.70035	4.06	
* Iron, Dissolved	3/30/23 10:59	4/3/23 11:36		1.015	1.42	mg/L	0.008120	0.0406	
* Lithium, Dissolved	3/30/23 10:59	4/3/23 11:36		1.015	0.0360	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	3/30/23 10:59	4/3/23 11:36		1.015	19.1	mg/L	0.021315	0.406	
* Molybdenum, Dissolved	3/30/23 10:59	4/3/23 11:36		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Dissolved (calc.)	3/30/23 10:59	4/3/23 11:36		1	30.6	mg/L			
* Silicon, Dissolved	3/30/23 10:59	4/3/23 11:36		1.015	14.3	mg/L	0.02030	0.25375	
* Sodium, Dissolved	3/30/23 10:59	4/3/23 11:36		1.015	21.5	mg/L	0.04060	0.406	
Analytical Method: EPA 200.8		***Analyst: DLJ***			***Preparation Method: EPA 1638***				
* Antimony, Total	3/31/23 06:13	3/31/23 14:07		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Total	3/31/23 06:13	3/31/23 14:07		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Total	3/31/23 06:13	3/31/23 14:07		1.015	0.00564	mg/L	0.000112	0.000203	
* Barium, Total	3/31/23 06:13	4/4/23 15:21		1.015	0.0344	mg/L	0.000508	0.001015	
* Beryllium, Total	3/31/23 06:13	3/31/23 14:07		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	3/31/23 06:13	3/31/23 14:07		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	3/31/23 06:13	3/31/23 14:07		1.015	0.000216	mg/L	0.000203	0.001015	J
* Cobalt, Total	3/31/23 06:13	3/31/23 14:07		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	3/31/23 06:13	3/31/23 14:07		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	3/31/23 06:13	3/31/23 14:07		1.015	0.179	mg/L	0.000152	0.001015	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-09R

Location Code: WMWGORAP
Collected: 3/27/23 14:40
Customer ID:
Submittal Date: 3/29/23 09:42

Laboratory ID Number: BD06143

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	3/31/23 06:13	3/31/23 14:07		1.015	3.20	mg/L	0.169505	0.5075	
* Selenium, Total	3/31/23 06:13	3/31/23 14:07		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	3/31/23 06:13	3/31/23 14:07		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	3/30/23 10:59	3/31/23 12:13		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	3/30/23 10:59	3/31/23 12:13		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Dissolved	3/30/23 10:59	3/31/23 12:13		1.015	0.00543	mg/L	0.000112	0.000203	
* Barium, Dissolved	3/30/23 10:59	4/4/23 13:27		1.015	0.0339	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	3/30/23 10:59	3/31/23 12:13		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	3/30/23 10:59	3/31/23 12:13		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	3/30/23 10:59	3/31/23 12:13		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	3/30/23 10:59	3/31/23 12:13		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Dissolved	3/30/23 10:59	3/31/23 12:13		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	3/30/23 10:59	3/31/23 12:13		1.015	0.186	mg/L	0.000152	0.001015	
* Potassium, Dissolved	3/30/23 10:59	3/31/23 12:13		1.015	3.34	mg/L	0.169505	0.5075	
* Selenium, Dissolved	3/30/23 10:59	3/31/23 12:13		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	3/30/23 10:59	3/31/23 12:13		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ELH***								
* Mercury, Total by CVAA	4/3/23 15:06	4/3/23 20:45		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	3/30/23 13:55	3/30/23 13:55		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
* Alkalinity to pH 4.5	4/7/23 12:25	4/7/23 15:29		1	127	mg CaCO3/L		0.10	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	3/29/23 12:30	3/30/23 13:47		1	281	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
* Bicarbonate Alkalinity, (calc.)	4/7/23 12:25	4/7/23 15:29		1	127	mg CaCO3/L		1	
* Carbonate Alkalinity, (calc.)	4/7/23 12:25	4/7/23 15:29		1	Not Detected	mg CaCO3/L		0.5	
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	4/3/23 16:32	4/3/23 16:32		1	Not Detected	mg/L	1.00	2	U

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-09R

Location Code: WMWGORAP
Collected: 3/27/23 14:40
Customer ID:
Submittal Date: 3/29/23 09:42

Laboratory ID Number: BD06143

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	3/30/23 12:10	3/30/23 12:10		1	19.1	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: CES***								
* Fluoride	4/3/23 14:21	4/3/23 14:21		1	0.207	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	4/4/23 15:11	4/4/23 15:11		4	80.6	mg/L	2.4	8	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	3/27/23 14:36	3/27/23 14:36			442.64	uS/cm			FA
pH	3/27/23 14:36	3/27/23 14:36			6.01	SU			FA
Temperature	3/27/23 14:36	3/27/23 14:36			18.27	C			FA
Turbidity	3/27/23 14:36	3/27/23 14:36			3.52	NTU			FA
Sulfide	3/27/23 14:36	3/27/23 14:36			0	mg/L			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 5/3/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/27/23 14:40
Customer ID:
Delivery Date: 3/29/23 09:42

Description: Gorgas Ash Pond - MW-09R

Laboratory ID Number: BD06143

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD06149	Aluminum, Dissolved	mg/L	0.000167	0.0198	0.100	0.104	0.104	0.101	0.0850 to 0.115	104	70.0 to 130	0.00	20.0
BD06149	Aluminum, Total	mg/L	0.000866	0.0198	0.100	0.125	0.125	0.103	0.0850 to 0.115	105	70.0 to 130	0.00	20.0
BD06149	Antimony, Dissolved	mg/L	0.000464	0.00100	0.100	0.107	0.107	0.0983	0.0850 to 0.115	107	70.0 to 130	0.00	20.0
BD06149	Antimony, Total	mg/L	0.000272	0.00100	0.100	0.0989	0.0971	0.0970	0.0850 to 0.115	98.9	70.0 to 130	1.84	20.0
BD06149	Arsenic, Dissolved	mg/L	0.0000011	0.000200	0.100	0.104	0.105	0.0994	0.0850 to 0.115	102	70.0 to 130	0.957	20.0
BD06149	Arsenic, Total	mg/L	0.0000131	0.000200	0.100	0.104	0.104	0.101	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BD06149	Barium, Dissolved	mg/L	0.0000037	0.00100	0.100	0.353	0.349	0.0988	0.0850 to 0.115	104	70.0 to 130	1.14	20.0
BD06149	Barium, Total	mg/L	0.0000151	0.00100	0.100	0.358	0.361	0.0998	0.0850 to 0.115	94.0	70.0 to 130	0.834	20.0
BD06149	Beryllium, Dissolved	mg/L	0.0000069	0.000880	0.100	0.0995	0.0984	0.103	0.0850 to 0.115	99.5	70.0 to 130	1.11	20.0
BD06149	Beryllium, Total	mg/L	0.0000208	0.000880	0.100	0.106	0.109	0.103	0.0850 to 0.115	106	70.0 to 130	2.79	20.0
BD06149	Boron, Dissolved	mg/L	-0.00131	0.0650	1.00	1.12	1.10	1.03	0.850 to 1.15	107	70.0 to 130	1.80	20.0
BD06149	Boron, Total	mg/L	-0.000121	0.0650	1.00	1.07	1.07	1.02	0.850 to 1.15	102	70.0 to 130	0.00	20.0
BD06149	Cadmium, Dissolved	mg/L	0.0000029	0.000147	0.100	0.112	0.111	0.110	0.0850 to 0.115	112	70.0 to 130	0.897	20.0
BD06149	Cadmium, Total	mg/L	0.0000055	0.000147	0.100	0.111	0.109	0.111	0.0850 to 0.115	111	70.0 to 130	1.82	20.0
BD06149	Calcium, Dissolved	mg/L	-0.0111	0.152	5.00	16.2	15.9	4.94	4.25 to 5.75	98.0	70.0 to 130	1.87	20.0
BD06149	Calcium, Total	mg/L	0.0239	0.152	5.00	17.9	17.8	5.03	4.25 to 5.75	90.0	70.0 to 130	0.560	20.0
BD06149	Chloride	mg/L	0.100	1.00	80.0	130	136	9.72	9.00 to 11.0	105	80.0 to 120	4.51	20.0
BD06149	Chromium, Dissolved	mg/L	-0.0000058	0.000440	0.100	0.100	0.101	0.0995	0.0850 to 0.115	99.8	70.0 to 130	0.995	20.0
BD06149	Chromium, Total	mg/L	0.0000641	0.000440	0.100	0.101	0.101	0.102	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BD06149	Cobalt, Dissolved	mg/L	-0.0000184	0.000147	0.100	0.103	0.105	0.104	0.0850 to 0.115	103	70.0 to 130	1.92	20.0
BD06149	Cobalt, Total	mg/L	-0.0000182	0.000147	0.100	0.104	0.104	0.107	0.0850 to 0.115	104	70.0 to 130	0.00	20.0
BD06149	Fluoride	mg/L	0.0131	0.125	2.50	2.93	2.98	2.66	2.25 to 2.75	107	80.0 to 120	1.69	20.0
BD06149	Iron, Dissolved	mg/L	-0.000147	0.0176	0.2	0.252	0.244	0.201	0.170 to 0.230	103	70.0 to 130	3.23	20.0
BD06149	Iron, Total	mg/L	-0.000394	0.0176	0.2	0.265	0.264	0.203	0.170 to 0.230	100	70.0 to 130	0.378	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 5/3/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/27/23 14:40
Customer ID:
Delivery Date: 3/29/23 09:42

Description: Gorgas Ash Pond - MW-09R

Laboratory ID Number: BD06143

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD06149	Lead, Dissolved	mg/L	0.0000079	0.000147	0.100	0.103	0.105	0.101	0.0850 to 0.115	103	70.0 to 130	1.92	20.0
BD06149	Lead, Total	mg/L	0.0000027	0.000147	0.100	0.102	0.100	0.105	0.0850 to 0.115	102	70.0 to 130	1.98	20.0
BD06149	Lithium, Dissolved	mg/L	0.000402	0.0154	0.200	0.273	0.268	0.199	0.170 to 0.230	106	70.0 to 130	1.85	20.0
BD06149	Lithium, Total	mg/L	0.000053	0.0154	0.200	0.265	0.265	0.199	0.170 to 0.230	102	70.0 to 130	0.00	20.0
BD06149	Magnesium, Dissolved	mg/L	0.000819	0.0462	5.00	8.79	8.65	4.93	4.25 to 5.75	101	70.0 to 130	1.61	20.0
BD06149	Magnesium, Total	mg/L	0.00266	0.0462	5.00	9.29	9.29	4.99	4.25 to 5.75	97.4	70.0 to 130	0.00	20.0
BD06149	Manganese, Dissolved	mg/L	0.0000691	0.00033	0.100	0.124	0.124	0.102	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BD06149	Manganese, Total	mg/L	0.0000240	0.00033	0.100	0.129	0.129	0.104	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BD06149	Mercury, Total by CVAA	mg/L	-2.000E-05	0.000500	0.004	0.00389	0.00392	0.0039	0.00340 to 0.00460	97.2	70.0 to 130	0.768	20.0
BD06149	Molybdenum, Dissolved	mg/L	-0.000343	0.0100	0.2	0.205	0.203	0.200	0.170 to 0.230	102	70.0 to 130	0.980	20.0
BD06149	Molybdenum, Total	mg/L	0.000	0.0100	0.2	0.203	0.202	0.204	0.170 to 0.230	102	70.0 to 130	0.494	20.0
BD06149	Potassium, Dissolved	mg/L	0.0207	0.367	10.0	14.3	14.4	9.88	8.50 to 11.5	96.4	70.0 to 130	0.697	20.0
BD06149	Potassium, Total	mg/L	0.0175	0.367	10.0	16.0	16.1	10.1	8.50 to 11.5	96.8	70.0 to 130	0.623	20.0
BD06149	Selenium, Dissolved	mg/L	0.000215	0.00100	0.100	0.102	0.100	0.101	0.0850 to 0.115	102	70.0 to 130	1.98	20.0
BD06149	Selenium, Total	mg/L	0.0000690	0.00100	0.100	0.101	0.0994	0.101	0.0850 to 0.115	101	70.0 to 130	1.60	20.0
BD06149	Silicon, Dissolved	mg/L	0.000678	0.0440	1.00	8.53	8.49	1.00	0.850 to 1.15	107	70.0 to 130	0.470	20.0
BD06149	Silicon, Total	mg/L	0.000389	0.0440	1.00	8.38	8.39	1.01	0.850 to 1.15	101	70.0 to 130	0.119	20.0
BD06149	Sodium, Dissolved	mg/L	0.000478	0.0880	5.00	123	124	4.79	4.25 to 5.75	0.00	70.0 to 130	0.810	20.0
BD06149	Sodium, Total	mg/L	0.00674	0.0880	5.00	150	142	4.81	4.25 to 5.75	240	70.0 to 130	5.48	20.0
BD06150	Sulfate	mg/L	0.260	2.0	20.0	20.5	20.3	20.3	18.0 to 22.0	102	80.0 to 120	0.980	20.0
BD06149	Thallium, Dissolved	mg/L	-0.0000325	0.000147	0.100	0.103	0.105	0.106	0.0850 to 0.115	103	70.0 to 130	1.92	20.0
BD06149	Thallium, Total	mg/L	-0.0000162	0.000147	0.100	0.0996	0.0976	0.102	0.0850 to 0.115	99.6	70.0 to 130	2.03	20.0
BD06140	Total Organic Carbon	mg/L	0.0950	1.00	10.0	12.1	12.0	24.9		89.3	80.0 to 120	0.830	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/27/23 14:40
Customer ID:
Delivery Date: 3/29/23 09:42

Description: Gorgas Ash Pond - MW-09R

Laboratory ID Number: BD06143

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD06144	Alkalinity to pH 4.5	mg CaCO3/L					207	50.8	45.0 to 55.0			0.962	10.0
BD06149	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.04	0.200	2.00	2.05	-0.039	1.99	1.80 to 2.20	102	90.0 to 110	0.00	15.0
BD06146	Solids, Dissolved	mg/L	1.00	25.0			302	50.0	40.0 to 60.0			0.988	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-9V

Location Code: WMWGORAP
Collected: 3/27/23 16:33
Customer ID:
Submittal Date: 3/29/23 09:42

Laboratory ID Number: BD06144

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	3/31/23 06:13	4/4/23 13:02		1.015	0.0359	mg/L	0.030000	0.1015	J
* Calcium, Total	3/31/23 06:13	4/4/23 16:17		10.15	49.0	mg/L	0.70035	4.06	
* Iron, Total	3/31/23 06:13	4/4/23 13:02		1.015	0.278	mg/L	0.008120	0.0406	
* Lithium, Total	3/31/23 06:13	4/4/23 13:02		1.015	0.0298	mg/L	0.007105	0.01999956	
* Magnesium, Total	3/31/23 06:13	4/4/23 13:02		1.015	15.7	mg/L	0.021315	0.406	
* Molybdenum, Total	3/31/23 06:13	4/4/23 13:02		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Total (calc.)	3/31/23 06:13	4/4/23 13:02		1	33.0	mg/L			
* Silicon, Total	3/31/23 06:13	4/4/23 13:02		1.015	15.4	mg/L	0.02030	0.25375	
* Sodium, Total	3/31/23 06:13	4/4/23 16:17		10.15	49.5	mg/L	0.4060	4.06	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	3/30/23 10:59	4/3/23 11:39		1.015	0.0353	mg/L	0.030000	0.1015	J
* Calcium, Dissolved	3/30/23 10:59	4/3/23 13:45		10.15	45.8	mg/L	0.70035	4.06	
* Iron, Dissolved	3/30/23 10:59	4/3/23 11:39		1.015	0.275	mg/L	0.008120	0.0406	
* Lithium, Dissolved	3/30/23 10:59	4/3/23 11:39		1.015	0.0304	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	3/30/23 10:59	4/3/23 11:39		1.015	15.8	mg/L	0.021315	0.406	
* Molybdenum, Dissolved	3/30/23 10:59	4/3/23 11:39		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Dissolved (calc.)	3/30/23 10:59	4/3/23 11:39		1	33.6	mg/L			
* Silicon, Dissolved	3/30/23 10:59	4/3/23 11:39		1.015	15.7	mg/L	0.02030	0.25375	
* Sodium, Dissolved	3/30/23 10:59	4/3/23 13:45		10.15	47.4	mg/L	0.4060	4.06	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/31/23 06:13	3/31/23 14:10		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Total	3/31/23 06:13	3/31/23 14:10		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Total	3/31/23 06:13	3/31/23 14:10		1.015	0.000153	mg/L	0.000112	0.000203	J
* Barium, Total	3/31/23 06:13	4/4/23 15:25		1.015	0.184	mg/L	0.000508	0.001015	
* Beryllium, Total	3/31/23 06:13	3/31/23 14:10		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	3/31/23 06:13	3/31/23 14:10		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	3/31/23 06:13	3/31/23 14:10		1.015	0.000236	mg/L	0.000203	0.001015	J
* Cobalt, Total	3/31/23 06:13	3/31/23 14:10		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	3/31/23 06:13	3/31/23 14:10		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	3/31/23 06:13	3/31/23 14:10		1.015	0.0360	mg/L	0.000152	0.001015	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 5/3/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-9V

Location Code: WMWGORAP
Collected: 3/27/23 16:33
Customer ID:
Submittal Date: 3/29/23 09:42

Laboratory ID Number: BD06144

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	3/31/23 06:13	3/31/23 14:10		1.015	2.15	mg/L	0.169505	0.5075	
* Selenium, Total	3/31/23 06:13	3/31/23 14:10		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	3/31/23 06:13	3/31/23 14:10		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	3/30/23 10:59	3/31/23 12:17		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	3/30/23 10:59	3/31/23 12:17		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Dissolved	3/30/23 10:59	3/31/23 12:17		1.015	0.000137	mg/L	0.000112	0.000203	J
* Barium, Dissolved	3/30/23 10:59	4/4/23 13:30		1.015	0.196	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	3/30/23 10:59	3/31/23 12:17		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	3/30/23 10:59	3/31/23 12:17		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	3/30/23 10:59	3/31/23 12:17		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	3/30/23 10:59	3/31/23 12:17		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Dissolved	3/30/23 10:59	3/31/23 12:17		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	3/30/23 10:59	3/31/23 12:17		1.015	0.0365	mg/L	0.000152	0.001015	
* Potassium, Dissolved	3/30/23 10:59	3/31/23 12:17		1.015	2.30	mg/L	0.169505	0.5075	
* Selenium, Dissolved	3/30/23 10:59	3/31/23 12:17		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	3/30/23 10:59	3/31/23 12:17		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ELH***								
* Mercury, Total by CVAA	4/3/23 15:06	4/3/23 20:49		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	3/30/23 13:57	3/30/23 13:57		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
* Alkalinity to pH 4.5	4/7/23 12:25	4/7/23 15:29		1	209	mg CaCO3/L		0.10	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	3/29/23 12:30	3/30/23 13:47		1	335	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
* Bicarbonate Alkalinity, (calc.)	4/7/23 12:25	4/7/23 15:29		1	208	mg CaCO3/L		1	
* Carbonate Alkalinity, (calc.)	4/7/23 12:25	4/7/23 15:29		1	0.527	mg CaCO3/L		0.5	
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	4/3/23 16:48	4/3/23 16:48		1	1.76	mg/L	1.00	2	J

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-9V

Location Code: WMWGORAP
Collected: 3/27/23 16:33
Customer ID:
Submittal Date: 3/29/23 09:42

Laboratory ID Number: BD06144

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	3/30/23 12:22	3/30/23 12:22		2	23.2	mg/L	1.00	2	
Analytical Method: SM4500F G 2017	***Analyst: CES***								
* Fluoride	4/3/23 14:22	4/3/23 14:22		1	0.164	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	4/4/23 15:12	4/4/23 15:12		2	47.9	mg/L	1.2	4	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	3/27/23 16:29	3/27/23 16:29			540.47	uS/cm			FA
pH	3/27/23 16:29	3/27/23 16:29			7.00	SU			FA
Temperature	3/27/23 16:29	3/27/23 16:29			18.86	C			FA
Turbidity	3/27/23 16:29	3/27/23 16:29			0.72	NTU			FA
Sulfide	3/27/23 16:29	3/27/23 16:29			2	mg/L			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/27/23 16:33
Customer ID:
Delivery Date: 3/29/23 09:42

Description: Gorgas Ash Pond - MW-9V

Laboratory ID Number: BD06144

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD06149	Aluminum, Dissolved	mg/L	0.000167	0.0198	0.100	0.104	0.104	0.101	0.0850 to 0.115	104	70.0 to 130	0.00	20.0
BD06149	Aluminum, Total	mg/L	0.000866	0.0198	0.100	0.125	0.125	0.103	0.0850 to 0.115	105	70.0 to 130	0.00	20.0
BD06149	Antimony, Dissolved	mg/L	0.000464	0.00100	0.100	0.107	0.107	0.0983	0.0850 to 0.115	107	70.0 to 130	0.00	20.0
BD06149	Antimony, Total	mg/L	0.000272	0.00100	0.100	0.0989	0.0971	0.0970	0.0850 to 0.115	98.9	70.0 to 130	1.84	20.0
BD06149	Arsenic, Dissolved	mg/L	0.0000011	0.000200	0.100	0.104	0.105	0.0994	0.0850 to 0.115	102	70.0 to 130	0.957	20.0
BD06149	Arsenic, Total	mg/L	0.0000131	0.000200	0.100	0.104	0.104	0.101	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BD06149	Barium, Dissolved	mg/L	0.0000037	0.00100	0.100	0.353	0.349	0.0988	0.0850 to 0.115	104	70.0 to 130	1.14	20.0
BD06149	Barium, Total	mg/L	0.0000151	0.00100	0.100	0.358	0.361	0.0998	0.0850 to 0.115	94.0	70.0 to 130	0.834	20.0
BD06149	Beryllium, Dissolved	mg/L	0.0000069	0.000880	0.100	0.0995	0.0984	0.103	0.0850 to 0.115	99.5	70.0 to 130	1.11	20.0
BD06149	Beryllium, Total	mg/L	0.0000208	0.000880	0.100	0.106	0.109	0.103	0.0850 to 0.115	106	70.0 to 130	2.79	20.0
BD06149	Boron, Dissolved	mg/L	-0.00131	0.0650	1.00	1.12	1.10	1.03	0.850 to 1.15	107	70.0 to 130	1.80	20.0
BD06149	Boron, Total	mg/L	-0.000121	0.0650	1.00	1.07	1.07	1.02	0.850 to 1.15	102	70.0 to 130	0.00	20.0
BD06149	Cadmium, Dissolved	mg/L	0.0000029	0.000147	0.100	0.112	0.111	0.110	0.0850 to 0.115	112	70.0 to 130	0.897	20.0
BD06149	Cadmium, Total	mg/L	0.0000055	0.000147	0.100	0.111	0.109	0.111	0.0850 to 0.115	111	70.0 to 130	1.82	20.0
BD06149	Calcium, Dissolved	mg/L	-0.0111	0.152	5.00	16.2	15.9	4.94	4.25 to 5.75	98.0	70.0 to 130	1.87	20.0
BD06149	Calcium, Total	mg/L	0.0239	0.152	5.00	17.9	17.8	5.03	4.25 to 5.75	90.0	70.0 to 130	0.560	20.0
BD06149	Chloride	mg/L	0.100	1.00	80.0	130	136	9.72	9.00 to 11.0	105	80.0 to 120	4.51	20.0
BD06149	Chromium, Dissolved	mg/L	-0.0000058	0.000440	0.100	0.100	0.101	0.0995	0.0850 to 0.115	99.8	70.0 to 130	0.995	20.0
BD06149	Chromium, Total	mg/L	0.0000641	0.000440	0.100	0.101	0.101	0.102	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BD06149	Cobalt, Dissolved	mg/L	-0.0000184	0.000147	0.100	0.103	0.105	0.104	0.0850 to 0.115	103	70.0 to 130	1.92	20.0
BD06149	Cobalt, Total	mg/L	-0.0000182	0.000147	0.100	0.104	0.104	0.107	0.0850 to 0.115	104	70.0 to 130	0.00	20.0
BD06149	Fluoride	mg/L	0.0131	0.125	2.50	2.93	2.98	2.66	2.25 to 2.75	107	80.0 to 120	1.69	20.0
BD06149	Iron, Dissolved	mg/L	-0.000147	0.0176	0.2	0.252	0.244	0.201	0.170 to 0.230	103	70.0 to 130	3.23	20.0
BD06149	Iron, Total	mg/L	-0.000394	0.0176	0.2	0.265	0.264	0.203	0.170 to 0.230	100	70.0 to 130	0.378	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/27/23 16:33
Customer ID:
Delivery Date: 3/29/23 09:42

Description: Gorgas Ash Pond - MW-9V

Laboratory ID Number: BD06144

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD06149	Lead, Dissolved	mg/L	0.0000079	0.000147	0.100	0.103	0.105	0.101	0.0850 to 0.115	103	70.0 to 130	1.92	20.0
BD06149	Lead, Total	mg/L	0.0000027	0.000147	0.100	0.102	0.100	0.105	0.0850 to 0.115	102	70.0 to 130	1.98	20.0
BD06149	Lithium, Dissolved	mg/L	0.000402	0.0154	0.200	0.273	0.268	0.199	0.170 to 0.230	106	70.0 to 130	1.85	20.0
BD06149	Lithium, Total	mg/L	0.000053	0.0154	0.200	0.265	0.265	0.199	0.170 to 0.230	102	70.0 to 130	0.00	20.0
BD06149	Magnesium, Dissolved	mg/L	0.000819	0.0462	5.00	8.79	8.65	4.93	4.25 to 5.75	101	70.0 to 130	1.61	20.0
BD06149	Magnesium, Total	mg/L	0.00266	0.0462	5.00	9.29	9.29	4.99	4.25 to 5.75	97.4	70.0 to 130	0.00	20.0
BD06149	Manganese, Dissolved	mg/L	0.0000691	0.00033	0.100	0.124	0.124	0.102	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BD06149	Manganese, Total	mg/L	0.0000240	0.00033	0.100	0.129	0.129	0.104	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BD06149	Mercury, Total by CVAA	mg/L	-2.000E-05	0.000500	0.004	0.00389	0.00392	0.0039	0.00340 to 0.00460	97.2	70.0 to 130	0.768	20.0
BD06149	Molybdenum, Dissolved	mg/L	-0.000343	0.0100	0.2	0.205	0.203	0.200	0.170 to 0.230	102	70.0 to 130	0.980	20.0
BD06149	Molybdenum, Total	mg/L	0.000	0.0100	0.2	0.203	0.202	0.204	0.170 to 0.230	102	70.0 to 130	0.494	20.0
BD06149	Potassium, Dissolved	mg/L	0.0207	0.367	10.0	14.3	14.4	9.88	8.50 to 11.5	96.4	70.0 to 130	0.697	20.0
BD06149	Potassium, Total	mg/L	0.0175	0.367	10.0	16.0	16.1	10.1	8.50 to 11.5	96.8	70.0 to 130	0.623	20.0
BD06149	Selenium, Dissolved	mg/L	0.000215	0.00100	0.100	0.102	0.100	0.101	0.0850 to 0.115	102	70.0 to 130	1.98	20.0
BD06149	Selenium, Total	mg/L	0.0000690	0.00100	0.100	0.101	0.0994	0.101	0.0850 to 0.115	101	70.0 to 130	1.60	20.0
BD06149	Silicon, Dissolved	mg/L	0.000678	0.0440	1.00	8.53	8.49	1.00	0.850 to 1.15	107	70.0 to 130	0.470	20.0
BD06149	Silicon, Total	mg/L	0.000389	0.0440	1.00	8.38	8.39	1.01	0.850 to 1.15	101	70.0 to 130	0.119	20.0
BD06149	Sodium, Dissolved	mg/L	0.000478	0.0880	5.00	123	124	4.79	4.25 to 5.75	0.00	70.0 to 130	0.810	20.0
BD06149	Sodium, Total	mg/L	0.00674	0.0880	5.00	150	142	4.81	4.25 to 5.75	240	70.0 to 130	5.48	20.0
BD06150	Sulfate	mg/L	0.260	2.0	20.0	20.5	20.3	20.3	18.0 to 22.0	102	80.0 to 120	0.980	20.0
BD06149	Thallium, Dissolved	mg/L	-0.0000325	0.000147	0.100	0.103	0.105	0.106	0.0850 to 0.115	103	70.0 to 130	1.92	20.0
BD06149	Thallium, Total	mg/L	-0.0000162	0.000147	0.100	0.0996	0.0976	0.102	0.0850 to 0.115	99.6	70.0 to 130	2.03	20.0
BD06140	Total Organic Carbon	mg/L	0.0950	1.00	10.0	12.1	12.0	24.9		89.3	80.0 to 120	0.830	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/27/23 16:33
Customer ID:
Delivery Date: 3/29/23 09:42

Description: Gorgas Ash Pond - MW-9V

Laboratory ID Number: BD06144

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD06144	Alkalinity to pH 4.5	mg CaCO3/L					207	50.8	45.0 to 55.0			0.962	10.0
BD06149	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.04	0.200	2.00	2.05	-0.039	1.99	1.80 to 2.20	102	90.0 to 110	0.00	15.0
BD06146	Solids, Dissolved	mg/L	1.00	25.0			302	50.0	40.0 to 60.0			0.988	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - PZ-18R

Location Code: WMWGORAP
Collected: 3/28/23 10:05
Customer ID:
Submittal Date: 3/29/23 09:42

Laboratory ID Number: BD06145

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7		***Analyst: ABB***			***Preparation Method: EPA 1638***				
* Boron, Total	3/31/23 06:13	4/4/23 13:05		1.015	0.0871	mg/L	0.030000	0.1015	J
* Calcium, Total	3/31/23 06:13	4/4/23 16:20		10.15	61.8	mg/L	0.70035	4.06	
* Iron, Total	3/31/23 06:13	4/4/23 13:05		1.015	0.764	mg/L	0.008120	0.0406	
* Lithium, Total	3/31/23 06:13	4/4/23 13:05		1.015	0.0155	mg/L	0.007105	0.01999956	J
* Magnesium, Total	3/31/23 06:13	4/4/23 13:05		1.015	18.1	mg/L	0.021315	0.406	
* Molybdenum, Total	3/31/23 06:13	4/4/23 13:05		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Total (calc.)	3/31/23 06:13	4/4/23 13:05		1	24.2	mg/L			
* Silicon, Total	3/31/23 06:13	4/4/23 13:05		1.015	11.3	mg/L	0.02030	0.25375	
* Sodium, Total	3/31/23 06:13	4/4/23 13:05		1.015	17.3	mg/L	0.04060	0.406	
Analytical Method: EPA 200.7		***Analyst: ABB***							
* Boron, Dissolved	3/30/23 10:59	4/3/23 11:42		1.015	0.0885	mg/L	0.030000	0.1015	J
* Calcium, Dissolved	3/30/23 10:59	4/3/23 13:48		10.15	61.8	mg/L	0.70035	4.06	
* Iron, Dissolved	3/30/23 10:59	4/3/23 11:42		1.015	0.749	mg/L	0.008120	0.0406	
* Lithium, Dissolved	3/30/23 10:59	4/3/23 11:42		1.015	0.0166	mg/L	0.007105	0.01999956	J
* Magnesium, Dissolved	3/30/23 10:59	4/3/23 11:42		1.015	18.2	mg/L	0.021315	0.406	
* Molybdenum, Dissolved	3/30/23 10:59	4/3/23 11:42		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Dissolved (calc.)	3/30/23 10:59	4/3/23 11:42		1	24.8	mg/L			
* Silicon, Dissolved	3/30/23 10:59	4/3/23 11:42		1.015	11.6	mg/L	0.02030	0.25375	
* Sodium, Dissolved	3/30/23 10:59	4/3/23 11:42		1.015	18.1	mg/L	0.04060	0.406	
Analytical Method: EPA 200.8		***Analyst: DLJ***			***Preparation Method: EPA 1638***				
* Antimony, Total	3/31/23 06:13	3/31/23 14:14		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Total	3/31/23 06:13	3/31/23 14:14		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Total	3/31/23 06:13	3/31/23 14:14		1.015	0.00106	mg/L	0.000112	0.000203	
* Barium, Total	3/31/23 06:13	4/4/23 15:28		1.015	0.0701	mg/L	0.000508	0.001015	
* Beryllium, Total	3/31/23 06:13	3/31/23 14:14		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	3/31/23 06:13	3/31/23 14:14		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	3/31/23 06:13	3/31/23 14:14		1.015	0.000212	mg/L	0.000203	0.001015	J
* Cobalt, Total	3/31/23 06:13	3/31/23 14:14		1.015	0.0000775	mg/L	0.000068	0.000203	J
* Lead, Total	3/31/23 06:13	3/31/23 14:14		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	3/31/23 06:13	3/31/23 14:14		1.015	0.0603	mg/L	0.000152	0.001015	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - PZ-18R

Location Code: WMWGORAP
Collected: 3/28/23 10:05
Customer ID:
Submittal Date: 3/29/23 09:42

Laboratory ID Number: BD06145

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	3/31/23 06:13	3/31/23 14:14		1.015	1.17	mg/L	0.169505	0.5075	
* Selenium, Total	3/31/23 06:13	3/31/23 14:14		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	3/31/23 06:13	3/31/23 14:14		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	3/30/23 10:59	3/31/23 12:20		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	3/30/23 10:59	3/31/23 12:20		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Dissolved	3/30/23 10:59	3/31/23 12:20		1.015	0.00111	mg/L	0.000112	0.000203	
* Barium, Dissolved	3/30/23 10:59	4/4/23 13:34		1.015	0.0688	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	3/30/23 10:59	3/31/23 12:20		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	3/30/23 10:59	3/31/23 12:20		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	3/30/23 10:59	3/31/23 12:20		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	3/30/23 10:59	3/31/23 12:20		1.015	0.0000777	mg/L	0.000068	0.000203	J
* Lead, Dissolved	3/30/23 10:59	3/31/23 12:20		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	3/30/23 10:59	3/31/23 12:20		1.015	0.0580	mg/L	0.000152	0.001015	
* Potassium, Dissolved	3/30/23 10:59	3/31/23 12:20		1.015	1.18	mg/L	0.169505	0.5075	
* Selenium, Dissolved	3/30/23 10:59	3/31/23 12:20		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	3/30/23 10:59	3/31/23 12:20		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ELH***								
* Mercury, Total by CVAA	4/3/23 15:06	4/3/23 20:53		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	3/30/23 13:58	3/30/23 13:58		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
* Alkalinity to pH 4.5	4/10/23 11:30	4/10/23 12:47		1	216	mg CaCO3/L		0.10	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	3/29/23 12:30	3/30/23 13:47		1	297	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
* Bicarbonate Alkalinity, (calc.)	4/10/23 11:30	4/10/23 12:47		1	216	mg CaCO3/L		1	
* Carbonate Alkalinity, (calc.)	4/10/23 11:30	4/10/23 12:47		1	Not Detected	mg CaCO3/L		0.5	
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	4/3/23 17:03	4/3/23 17:03		1	Not Detected	mg/L	1.00	2	U

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - PZ-18R

Location Code: WMWGORAP
Collected: 3/28/23 10:05
Customer ID:
Submittal Date: 3/29/23 09:42

Laboratory ID Number: BD06145

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	3/30/23 12:13	3/30/23 12:13		1	4.00	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: CES***								
* Fluoride	4/3/23 14:23	4/3/23 14:23		1	0.175	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	4/4/23 15:13	4/4/23 15:13		2	44.9	mg/L	1.2	4	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	3/28/23 10:02	3/28/23 10:02			450.65	uS/cm			FA
pH	3/28/23 10:02	3/28/23 10:02			7.22	SU			FA
Temperature	3/28/23 10:02	3/28/23 10:02			16.79	C			FA
Turbidity	3/28/23 10:02	3/28/23 10:02			0.75	NTU			FA
Sulfide	3/28/23 10:02	3/28/23 10:02			0	mg/L			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/28/23 10:05
Customer ID:
Delivery Date: 3/29/23 09:42

Description: Gorgas Ash Pond - PZ-18R

Laboratory ID Number: BD06145

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD06149	Aluminum, Dissolved	mg/L	0.000167	0.0198	0.100	0.104	0.104	0.101	0.0850 to 0.115	104	70.0 to 130	0.00	20.0
BD06149	Aluminum, Total	mg/L	0.000866	0.0198	0.100	0.125	0.125	0.103	0.0850 to 0.115	105	70.0 to 130	0.00	20.0
BD06149	Antimony, Dissolved	mg/L	0.000464	0.00100	0.100	0.107	0.107	0.0983	0.0850 to 0.115	107	70.0 to 130	0.00	20.0
BD06149	Antimony, Total	mg/L	0.000272	0.00100	0.100	0.0989	0.0971	0.0970	0.0850 to 0.115	98.9	70.0 to 130	1.84	20.0
BD06149	Arsenic, Dissolved	mg/L	0.0000011	0.000200	0.100	0.104	0.105	0.0994	0.0850 to 0.115	102	70.0 to 130	0.957	20.0
BD06149	Arsenic, Total	mg/L	0.0000131	0.000200	0.100	0.104	0.104	0.101	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BD06149	Barium, Dissolved	mg/L	0.0000037	0.00100	0.100	0.353	0.349	0.0988	0.0850 to 0.115	104	70.0 to 130	1.14	20.0
BD06149	Barium, Total	mg/L	0.0000151	0.00100	0.100	0.358	0.361	0.0998	0.0850 to 0.115	94.0	70.0 to 130	0.834	20.0
BD06149	Beryllium, Dissolved	mg/L	0.0000069	0.000880	0.100	0.0995	0.0984	0.103	0.0850 to 0.115	99.5	70.0 to 130	1.11	20.0
BD06149	Beryllium, Total	mg/L	0.0000208	0.000880	0.100	0.106	0.109	0.103	0.0850 to 0.115	106	70.0 to 130	2.79	20.0
BD06149	Boron, Dissolved	mg/L	-0.00131	0.0650	1.00	1.12	1.10	1.03	0.850 to 1.15	107	70.0 to 130	1.80	20.0
BD06149	Boron, Total	mg/L	-0.000121	0.0650	1.00	1.07	1.07	1.02	0.850 to 1.15	102	70.0 to 130	0.00	20.0
BD06149	Cadmium, Dissolved	mg/L	0.0000029	0.000147	0.100	0.112	0.111	0.110	0.0850 to 0.115	112	70.0 to 130	0.897	20.0
BD06149	Cadmium, Total	mg/L	0.0000055	0.000147	0.100	0.111	0.109	0.111	0.0850 to 0.115	111	70.0 to 130	1.82	20.0
BD06149	Calcium, Dissolved	mg/L	-0.0111	0.152	5.00	16.2	15.9	4.94	4.25 to 5.75	98.0	70.0 to 130	1.87	20.0
BD06149	Calcium, Total	mg/L	0.0239	0.152	5.00	17.9	17.8	5.03	4.25 to 5.75	90.0	70.0 to 130	0.560	20.0
BD06149	Chloride	mg/L	0.100	1.00	80.0	130	136	9.72	9.00 to 11.0	105	80.0 to 120	4.51	20.0
BD06149	Chromium, Dissolved	mg/L	-0.0000058	0.000440	0.100	0.100	0.101	0.0995	0.0850 to 0.115	99.8	70.0 to 130	0.995	20.0
BD06149	Chromium, Total	mg/L	0.0000641	0.000440	0.100	0.101	0.101	0.102	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BD06149	Cobalt, Dissolved	mg/L	-0.0000184	0.000147	0.100	0.103	0.105	0.104	0.0850 to 0.115	103	70.0 to 130	1.92	20.0
BD06149	Cobalt, Total	mg/L	-0.0000182	0.000147	0.100	0.104	0.104	0.107	0.0850 to 0.115	104	70.0 to 130	0.00	20.0
BD06149	Fluoride	mg/L	0.0131	0.125	2.50	2.93	2.98	2.66	2.25 to 2.75	107	80.0 to 120	1.69	20.0
BD06149	Iron, Dissolved	mg/L	-0.000147	0.0176	0.2	0.252	0.244	0.201	0.170 to 0.230	103	70.0 to 130	3.23	20.0
BD06149	Iron, Total	mg/L	-0.000394	0.0176	0.2	0.265	0.264	0.203	0.170 to 0.230	100	70.0 to 130	0.378	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/28/23 10:05
Customer ID:
Delivery Date: 3/29/23 09:42

Description: Gorgas Ash Pond - PZ-18R

Laboratory ID Number: BD06145

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD06149	Lead, Dissolved	mg/L	0.0000079	0.000147	0.100	0.103	0.105	0.101	0.0850 to 0.115	103	70.0 to 130	1.92	20.0
BD06149	Lead, Total	mg/L	0.0000027	0.000147	0.100	0.102	0.100	0.105	0.0850 to 0.115	102	70.0 to 130	1.98	20.0
BD06149	Lithium, Dissolved	mg/L	0.000402	0.0154	0.200	0.273	0.268	0.199	0.170 to 0.230	106	70.0 to 130	1.85	20.0
BD06149	Lithium, Total	mg/L	0.000053	0.0154	0.200	0.265	0.265	0.199	0.170 to 0.230	102	70.0 to 130	0.00	20.0
BD06149	Magnesium, Dissolved	mg/L	0.000819	0.0462	5.00	8.79	8.65	4.93	4.25 to 5.75	101	70.0 to 130	1.61	20.0
BD06149	Magnesium, Total	mg/L	0.00266	0.0462	5.00	9.29	9.29	4.99	4.25 to 5.75	97.4	70.0 to 130	0.00	20.0
BD06149	Manganese, Dissolved	mg/L	0.0000691	0.00033	0.100	0.124	0.124	0.102	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BD06149	Manganese, Total	mg/L	0.0000240	0.00033	0.100	0.129	0.129	0.104	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BD06149	Mercury, Total by CVAA	mg/L	-2.000E-05	0.000500	0.004	0.00389	0.00392	0.0039	0.00340 to 0.00460	97.2	70.0 to 130	0.768	20.0
BD06149	Molybdenum, Dissolved	mg/L	-0.000343	0.0100	0.2	0.205	0.203	0.200	0.170 to 0.230	102	70.0 to 130	0.980	20.0
BD06149	Molybdenum, Total	mg/L	0.000	0.0100	0.2	0.203	0.202	0.204	0.170 to 0.230	102	70.0 to 130	0.494	20.0
BD06149	Potassium, Dissolved	mg/L	0.0207	0.367	10.0	14.3	14.4	9.88	8.50 to 11.5	96.4	70.0 to 130	0.697	20.0
BD06149	Potassium, Total	mg/L	0.0175	0.367	10.0	16.0	16.1	10.1	8.50 to 11.5	96.8	70.0 to 130	0.623	20.0
BD06149	Selenium, Dissolved	mg/L	0.000215	0.00100	0.100	0.102	0.100	0.101	0.0850 to 0.115	102	70.0 to 130	1.98	20.0
BD06149	Selenium, Total	mg/L	0.0000690	0.00100	0.100	0.101	0.0994	0.101	0.0850 to 0.115	101	70.0 to 130	1.60	20.0
BD06149	Silicon, Dissolved	mg/L	0.000678	0.0440	1.00	8.53	8.49	1.00	0.850 to 1.15	107	70.0 to 130	0.470	20.0
BD06149	Silicon, Total	mg/L	0.000389	0.0440	1.00	8.38	8.39	1.01	0.850 to 1.15	101	70.0 to 130	0.119	20.0
BD06149	Sodium, Dissolved	mg/L	0.000478	0.0880	5.00	123	124	4.79	4.25 to 5.75	0.00	70.0 to 130	0.810	20.0
BD06149	Sodium, Total	mg/L	0.00674	0.0880	5.00	150	142	4.81	4.25 to 5.75	240	70.0 to 130	5.48	20.0
BD06150	Sulfate	mg/L	0.260	2.0	20.0	20.5	20.3	20.3	18.0 to 22.0	102	80.0 to 120	0.980	20.0
BD06149	Thallium, Dissolved	mg/L	-0.0000325	0.000147	0.100	0.103	0.105	0.106	0.0850 to 0.115	103	70.0 to 130	1.92	20.0
BD06149	Thallium, Total	mg/L	-0.0000162	0.000147	0.100	0.0996	0.0976	0.102	0.0850 to 0.115	99.6	70.0 to 130	2.03	20.0
BD06140	Total Organic Carbon	mg/L	0.0950	1.00	10.0	12.1	12.0	24.9		89.3	80.0 to 120	0.830	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/28/23 10:05
Customer ID:
Delivery Date: 3/29/23 09:42

Description: Gorgas Ash Pond - PZ-18R

Laboratory ID Number: BD06145

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD06148	Alkalinity to pH 4.5	mg CaCO3/L					91.9	50.2	45.0 to 55.0			2.20	10.0
BD06149	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.04	0.200	2.00	2.05	-0.039	1.99	1.80 to 2.20	102	90.0 to 110	0.00	15.0
BD06146	Solids, Dissolved	mg/L	1.00	25.0			302	50.0	40.0 to 60.0			0.988	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - PZ-18R Dup

Location Code: WMWGORAP
Collected: 3/28/23 10:05
Customer ID:
Submittal Date: 3/29/23 09:42

Laboratory ID Number: BD06146

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	3/31/23 06:13	4/4/23 13:08		1.015	0.0866	mg/L	0.030000	0.1015	J
* Calcium, Total	3/31/23 06:13	4/4/23 16:24		10.15	67.6	mg/L	0.70035	4.06	
* Iron, Total	3/31/23 06:13	4/4/23 13:08		1.015	0.758	mg/L	0.008120	0.0406	
* Lithium, Total	3/31/23 06:13	4/4/23 13:08		1.015	0.0155	mg/L	0.007105	0.01999956	J
* Magnesium, Total	3/31/23 06:13	4/4/23 13:08		1.015	18.0	mg/L	0.021315	0.406	
* Molybdenum, Total	3/31/23 06:13	4/4/23 13:08		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Total (calc.)	3/31/23 06:13	4/4/23 13:08		1	24.2	mg/L			
* Silicon, Total	3/31/23 06:13	4/4/23 13:08		1.015	11.3	mg/L	0.02030	0.25375	
* Sodium, Total	3/31/23 06:13	4/4/23 13:08		1.015	17.1	mg/L	0.04060	0.406	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	3/30/23 10:59	4/3/23 11:45		1.015	0.0876	mg/L	0.030000	0.1015	J
* Calcium, Dissolved	3/30/23 10:59	4/3/23 13:52		10.15	61.2	mg/L	0.70035	4.06	
* Iron, Dissolved	3/30/23 10:59	4/3/23 11:45		1.015	0.747	mg/L	0.008120	0.0406	
* Lithium, Dissolved	3/30/23 10:59	4/3/23 11:45		1.015	0.0162	mg/L	0.007105	0.01999956	J
* Magnesium, Dissolved	3/30/23 10:59	4/3/23 11:45		1.015	18.2	mg/L	0.021315	0.406	
* Molybdenum, Dissolved	3/30/23 10:59	4/3/23 11:45		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Dissolved (calc.)	3/30/23 10:59	4/3/23 11:45		1	24.4	mg/L			
* Silicon, Dissolved	3/30/23 10:59	4/3/23 11:45		1.015	11.4	mg/L	0.02030	0.25375	
* Sodium, Dissolved	3/30/23 10:59	4/3/23 11:45		1.015	17.7	mg/L	0.04060	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/31/23 06:13	3/31/23 14:17		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Total	3/31/23 06:13	3/31/23 14:17		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Total	3/31/23 06:13	3/31/23 14:17		1.015	0.00113	mg/L	0.000112	0.000203	
* Barium, Total	3/31/23 06:13	4/4/23 15:32		1.015	0.0711	mg/L	0.000508	0.001015	
* Beryllium, Total	3/31/23 06:13	3/31/23 14:17		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	3/31/23 06:13	3/31/23 14:17		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	3/31/23 06:13	3/31/23 14:17		1.015	0.000219	mg/L	0.000203	0.001015	J
* Cobalt, Total	3/31/23 06:13	3/31/23 14:17		1.015	0.0000736	mg/L	0.000068	0.000203	J
* Lead, Total	3/31/23 06:13	3/31/23 14:17		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	3/31/23 06:13	3/31/23 14:17		1.015	0.0579	mg/L	0.000152	0.001015	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

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General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - PZ-18R Dup

Location Code: WMWGORAP
Collected: 3/28/23 10:05
Customer ID:
Submittal Date: 3/29/23 09:42

Laboratory ID Number: BD06146

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	3/31/23 06:13	3/31/23 14:17		1.015	1.19	mg/L	0.169505	0.5075	
* Selenium, Total	3/31/23 06:13	3/31/23 14:17		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	3/31/23 06:13	3/31/23 14:17		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	3/30/23 10:59	3/31/23 12:24		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	3/30/23 10:59	3/31/23 12:24		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Dissolved	3/30/23 10:59	3/31/23 12:24		1.015	0.00117	mg/L	0.000112	0.000203	
* Barium, Dissolved	3/30/23 10:59	4/4/23 13:37		1.015	0.0667	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	3/30/23 10:59	3/31/23 12:24		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	3/30/23 10:59	3/31/23 12:24		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	3/30/23 10:59	3/31/23 12:24		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	3/30/23 10:59	3/31/23 12:24		1.015	0.0000698	mg/L	0.000068	0.000203	J
* Lead, Dissolved	3/30/23 10:59	3/31/23 12:24		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	3/30/23 10:59	3/31/23 12:24		1.015	0.0592	mg/L	0.000152	0.001015	
* Potassium, Dissolved	3/30/23 10:59	3/31/23 12:24		1.015	1.21	mg/L	0.169505	0.5075	
* Selenium, Dissolved	3/30/23 10:59	3/31/23 12:24		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	3/30/23 10:59	3/31/23 12:24		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ELH***								
* Mercury, Total by CVAA	4/3/23 15:06	4/3/23 20:57		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	3/30/23 14:00	3/30/23 14:00		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
* Alkalinity to pH 4.5	4/10/23 11:30	4/10/23 12:47		1	216	mg CaCO3/L		0.10	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	3/29/23 12:30	3/30/23 13:47		1	305	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
* Bicarbonate Alkalinity, (calc.)	4/10/23 11:30	4/10/23 12:47		1	215	mg CaCO3/L		1	
* Carbonate Alkalinity, (calc.)	4/10/23 11:30	4/10/23 12:47		1	0.571	mg CaCO3/L		0.5	
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	4/3/23 17:18	4/3/23 17:18		1	1.21	mg/L	1.00	2	J

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 5/3/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - PZ-18R Dup

Location Code: WMWGORAP
Collected: 3/28/23 10:05
Customer ID:
Submittal Date: 3/29/23 09:42

Laboratory ID Number: BD06146

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	3/30/23 12:14	3/30/23 12:14		1	4.05	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: CES***								
* Fluoride	4/3/23 14:24	4/3/23 14:24		1	0.178	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	4/4/23 15:14	4/4/23 15:14		2	45.1	mg/L	1.2	4	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	3/28/23 10:02	3/28/23 10:02			450.65	uS/cm			FA
pH	3/28/23 10:02	3/28/23 10:02			7.22	SU			FA
Temperature	3/28/23 10:02	3/28/23 10:02			16.79	C			FA
Turbidity	3/28/23 10:02	3/28/23 10:02			0.75	NTU			FA
Sulfide	3/28/23 10:02	3/28/23 10:02			0	mg/L			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 5/3/2023
Version: 3.5
COA_CCR

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/28/23 10:05
Customer ID:
Delivery Date: 3/29/23 09:42

Description: Gorgas Ash Pond - PZ-18R Dup

Laboratory ID Number: BD06146

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD06149	Aluminum, Dissolved	mg/L	0.000167	0.0198	0.100	0.104	0.104	0.101	0.0850 to 0.115	104	70.0 to 130	0.00	20.0
BD06149	Aluminum, Total	mg/L	0.000866	0.0198	0.100	0.125	0.125	0.103	0.0850 to 0.115	105	70.0 to 130	0.00	20.0
BD06149	Antimony, Dissolved	mg/L	0.000464	0.00100	0.100	0.107	0.107	0.0983	0.0850 to 0.115	107	70.0 to 130	0.00	20.0
BD06149	Antimony, Total	mg/L	0.000272	0.00100	0.100	0.0989	0.0971	0.0970	0.0850 to 0.115	98.9	70.0 to 130	1.84	20.0
BD06149	Arsenic, Dissolved	mg/L	0.0000011	0.000200	0.100	0.104	0.105	0.0994	0.0850 to 0.115	102	70.0 to 130	0.957	20.0
BD06149	Arsenic, Total	mg/L	0.0000131	0.000200	0.100	0.104	0.104	0.101	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BD06149	Barium, Dissolved	mg/L	0.0000037	0.00100	0.100	0.353	0.349	0.0988	0.0850 to 0.115	104	70.0 to 130	1.14	20.0
BD06149	Barium, Total	mg/L	0.0000151	0.00100	0.100	0.358	0.361	0.0998	0.0850 to 0.115	94.0	70.0 to 130	0.834	20.0
BD06149	Beryllium, Dissolved	mg/L	0.0000069	0.000880	0.100	0.0995	0.0984	0.103	0.0850 to 0.115	99.5	70.0 to 130	1.11	20.0
BD06149	Beryllium, Total	mg/L	0.0000208	0.000880	0.100	0.106	0.109	0.103	0.0850 to 0.115	106	70.0 to 130	2.79	20.0
BD06149	Boron, Dissolved	mg/L	-0.00131	0.0650	1.00	1.12	1.10	1.03	0.850 to 1.15	107	70.0 to 130	1.80	20.0
BD06149	Boron, Total	mg/L	-0.000121	0.0650	1.00	1.07	1.07	1.02	0.850 to 1.15	102	70.0 to 130	0.00	20.0
BD06149	Cadmium, Dissolved	mg/L	0.0000029	0.000147	0.100	0.112	0.111	0.110	0.0850 to 0.115	112	70.0 to 130	0.897	20.0
BD06149	Cadmium, Total	mg/L	0.0000055	0.000147	0.100	0.111	0.109	0.111	0.0850 to 0.115	111	70.0 to 130	1.82	20.0
BD06149	Calcium, Dissolved	mg/L	-0.0111	0.152	5.00	16.2	15.9	4.94	4.25 to 5.75	98.0	70.0 to 130	1.87	20.0
BD06149	Calcium, Total	mg/L	0.0239	0.152	5.00	17.9	17.8	5.03	4.25 to 5.75	90.0	70.0 to 130	0.560	20.0
BD06149	Chloride	mg/L	0.100	1.00	80.0	130	136	9.72	9.00 to 11.0	105	80.0 to 120	4.51	20.0
BD06149	Chromium, Dissolved	mg/L	-0.0000058	0.000440	0.100	0.100	0.101	0.0995	0.0850 to 0.115	99.8	70.0 to 130	0.995	20.0
BD06149	Chromium, Total	mg/L	0.0000641	0.000440	0.100	0.101	0.101	0.102	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BD06149	Cobalt, Dissolved	mg/L	-0.0000184	0.000147	0.100	0.103	0.105	0.104	0.0850 to 0.115	103	70.0 to 130	1.92	20.0
BD06149	Cobalt, Total	mg/L	-0.0000182	0.000147	0.100	0.104	0.104	0.107	0.0850 to 0.115	104	70.0 to 130	0.00	20.0
BD06149	Fluoride	mg/L	0.0131	0.125	2.50	2.93	2.98	2.66	2.25 to 2.75	107	80.0 to 120	1.69	20.0
BD06149	Iron, Dissolved	mg/L	-0.000147	0.0176	0.2	0.252	0.244	0.201	0.170 to 0.230	103	70.0 to 130	3.23	20.0
BD06149	Iron, Total	mg/L	-0.000394	0.0176	0.2	0.265	0.264	0.203	0.170 to 0.230	100	70.0 to 130	0.378	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/28/23 10:05
Customer ID:
Delivery Date: 3/29/23 09:42

Description: Gorgas Ash Pond - PZ-18R Dup

Laboratory ID Number: BD06146

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD06149	Lead, Dissolved	mg/L	0.0000079	0.000147	0.100	0.103	0.105	0.101	0.0850 to 0.115	103	70.0 to 130	1.92	20.0
BD06149	Lead, Total	mg/L	0.0000027	0.000147	0.100	0.102	0.100	0.105	0.0850 to 0.115	102	70.0 to 130	1.98	20.0
BD06149	Lithium, Dissolved	mg/L	0.000402	0.0154	0.200	0.273	0.268	0.199	0.170 to 0.230	106	70.0 to 130	1.85	20.0
BD06149	Lithium, Total	mg/L	0.000053	0.0154	0.200	0.265	0.265	0.199	0.170 to 0.230	102	70.0 to 130	0.00	20.0
BD06149	Magnesium, Dissolved	mg/L	0.000819	0.0462	5.00	8.79	8.65	4.93	4.25 to 5.75	101	70.0 to 130	1.61	20.0
BD06149	Magnesium, Total	mg/L	0.00266	0.0462	5.00	9.29	9.29	4.99	4.25 to 5.75	97.4	70.0 to 130	0.00	20.0
BD06149	Manganese, Dissolved	mg/L	0.0000691	0.00033	0.100	0.124	0.124	0.102	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BD06149	Manganese, Total	mg/L	0.0000240	0.00033	0.100	0.129	0.129	0.104	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BD06149	Mercury, Total by CVAA	mg/L	-2.000E-05	0.000500	0.004	0.00389	0.00392	0.0039	0.00340 to 0.00460	97.2	70.0 to 130	0.768	20.0
BD06149	Molybdenum, Dissolved	mg/L	-0.000343	0.0100	0.2	0.205	0.203	0.200	0.170 to 0.230	102	70.0 to 130	0.980	20.0
BD06149	Molybdenum, Total	mg/L	0.000	0.0100	0.2	0.203	0.202	0.204	0.170 to 0.230	102	70.0 to 130	0.494	20.0
BD06149	Potassium, Dissolved	mg/L	0.0207	0.367	10.0	14.3	14.4	9.88	8.50 to 11.5	96.4	70.0 to 130	0.697	20.0
BD06149	Potassium, Total	mg/L	0.0175	0.367	10.0	16.0	16.1	10.1	8.50 to 11.5	96.8	70.0 to 130	0.623	20.0
BD06149	Selenium, Dissolved	mg/L	0.000215	0.00100	0.100	0.102	0.100	0.101	0.0850 to 0.115	102	70.0 to 130	1.98	20.0
BD06149	Selenium, Total	mg/L	0.0000690	0.00100	0.100	0.101	0.0994	0.101	0.0850 to 0.115	101	70.0 to 130	1.60	20.0
BD06149	Silicon, Dissolved	mg/L	0.000678	0.0440	1.00	8.53	8.49	1.00	0.850 to 1.15	107	70.0 to 130	0.470	20.0
BD06149	Silicon, Total	mg/L	0.000389	0.0440	1.00	8.38	8.39	1.01	0.850 to 1.15	101	70.0 to 130	0.119	20.0
BD06149	Sodium, Dissolved	mg/L	0.000478	0.0880	5.00	123	124	4.79	4.25 to 5.75	0.00	70.0 to 130	0.810	20.0
BD06149	Sodium, Total	mg/L	0.00674	0.0880	5.00	150	142	4.81	4.25 to 5.75	240	70.0 to 130	5.48	20.0
BD06150	Sulfate	mg/L	0.260	2.0	20.0	20.5	20.3	20.3	18.0 to 22.0	102	80.0 to 120	0.980	20.0
BD06149	Thallium, Dissolved	mg/L	-0.0000325	0.000147	0.100	0.103	0.105	0.106	0.0850 to 0.115	103	70.0 to 130	1.92	20.0
BD06149	Thallium, Total	mg/L	-0.0000162	0.000147	0.100	0.0996	0.0976	0.102	0.0850 to 0.115	99.6	70.0 to 130	2.03	20.0
BD06140	Total Organic Carbon	mg/L	0.0950	1.00	10.0	12.1	12.0	24.9		89.3	80.0 to 120	0.830	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/28/23 10:05
Customer ID:
Delivery Date: 3/29/23 09:42

Description: Gorgas Ash Pond - PZ-18R Dup

Laboratory ID Number: BD06146

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD06148	Alkalinity to pH 4.5	mg CaCO3/L					91.9	50.2	45.0 to 55.0			2.20	10.0
BD06149	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.04	0.200	2.00	2.05	-0.039	1.99	1.80 to 2.20	102	90.0 to 110	0.00	15.0
BD06146	Solids, Dissolved	mg/L	1.00	25.0			302	50.0	40.0 to 60.0			0.988	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 5/3/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-18R

Location Code: WMWGORAP
Collected: 3/28/23 11:10
Customer ID:
Submittal Date: 3/29/23 09:42

Laboratory ID Number: BD06147

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	3/31/23 06:13	4/4/23 13:12		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	3/31/23 06:13	4/4/23 13:12		1.015	25.8	mg/L	0.070035	0.406	
* Iron, Total	3/31/23 06:13	4/4/23 13:12		1.015	3.29	mg/L	0.008120	0.0406	
* Lithium, Total	3/31/23 06:13	4/4/23 13:12		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	3/31/23 06:13	4/4/23 13:12		1.015	6.32	mg/L	0.021315	0.406	
* Molybdenum, Total	3/31/23 06:13	4/4/23 13:12		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Total (calc.)	3/31/23 06:13	4/4/23 13:12		1	23.3	mg/L			
* Silicon, Total	3/31/23 06:13	4/4/23 13:12		1.015	10.9	mg/L	0.02030	0.25375	
* Sodium, Total	3/31/23 06:13	4/4/23 13:12		1.015	10.5	mg/L	0.04060	0.406	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	3/30/23 10:59	4/3/23 11:48		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Dissolved	3/30/23 10:59	4/3/23 11:48		1.015	26.3	mg/L	0.070035	0.406	
* Iron, Dissolved	3/30/23 10:59	4/3/23 11:48		1.015	3.46	mg/L	0.008120	0.0406	
* Lithium, Dissolved	3/30/23 10:59	4/3/23 11:48		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Dissolved	3/30/23 10:59	4/3/23 11:48		1.015	6.51	mg/L	0.021315	0.406	
* Molybdenum, Dissolved	3/30/23 10:59	4/3/23 11:48		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Dissolved (calc.)	3/30/23 10:59	4/3/23 11:48		1	23.8	mg/L			
* Silicon, Dissolved	3/30/23 10:59	4/3/23 11:48		1.015	11.1	mg/L	0.02030	0.25375	
* Sodium, Dissolved	3/30/23 10:59	4/3/23 11:48		1.015	11.0	mg/L	0.04060	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/31/23 06:13	3/31/23 14:21		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Total	3/31/23 06:13	3/31/23 14:21		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Total	3/31/23 06:13	3/31/23 14:21		1.015	0.000433	mg/L	0.000112	0.000203	
* Barium, Total	3/31/23 06:13	4/4/23 15:36		1.015	0.0803	mg/L	0.000508	0.001015	
* Beryllium, Total	3/31/23 06:13	3/31/23 14:21		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	3/31/23 06:13	3/31/23 14:21		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	3/31/23 06:13	3/31/23 14:21		1.015	0.000221	mg/L	0.000203	0.001015	J
* Cobalt, Total	3/31/23 06:13	3/31/23 14:21		1.015	0.000688	mg/L	0.000068	0.000203	
* Lead, Total	3/31/23 06:13	3/31/23 14:21		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	3/31/23 06:13	3/31/23 14:21		1.015	0.164	mg/L	0.000152	0.001015	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-18R

Location Code: WMWGORAP
Collected: 3/28/23 11:10
Customer ID:
Submittal Date: 3/29/23 09:42

Laboratory ID Number: BD06147

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	3/31/23 06:13	3/31/23 14:21		1.015	0.958	mg/L	0.169505	0.5075	
* Selenium, Total	3/31/23 06:13	3/31/23 14:21		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	3/31/23 06:13	3/31/23 14:21		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	3/30/23 10:59	3/31/23 12:27		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	3/30/23 10:59	3/31/23 12:27		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Dissolved	3/30/23 10:59	3/31/23 12:27		1.015	0.000452	mg/L	0.000112	0.000203	
* Barium, Dissolved	3/30/23 10:59	4/4/23 13:41		1.015	0.0781	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	3/30/23 10:59	3/31/23 12:27		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	3/30/23 10:59	3/31/23 12:27		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	3/30/23 10:59	3/31/23 12:27		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	3/30/23 10:59	3/31/23 12:27		1.015	0.000680	mg/L	0.000068	0.000203	
* Lead, Dissolved	3/30/23 10:59	3/31/23 12:27		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	3/30/23 10:59	3/31/23 12:27		1.015	0.162	mg/L	0.000152	0.001015	
* Potassium, Dissolved	3/30/23 10:59	3/31/23 12:27		1.015	0.938	mg/L	0.169505	0.5075	
* Selenium, Dissolved	3/30/23 10:59	3/31/23 12:27		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	3/30/23 10:59	3/31/23 12:27		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ELH***								
* Mercury, Total by CVAA	4/3/23 15:06	4/3/23 21:01		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	3/30/23 14:02	3/30/23 14:02		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
* Alkalinity to pH 4.5	4/10/23 11:30	4/10/23 12:47		1	90.5	mg CaCO3/L		0.10	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	3/31/23 10:10	4/3/23 13:13		1	154	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
* Bicarbonate Alkalinity, (calc.)	4/10/23 11:30	4/10/23 12:47		1	90.4	mg CaCO3/L		1	
* Carbonate Alkalinity, (calc.)	4/10/23 11:30	4/10/23 12:47		1	Not Detected	mg CaCO3/L		0.5	
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	4/3/23 17:33	4/3/23 17:33		1	1.01	mg/L	1.00	2	J

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-18R

Location Code: WMWGORAP
Collected: 3/28/23 11:10
Customer ID:
Submittal Date: 3/29/23 09:42

Laboratory ID Number: BD06147

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	3/30/23 12:15	3/30/23 12:15		1	3.00	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: CES***								
* Fluoride	4/3/23 14:26	4/3/23 14:26		1	0.115	mg/L	0.06	0.125	J
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	4/4/23 15:03	4/4/23 15:03		1	26.3	mg/L	0.6	2	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	3/28/23 11:07	3/28/23 11:07			220.04	uS/cm			FA
pH	3/28/23 11:07	3/28/23 11:07			6.48	SU			FA
Temperature	3/28/23 11:07	3/28/23 11:07			17.16	C			FA
Turbidity	3/28/23 11:07	3/28/23 11:07			1.74	NTU			FA
Sulfide	3/28/23 11:07	3/28/23 11:07			0	mg/L			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 5/3/2023
Version: 3.5
COA_CCR

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/28/23 11:10
Customer ID:
Delivery Date: 3/29/23 09:42

Description: Gorgas Ash Pond - MW-18R

Laboratory ID Number: BD06147

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD06149	Aluminum, Dissolved	mg/L	0.000167	0.0198	0.100	0.104	0.104	0.101	0.0850 to 0.115	104	70.0 to 130	0.00	20.0
BD06149	Aluminum, Total	mg/L	0.000866	0.0198	0.100	0.125	0.125	0.103	0.0850 to 0.115	105	70.0 to 130	0.00	20.0
BD06149	Antimony, Dissolved	mg/L	0.000464	0.00100	0.100	0.107	0.107	0.0983	0.0850 to 0.115	107	70.0 to 130	0.00	20.0
BD06149	Antimony, Total	mg/L	0.000272	0.00100	0.100	0.0989	0.0971	0.0970	0.0850 to 0.115	98.9	70.0 to 130	1.84	20.0
BD06149	Arsenic, Dissolved	mg/L	0.0000011	0.000200	0.100	0.104	0.105	0.0994	0.0850 to 0.115	102	70.0 to 130	0.957	20.0
BD06149	Arsenic, Total	mg/L	0.0000131	0.000200	0.100	0.104	0.104	0.101	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BD06149	Barium, Dissolved	mg/L	0.0000037	0.00100	0.100	0.353	0.349	0.0988	0.0850 to 0.115	104	70.0 to 130	1.14	20.0
BD06149	Barium, Total	mg/L	0.0000151	0.00100	0.100	0.358	0.361	0.0998	0.0850 to 0.115	94.0	70.0 to 130	0.834	20.0
BD06149	Beryllium, Dissolved	mg/L	0.0000069	0.000880	0.100	0.0995	0.0984	0.103	0.0850 to 0.115	99.5	70.0 to 130	1.11	20.0
BD06149	Beryllium, Total	mg/L	0.0000208	0.000880	0.100	0.106	0.109	0.103	0.0850 to 0.115	106	70.0 to 130	2.79	20.0
BD06149	Boron, Dissolved	mg/L	-0.00131	0.0650	1.00	1.12	1.10	1.03	0.850 to 1.15	107	70.0 to 130	1.80	20.0
BD06149	Boron, Total	mg/L	-0.000121	0.0650	1.00	1.07	1.07	1.02	0.850 to 1.15	102	70.0 to 130	0.00	20.0
BD06149	Cadmium, Dissolved	mg/L	0.0000029	0.000147	0.100	0.112	0.111	0.110	0.0850 to 0.115	112	70.0 to 130	0.897	20.0
BD06149	Cadmium, Total	mg/L	0.0000055	0.000147	0.100	0.111	0.109	0.111	0.0850 to 0.115	111	70.0 to 130	1.82	20.0
BD06149	Calcium, Dissolved	mg/L	-0.0111	0.152	5.00	16.2	15.9	4.94	4.25 to 5.75	98.0	70.0 to 130	1.87	20.0
BD06149	Calcium, Total	mg/L	0.0239	0.152	5.00	17.9	17.8	5.03	4.25 to 5.75	90.0	70.0 to 130	0.560	20.0
BD06149	Chloride	mg/L	0.100	1.00	80.0	130	136	9.72	9.00 to 11.0	105	80.0 to 120	4.51	20.0
BD06149	Chromium, Dissolved	mg/L	-0.0000058	0.000440	0.100	0.100	0.101	0.0995	0.0850 to 0.115	99.8	70.0 to 130	0.995	20.0
BD06149	Chromium, Total	mg/L	0.0000641	0.000440	0.100	0.101	0.101	0.102	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BD06149	Cobalt, Dissolved	mg/L	-0.0000184	0.000147	0.100	0.103	0.105	0.104	0.0850 to 0.115	103	70.0 to 130	1.92	20.0
BD06149	Cobalt, Total	mg/L	-0.0000182	0.000147	0.100	0.104	0.104	0.107	0.0850 to 0.115	104	70.0 to 130	0.00	20.0
BD06149	Fluoride	mg/L	0.0131	0.125	2.50	2.93	2.98	2.66	2.25 to 2.75	107	80.0 to 120	1.69	20.0
BD06149	Iron, Dissolved	mg/L	-0.000147	0.0176	0.2	0.252	0.244	0.201	0.170 to 0.230	103	70.0 to 130	3.23	20.0
BD06149	Iron, Total	mg/L	-0.000394	0.0176	0.2	0.265	0.264	0.203	0.170 to 0.230	100	70.0 to 130	0.378	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/28/23 11:10
Customer ID:
Delivery Date: 3/29/23 09:42

Description: Gorgas Ash Pond - MW-18R

Laboratory ID Number: BD06147

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD06149	Lead, Dissolved	mg/L	0.0000079	0.000147	0.100	0.103	0.105	0.101	0.0850 to 0.115	103	70.0 to 130	1.92	20.0
BD06149	Lead, Total	mg/L	0.0000027	0.000147	0.100	0.102	0.100	0.105	0.0850 to 0.115	102	70.0 to 130	1.98	20.0
BD06149	Lithium, Dissolved	mg/L	0.000402	0.0154	0.200	0.273	0.268	0.199	0.170 to 0.230	106	70.0 to 130	1.85	20.0
BD06149	Lithium, Total	mg/L	0.000053	0.0154	0.200	0.265	0.265	0.199	0.170 to 0.230	102	70.0 to 130	0.00	20.0
BD06149	Magnesium, Dissolved	mg/L	0.000819	0.0462	5.00	8.79	8.65	4.93	4.25 to 5.75	101	70.0 to 130	1.61	20.0
BD06149	Magnesium, Total	mg/L	0.00266	0.0462	5.00	9.29	9.29	4.99	4.25 to 5.75	97.4	70.0 to 130	0.00	20.0
BD06149	Manganese, Dissolved	mg/L	0.0000691	0.00033	0.100	0.124	0.124	0.102	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BD06149	Manganese, Total	mg/L	0.0000240	0.00033	0.100	0.129	0.129	0.104	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BD06149	Mercury, Total by CVAA	mg/L	-2.000E-05	0.000500	0.004	0.00389	0.00392	0.0039	0.00340 to 0.00460	97.2	70.0 to 130	0.768	20.0
BD06149	Molybdenum, Dissolved	mg/L	-0.000343	0.0100	0.2	0.205	0.203	0.200	0.170 to 0.230	102	70.0 to 130	0.980	20.0
BD06149	Molybdenum, Total	mg/L	0.000	0.0100	0.2	0.203	0.202	0.204	0.170 to 0.230	102	70.0 to 130	0.494	20.0
BD06149	Potassium, Dissolved	mg/L	0.0207	0.367	10.0	14.3	14.4	9.88	8.50 to 11.5	96.4	70.0 to 130	0.697	20.0
BD06149	Potassium, Total	mg/L	0.0175	0.367	10.0	16.0	16.1	10.1	8.50 to 11.5	96.8	70.0 to 130	0.623	20.0
BD06149	Selenium, Dissolved	mg/L	0.000215	0.00100	0.100	0.102	0.100	0.101	0.0850 to 0.115	102	70.0 to 130	1.98	20.0
BD06149	Selenium, Total	mg/L	0.0000690	0.00100	0.100	0.101	0.0994	0.101	0.0850 to 0.115	101	70.0 to 130	1.60	20.0
BD06149	Silicon, Dissolved	mg/L	0.000678	0.0440	1.00	8.53	8.49	1.00	0.850 to 1.15	107	70.0 to 130	0.470	20.0
BD06149	Silicon, Total	mg/L	0.000389	0.0440	1.00	8.38	8.39	1.01	0.850 to 1.15	101	70.0 to 130	0.119	20.0
BD06149	Sodium, Dissolved	mg/L	0.000478	0.0880	5.00	123	124	4.79	4.25 to 5.75	0.00	70.0 to 130	0.810	20.0
BD06149	Sodium, Total	mg/L	0.00674	0.0880	5.00	150	142	4.81	4.25 to 5.75	240	70.0 to 130	5.48	20.0
BD06150	Sulfate	mg/L	0.260	2.0	20.0	20.5	20.3	20.3	18.0 to 22.0	102	80.0 to 120	0.980	20.0
BD06149	Thallium, Dissolved	mg/L	-0.0000325	0.000147	0.100	0.103	0.105	0.106	0.0850 to 0.115	103	70.0 to 130	1.92	20.0
BD06149	Thallium, Total	mg/L	-0.0000162	0.000147	0.100	0.0996	0.0976	0.102	0.0850 to 0.115	99.6	70.0 to 130	2.03	20.0
BD06140	Total Organic Carbon	mg/L	0.0950	1.00	10.0	12.1	12.0	24.9		89.3	80.0 to 120	0.830	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/28/23 11:10
Customer ID:
Delivery Date: 3/29/23 09:42

Description: Gorgas Ash Pond - MW-18R

Laboratory ID Number: BD06147

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD06148	Alkalinity to pH 4.5	mg CaCO3/L					91.9	50.2	45.0 to 55.0			2.20	10.0
BD06149	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.04	0.200	2.00	2.05	-0.039	1.99	1.80 to 2.20	102	90.0 to 110	0.00	15.0
BD06149	Solids, Dissolved	mg/L	0.0000	25.0			399	52.0	40.0 to 60.0			0.998	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-18R Dup

Location Code: WMWGORAP
Collected: 3/28/23 11:10
Customer ID:
Submittal Date: 3/29/23 09:42

Laboratory ID Number: BD06148

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	3/31/23 06:13	4/4/23 13:15		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	3/31/23 06:13	4/4/23 13:15		1.015	26.1	mg/L	0.070035	0.406	
* Iron, Total	3/31/23 06:13	4/4/23 13:15		1.015	3.30	mg/L	0.008120	0.0406	
* Lithium, Total	3/31/23 06:13	4/4/23 13:15		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	3/31/23 06:13	4/4/23 13:15		1.015	6.32	mg/L	0.021315	0.406	
* Molybdenum, Total	3/31/23 06:13	4/4/23 13:15		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Total (calc.)	3/31/23 06:13	4/4/23 13:15		1	23.5	mg/L			
* Silicon, Total	3/31/23 06:13	4/4/23 13:15		1.015	11.0	mg/L	0.02030	0.25375	
* Sodium, Total	3/31/23 06:13	4/4/23 13:15		1.015	10.6	mg/L	0.04060	0.406	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	3/30/23 10:59	4/3/23 11:51		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Dissolved	3/30/23 10:59	4/3/23 11:51		1.015	25.6	mg/L	0.070035	0.406	
* Iron, Dissolved	3/30/23 10:59	4/3/23 11:51		1.015	3.40	mg/L	0.008120	0.0406	
* Lithium, Dissolved	3/30/23 10:59	4/3/23 11:51		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Dissolved	3/30/23 10:59	4/3/23 11:51		1.015	6.32	mg/L	0.021315	0.406	
* Molybdenum, Dissolved	3/30/23 10:59	4/3/23 11:51		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Dissolved (calc.)	3/30/23 10:59	4/3/23 11:51		1	23.5	mg/L			
* Silicon, Dissolved	3/30/23 10:59	4/3/23 11:51		1.015	11.0	mg/L	0.02030	0.25375	
* Sodium, Dissolved	3/30/23 10:59	4/3/23 11:51		1.015	10.8	mg/L	0.04060	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/31/23 06:13	3/31/23 14:25		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Total	3/31/23 06:13	3/31/23 14:25		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Total	3/31/23 06:13	3/31/23 14:25		1.015	0.000490	mg/L	0.000112	0.000203	
* Barium, Total	3/31/23 06:13	4/4/23 15:39		1.015	0.0809	mg/L	0.000508	0.001015	
* Beryllium, Total	3/31/23 06:13	3/31/23 14:25		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	3/31/23 06:13	3/31/23 14:25		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	3/31/23 06:13	3/31/23 14:25		1.015	0.000237	mg/L	0.000203	0.001015	J
* Cobalt, Total	3/31/23 06:13	3/31/23 14:25		1.015	0.000717	mg/L	0.000068	0.000203	
* Lead, Total	3/31/23 06:13	3/31/23 14:25		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	3/31/23 06:13	3/31/23 14:25		1.015	0.167	mg/L	0.000152	0.001015	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-18R Dup

Location Code: WMWGORAP
Collected: 3/28/23 11:10
Customer ID:
Submittal Date: 3/29/23 09:42

Laboratory ID Number: BD06148

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	3/31/23 06:13	3/31/23 14:25		1.015	0.984	mg/L	0.169505	0.5075	
* Selenium, Total	3/31/23 06:13	3/31/23 14:25		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	3/31/23 06:13	3/31/23 14:25		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	3/30/23 10:59	3/31/23 12:31		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	3/30/23 10:59	3/31/23 12:31		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Dissolved	3/30/23 10:59	3/31/23 12:31		1.015	0.000459	mg/L	0.000112	0.000203	
* Barium, Dissolved	3/30/23 10:59	4/4/23 13:44		1.015	0.0771	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	3/30/23 10:59	3/31/23 12:31		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	3/30/23 10:59	3/31/23 12:31		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	3/30/23 10:59	3/31/23 12:31		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	3/30/23 10:59	3/31/23 12:31		1.015	0.000676	mg/L	0.000068	0.000203	
* Lead, Dissolved	3/30/23 10:59	3/31/23 12:31		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	3/30/23 10:59	3/31/23 12:31		1.015	0.163	mg/L	0.000152	0.001015	
* Potassium, Dissolved	3/30/23 10:59	3/31/23 12:31		1.015	0.925	mg/L	0.169505	0.5075	
* Selenium, Dissolved	3/30/23 10:59	3/31/23 12:31		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	3/30/23 10:59	3/31/23 12:31		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ELH***								
* Mercury, Total by CVAA	4/3/23 15:06	4/3/23 21:05		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	3/30/23 14:04	3/30/23 14:04		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
* Alkalinity to pH 4.5	4/10/23 11:30	4/10/23 12:47		1	89.9	mg CaCO3/L		0.10	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	3/31/23 10:10	4/3/23 13:13		1	150	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
* Bicarbonate Alkalinity, (calc.)	4/10/23 11:30	4/10/23 12:47		1	89.8	mg CaCO3/L		1	
* Carbonate Alkalinity, (calc.)	4/10/23 11:30	4/10/23 12:47		1	Not Detected	mg CaCO3/L		0.5	
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	4/3/23 17:48	4/3/23 17:48		1	Not Detected	mg/L	1.00	2	U

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-18R Dup

Location Code: WMWGORAP
Collected: 3/28/23 11:10
Customer ID:
Submittal Date: 3/29/23 09:42

Laboratory ID Number: BD06148

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	3/30/23 12:16	3/30/23 12:16		1	3.13	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: CES***								
* Fluoride	4/3/23 14:27	4/3/23 14:27		1	0.111	mg/L	0.06	0.125	J
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	4/4/23 15:05	4/4/23 15:05		1	26.2	mg/L	0.6	2	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	3/28/23 11:07	3/28/23 11:07			220.04	uS/cm			FA
pH	3/28/23 11:07	3/28/23 11:07			6.48	SU			FA
Temperature	3/28/23 11:07	3/28/23 11:07			17.16	C			FA
Turbidity	3/28/23 11:07	3/28/23 11:07			1.74	NTU			FA
Sulfide	3/28/23 11:07	3/28/23 11:07			0	mg/L			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/28/23 11:10
Customer ID:
Delivery Date: 3/29/23 09:42

Description: Gorgas Ash Pond - MW-18R Dup

Laboratory ID Number: BD06148

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD06149	Aluminum, Dissolved	mg/L	0.000167	0.0198	0.100	0.104	0.104	0.101	0.0850 to 0.115	104	70.0 to 130	0.00	20.0
BD06149	Aluminum, Total	mg/L	0.000866	0.0198	0.100	0.125	0.125	0.103	0.0850 to 0.115	105	70.0 to 130	0.00	20.0
BD06149	Antimony, Dissolved	mg/L	0.000464	0.00100	0.100	0.107	0.107	0.0983	0.0850 to 0.115	107	70.0 to 130	0.00	20.0
BD06149	Antimony, Total	mg/L	0.000272	0.00100	0.100	0.0989	0.0971	0.0970	0.0850 to 0.115	98.9	70.0 to 130	1.84	20.0
BD06149	Arsenic, Dissolved	mg/L	0.0000011	0.000200	0.100	0.104	0.105	0.0994	0.0850 to 0.115	102	70.0 to 130	0.957	20.0
BD06149	Arsenic, Total	mg/L	0.0000131	0.000200	0.100	0.104	0.104	0.101	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BD06149	Barium, Dissolved	mg/L	0.0000037	0.00100	0.100	0.353	0.349	0.0988	0.0850 to 0.115	104	70.0 to 130	1.14	20.0
BD06149	Barium, Total	mg/L	0.0000151	0.00100	0.100	0.358	0.361	0.0998	0.0850 to 0.115	94.0	70.0 to 130	0.834	20.0
BD06149	Beryllium, Dissolved	mg/L	0.0000069	0.000880	0.100	0.0995	0.0984	0.103	0.0850 to 0.115	99.5	70.0 to 130	1.11	20.0
BD06149	Beryllium, Total	mg/L	0.0000208	0.000880	0.100	0.106	0.109	0.103	0.0850 to 0.115	106	70.0 to 130	2.79	20.0
BD06149	Boron, Dissolved	mg/L	-0.00131	0.0650	1.00	1.12	1.10	1.03	0.850 to 1.15	107	70.0 to 130	1.80	20.0
BD06149	Boron, Total	mg/L	-0.000121	0.0650	1.00	1.07	1.07	1.02	0.850 to 1.15	102	70.0 to 130	0.00	20.0
BD06149	Cadmium, Dissolved	mg/L	0.0000029	0.000147	0.100	0.112	0.111	0.110	0.0850 to 0.115	112	70.0 to 130	0.897	20.0
BD06149	Cadmium, Total	mg/L	0.0000055	0.000147	0.100	0.111	0.109	0.111	0.0850 to 0.115	111	70.0 to 130	1.82	20.0
BD06149	Calcium, Dissolved	mg/L	-0.0111	0.152	5.00	16.2	15.9	4.94	4.25 to 5.75	98.0	70.0 to 130	1.87	20.0
BD06149	Calcium, Total	mg/L	0.0239	0.152	5.00	17.9	17.8	5.03	4.25 to 5.75	90.0	70.0 to 130	0.560	20.0
BD06149	Chloride	mg/L	0.100	1.00	80.0	130	136	9.72	9.00 to 11.0	105	80.0 to 120	4.51	20.0
BD06149	Chromium, Dissolved	mg/L	-0.0000058	0.000440	0.100	0.100	0.101	0.0995	0.0850 to 0.115	99.8	70.0 to 130	0.995	20.0
BD06149	Chromium, Total	mg/L	0.0000641	0.000440	0.100	0.101	0.101	0.102	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BD06149	Cobalt, Dissolved	mg/L	-0.0000184	0.000147	0.100	0.103	0.105	0.104	0.0850 to 0.115	103	70.0 to 130	1.92	20.0
BD06149	Cobalt, Total	mg/L	-0.0000182	0.000147	0.100	0.104	0.104	0.107	0.0850 to 0.115	104	70.0 to 130	0.00	20.0
BD06149	Fluoride	mg/L	0.0131	0.125	2.50	2.93	2.98	2.66	2.25 to 2.75	107	80.0 to 120	1.69	20.0
BD06149	Iron, Dissolved	mg/L	-0.000147	0.0176	0.2	0.252	0.244	0.201	0.170 to 0.230	103	70.0 to 130	3.23	20.0
BD06149	Iron, Total	mg/L	-0.000394	0.0176	0.2	0.265	0.264	0.203	0.170 to 0.230	100	70.0 to 130	0.378	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/28/23 11:10
Customer ID:
Delivery Date: 3/29/23 09:42

Description: Gorgas Ash Pond - MW-18R Dup

Laboratory ID Number: BD06148

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD06149	Lead, Dissolved	mg/L	0.0000079	0.000147	0.100	0.103	0.105	0.101	0.0850 to 0.115	103	70.0 to 130	1.92	20.0
BD06149	Lead, Total	mg/L	0.0000027	0.000147	0.100	0.102	0.100	0.105	0.0850 to 0.115	102	70.0 to 130	1.98	20.0
BD06149	Lithium, Dissolved	mg/L	0.000402	0.0154	0.200	0.273	0.268	0.199	0.170 to 0.230	106	70.0 to 130	1.85	20.0
BD06149	Lithium, Total	mg/L	0.000053	0.0154	0.200	0.265	0.265	0.199	0.170 to 0.230	102	70.0 to 130	0.00	20.0
BD06149	Magnesium, Dissolved	mg/L	0.000819	0.0462	5.00	8.79	8.65	4.93	4.25 to 5.75	101	70.0 to 130	1.61	20.0
BD06149	Magnesium, Total	mg/L	0.00266	0.0462	5.00	9.29	9.29	4.99	4.25 to 5.75	97.4	70.0 to 130	0.00	20.0
BD06149	Manganese, Dissolved	mg/L	0.0000691	0.00033	0.100	0.124	0.124	0.102	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BD06149	Manganese, Total	mg/L	0.0000240	0.00033	0.100	0.129	0.129	0.104	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BD06149	Mercury, Total by CVAA	mg/L	-2.000E-05	0.000500	0.004	0.00389	0.00392	0.0039	0.00340 to 0.00460	97.2	70.0 to 130	0.768	20.0
BD06149	Molybdenum, Dissolved	mg/L	-0.000343	0.0100	0.2	0.205	0.203	0.200	0.170 to 0.230	102	70.0 to 130	0.980	20.0
BD06149	Molybdenum, Total	mg/L	0.000	0.0100	0.2	0.203	0.202	0.204	0.170 to 0.230	102	70.0 to 130	0.494	20.0
BD06149	Potassium, Dissolved	mg/L	0.0207	0.367	10.0	14.3	14.4	9.88	8.50 to 11.5	96.4	70.0 to 130	0.697	20.0
BD06149	Potassium, Total	mg/L	0.0175	0.367	10.0	16.0	16.1	10.1	8.50 to 11.5	96.8	70.0 to 130	0.623	20.0
BD06149	Selenium, Dissolved	mg/L	0.000215	0.00100	0.100	0.102	0.100	0.101	0.0850 to 0.115	102	70.0 to 130	1.98	20.0
BD06149	Selenium, Total	mg/L	0.0000690	0.00100	0.100	0.101	0.0994	0.101	0.0850 to 0.115	101	70.0 to 130	1.60	20.0
BD06149	Silicon, Dissolved	mg/L	0.000678	0.0440	1.00	8.53	8.49	1.00	0.850 to 1.15	107	70.0 to 130	0.470	20.0
BD06149	Silicon, Total	mg/L	0.000389	0.0440	1.00	8.38	8.39	1.01	0.850 to 1.15	101	70.0 to 130	0.119	20.0
BD06149	Sodium, Dissolved	mg/L	0.000478	0.0880	5.00	123	124	4.79	4.25 to 5.75	0.00	70.0 to 130	0.810	20.0
BD06149	Sodium, Total	mg/L	0.00674	0.0880	5.00	150	142	4.81	4.25 to 5.75	240	70.0 to 130	5.48	20.0
BD06150	Sulfate	mg/L	0.260	2.0	20.0	20.5	20.3	20.3	18.0 to 22.0	102	80.0 to 120	0.980	20.0
BD06149	Thallium, Dissolved	mg/L	-0.0000325	0.000147	0.100	0.103	0.105	0.106	0.0850 to 0.115	103	70.0 to 130	1.92	20.0
BD06149	Thallium, Total	mg/L	-0.0000162	0.000147	0.100	0.0996	0.0976	0.102	0.0850 to 0.115	99.6	70.0 to 130	2.03	20.0
BD06140	Total Organic Carbon	mg/L	0.0950	1.00	10.0	12.1	12.0	24.9		89.3	80.0 to 120	0.830	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/28/23 11:10
Customer ID:
Delivery Date: 3/29/23 09:42

Description: Gorgas Ash Pond - MW-18R Dup

Laboratory ID Number: BD06148

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD06148	Alkalinity to pH 4.5	mg CaCO3/L					91.9	50.2	45.0 to 55.0			2.20	10.0
BD06149	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.04	0.200	2.00	2.05	-0.039	1.99	1.80 to 2.20	102	90.0 to 110	0.00	15.0
BD06149	Solids, Dissolved	mg/L	0.0000	25.0			399	52.0	40.0 to 60.0			0.998	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-38H

Location Code: WMWGORAP
Collected: 3/28/23 13:15
Customer ID:
Submittal Date: 3/29/23 09:42

Laboratory ID Number: BD06149

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	3/31/23 06:13	4/4/23 13:18		1.015	0.0503	mg/L	0.030000	0.1015	J
* Calcium, Total	3/31/23 06:13	4/4/23 13:18		1.015	13.4	mg/L	0.070035	0.406	
* Iron, Total	3/31/23 06:13	4/4/23 13:18		1.015	0.0642	mg/L	0.008120	0.0406	
* Lithium, Total	3/31/23 06:13	4/4/23 13:18		1.015	0.0603	mg/L	0.007105	0.01999956	
* Magnesium, Total	3/31/23 06:13	4/4/23 13:18		1.015	4.42	mg/L	0.021315	0.406	
* Molybdenum, Total	3/31/23 06:13	4/4/23 13:18		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Total (calc.)	3/31/23 06:13	4/4/23 13:18		1	15.8	mg/L			
* Silicon, Total	3/31/23 06:13	4/4/23 13:18		1.015	7.37	mg/L	0.02030	0.25375	
* Sodium, Total	3/31/23 06:13	4/4/23 16:27		10.15	138	mg/L	0.4060	4.06	RA
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	3/30/23 10:59	4/3/23 11:55		1.015	0.0474	mg/L	0.030000	0.1015	J
* Calcium, Dissolved	3/30/23 10:59	4/3/23 11:55		1.015	11.3	mg/L	0.070035	0.406	
* Iron, Dissolved	3/30/23 10:59	4/3/23 11:55		1.015	0.0459	mg/L	0.008120	0.0406	
* Lithium, Dissolved	3/30/23 10:59	4/3/23 11:55		1.015	0.0604	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	3/30/23 10:59	4/3/23 11:55		1.015	3.74	mg/L	0.021315	0.406	
* Molybdenum, Dissolved	3/30/23 10:59	4/3/23 11:55		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Dissolved (calc.)	3/30/23 10:59	4/3/23 11:55		1	16.0	mg/L			
* Silicon, Dissolved	3/30/23 10:59	4/3/23 11:55		1.015	7.46	mg/L	0.02030	0.25375	
* Sodium, Dissolved	3/30/23 10:59	4/3/23 13:55		10.15	123	mg/L	0.4060	4.06	RA
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/31/23 06:13	3/31/23 14:29		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Total	3/31/23 06:13	3/31/23 14:29		1.015	0.0196	mg/L	0.009135	0.05075	J
* Arsenic, Total	3/31/23 06:13	3/31/23 14:29		1.015	0.00303	mg/L	0.000112	0.000203	
* Barium, Total	3/31/23 06:13	4/4/23 15:43		1.015	0.264	mg/L	0.000508	0.001015	
* Beryllium, Total	3/31/23 06:13	3/31/23 14:29		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	3/31/23 06:13	3/31/23 14:29		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	3/31/23 06:13	3/31/23 14:29		1.015	0.000213	mg/L	0.000203	0.001015	J
* Cobalt, Total	3/31/23 06:13	3/31/23 14:29		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	3/31/23 06:13	3/31/23 14:29		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	3/31/23 06:13	3/31/23 14:29		1.015	0.0283	mg/L	0.000152	0.001015	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-38H

Location Code: WMWGORAP
Collected: 3/28/23 13:15
Customer ID:
Submittal Date: 3/29/23 09:42

Laboratory ID Number: BD06149

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	3/31/23 06:13	3/31/23 14:29		1.015	6.32	mg/L	0.169505	0.5075	
* Selenium, Total	3/31/23 06:13	3/31/23 14:29		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	3/31/23 06:13	3/31/23 14:29		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	3/30/23 10:59	3/31/23 12:34		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	3/30/23 10:59	3/31/23 12:34		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Dissolved	3/30/23 10:59	3/31/23 12:34		1.015	0.00193	mg/L	0.000112	0.000203	
* Barium, Dissolved	3/30/23 10:59	4/4/23 13:48		1.015	0.249	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	3/30/23 10:59	3/31/23 12:34		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	3/30/23 10:59	3/31/23 12:34		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	3/30/23 10:59	3/31/23 12:34		1.015	0.000204	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	3/30/23 10:59	3/31/23 12:34		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Dissolved	3/30/23 10:59	3/31/23 12:34		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	3/30/23 10:59	3/31/23 12:34		1.015	0.0233	mg/L	0.000152	0.001015	
* Potassium, Dissolved	3/30/23 10:59	3/31/23 12:34		1.015	4.66	mg/L	0.169505	0.5075	
* Selenium, Dissolved	3/30/23 10:59	3/31/23 12:34		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	3/30/23 10:59	3/31/23 12:34		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ELH***								
* Mercury, Total by CVAA	4/3/23 15:06	4/3/23 21:08		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	3/30/23 14:06	3/30/23 14:06		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
* Alkalinity to pH 4.5	4/10/23 11:30	4/10/23 12:47		1	243	mg CaCO3/L		0.10	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	3/31/23 10:10	4/3/23 13:13		1	403	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
* Bicarbonate Alkalinity, (calc.)	4/10/23 11:30	4/10/23 12:47		1	240	mg CaCO3/L		1	
* Carbonate Alkalinity, (calc.)	4/10/23 11:30	4/10/23 12:47		1	3.18	mg CaCO3/L		0.5	
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	4/3/23 18:01	4/3/23 18:01		1	2.47	mg/L	1.00	2	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description:	Gorgas Ash Pond - MW-38H	**Location Code:**	WMWGORAP
		Collected:	3/28/23 13:15
		Customer ID:	
Laboratory ID Number:	BD06149	**Submittal Date:**	3/29/23 09:42

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	3/30/23 12:32	3/30/23 12:32		8	45.8	mg/L	4.00	8	
Analytical Method: SM4500F G 2017	***Analyst: CES***								
* Fluoride	4/3/23 14:28	4/3/23 14:28		1	0.254	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	4/4/23 15:06	4/4/23 15:06		1	39.5	mg/L	0.6	2	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	3/28/23 13:12	3/28/23 13:12			588.55	uS/cm			FA
pH	3/28/23 13:12	3/28/23 13:12			7.85	SU			FA
Temperature	3/28/23 13:12	3/28/23 13:12			19.28	C			FA
Turbidity	3/28/23 13:12	3/28/23 13:12			2.29	NTU			FA
Sulfide	3/28/23 13:12	3/28/23 13:12			0	mg/L			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 5/3/2023
Version: 3.5
COA_CCR

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/28/23 13:15
Customer ID:
Delivery Date: 3/29/23 09:42

Description: Gorgas Ash Pond - MW-38H

Laboratory ID Number: BD06149

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD06149	Aluminum, Dissolved	mg/L	0.000167	0.0198	0.100	0.104	0.104	0.101	0.0850 to 0.115	104	70.0 to 130	0.00	20.0
BD06149	Aluminum, Total	mg/L	0.000866	0.0198	0.100	0.125	0.125	0.103	0.0850 to 0.115	105	70.0 to 130	0.00	20.0
BD06149	Antimony, Dissolved	mg/L	0.000464	0.00100	0.100	0.107	0.107	0.0983	0.0850 to 0.115	107	70.0 to 130	0.00	20.0
BD06149	Antimony, Total	mg/L	0.000272	0.00100	0.100	0.0989	0.0971	0.0970	0.0850 to 0.115	98.9	70.0 to 130	1.84	20.0
BD06149	Arsenic, Dissolved	mg/L	0.0000011	0.000200	0.100	0.104	0.105	0.0994	0.0850 to 0.115	102	70.0 to 130	0.957	20.0
BD06149	Arsenic, Total	mg/L	0.0000131	0.000200	0.100	0.104	0.104	0.101	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BD06149	Barium, Dissolved	mg/L	0.0000037	0.00100	0.100	0.353	0.349	0.0988	0.0850 to 0.115	104	70.0 to 130	1.14	20.0
BD06149	Barium, Total	mg/L	0.0000151	0.00100	0.100	0.358	0.361	0.0998	0.0850 to 0.115	94.0	70.0 to 130	0.834	20.0
BD06149	Beryllium, Dissolved	mg/L	0.0000069	0.000880	0.100	0.0995	0.0984	0.103	0.0850 to 0.115	99.5	70.0 to 130	1.11	20.0
BD06149	Beryllium, Total	mg/L	0.0000208	0.000880	0.100	0.106	0.109	0.103	0.0850 to 0.115	106	70.0 to 130	2.79	20.0
BD06149	Boron, Dissolved	mg/L	-0.00131	0.0650	1.00	1.12	1.10	1.03	0.850 to 1.15	107	70.0 to 130	1.80	20.0
BD06149	Boron, Total	mg/L	-0.000121	0.0650	1.00	1.07	1.07	1.02	0.850 to 1.15	102	70.0 to 130	0.00	20.0
BD06149	Cadmium, Dissolved	mg/L	0.0000029	0.000147	0.100	0.112	0.111	0.110	0.0850 to 0.115	112	70.0 to 130	0.897	20.0
BD06149	Cadmium, Total	mg/L	0.0000055	0.000147	0.100	0.111	0.109	0.111	0.0850 to 0.115	111	70.0 to 130	1.82	20.0
BD06149	Calcium, Dissolved	mg/L	-0.0111	0.152	5.00	16.2	15.9	4.94	4.25 to 5.75	98.0	70.0 to 130	1.87	20.0
BD06149	Calcium, Total	mg/L	0.0239	0.152	5.00	17.9	17.8	5.03	4.25 to 5.75	90.0	70.0 to 130	0.560	20.0
BD06149	Chloride	mg/L	0.100	1.00	80.0	130	136	9.72	9.00 to 11.0	105	80.0 to 120	4.51	20.0
BD06149	Chromium, Dissolved	mg/L	-0.0000058	0.000440	0.100	0.100	0.101	0.0995	0.0850 to 0.115	99.8	70.0 to 130	0.995	20.0
BD06149	Chromium, Total	mg/L	0.0000641	0.000440	0.100	0.101	0.101	0.102	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BD06149	Cobalt, Dissolved	mg/L	-0.0000184	0.000147	0.100	0.103	0.105	0.104	0.0850 to 0.115	103	70.0 to 130	1.92	20.0
BD06149	Cobalt, Total	mg/L	-0.0000182	0.000147	0.100	0.104	0.104	0.107	0.0850 to 0.115	104	70.0 to 130	0.00	20.0
BD06149	Fluoride	mg/L	0.0131	0.125	2.50	2.93	2.98	2.66	2.25 to 2.75	107	80.0 to 120	1.69	20.0
BD06149	Iron, Dissolved	mg/L	-0.000147	0.0176	0.2	0.252	0.244	0.201	0.170 to 0.230	103	70.0 to 130	3.23	20.0
BD06149	Iron, Total	mg/L	-0.000394	0.0176	0.2	0.265	0.264	0.203	0.170 to 0.230	100	70.0 to 130	0.378	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/28/23 13:15
Customer ID:
Delivery Date: 3/29/23 09:42

Description: Gorgas Ash Pond - MW-38H

Laboratory ID Number: BD06149

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD06149	Lead, Dissolved	mg/L	0.0000079	0.000147	0.100	0.103	0.105	0.101	0.0850 to 0.115	103	70.0 to 130	1.92	20.0
BD06149	Lead, Total	mg/L	0.0000027	0.000147	0.100	0.102	0.100	0.105	0.0850 to 0.115	102	70.0 to 130	1.98	20.0
BD06149	Lithium, Dissolved	mg/L	0.000402	0.0154	0.200	0.273	0.268	0.199	0.170 to 0.230	106	70.0 to 130	1.85	20.0
BD06149	Lithium, Total	mg/L	0.000053	0.0154	0.200	0.265	0.265	0.199	0.170 to 0.230	102	70.0 to 130	0.00	20.0
BD06149	Magnesium, Dissolved	mg/L	0.000819	0.0462	5.00	8.79	8.65	4.93	4.25 to 5.75	101	70.0 to 130	1.61	20.0
BD06149	Magnesium, Total	mg/L	0.00266	0.0462	5.00	9.29	9.29	4.99	4.25 to 5.75	97.4	70.0 to 130	0.00	20.0
BD06149	Manganese, Dissolved	mg/L	0.0000691	0.00033	0.100	0.124	0.124	0.102	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BD06149	Manganese, Total	mg/L	0.0000240	0.00033	0.100	0.129	0.129	0.104	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BD06149	Mercury, Total by CVAA	mg/L	-2.000E-05	0.000500	0.004	0.00389	0.00392	0.0039	0.00340 to 0.00460	97.2	70.0 to 130	0.768	20.0
BD06149	Molybdenum, Dissolved	mg/L	-0.000343	0.0100	0.2	0.205	0.203	0.200	0.170 to 0.230	102	70.0 to 130	0.980	20.0
BD06149	Molybdenum, Total	mg/L	0.000	0.0100	0.2	0.203	0.202	0.204	0.170 to 0.230	102	70.0 to 130	0.494	20.0
BD06149	Potassium, Dissolved	mg/L	0.0207	0.367	10.0	14.3	14.4	9.88	8.50 to 11.5	96.4	70.0 to 130	0.697	20.0
BD06149	Potassium, Total	mg/L	0.0175	0.367	10.0	16.0	16.1	10.1	8.50 to 11.5	96.8	70.0 to 130	0.623	20.0
BD06149	Selenium, Dissolved	mg/L	0.000215	0.00100	0.100	0.102	0.100	0.101	0.0850 to 0.115	102	70.0 to 130	1.98	20.0
BD06149	Selenium, Total	mg/L	0.0000690	0.00100	0.100	0.101	0.0994	0.101	0.0850 to 0.115	101	70.0 to 130	1.60	20.0
BD06149	Silicon, Dissolved	mg/L	0.000678	0.0440	1.00	8.53	8.49	1.00	0.850 to 1.15	107	70.0 to 130	0.470	20.0
BD06149	Silicon, Total	mg/L	0.000389	0.0440	1.00	8.38	8.39	1.01	0.850 to 1.15	101	70.0 to 130	0.119	20.0
BD06149	Sodium, Dissolved	mg/L	0.000478	0.0880	5.00	123	124	4.79	4.25 to 5.75	0.00	70.0 to 130	0.810	20.0
BD06149	Sodium, Total	mg/L	0.00674	0.0880	5.00	150	142	4.81	4.25 to 5.75	240	70.0 to 130	5.48	20.0
BD06150	Sulfate	mg/L	0.260	2.0	20.0	20.5	20.3	20.3	18.0 to 22.0	102	80.0 to 120	0.980	20.0
BD06149	Thallium, Dissolved	mg/L	-0.0000325	0.000147	0.100	0.103	0.105	0.106	0.0850 to 0.115	103	70.0 to 130	1.92	20.0
BD06149	Thallium, Total	mg/L	-0.0000162	0.000147	0.100	0.0996	0.0976	0.102	0.0850 to 0.115	99.6	70.0 to 130	2.03	20.0
BD06140	Total Organic Carbon	mg/L	0.0950	1.00	10.0	12.1	12.0	24.9		89.3	80.0 to 120	0.830	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/28/23 13:15
Customer ID:
Delivery Date: 3/29/23 09:42

Description: Gorgas Ash Pond - MW-38H

Laboratory ID Number: BD06149

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD06148	Alkalinity to pH 4.5	mg CaCO3/L					91.9	50.2	45.0 to 55.0			2.20	10.0
BD06149	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.04	0.200	2.00	2.05	-0.039	1.99	1.80 to 2.20	102	90.0 to 110	0.00	15.0
BD06149	Solids, Dissolved	mg/L	0.0000	25.0			399	52.0	40.0 to 60.0			0.998	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond Field Blank-6

Location Code: WMWGORAPFB
Collected: 3/28/23 14:15
Customer ID:
Submittal Date: 3/29/23 09:42

Laboratory ID Number: BD06150

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7		***Analyst: ABB***			***Preparation Method: EPA 1638***				
* Boron, Total	3/31/23 06:13	4/4/23 13:40		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	3/31/23 06:13	4/4/23 13:40		1.015	Not Detected	mg/L	0.070035	0.406	U
* Iron, Total	3/31/23 06:13	4/4/23 13:40		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Total	3/31/23 06:13	4/4/23 13:40		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	3/31/23 06:13	4/4/23 13:40		1.015	Not Detected	mg/L	0.021315	0.406	U
* Molybdenum, Total	3/31/23 06:13	4/4/23 13:40		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Total (calc.)	3/31/23 06:13	4/4/23 13:40		1	Not Detected	mg/L			
* Silicon, Total	3/31/23 06:13	4/4/23 13:40		1.015	Not Detected	mg/L	0.02030	0.25375	U
* Sodium, Total	3/31/23 06:13	4/4/23 13:40		1.015	Not Detected	mg/L	0.04060	0.406	U
Analytical Method: EPA 200.8		***Analyst: DLJ***			***Preparation Method: EPA 1638***				
* Antimony, Total	3/31/23 06:13	3/31/23 14:57		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Total	3/31/23 06:13	3/31/23 14:57		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Total	3/31/23 06:13	3/31/23 14:57		1.015	Not Detected	mg/L	0.000112	0.000203	U
* Barium, Total	3/31/23 06:13	4/4/23 16:11		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Beryllium, Total	3/31/23 06:13	3/31/23 14:57		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	3/31/23 06:13	3/31/23 14:57		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	3/31/23 06:13	3/31/23 14:57		1.015	0.000206	mg/L	0.000203	0.001015	J
* Cobalt, Total	3/31/23 06:13	3/31/23 14:57		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	3/31/23 06:13	3/31/23 14:57		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	3/31/23 06:13	3/31/23 14:57		1.015	Not Detected	mg/L	0.000152	0.001015	U
* Potassium, Total	3/31/23 06:13	3/31/23 14:57		1.015	Not Detected	mg/L	0.169505	0.5075	U
* Selenium, Total	3/31/23 06:13	3/31/23 14:57		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	3/31/23 06:13	3/31/23 14:57		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1		***Analyst: ELH***							
* Mercury, Total by CVAA	4/3/23 15:06	4/3/23 21:28		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2		***Analyst: SC***							
* Nitrogen, Nitrate/Nitrite	3/30/23 14:11	3/30/23 14:11		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2540C		***Analyst: CNJ***							
* Solids, Dissolved	3/31/23 10:10	4/3/23 13:13		1	Not Detected	mg/L		25	U

MDL's and RL's are adjusted for sample dilution, as applicable

Comments:

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond Field Blank-6

Location Code: WMWGORAPFB
Collected: 3/28/23 14:15
Customer ID:
Submittal Date: 3/29/23 09:42

Laboratory ID Number: BD06150

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	3/31/23 20:35	3/31/23 20:35		1	Not Detected	mg/L	1.00	2	U
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	3/30/23 12:44	3/30/23 12:44		1	Not Detected	mg/L	0.50	1	U
Analytical Method: SM4500F G 2017	***Analyst: CES***								
* Fluoride	3/30/23 16:10	3/30/23 16:10		1	0.242	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	4/4/23 15:07	4/4/23 15:07		1	Not Detected	mg/L	0.6	2	U

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments:

Reported: 5/3/2023
Version: 3.5
COA_CCR

Batch QC Summary

Customer Account: WMWGORAPFB
Sample Date: 3/28/23 14:15
Customer ID:
Delivery Date: 3/29/23 09:42

Description: Gorgas Ash Pond Field Blank-6

Laboratory ID Number: BD06150

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD06150	Aluminum, Total	mg/L	0.00102	0.0198	0.100	0.103	0.103	0.103	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BD06150	Antimony, Total	mg/L	0.000222	0.00100	0.100	0.0927	0.0923	0.0933	0.0850 to 0.115	92.7	70.0 to 130	0.432	20.0
BD06150	Arsenic, Total	mg/L	0.0000100	0.000200	0.100	0.101	0.0998	0.103	0.0850 to 0.115	101	70.0 to 130	1.20	20.0
BD06150	Barium, Total	mg/L	-0.0000095	0.00100	0.100	0.100	0.0996	0.103	0.0850 to 0.115	100	70.0 to 130	0.401	20.0
BD06150	Beryllium, Total	mg/L	0.0000192	0.000880	0.100	0.108	0.108	0.107	0.0850 to 0.115	108	70.0 to 130	0.00	20.0
BD06150	Boron, Total	mg/L	0.000008	0.0650	1.00	1.00	1.01	0.991	0.850 to 1.15	100	70.0 to 130	0.995	20.0
BD06150	Cadmium, Total	mg/L	0.0000088	0.000147	0.100	0.110	0.110	0.112	0.0850 to 0.115	110	70.0 to 130	0.00	20.0
BD06150	Calcium, Total	mg/L	0.0217	0.152	5.00	4.81	4.79	4.80	4.25 to 5.75	96.2	70.0 to 130	0.417	20.0
BD06150	Chloride	mg/L	0.0416	1.00	10.0	10.0	9.77	9.70	9.00 to 11.0	100	80.0 to 120	2.33	20.0
BD06150	Chromium, Total	mg/L	-0.0000307	0.000440	0.100	0.104	0.102	0.103	0.0850 to 0.115	104	70.0 to 130	1.94	20.0
BD06150	Cobalt, Total	mg/L	-0.0000179	0.000147	0.100	0.108	0.106	0.107	0.0850 to 0.115	108	70.0 to 130	1.87	20.0
BD06150	Fluoride	mg/L	0.0483	0.125	2.50	2.73	2.76	2.66	2.25 to 2.75	99.5	80.0 to 120	1.09	20.0
BD06150	Iron, Total	mg/L	-0.000762	0.0176	0.2	0.200	0.205	0.198	0.170 to 0.230	100	70.0 to 130	2.47	20.0
BD06150	Lead, Total	mg/L	0.0000018	0.000147	0.100	0.105	0.102	0.103	0.0850 to 0.115	105	70.0 to 130	2.90	20.0
BD06150	Lithium, Total	mg/L	0.000561	0.0154	0.200	0.198	0.200	0.197	0.170 to 0.230	99.0	70.0 to 130	1.01	20.0
BD06150	Magnesium, Total	mg/L	0.0117	0.0462	5.00	4.86	4.89	4.83	4.25 to 5.75	97.2	70.0 to 130	0.615	20.0
BD06150	Manganese, Total	mg/L	0.0000255	0.00033	0.100	0.104	0.102	0.104	0.0850 to 0.115	104	70.0 to 130	1.94	20.0
BD06150	Mercury, Total by CVAA	mg/L	-2.000E-05	0.000500	0.004	0.00392	0.00393	0.0039	0.00340 to 0.00460	98.0	70.0 to 130	0.255	20.0
BD06150	Molybdenum, Total	mg/L	0.000	0.0100	0.2	0.201	0.202	0.199	0.170 to 0.230	100	70.0 to 130	0.496	20.0
BD06150	Potassium, Total	mg/L	0.00716	0.367	10.0	10.0	9.90	10.1	8.50 to 11.5	100	70.0 to 130	1.01	20.0
BD06150	Selenium, Total	mg/L	0.0000739	0.00100	0.100	0.102	0.102	0.103	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BD06150	Silicon, Total	mg/L	-0.000469	0.0440	1.00	0.993	1.01	0.985	0.850 to 1.15	99.3	70.0 to 130	1.70	20.0
BD06150	Sodium, Total	mg/L	0.0147	0.0880	5.00	4.72	4.77	4.66	4.25 to 5.75	94.4	70.0 to 130	1.05	20.0
BD06150	Sulfate	mg/L	0.260	2.0	20.0	20.5	20.3	20.3	18.0 to 22.0	102	80.0 to 120	0.980	20.0

Comments:

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGORAPFB
Sample Date: 3/28/23 14:15
Customer ID:
Delivery Date: 3/29/23 09:42

Description: Gorgas Ash Pond Field Blank-6

Laboratory ID Number: BD06150

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD06150	Thallium, Total	mg/L	-0.0000125	0.000147	0.100	0.103	0.0997	0.102	0.0850 to 0.115	103	70.0 to 130	3.26	20.0
BD06150	Total Organic Carbon	mg/L	0.0747	1.00	10.0	9.94	9.70	9.75		99.4	80.0 to 120	2.44	20.0

Comments:

Reported: 5/3/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAPFB
Sample Date: 3/28/23 14:15
Customer ID:
Delivery Date: 3/29/23 09:42

Description: Gorgas Ash Pond Field Blank-6

Laboratory ID Number: BD06150

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD06150	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.02	0.200	2.00	2.00	-0.029	1.89	1.80 to 2.20	100	90.0 to 110	0.00	15.0
BD06149	Solids, Dissolved	mg/L	0.0000	25.0			399	52.0	40.0 to 60.0			0.998	10.0

Comments:

Definitions

Project Number: WMWGORAP_1400

Abbreviation	Description
DF	Dilution Factor
LCS	Lab Control Sample
LFM	Lab Fortified Matrix
MB	Method Blank
MDL	Method Detection Limit; minimum concentration of an analyte that can be determined with 99% confidence that the concentration is greater than zero.
MS	Matrix Spike
MSD	Matrix Spike Duplicate
Prec	Precision (% RPD)
Q	Qualifier; comment used to note deviations or additional information associated with analytical results.
QC	Quality Control
Rec	Recovery of Matrix Spike
RL	Reporting Limit; lowest concentration at which an analyte can be quantitatively measured.
Vio Spec	Violation Specification; regulatory limit which has been exceeded by the sample analyzed.

Qualifier	Description
A	Bicarbonate alkalinity, carbonate alkalinity, hydroxide alkalinity, free carbon dioxide, and/or total carbon dioxide calculations are estimates due to pH>10SU and/or TDS>500mg/L.
AI	Bicarbonate alkalinity, carbonate alkalinity, hydroxide alkalinity, free carbon dioxide, and/or total carbon dioxide calculations are invalid due to pH>12SU and not reported.
FA	Field results were reviewed by the Water Field Group. Refer to APC Field Case Narrative.
J	Reported value is an estimate because concentration is less than reporting limit.
R	Matrix spike recovery and/or matrix spike duplicate recovery is outside of specification limit.
RA	Matrix spike is invalid due to sample concentration.
U	Compound was analyzed, but not detected.

Alabama Power
Lab & Field SERVICES

Chain of Custody
Groundwater
APC General Testing Laboratory

☑ Field Complete ☐ Outside Lab
☑ Lab Complete

Lab ETA:

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Collector	TJ Daugherty	Requested By	Greg Dyer
		Location	Gorgas Ash Pond

Bottles

1	Metals	500 mL	3	Hg	250 mL	5	TDS/Alkalinity	500 mL	7	N/A	N/A
2	Dissolved Metals	500 mL	4	Nitrite, Nitrate; TOC	250 mL	6	Anions	250 mL	8	N/A	N/A

Comments: bottles 3-6 for MW-6V DIS. BC 03/09/2023

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id	pH Check
MW-6V	03/08/2023	13:50	6	Groundwater		BD04999	☑
MW-6V DIS	03/08/2023	13:50	4	Field Filtered		BD05000	☑
							☐
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Relinquished By	Received By	Date/Time
	Burke Caton	03/09/2023 11:00

SmarTroll ID	7586-41445-5-4	Cooler Temp	1.3 °C
Turbidity ID	4677-23343-4-2	Thermometer ID	10614-61208-2-1
Sample Event	1400	pH Strip ID	10620-61238-10-4

Bottles/Pre-Preserved Bottles are provided by the GTL

Total Metals and Alkalinity are not performed on Dissolved Sets

Dissolved Metals and Alkalinity are not performed on blanks i.e. Field Blanks or Equipment Blanks

Alabama Power Lab & Field Services

Chain of Custody Groundwater

APC General Testing Laboratory

☑ Field Complete ☐ Outside Lab

☑ Lab Complete

Lab ETA

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Collector	Dallas Gentry	Requested By	Greg Dyer
		Location	Gorgas Ash Pond

Bottles

1	Metals	500 mL	3	Hg	250 mL	5	TDS/Alkalinity	500 mL	7	N/A	N/A
2	Dissolved Metals	500 mL	4	Nitrite, Nitrate; TOC	250 mL	6	Anions	500 mL	8	N/A	N/A

Comments

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id	pH Check
MW-30HA	03/13/2023	13:20	6	Groundwater		BD05364	☑
MW-36V	03/14/2023	11:10	6	Groundwater		BD05365	☑
MW-27HR	03/14/2023	13:04	6	Groundwater		BD05366	☑
MW-28H	03/14/2023	14:57	6	Groundwater		BD05367	☑
MW-37HR	03/15/2023	12:08	6	Groundwater		BD05368	☑
MW-47	03/15/2023	13:51	6	Groundwater		BD05369	☑
MW-14R	03/15/2023	14:52	6	Groundwater		BD05370	☑
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Relinquished By	Received By	Date/Time
Dallas Gentry		03/16/2023 08:36

SmarTroll ID	7586-41443-5-2	Cooler Temp	0.8 °C
Turbidity ID	9901-57263-1-1	Thermometer ID	10614-61208-2-1
Sample Event	1400	pH Strip ID	7453-40656-10-8

Bottles/Pre-Preserved Bottles are provided by the GTL

Total Metals and Alkalinity are not performed on Dissolved Sets

Dissolved Metals and Alkalinity are not performed on blanks i.e. Field Blanks or Equipment Blanks

Chain of Custody Groundwater

APC General Testing Laboratory

☑ Field Complete ☐ Outside Lab

☑ Lab Complete

Lab ETA

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Collector	Anthony Goggins	Requested By	Greg Dyer
		Location	Gorgas Ash Pond

Bottles

1	Metals	500 mL	3	Hg	250 mL	5	TDS/Alkalinity	500 mL	7	N/A	N/A
2	Dissolved Metals	500 mL	4	Nitrite, Nitrate; TOC	250 mL	6	Anions	500 mL	8	N/A	N/A

Comments

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id	pH Check
MW-36H	03/15/2023	11:17	6	Groundwater		BD05371	☑
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Relinquished By	Received By	Date/Time
		03/16/2023 08:37

SmarTroll ID	7586-41446-5-5	Cooler Temp	0.4 °C
Turbidity ID	9830-57039-1-1	Thermometer ID	10614-61208-2-1
Sample Event	1400	pH Strip ID	7453-40656-10-8

Bottles/Pre-Preserved Bottles are provided by the GTL

Total Metals and Alkalinity are not performed on Dissolved Sets

Dissolved Metals and Alkalinity are not performed on blanks i.e. Field Blanks or Equipment Blanks

Alabama Power
Lab & Field SERVICES

Chain of Custody
Groundwater

APC General Testing Laboratory

☑ Field Complete ☐ Outside Lab
☑ Lab Complete

Lab ETA

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Collector	TJ Daugherty	Requested By	Greg Dyer
		Location	Gorgas Ash Pond

Bottles

1	Metals	500 mL	3	Hg	250 mL	5	TDS/Alkalinity	500 mL	7	N/A	N/A
2	Dissolved Metals	500 mL	4	Nitrite, Nitrate; TOC	250 mL	6	Anions	500 mL	8	N/A	N/A

Comments

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id	pH Check
MW-41HS	03/13/2023	14:40	6	Groundwater		BD05372	☑
MW-7	03/14/2023	10:27	6	Groundwater		BD05373	☑
MW-6S	03/14/2023	11:52	6	Groundwater		BD05374	☑
MW-6S Dup	03/14/2023	11:52	6	Sample Duplicate		BD05375	☑
MW-6D	03/14/2023	12:55	6	Groundwater		BD05376	☑
MW-23V	03/14/2023	14:00	6	Groundwater		BD05377	☑
MW-23H	03/14/2023	14:40	6	Groundwater		BD05378	☑
MW-41HD	03/15/2023	10:55	6	Groundwater		BD05379	☑
MW-24H	03/15/2023	12:30	6	Groundwater		BD05380	☑
MW-24H Dup	03/15/2023	12:30	6	Sample Duplicate		BD05381	☑
MW-42H	03/15/2023	14:20	6	Groundwater		BD05382	☑
FB-1	03/15/2023	14:45	5	Field Blank		BD05383	☑
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Relinquished By	Received By	Date/Time
	Burke Caton	03/16/2023 08:57

SmarTroll ID	7586-41445-5-4	Cooler Temp	1.3 ℃
Turbidity ID	4677-23343-4-2	Thermometer ID	10614-61208-2-1
Sample Event	1400	pH Strip ID	7453-40656-10-8

Bottles/Pre-Preserved Bottles are provided by the GTL

Total Metals and Alkalinity are not performed on Dissolved Sets

Dissolved Metals and Alkalinity are not performed on blanks i.e. Field Blanks or Equipment Blanks

Alabama Power Lab & Field Services

Chain of Custody Groundwater

APC General Testing Laboratory

☑ Field Complete ☐ Outside Lab

☑ Lab Complete

Lab ETA

Requested Complete Date: Routine

Collector: Anthony Goggins

Results To: Dustin Brooks, Greg Dyer

Requested By: Greg Dyer

Location: Gorgas Ash Pond

Bottles

1	Metals	500 mL	3	Hg	250 mL	5	TDS/Alkalinity	500 mL	7	N/A	N/A
2	Dissolved Metals	500 mL	4	Nitrite, Nitrate; TOC	250 mL	6	Anions	500 mL	8	N/A	N/A

Comments

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id	pH Check
MW-32H	03/21/2023	10:45	6	Groundwater		BD05861	☑
MW-19	03/21/2023	12:30	6	Groundwater		BD05862	☑
FB-2	03/21/2023	12:50	5	Field Blank		BD05863	☑
PZ-22	03/21/2023	13:38	6	Groundwater		BD05864	☑
MW-17	03/22/2023	10:28	6	Groundwater		BD05865	☑
MW-17Dup	03/22/2023	10:28	6	Sample Duplicate		BD05866	☑
MW-17V	03/22/2023	12:30	6	Groundwater		BD05867	☑
FB-5	03/22/2023	12:55	5	Field Blank		BD05868	☑
MW-2	03/22/2023	13:58	6	Groundwater		BD05869	☑
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Relinquished By	Received By	Date/Time
		03/23/2023 09:59

SmarTroll ID: 7586-41446-5-5

Turbidity ID: 9830-57039-1-1

Sample Event: 1400

Cooler Temp: 1.6 ℃

Thermometer ID: 10614-61208-2-1

pH Strip ID: 10429-60252-10-8

Bottles/Pre-Preserved Bottles are provided by the GTL

Total Metals and Alkalinity are not performed on Dissolved Sets

Dissolved Metals and Alkalinity are not performed on blanks i.e. Field Blanks or Equipment Blanks

Alabama Power
Lab & Field SERVICES

Chain of Custody Groundwater

APC General Testing Laboratory

☑ Field Complete
☐ Outside Lab
☑ Lab Complete

Lab ETA

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Collector	Dallas Gentry	Requested By	Greg Dyer
		Location	Gorgas Ash Pond

Bottles

1	Metals	500 mL
2	Dissolved Metals	500 mL
3	Hg	250 mL
4	Nitrite, Nitrate; TOC	250 mL
5	TDS/Alkalinity	500 mL
6	Anions	500 mL
7	N/A	N/A
8	N/A	N/A

Comments

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id	pH Check
MW-15V	03/20/2023	12:27	6	Groundwater		BD05850	☑
FB-3	03/20/2023	14:00	5	Field Blank		BD05851	☑
MW-15	03/20/2023	15:06	6	Groundwater		BD05852	☑
PZ-16	03/21/2023	08:52	6	Groundwater		BD05853	☑
MW-16D	03/21/2023	10:00	6	Groundwater		BD05854	☑
MW-16S	03/21/2023	11:30	6	Groundwater		BD05855	☑
MW-21	03/21/2023	13:09	6	Groundwater		BD05856	☑
MW-21V	03/21/2023	14:40	6	Groundwater		BD05857	☑
MW-25HA	03/22/2023	09:30	6	Groundwater		BD05858	☑
MW-26H	03/22/2023	11:32	6	Groundwater		BD05859	☑
MW-40H	03/22/2023	12:48	6	Groundwater		BD05860	☑
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Relinquished By	Received By	Date/Time
		03/23/2023 10:00

SmarTroll ID	7586-41443-5-2	Cooler Temp	0.8 °C
Turbidity ID	9901-57263-1-1	Thermometer ID	10614-61208-2-1
Sample Event	1400	pH Strip ID	10429-60252-10-8

Bottles/Pre-Preserved Bottles are provided by the GTL

Total Metals and Alkalinity are not performed on Dissolved Sets

Dissolved Metals and Alkalinity are not performed on blanks i.e. Field Blanks or Equipment Blanks

Alabama Power Lab & Field Services

Chain of Custody Groundwater

APC General Testing Laboratory

☑ Field Complete ☐ Outside Lab

☑ Lab Complete

Lab ETA

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Collector	TJ Daugherty	Requested By	Greg Dyer
		Location	Gorgas Ash Pond

Bottles

1	Metals	500 mL	3	Hg	250 mL	5	TDS/Alkalinity	500 mL	7	N/A	N/A
2	Dissolved Metals	500 mL	4	Nitrite, Nitrate; TOC	250 mL	6	Anions	500 mL	8	N/A	N/A

Comments

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id	pH Check
MW-05R	03/20/2023	14:05	6	Groundwater		BD05870	☑
MW-3	03/21/2023	10:55	6	Groundwater		BD05871	☑
MW-03V	03/21/2023	14:25	6	Groundwater		BD05872	☑
MW-12V	03/22/2023	10:53	6	Groundwater		BD05873	☑
MW-12	03/22/2023	13:00	6	Groundwater		BD05874	☑
MW-11R	03/22/2023	14:55	6	Groundwater		BD05875	☑
FB-4	03/22/2023	15:20	5	Field Blank		BD05876	☑
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Relinquished By	Received By	Date/Time
		03/23/2023 10:04

SmarTroll ID	7586-41445-5-4	Cooler Temp	0.6 °C
Turbidity ID	4677-23343-4-2	Thermometer ID	10614-61208-2-1
Sample Event	1400	pH Strip ID	10429-60252-10-8

Bottles/Pre-Preserved Bottles are provided by the GTL

Total Metals and Alkalinity are not performed on Dissolved Sets

Dissolved Metals and Alkalinity are not performed on blanks i.e. Field Blanks or Equipment Blanks

Alabama Power
Lab & Field SERVICES

Chain of Custody Groundwater

APC General Testing Laboratory

☑ Field Complete
☑ Lab Complete
☐ Outside Lab

Lab ETA

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Collector	Dallas Gentry	Requested By	Greg Dyer
		Location	Gorgas Ash Pond

Bottles

1	Metals	500 mL	3	Hg	250 mL	5	TDS/Alkalinity	500 mL	7	N/A	N/A
2	Dissolved Metals	500 mL	4	Nitrite, Nitrate; TOC	250 mL	6	Anions	500 mL	8	N/A	N/A

Comments

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id	pH Check
MW-13R	03/27/2023	12:05	6	Groundwater		BD06130	☑
MW-10R	03/27/2023	14:07	6	Groundwater		BD06131	☑
MW-18VR	03/27/2023	15:31	6	Groundwater		BD06132	☑
EB-1	03/27/2023	16:00	5	Equipment Blank		BD06133	☑
MW-45V	03/28/2023	08:55	6	Groundwater		BD06134	☑
MW-43H	03/28/2023	10:03	6	Groundwater		BD06135	☑
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Relinquished By	Received By	Date/Time
		03/29/2023 09:25

SmarTroll ID	7586-41443-5-2	Cooler Temp	0.4 °C
Turbidity ID	9901-57263-1-1	Thermometer ID	10614-61208-2-1
Sample Event	1400	pH Strip ID	10429-60252-10-8

Bottles/Pre-Preserved Bottles are provided by the GTL

Total Metals and Alkalinity are not performed on Dissolved Sets

Dissolved Metals and Alkalinity are not performed on blanks i.e. Field Blanks or Equipment Blanks

Alabama Power Lab & Field Services

Chain of Custody Groundwater

APC General Testing Laboratory

☑ Field Complete ☐ Outside Lab

☑ Lab Complete

Lab ETA ☐

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Collector	TJ Daugherty	Requested By	Greg Dyer
		Location	Gorgas Ash Pond

Bottles

1	Metals	500 mL	3	Hg	250 mL	5	TDS/Alkalinity	500 mL	7	N/A	N/A
2	Dissolved Metals	500 mL	4	Nitrite, Nitrate; TOC	250 mL	6	Anions	500 mL	8	N/A	N/A

Comments

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id	pH Check
MW-8	03/27/2023	12:35	6	Groundwater		BD06142	☑
MW-09R	03/27/2023	14:40	6	Groundwater		BD06143	☑
MW-9V	03/27/2023	16:33	6	Groundwater		BD06144	☑
PZ-18R	03/28/2023	10:05	6	Groundwater		BD06145	☑
PZ-18R Dup	03/28/2023	10:05	6	Sample Duplicate		BD06146	☑
MW-18R	03/28/2023	11:10	6	Groundwater		BD06147	☑
MW-18R Dup	03/28/2023	11:10	6	Sample Duplicate		BD06148	☑
MW-38H	03/28/2023	13:15	6	Groundwater		BD06149	☑
FB-6	03/28/2023	14:15	5	Field Blank		BD06150	☑
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Relinquished By	Received By	Date/Time
		03/29/2023 09:31

SmarTroll ID	7586-41445-5-4	Cooler Temp	1.3 °C
Turbidity ID	4677-23343-4-2	Thermometer ID	10614-61208-2-1
Sample Event	1400	pH Strip ID	10429-60252-10-8

Bottles/Pre-Preserved Bottles are provided by the GTL

Total Metals and Alkalinity are not performed on Dissolved Sets

Dissolved Metals and Alkalinity are not performed on blanks i.e. Field Blanks or Equipment Blanks

Alabama Power
Lab & Field SERVICES

Chain of Custody
Groundwater

APC General Testing Laboratory

☑ Field Complete ☐ Outside Lab
☑ Lab Complete

Lab ETA

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Collector	Anthony Goggins	Requested By	Greg Dyer
		Location	Gorgas Ash Pond

Bottles

1	Metals	500 mL	3	Hg	250 mL	5	TDS/Alkalinity	500 mL	7	N/A	N/A
2	Dissolved Metals	500 mL	4	Nitrite, Nitrate; TOC	250 mL	6	Anions	500 mL	8	N/A	N/A

Comments

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id	pH Check
MW-46	03/27/2023	10:45	6	Groundwater		BD06136	☑
MW-46 Dup	03/27/2023	10:45	6	Sample Duplicate		BD06137	☑
MW-01R	03/27/2023	13:02	6	Groundwater		BD06138	☑
MW-31H	03/27/2023	15:00	6	Groundwater		BD06139	☑
MW-31V	03/27/2023	16:37	6	Groundwater		BD06140	☑
MW-29H	03/28/2023	09:30	6	Groundwater		BD06141	☑
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Relinquished By	Received By	Date/Time
	Brooke Carter	03/29/2023 09:34

SmarTroll ID	7586-41446-5-5	Cooler Temp	1.0 °C
Turbidity ID	9830-57039-1-1	Thermometer ID	10614-61208-2-1
Sample Event	1400	pH Strip ID	10429-60252-10-8

Bottles/Pre-Preserved Bottles are provided by the GTL

Total Metals and Alkalinity are not performed on Dissolved Sets

Dissolved Metals and Alkalinity are not performed on blanks i.e. Field Blanks or Equipment Blanks

Alabama Power Lab & Field Services

Chain of Custody Groundwater

APC General Testing Laboratory

☑ Field Complete
☑ Lab Complete
☑ Outside Lab

Lab ETA:

Requested Complete Date: Routine
Collector: TJ Daugherty
Results To: Dustin Brooks, Greg Dyer
Requested By: Greg Dyer
Location: Gorgas Ash Pond

Bottles

1	Radium	1 L	3	N/A	N/A	5	N/A	N/A	7	N/A	N/A
2	N/A	N/A	4	N/A	N/A	6	N/A	N/A	8	N/A	N/A

Comments: Added 2 mL HNO3 3/9/23 @ 1210 to MW-6V DIS. BC 03/09/2023
Tracking ID 10363-59902-2-1

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id	pH Check
MW-6V	03/08/2023	13:50	1	Groundwater		BD05001	☑
MW-6V DIS	03/08/2023	13:50	1	Field Filtered		BD05002	☑
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Relinquished By	Received By	Date/Time
	Brooke Caton	03/09/2023 11:00

SmarTroll ID: 7586-41445-5-4
Turbidity ID: 4677-23343-4-2
Sample Event: 1400
Cooler Temp: N/A
Thermometer ID: N/A
pH Strip ID: 10620-61238-10-4

Bottles/Pre-Preserved Bottles are provided by the GTL

Total Metals and Alkalinity are not performed on Dissolved Sets

Dissolved Metals and Alkalinity are not performed on blanks i.e. Field Blanks or Equipment Blanks

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APC General Testing Laboratory

☑ Field Complete
☑ Lab Complete
☑ Outside Lab

Lab ETA

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Collector	Dallas Gentry	Requested By	Greg Dyer
		Location	Gorgas Ash Pond

Bottles

1	Radium	1 L	3	N/A	N/A	5	N/A	N/A	7	N/A	N/A
2	N/A	N/A	4	N/A	N/A	6	N/A	N/A	8	N/A	N/A

Comments: Radium MS/MSD collected at MW-28H

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id	pH Check
MW-30HA	03/13/2023	13:20	1	Groundwater		BD05384	☑
MW-36V	03/14/2023	11:10	1	Groundwater		BD05385	☑
MW-27HR	03/14/2023	13:04	1	Groundwater		BD05386	☑
MW-28H	03/14/2023	14:57	3	Groundwater		BD05387	☑
MW-37HR	03/15/2023	12:08	1	Groundwater		BD05388	☑
MW-47	03/15/2023	13:51	1	Groundwater		BD05389	☑
MW-14R	03/15/2023	14:52	1	Groundwater		BD05390	☑
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Relinquished By	Received By	Date/Time
		03/16/2023 08:36

SmarTroll ID	7586-41443-5-2	Cooler Temp	N/A
Turbidity ID	9901-57263-1-1	Thermometer ID	N/A
Sample Event	1400	pH Strip ID	7453-40656-10-8

Bottles/Pre-Preserved Bottles are provided by the GTL

Total Metals and Alkalinity are not performed on Dissolved Sets

Dissolved Metals and Alkalinity are not performed on blanks i.e. Field Blanks or Equipment Blanks

Alabama Power Lab & Field Services

Chain of Custody
Groundwater

APC General Testing Laboratory

☑ Field Complete
☑ Lab Complete
☑ Outside Lab

Lab ETA

Requested Complete Date: Routine
Collector: Anthony Goggins
Results To: Dustin Brooks, Greg Dyer
Requested By: Greg Dyer
Location: Gorgas Ash Pond

Bottles

1	Radium	1 L	3	N/A	N/A	5	N/A	N/A	7	N/A	N/A
2	N/A	N/A	4	N/A	N/A	6	N/A	N/A	8	N/A	N/A

Comments

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id	pH Check
MW-36H	03/15/2023	11:17	1	Groundwater		BD05391	☑
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Relinquished By	Received By	Date/Time
		03/16/2023 08:37

SmarTroll ID: 7586-41446-5-5
Turbidity ID: 9830-57039-1-1
Sample Event: 1400
Cooler Temp: N/A
Thermometer ID: N/A
pH Strip ID: 7453-40656-10-8

Bottles/Pre-Preserved Bottles are provided by the GTL

Total Metals and Alkalinity are not performed on Dissolved Sets

Dissolved Metals and Alkalinity are not performed on blanks i.e. Field Blanks or Equipment Blanks

Alabama Power
Lab & Field SERVICES

Chain of Custody Groundwater

APC General Testing Laboratory

☑ Field Complete
☑ Lab Complete
☑ Outside Lab

Lab ETA

Requested Complete Date: Routine
Collector: TJ Daugherty
Results To: Dustin Brooks, Greg Dyer
Requested By: Greg Dyer
Location: Gorgas Ash Pond

Bottles

1	Radium	1 L	3	N/A	N/A	5	N/A	N/A	7	N/A	N/A
2	N/A	N/A	4	N/A	N/A	6	N/A	N/A	8	N/A	N/A

Comments: Rad MS/MSD @ MW-6D

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id	pH Check
MW-41HS	03/13/2023	14:40	1	Groundwater		BD05392	☑
MW-7	03/14/2023	10:27	1	Groundwater		BD05393	☑
MW-6S	03/14/2023	11:52	1	Groundwater		BD05394	☑
MW-6S Dup	03/14/2023	11:52	1	Sample Duplicate		BD05395	☑
MW-6D	03/14/2023	12:55	3	Groundwater		BD05396	☑
MW-23V	03/14/2023	14:00	1	Groundwater		BD05397	☑
MW-23H	03/14/2023	14:40	1	Groundwater		BD05398	☑
MW-41HD	03/15/2023	10:55	1	Groundwater		BD05399	☑
MW-24H	03/15/2023	12:30	1	Groundwater		BD05400	☑
MW-24H Dup	03/15/2023	12:30	1	Sample Duplicate		BD05401	☑
MW-42H	03/15/2023	14:20	1	Groundwater		BD05402	☑
FB-1	03/15/2023	14:45	1	Field Blank		BD05403	☑
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Relinquished By	Received By	Date/Time
	Burke Caton	03/16/2023 08:57

SmarTroll ID: 7586-41445-5-4
Turbidity ID: 4677-23343-4-2
Sample Event: 1400
Cooler Temp: N/A
Thermometer ID: N/A
pH Strip ID: 7453-40656-10-8

Bottles/Pre-Preserved Bottles are provided by the GTL

Total Metals and Alkalinity are not performed on Dissolved Sets

Dissolved Metals and Alkalinity are not performed on blanks i.e. Field Blanks or Equipment Blanks

Alabama Power
Lab & Field SERVICES

Chain of Custody Groundwater

APC General Testing Laboratory

☑ Field Complete
☑ Lab Complete
☑ Outside Lab

Lab ETA

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Collector	Anthony Goggins	Requested By	Greg Dyer
		Location	Gorgas Ash Pond

Bottles

1	Radium	1 L	3	N/A	N/A	5	N/A	N/A	7	N/A	N/A
2	N/A	N/A	4	N/A	N/A	6	N/A	N/A	8	N/A	N/A

Comments: MS/MSD @ MW-19

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id	pH Check
MW-32H	03/21/2023	10:45	1	Groundwater		BD05888	☑
MW-19	03/21/2023	12:30	3	Groundwater		BD05889	☑
FB-2	03/21/2023	12:50	1	Field Blank		BD05890	☑
PZ-22	03/21/2023	13:38	1	Groundwater		BD05891	☑
MW-17	03/22/2023	10:28	1	Groundwater		BD05892	☑
MW-17Dup	03/22/2023	10:28	1	Sample Duplicate		BD05893	☑
MW-17V	03/22/2023	12:30	1	Groundwater		BD05894	☑
FB-5	03/22/2023	12:55	1	Field Blank		BD05895	☑
MW-2	03/22/2023	13:58	1	Groundwater		BD05896	☑
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Relinquished By	Received By	Date/Time
		03/23/2023 09:59

SmarTroll ID	7586-41446-5-5	Cooler Temp	N/A
Turbidity ID	9830-57039-1-1	Thermometer ID	N/A
Sample Event	1400	pH Strip ID	10429-60252-10-8

Bottles/Pre-Preserved Bottles are provided by the GTL

Total Metals and Alkalinity are not performed on Dissolved Sets

Dissolved Metals and Alkalinity are not performed on blanks i.e. Field Blanks or Equipment Blanks

Alabama Power
Lab & Field SERVICES

Chain of Custody Groundwater

APC General Testing Laboratory

☑ Field Complete
☑ Lab Complete
☑ Outside Lab

Lab ETA

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Collector	Dallas Gentry	Requested By	Greg Dyer
		Location	Gorgas Ash Pond

Bottles

1	Radium	1 L	3	N/A	N/A	5	N/A	N/A	7	N/A	N/A
2	N/A	N/A	4	N/A	N/A	6	N/A	N/A	8	N/A	N/A

Comments

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id	pH Check
MW-15V	03/20/2023	12:27	1	Groundwater		BD05877	☑
FB-3	03/20/2023	14:00	1	Field Blank		BD05878	☑
MW-15	03/20/2023	15:06	1	Groundwater		BD05879	☑
PZ-16	03/21/2023	08:52	1	Groundwater		BD05880	☑
MW-16D	03/21/2023	10:00	1	Groundwater		BD05881	☑
MW-16S	03/21/2023	11:30	1	Groundwater		BD05882	☑
MW-21	03/21/2023	13:09	1	Groundwater		BD05883	☑
MW-21V	03/21/2023	14:40	1	Groundwater		BD05884	☑
MW-25HA	03/22/2023	09:30	1	Groundwater		BD05885	☑
MW-26H	03/22/2023	11:32	1	Groundwater		BD05886	☑
MW-40H	03/22/2023	12:48	1	Groundwater		BD05887	☑
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Relinquished By	Received By	Date/Time
Dallas Gentry		03/23/2023 10:00

SmarTroll ID	7586-41443-5-2	Cooler Temp	N/A
Turbidity ID	9901-57263-1-1	Thermometer ID	N/A
Sample Event	1400	pH Strip ID	10429-60252-10-8

Bottles/Pre-Preserved Bottles are provided by the GTL

Total Metals and Alkalinity are not performed on Dissolved Sets

Dissolved Metals and Alkalinity are not performed on blanks i.e. Field Blanks or Equipment Blanks

Alabama Power Lab & Field Services

Chain of Custody Groundwater

APC General Testing Laboratory

☑ Field Complete ☑ Outside Lab

☑ Lab Complete

Lab ETA

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Collector	TJ Daugherty	Requested By	Greg Dyer
		Location	Gorgas Ash Pond

Bottles

1	Radium	1 L	3	N/A	N/A	5	N/A	N/A	7	N/A	N/A
2	N/A	N/A	4	N/A	N/A	6	N/A	N/A	8	N/A	N/A

Comments: Rad MS/MSD @ MW-11R

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id	pH Check
MW-05R	03/20/2023	14:05	1	Groundwater		BD05897	☑
MW-3	03/21/2023	10:55	1	Groundwater		BD05898	☑
MW-03V	03/21/2023	14:25	1	Groundwater		BD05899	☑
MW-12V	03/22/2023	10:53	1	Groundwater		BD05900	☑
MW-12	03/22/2023	13:00	1	Groundwater		BD05901	☑
MW-11R	03/22/2023	14:55	3	Groundwater		BD05902	☑
FB-4	03/22/2023	15:20	1	Field Blank		BD05903	☑
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Relinquished By	Received By	Date/Time
		03/23/2023 10:04

SmarTroll ID	7586-41445-5-4	Cooler Temp	N/A
Turbidity ID	4677-23343-4-2	Thermometer ID	N/A
Sample Event	1400	pH Strip ID	10429-60252-10-8

Bottles/Pre-Preserved Bottles are provided by the GTL

Total Metals and Alkalinity are not performed on Dissolved Sets

Dissolved Metals and Alkalinity are not performed on blanks i.e. Field Blanks or Equipment Blanks

Alabama Power
Lab & Field SERVICES

Chain of Custody Groundwater

APC General Testing Laboratory

☑ Field Complete ☑ Outside Lab
☑ Lab Complete

Lab ETA

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Collector	Dallas Gentry	Requested By	Greg Dyer
		Location	Gorgas Ash Pond

Bottles

1	Radium	1 L	3	N/A	N/A	5	N/A	N/A	7	N/A	N/A
2	N/A	N/A	4	N/A	N/A	6	N/A	N/A	8	N/A	N/A

Comments

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id	pH Check
MW-13R	03/27/2023	12:05	1	Groundwater		BD06151	☑
MW-10R	03/27/2023	14:07	1	Groundwater		BD06152	☑
MW-18VR	03/27/2023	15:31	1	Groundwater		BD06153	☑
EB-1	03/27/2023	16:00	1	Equipment Blank		BD06154	☑
MW-45V	03/28/2023	08:55	1	Groundwater		BD06155	☑
MW-43H	03/28/2023	10:03	1	Groundwater		BD06156	☑
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Relinquished By	Received By	Date/Time
		03/29/2023 09:25

SmarTroll ID	7586-41443-5-2	Cooler Temp	N/A
Turbidity ID	9901-57263-1-1	Thermometer ID	N/A
Sample Event	1400	pH Strip ID	10429-60252-10-8

Bottles/Pre-Preserved Bottles are provided by the GTL

Total Metals and Alkalinity are not performed on Dissolved Sets

Dissolved Metals and Alkalinity are not performed on blanks i.e. Field Blanks or Equipment Blanks

Chain of Custody
Groundwater
APC General Testing Laboratory

☑ Field Complete
☑ Lab Complete
☑ Outside Lab

Lab ETA:

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Collector	TJ Daugherty	Requested By	Greg Dyer
		Location	Gorgas Ash Pond

Bottles

1	Radium	1 L	3	N/A	N/A	5	N/A	N/A	7	N/A	N/A
2	N/A	N/A	4	N/A	N/A	6	N/A	N/A	8	N/A	N/A

Comments:

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id	pH Check
MW-8	03/27/2023	12:35	1	Groundwater		BD06163	☑
MW-09R	03/27/2023	14:40	1	Groundwater		BD06164	☑
MW-9V	03/27/2023	16:33	1	Groundwater		BD06165	☑
PZ-18R	03/28/2023	10:05	1	Groundwater		BD06166	☑
PZ-18R Dup	03/28/2023	10:05	1	Sample Duplicate		BD06167	☑
MW-18R	03/28/2023	11:10	1	Groundwater		BD06168	☑
MW-18R Dup	03/28/2023	11:10	1	Sample Duplicate		BD06169	☑
MW-38H	03/28/2023	13:15	1	Groundwater		BD06170	☑
FB-6	03/28/2023	14:15	1	Field Blank		BD06171	☑
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Relinquished By	Received By	Date/Time
		03/29/2023 09:31

SmarTroll ID	7586-41445-5-4	Cooler Temp	N/A
Turbidity ID	4677-23343-4-2	Thermometer ID	N/A
Sample Event	1400	pH Strip ID	10429-60252-10-8

Bottles/Pre-Preserved Bottles are provided by the GTL

Total Metals and Alkalinity are not performed on Dissolved Sets

Dissolved Metals and Alkalinity are not performed on blanks i.e. Field Blanks or Equipment Blanks

Alabama Power
Lab & Field SERVICES

Chain of Custody
Groundwater

APC General Testing Laboratory

☑ Field Complete
☑ Lab Complete
☑ Outside Lab

Lab ETA:

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Collector	Anthony Goggins	Requested By	Greg Dyer
		Location	Gorgas Ash Pond

Bottles

1	Radium	1 L	3	N/A	N/A	5	N/A	N/A	7	N/A	N/A
2	N/A	N/A	4	N/A	N/A	6	N/A	N/A	8	N/A	N/A

Comments:

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id	pH Check
MW-46	03/27/2023	10:45	1	Groundwater		BD06157	☑
MW-46 Dup	03/27/2023	10:45	1	Sample Duplicate		BD06158	☑
MW-01R	03/27/2023	13:02	1	Groundwater		BD06159	☑
MW-31H	03/27/2023	15:00	1	Groundwater		BD06160	☑
MW-31V	03/27/2023	16:37	1	Groundwater		BD06161	☑
MW-29H	03/28/2023	09:30	1	Groundwater		BD06162	☑
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Relinquished By	Received By	Date/Time
	Brooke Cotton	03/29/2023 09:33

SmarTroll ID	7586-41446-5-5	Cooler Temp	N/A
Turbidity ID	9830-57039-1-1	Thermometer ID	N/A
Sample Event	1400	pH Strip ID	10429-60252-10-8

Bottles/Pre-Preserved Bottles are provided by the GTL

Total Metals and Alkalinity are not performed on Dissolved Sets

Dissolved Metals and Alkalinity are not performed on blanks i.e. Field Blanks or Equipment Blanks

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040
205-664-6001

Analytical Report

Sample Group :	WMWGORAP_1403
Project/Site :	Gorgas Ash Pond Parrish, AL 35580
For :	Southern Company Services 3535 Colonnade Parkway Birmingham, AL 35243
Attention :	Dustin Brooks & Greg Dyer
Released By :	Brooke Caton tbwill@southernco.com (205) 664-6101

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040
(205) 664-6001

April 25, 2023

Dear Dustin Brooks,

Enclosed are the analytical results for sample(s) received by the laboratory between March 09, 2023 and March 16, 2023. All results reported herein conform to the laboratory's most current Quality Assurance Manual. Results marked with an asterisk conform to the most current applicable TNI/NELAC requirements. Exceptions will be noted in the body of the report.

Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2023

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Quality Control: Brooke Caton

Digitally signed by Brooke Caton
Date: 2023.04.25
10:49:11 -05'00'

Supervision: T Durant Maske

Digitally signed by T Durant Maske
DN: cn=T Durant Maske gn=T Durant Maske c=US United States l=US United States e=tdmaske@southernco.com
Reason: I am the author of this document
Location:
Date: 2023-05-04 09:46-05:00

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Case Narrative

Total Metals ICP

Gorgas Ash Pond

WMWGORAP_1403

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
BD04989	749819	WMWGORAP_1403
BD04990	749819	WMWGORAP_1403
BD04991	749819	WMWGORAP_1403
BD04992	749819	WMWGORAP_1403
BD04993	749819	WMWGORAP_1403
BD05362	750100	WMWGORAP_1403

4. All of the above samples were analyzed by EPA 200.7 and prepared by EPA 1638.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- Prior to sample analysis, an initial calibration verification (ICV) was analyzed, and all criteria were met.
- Following the ICV, an initial calibration blank (ICB) was analyzed, and all criteria were met.
- All continued calibration verification (CCV) were within the acceptance criteria for the requested analytes.
- All continued calibration blanks (CCB) were analyzed, and all criteria were met.
- A preparation method blank and laboratory control sample were digested and analyzed with the samples in each digestion batch.
- All laboratory control sample criteria were met.
- The method blank associated with each digestion batch passed all acceptance criteria for all requested analytes.
- All calibration curve requirements were within acceptance criteria.
- All sample internal standard criteria were met.
- The spectral interference check associated with EPA 200.7 was analyzed and all acceptance criteria were met.
- It is noted that the QC summary page typically provides the QC results from the original batch analytical sequence. If dilutions were subsequently performed to bring sample concentrations within the calibration range, any additional QC data from the dilution analyses may need to be obtained from the laboratory. Any qualifications applied to original analyses or dilution re-analyses are based upon QC data available at the time of review.

Revision 5

Case Narrative

Matrix Specific Quality Control Procedures:

Similarity of matrix and therefore relevance of matrix specific QC results should not be automatically inferred for any sample other than the sample selected for QC.

- A matrix spike and matrix spike duplicate were digested and analyzed with each ICP batch. All acceptance criteria for accuracy were met, except for the following:
    - BD05362 Sodium MS/MSD spike levels were less than 30% of the sample concentrations.
- A matrix spike and matrix spike duplicate were digested and analyzed with each ICP batch. All acceptance criteria for precision were met.

7. The following sample was diluted due to the analyzed sample concentration being greater than the high standard of the calibration curve:

Sample ID	**Analyte**	**Dilution Factor**
BD04990	Sodium	10.15
BD04991	Calcium, Sodium	101.5
BD04992	Calcium, Sodium	101.5
BD05362	Sodium	10.15

8. The raw data results are shown with dilution factors included.

Case Narrative

Dissolved Metals ICP

Gorgas Ash Pond

WMWGORAP_1403

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
BD04990	750362	WMWGORAP_1403
BD04991	750362	WMWGORAP_1403
BD04992	750362	WMWGORAP_1403
BD05362	750062	WMWGORAP_1403

4. All of the above samples were analyzed and prepared by EPA 200.7 for dissolved analysis.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- Prior to sample analysis, an initial calibration verification (ICV) was analyzed, and all criteria were met.
- Following the ICV, an initial calibration blank (ICB) was analyzed, and all criteria were met.
- All continued calibration verification (CCV) were within the acceptance criteria for the requested analytes.
- All continued calibration blanks (CCB) were analyzed, and all criteria were met.
- Due to no filtered method blank (MB) or laboratory control sample (LCS) submitted with the sample set, an unfiltered MB and LCS were analyzed with the samples in each batch.
- All laboratory control sample criteria were met.
- The method blank associated with each batch passed all acceptance criteria for all requested analytes.
- All calibration curve requirements were within acceptance criteria.
- All sample internal standard criteria were met.
- The spectral interference check associated with EPA 200.7 was analyzed and all acceptance criteria were met.
- It is noted that the QC summary page typically provides the QC results from the original batch analytical sequence. If dilutions were subsequently performed to bring sample concentrations within the calibration range, any additional QC data from the dilution analyses may need to be obtained from the laboratory. Any qualifications applied to original analyses or dilution re-analyses are based upon QC data available at the time of review.

Matrix Specific Quality Control Procedures:

Revision 5

Similarity of matrix and therefore relevance of matrix specific QC results should not be automatically inferred for any sample other than the sample selected for QC.

- A matrix spike and matrix spike duplicate were analyzed with each ICP batch. All acceptance criteria for accuracy were met except for the following:
    - BD04992 Calcium and Sodium MS/MSD spike levels were less than 30% of the sample concentrations.
- A matrix spike and matrix spike duplicate were analyzed with each ICP batch. All acceptance criteria for precision were met.

7. The following samples were diluted due to the analyzed sample concentration being greater than the high standard of the calibration curve:

Sample ID	Analyte	Dilution Factor
BD04990	Sodium	10.15
BD04991	Calcium, Sodium	101.5
BD04992	Calcium, Sodium	101.5
BD05362	Sodium	10.15

8. The raw data results are shown with dilution factors included.

Case Narrative

Total Metals ICPMS

Gorgas Ash Pond

WMWGORAP_1403

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
BD04989	749993	WMWGORAP_1403
BD04990	749993, 751861	WMWGORAP_1403
BD04991	749993, 751861	WMWGORAP_1403
BD04992	749993	WMWGORAP_1403
BD04993	749993	WMWGORAP_1403
BD05362	750626	WMWGORAP_1403

4. All of the above samples were analyzed by EPA 200.8 and prepared by EPA 1638.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- All tune and calibration met criteria for all requested analytes.
- Prior to sample analysis, an initial calibration verification (ICV) was analyzed, and all criteria were met.
- Following the ICV, an initial calibration blank (ICB) was analyzed and was below the limit of quantitation for all requested analytes.
- All continued calibration verification (CCV) were within the acceptance criteria for the requested analytes.
- All continued calibration blanks (CCB) were below the limit of quantitation for the requested analytes.
- A preparation method blank and laboratory control sample were digested and analyzed with the samples in each digestion batch.
- All laboratory control sample criteria were met.
- The method blank associated with each digestion batch passed all acceptance criteria for all requested analytes.
- The interference check samples associated with EPA 200.8 were analyzed and passed for all requested analytes.
- All sample internal standard criteria were met.
- It is noted that the QC summary page typically provides the QC results from the original batch analytical sequence. If dilutions were subsequently performed to bring sample concentrations within the calibration range, any additional QC data from the dilution analyses may need to be obtained from the laboratory. Any qualifications applied to original analyses or dilution re-analyses are based upon QC data available at the time of review.

Revision 5

Matrix Specific Quality Control Procedures:

Similarity of matrix and therefore relevance of matrix specific QC results should not be automatically inferred for any sample other than the sample selected for QC.

- A matrix spike and matrix spike duplicate were digested and analyzed with each ICPMS batch. All acceptance criteria for accuracy were met, except for the following:
    - BD04991 Aluminum MS/MSD spike levels were less than 30% of the sample concentrations.
- A matrix spike and matrix spike duplicate were digested and analyzed with each ICPMS batch. All acceptance criteria for precision were met.

7. The following sample was diluted due to the analyzed sample concentration being greater than the high standard of the calibration curve:

Sample ID	Analyte	Dilution Factor
BD04992	Aluminum	5.075

8. The raw data results are shown with dilution factors included.

Case Narrative

Dissolved Metals ICPMS

Gorgas Ash Pond

WMWGORAP_1403

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	**Batch ID**	**Project ID**
BD04990	749610, 751441	WMWGORAP_1403
BD04991	749610	WMWGORAP_1403
BD04992	749610	WMWGORAP_1403
BD05362	750594	WMWGORAP_1403

4. All of the above samples were analyzed and prepared by EPA 200.8 for dissolved analysis.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- All tune and calibration met criteria for all requested analytes.
- Prior to sample analysis, an initial calibration verification (ICV) was analyzed, and all criteria were met.
- Following the ICV, an initial calibration blank (ICB) was analyzed and was below the limit of quantitation for all requested analytes.
- All continued calibration verification (CCV) were within the acceptance criteria for the requested analytes.
- All continued calibration blanks (CCB) were below the limit of quantitation for the requested analytes.
- Due to no filtered method blank (MB) or laboratory control sample (LCS) submitted with the sample set, an unfiltered MB and LCS were analyzed with the samples in each batch.
- All laboratory control sample criteria were met.
- The method blank associated with each preparation batch passed all acceptance criteria for all requested analytes.
- The interference check samples associated with EPA 200.8 were analyzed and passed for all requested analytes.
- All sample internal standard criteria were met.
- It is noted that the QC summary page typically provides the QC results from the original batch analytical sequence. If dilutions were subsequently performed to bring sample concentrations within the calibration range, any additional QC data from the dilution analyses may need to be obtained from the laboratory. Any qualifications applied to original analyses or dilution re-analyses are based upon QC data available at the time of review.

Revision 5

Matrix Specific Quality Control Procedures:

Similarity of matrix and therefore relevance of matrix specific QC results should not be automatically inferred for any sample other than the sample selected for QC.

- A matrix spike and matrix spike duplicate were analyzed with each ICPMS batch. All acceptance criteria for accuracy were met.
- A matrix spike and matrix spike duplicate were analyzed with each ICPMS batch. All acceptance criteria for precision were met.

7. All samples were analyzed without a dilution factor.
8. The raw data results are shown with dilution factors included.

Case Narrative

Mercury

Gorgas Ash Pond

WMWGORAP_1403

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
BD04989	749459	WMWGORAP_1403
BD04990	749459	WMWGORAP_1403
BD04991	749459	WMWGORAP_1403
BD04992	749459	WMWGORAP_1403
BD04993	749459	WMWGORAP_1403
BD05362	750182	WMWGORAP_1403

4. All of the above samples were analyzed and prepared by EPA 245.1.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- Prior to sample analysis, an initial calibration verification (ICV) was analyzed, and all criteria were met.
- Following the ICV, an initial calibration blank (ICB) was analyzed and was below the method detection limit for the requested analyte.
- All continued calibration verification (CCV) were within the acceptance criteria for the requested analyte.
- All continued calibration blanks (CCB) were below the limit of quantitation for the requested analyte.
- A preparation method blank and laboratory control sample were digested and analyzed with the samples in each digestion batch.
- All laboratory control sample criteria were met.
- The method blank associated with each digestion batch was below the limit of quantitation for the requested analyte.
- All calibration met criteria for the requested analyte.
- All response signals were satisfactory.

Matrix Specific Quality Control Procedures:

Similarity of matrix and therefore relevance of matrix specific QC results should not be automatically inferred for any sample other than the sample selected for QC.

Revision 5

- A matrix spike and matrix spike duplicate were digested and analyzed with each analytical batch. All acceptance criteria for accuracy were met.
- A matrix spike and matrix spike duplicate were digested and analyzed with each analytical batch. All acceptance criteria for precision were met.

7. All samples were analyzed without a dilution factor.

Case Narrative

Total Dissolved Solids

Gorgas Ash Pond

WMWGORAP_1403

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
BD04989	749571	WMWGORAP_1403
BD04990	749571	WMWGORAP_1403
BD04991	749571	WMWGORAP_1403
BD04992	749571	WMWGORAP_1403
BD04993	749571	WMWGORAP_1403
BD05362	750173	WMWGORAP_1403

4. All of the above samples were prepared and analyzed by Standard Method 2540C.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- A Method Blank was analyzed with each batch. All criteria were met.
- All final weights of samples, standards, and blanks agreed within 0.5mg of the previous weight.
- A sample duplicate was analyzed with each batch, and RPD was ≤ 10%.
- A laboratory control sample was analyzed with each batch. All criteria were met.
- Samples were between 2.5mg and 200mg residue.
- All samples with residue <2.5mg had the maximum volume of 150mL filtered. Affected samples are as follows:
    - BD04989
    - BD04993

Case Narrative

Alkalinity

Gorgas Ash Pond

WMWGORAP_1403

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
BD04990	750254, 750255, 750256	WMWGORAP_1403
BD04991	750254, 750255, 750256	WMWGORAP_1403
BD04992	750254, 750255, 750256	WMWGORAP_1403
BD05362	750254, 750255, 750256	WMWGORAP_1403

4. All of the above samples were prepared and analyzed by Standard Method 2320B.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- An initial pH check was analyzed with each batch. The acceptance criteria were met.
- A final pH check was analyzed with each batch. The acceptance criteria were met.
- An alkalinity laboratory control sample was analyzed with each batch. Range criteria of within 10% of true value was met.
- An alkalinity sample duplicate was analyzed with each batch. Precision criteria less than 10 RPD was met.

7. The following samples had pH>10 and/or TDS>500mg/L. Therefore, the calculations for carbonate and bicarbonate are estimates:
    - BD04991
    - BD04992

Case Narrative

Anions

Gorgas Ash Pond

WMWGORAP_1403

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
BD04989	749890, 749893, 750396	WMWGORAP_1403
BD04990	749890, 749893, 750396	WMWGORAP_1403
BD04991	749890, 749893, 750396	WMWGORAP_1403
BD04992	749890, 749893, 750396	WMWGORAP_1403
BD04993	749890, 749893, 750396	WMWGORAP_1403
BD05362	750852, 750990, 750396	WMWGORAP_1403

4. All of the above samples were analyzed and prepared by SM4500 Cl E, SM4500 F G, and SM4500 SO4 E.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- All calibration met criteria for the requested analyte.
- Prior to sample analysis, an initial calibration verification (ICV) was analyzed, and all criteria were met.
- Prior to sample analysis, an initial calibration blank (ICB) was analyzed and was below half the limit of quantitation for the requested analyte.
- All continued calibration verification (CCV) were within the acceptance criteria for the requested analyte.
- All continued calibration blanks (CCB) were below the limit of quantitation for the requested analyte.
- It is noted that the QC summary page typically provides the QC results from the original batch analytical sequence. If dilutions were subsequently performed to bring sample concentrations within the calibration range, any additional QC data from the dilution analyses may need to be obtained from the laboratory. Any qualifications applied to original analyses or dilution re-analyses are based upon QC data available at the time of review.

Matrix Specific Quality Control Procedures:

Similarity of matrix and therefore relevance of matrix specific QC results should not be automatically inferred for any sample other than the sample selected for QC.

Revision 5

- A matrix spike and matrix spike duplicate were analyzed with each batch. All acceptance criteria for accuracy were met.
- A matrix spike and matrix spike duplicate were analyzed with each batch. All acceptance criteria for precision were met.

7. The following samples were diluted due to the analyzed sample concentration being greater than the high standard of the calibration curve:

Sample ID	Analyte	Dilution Factor
BD04991	Chloride, Sulfate	50, 50
BD04992	Chloride, Sulfate	50, 50

8. The raw data results are shown with dilution factors included.

Case Narrative

Nitrate-Nitrite

Gorgas Ash Pond

WMWGORAP_1403

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
BD04989	749700	WMWGORAP_1403
BD04990	749700	WMWGORAP_1403
BD04991	749700	WMWGORAP_1403
BD04992	749700	WMWGORAP_1403
BD04993	749700	WMWGORAP_1403
BD05362	750387	WMWGORAP_1403

4. All of the above samples were prepared and analyzed for NO_x by EPA 353.2.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- Water baseline report was run and met criteria.
- All calibration met criteria for the requested analytes.
- Prior to sample analysis, an initial calibration verification (ICV) was analyzed and met all criteria.
- All continued calibration verification (CCV) were within the acceptance criteria.
- Prior to sample analysis, an initial calibration blank (ICB) was analyzed and were below limit of detection.
- All continued calibration blanks (CCB) were below the limit of detection.

EPA 353.2 Specific QC:

- Prior to sample analysis, Cadmium coil reduction efficiency check met criteria.
- Matrix Specific QC:
  - A sample duplicate was run and criteria for precision was met.
  - A matrix spike was run and criteria for accuracy was met.

7. All samples were analyzed without a dilution factor.
8. The raw data results are shown with dilution factors included.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Case Narrative

Alabama Power

Total Organic Carbon

Gorgas Ash Pond

WMWGORAP_1403

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
BD04989	749365	WMWGORAP_1403
BD04990	749365	WMWGORAP_1403
BD04991	749365	WMWGORAP_1403
BD04992	749365	WMWGORAP_1403
BD04993	749365	WMWGORAP_1403
BD05362	750036	WMWGORAP_1403

4. All of the above samples were prepared and analyzed by Standard Method 5310B.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- All calibration criteria were met.
- Prior to sample analysis, an initial calibration verification (ICV) was analyzed and met all criteria.
- Prior to sample analysis, an initial calibration blank (ICB) was analyzed and was <1/2RL.
- All continued calibration verifications (CCVs) were within the acceptance range.
- All continued calibration blanks (CCBs) were <1/2RL.

Matrix Specific Quality Control Procedures:

- A matrix spike and matrix spike duplicate were analyzed with each batch. All acceptance criteria for accuracy were met.
- A matrix spike and matrix spike duplicate were analyzed with each batch. All acceptance criteria for precision were met.

7. All samples were analyzed without a dilution factor.
8. The raw data results are shown with dilution factors included.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond Field Blank-1

Location Code: WMWGORAPFB
Collected: 3/8/23 09:50
Customer ID:
Submittal Date: 3/9/23 11:35

Laboratory ID Number: BD04989

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	3/14/23 12:59	3/20/23 13:52		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	3/14/23 12:59	3/20/23 13:52		1.015	Not Detected	mg/L	0.070035	0.406	U
* Iron, Total	3/14/23 12:59	3/20/23 13:52		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Total	3/14/23 12:59	3/20/23 13:52		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	3/14/23 12:59	3/20/23 13:52		1.015	Not Detected	mg/L	0.021315	0.406	U
* Silica, Total (calc.)	3/14/23 12:59	3/20/23 13:52		1	Not Detected	mg/L			
* Silicon, Total	3/14/23 12:59	3/20/23 13:52		1.015	Not Detected	mg/L	0.02030	0.25375	U
* Sodium, Total	3/14/23 12:59	3/20/23 13:52		1.015	Not Detected	mg/L	0.04060	0.406	U
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/14/23 12:59	3/14/23 16:06		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	3/14/23 12:59	3/14/23 16:06		1.015	Not Detected	mg/L	0.006090	0.05075	U
* Arsenic, Total	3/14/23 12:59	3/14/23 16:06		1.015	Not Detected	mg/L	0.000081	0.000203	U
* Barium, Total	3/14/23 12:59	3/14/23 16:06		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Beryllium, Total	3/14/23 12:59	3/14/23 16:06		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	3/14/23 12:59	3/14/23 16:06		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	3/14/23 12:59	3/14/23 16:06		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	3/14/23 12:59	3/14/23 16:06		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	3/14/23 12:59	3/14/23 16:06		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	3/14/23 12:59	3/14/23 16:06		1.015	Not Detected	mg/L	0.000152	0.001015	U
* Molybdenum, Total	3/14/23 12:59	3/14/23 16:06		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Total	3/14/23 12:59	3/14/23 16:06		1.015	Not Detected	mg/L	0.169505	0.5075	U
* Selenium, Total	3/14/23 12:59	3/14/23 16:06		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	3/14/23 12:59	3/14/23 16:06		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ELH***								
* Mercury, Total by CVAA	3/10/23 11:42	3/10/23 16:23		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	3/9/23 14:43	3/9/23 14:43		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	3/10/23 11:03	3/14/23 13:50		1	Not Detected	mg/L		25	U

MDL's and RL's are adjusted for sample dilution, as applicable

Comments:

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond Field Blank-1

Location Code: WMWGORAPFB
Collected: 3/8/23 09:50
Customer ID:
Submittal Date: 3/9/23 11:35

Laboratory ID Number: BD04989

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	3/9/23 16:47	3/9/23 16:47		1	Not Detected	mg/L	1.00	2	U
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	3/14/23 10:56	3/14/23 10:56		1	Not Detected	mg/L	0.50	1	U
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	3/14/23 13:52	3/14/23 13:52		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	3/21/23 12:37	3/21/23 12:37		1	Not Detected	mg/L	0.6	2	U

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments:

Reported: 4/25/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAPFB
Sample Date: 3/8/23 09:50
Customer ID:
Delivery Date: 3/9/23 11:35

Description: Gorgas Ash Pond Field Blank-1

Laboratory ID Number: BD04989

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04993	Aluminum, Total	mg/L	0.000762	0.0198	0.100	0.102	0.103	0.101	0.0850 to 0.115	102	70.0 to 130	0.976	20.0
BD04993	Antimony, Total	mg/L	0.000323	0.00100	0.100	0.0980	0.0985	0.0970	0.0850 to 0.115	98.0	70.0 to 130	0.509	20.0
BD04993	Arsenic, Total	mg/L	0.0000113	0.000200	0.100	0.0990	0.0997	0.0987	0.0850 to 0.115	99.0	70.0 to 130	0.705	20.0
BD04993	Barium, Total	mg/L	0.0000160	0.00100	0.100	0.106	0.105	0.106	0.0850 to 0.115	106	70.0 to 130	0.948	20.0
BD04993	Beryllium, Total	mg/L	0.0000143	0.000880	0.100	0.112	0.113	0.113	0.0850 to 0.115	112	70.0 to 130	0.889	20.0
BD04993	Boron, Total	mg/L	-0.000855	0.0650	1.00	1.02	1.01	1.02	0.850 to 1.15	102	70.0 to 130	0.985	20.0
BD04993	Cadmium, Total	mg/L	0.0000024	0.000147	0.100	0.0998	0.0993	0.0992	0.0850 to 0.115	99.8	70.0 to 130	0.502	20.0
BD04993	Calcium, Total	mg/L	-0.00246	0.152	5.00	5.01	4.98	5.09	4.25 to 5.75	100	70.0 to 130	0.601	20.0
BD04993	Chloride	mg/L	0.0525	1.00	10.0	9.90	9.86	9.99	9.00 to 11.0	99.0	80.0 to 120	0.405	20.0
BD04993	Chromium, Total	mg/L	-0.0000133	0.000440	0.100	0.0992	0.0987	0.0969	0.0850 to 0.115	98.9	70.0 to 130	0.505	20.0
BD04993	Cobalt, Total	mg/L	-0.0000001	0.000147	0.100	0.0995	0.101	0.0998	0.0850 to 0.115	99.5	70.0 to 130	1.50	20.0
BD04993	Fluoride	mg/L	0.0255	0.125	2.50	2.61	2.60	2.59	2.25 to 2.75	104	80.0 to 120	0.384	20.0
BD04993	Iron, Total	mg/L	0.000603	0.0176	0.2	0.206	0.205	0.204	0.170 to 0.230	103	70.0 to 130	0.487	20.0
BD04993	Lead, Total	mg/L	0.0000087	0.000147	0.100	0.102	0.106	0.103	0.0850 to 0.115	102	70.0 to 130	3.85	20.0
BD04993	Lithium, Total	mg/L	0.000426	0.0154	0.200	0.203	0.202	0.198	0.170 to 0.230	102	70.0 to 130	0.494	20.0
BD04993	Magnesium, Total	mg/L	0.00694	0.0462	5.00	4.98	4.92	4.95	4.25 to 5.75	99.6	70.0 to 130	1.21	20.0
BD04993	Manganese, Total	mg/L	0.000107	0.00033	0.100	0.101	0.102	0.101	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BD04992	Mercury, Total by CVAA	mg/L	1.000E-05	0.000500	0.004	0.00399	0.004	0.00395	0.00340 to 0.00460	99.8	70.0 to 130	0.250	20.0
BD04993	Molybdenum, Total	mg/L	0.0000127	0.0002	0.100	0.101	0.101	0.0997	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BD04993	Potassium, Total	mg/L	0.0242	0.367	10.0	10.0	10.2	10.0	8.50 to 11.5	100	70.0 to 130	1.98	20.0
BD04993	Selenium, Total	mg/L	-0.0000009	0.00100	0.100	0.101	0.101	0.101	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BD04993	Silicon, Total	mg/L	-0.000941	0.0440	1.00	1.02	1.02	1.02	0.850 to 1.15	102	70.0 to 130	0.00	20.0
BD04993	Sodium, Total	mg/L	0.00172	0.0880	5.00	4.83	4.79	4.75	4.25 to 5.75	94.8	70.0 to 130	0.832	20.0
BD04993	Sulfate	mg/L	0.0758	2.0	20.0	20.5	20.1	19.9	18.0 to 22.0	102	80.0 to 120	1.97	20.0

Comments:

Reported: 4/25/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAPFB
Sample Date: 3/8/23 09:50
Customer ID:
Delivery Date: 3/9/23 11:35

Description: Gorgas Ash Pond Field Blank-1

Laboratory ID Number: BD04989

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04993	Thallium, Total	mg/L	0.0000024	0.000147	0.100	0.103	0.106	0.103	0.0850 to 0.115	103	70.0 to 130	2.87	20.0
BD04993	Total Organic Carbon	mg/L	0.00581	1.00	10.0	10.8	10.8	10.4		108	80.0 to 120	0.00	20.0

Comments:

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAPFB
Sample Date: 3/8/23 09:50
Customer ID:
Delivery Date: 3/9/23 11:35

Description: Gorgas Ash Pond Field Blank-1

Laboratory ID Number: BD04989

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04993	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.05	0.200	2.00	2.27	0.191	1.99	1.80 to 2.20	103	90.0 to 110	6.58	15.0
BD04992	Solids, Dissolved	mg/L	0.0000	25.0			2830	47.0	40.0 to 60.0			2.50	10.0

Comments:

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-35HO

Location Code: WMWGORAP
Collected: 3/8/23 10:13
Customer ID:
Submittal Date: 3/9/23 11:35

Laboratory ID Number: BD04990

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	3/14/23 12:59	3/20/23 13:56		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	3/14/23 12:59	3/20/23 13:56		1.015	1.49	mg/L	0.070035	0.406	
* Iron, Total	3/14/23 12:59	3/20/23 13:56		1.015	0.0205	mg/L	0.008120	0.0406	J
* Lithium, Total	3/14/23 12:59	3/20/23 13:56		1.015	0.0633	mg/L	0.007105	0.01999956	
* Magnesium, Total	3/14/23 12:59	3/20/23 13:56		1.015	0.356	mg/L	0.021315	0.406	J
* Silica, Total (calc.)	3/14/23 12:59	3/20/23 13:56		1	18.8	mg/L			
* Silicon, Total	3/14/23 12:59	3/20/23 13:56		1.015	8.79	mg/L	0.02030	0.25375	
* Sodium, Total	3/14/23 12:59	3/20/23 14:15		10.15	119	mg/L	0.4060	4.06	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	3/9/23 14:04	3/20/23 14:37		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Dissolved	3/9/23 14:04	3/20/23 14:37		1.015	1.44	mg/L	0.070035	0.406	
* Iron, Dissolved	3/9/23 14:04	3/20/23 14:37		1.015	0.0107	mg/L	0.008120	0.0406	J
* Lithium, Dissolved	3/9/23 14:04	3/20/23 14:37		1.015	0.0633	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	3/9/23 14:04	3/20/23 14:37		1.015	0.319	mg/L	0.021315	0.406	J
* Silica, Dissolved (calc.)	3/9/23 14:04	3/20/23 14:37		1	18.7	mg/L			
* Silicon, Dissolved	3/9/23 14:04	3/20/23 14:37		1.015	8.76	mg/L	0.02030	0.25375	
* Sodium, Dissolved	3/9/23 14:04	3/20/23 14:52		10.15	106	mg/L	0.4060	4.06	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/14/23 12:59	3/14/23 16:10		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	3/14/23 12:59	3/14/23 16:10		1.015	0.0176	mg/L	0.006090	0.05075	J
* Arsenic, Total	3/14/23 12:59	3/14/23 16:10		1.015	Not Detected	mg/L	0.000081	0.000203	U
* Barium, Total	3/14/23 12:59	3/14/23 16:10		1.015	0.0521	mg/L	0.000508	0.001015	
* Beryllium, Total	3/14/23 12:59	3/14/23 16:10		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	3/14/23 12:59	3/14/23 16:10		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	3/14/23 12:59	3/14/23 16:10		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	3/14/23 12:59	3/14/23 16:10		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	3/14/23 12:59	3/14/23 16:10		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	3/14/23 12:59	3/14/23 16:10		1.015	0.00429	mg/L	0.000152	0.001015	
* Molybdenum, Total	3/14/23 12:59	3/14/23 16:10		1.015	0.000600	mg/L	0.000102	0.000203	
* Potassium, Total	3/14/23 12:59	3/14/23 16:10		1.015	1.04	mg/L	0.169505	0.5075	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-35HO

Location Code: WMWGORAP
Collected: 3/8/23 10:13
Customer ID:
Submittal Date: 3/9/23 11:35

Laboratory ID Number: BD04990

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	3/14/23 12:59	3/14/23 16:10		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	3/14/23 12:59	3/14/23 16:10		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	3/9/23 14:04	3/9/23 15:13		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	3/9/23 14:04	3/9/23 15:13		1.015	0.00779	mg/L	0.006090	0.05075	J
* Arsenic, Dissolved	3/9/23 14:04	3/9/23 15:13		1.015	Not Detected	mg/L	0.000081	0.000203	U
* Barium, Dissolved	3/9/23 14:04	3/9/23 15:13		1.015	0.0509	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	3/9/23 14:04	3/9/23 15:13		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	3/9/23 14:04	3/9/23 15:13		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	3/9/23 14:04	3/9/23 15:13		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	3/9/23 14:04	3/9/23 15:13		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Dissolved	3/9/23 14:04	3/9/23 15:13		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	3/9/23 14:04	3/9/23 15:13		1.015	0.00426	mg/L	0.000152	0.001015	
* Molybdenum, Dissolved	3/9/23 14:04	3/9/23 15:13		1.015	0.000604	mg/L	0.000102	0.000203	
* Potassium, Dissolved	3/9/23 14:04	3/9/23 15:13		1.015	0.909	mg/L	0.169505	0.5075	
* Selenium, Dissolved	3/30/23 10:24	3/31/23 09:51		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	3/9/23 14:04	3/9/23 15:13		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ELH***								
* Mercury, Total by CVAA	3/10/23 11:42	3/10/23 16:27		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	3/9/23 14:44	3/9/23 14:44		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
* Alkalinity to pH 4.5	3/17/23 14:47	3/17/23 15:15		1	210	mg CaCO3/L		0.10	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	3/10/23 11:03	3/14/23 13:50		1	287	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
* Bicarbonate Alkalinity, (calc.)	3/17/23 14:47	3/17/23 15:15		1	206	mg CaCO3/L		1	
* Carbonate Alkalinity, (calc.)	3/17/23 14:47	3/17/23 15:15		1	4.04	mg CaCO3/L		0.5	
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	3/9/23 17:00	3/9/23 17:00		1	3.66	mg/L	1.00	2	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-35HO

Location Code: WMWGORAP
Collected: 3/8/23 10:13
Customer ID:
Submittal Date: 3/9/23 11:35

Laboratory ID Number: BD04990

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	3/14/23 10:53	3/14/23 10:53		1	8.75	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	3/14/23 13:53	3/14/23 13:53		1	0.171	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	3/21/23 12:38	3/21/23 12:38		1	15.0	mg/L	0.6	2	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	3/8/23 10:10	3/8/23 10:10			454.15	uS/cm			FA
pH	3/8/23 10:10	3/8/23 10:10			8.42	SU			FA
Temperature	3/8/23 10:10	3/8/23 10:10			17.66	C			FA
Turbidity	3/8/23 10:10	3/8/23 10:10			1.44	NTU			FA
Sulfide	3/8/23 10:10	3/8/23 10:10			0	mg/L			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/8/23 10:13
Customer ID:
Delivery Date: 3/9/23 11:35

Description: Gorgas Ash Pond - MW-35HO

Laboratory ID Number: BD04990

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04992	Aluminum, Dissolved	mg/L	0.0000156	0.0198	0.100	0.102	0.101	0.101	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BD04993	Aluminum, Total	mg/L	0.000762	0.0198	0.100	0.102	0.103	0.101	0.0850 to 0.115	102	70.0 to 130	0.976	20.0
BD04992	Antimony, Dissolved	mg/L	0.000342	0.00100	0.100	0.0951	0.0941	0.0893	0.0850 to 0.115	95.1	70.0 to 130	1.06	20.0
BD04993	Antimony, Total	mg/L	0.000323	0.00100	0.100	0.0980	0.0985	0.0970	0.0850 to 0.115	98.0	70.0 to 130	0.509	20.0
BD04992	Arsenic, Dissolved	mg/L	0.0000116	0.000200	0.100	0.101	0.101	0.0997	0.0850 to 0.115	100	70.0 to 130	0.00	20.0
BD04993	Arsenic, Total	mg/L	0.0000113	0.000200	0.100	0.0990	0.0997	0.0987	0.0850 to 0.115	99.0	70.0 to 130	0.705	20.0
BD04992	Barium, Dissolved	mg/L	-0.0000049	0.00100	0.100	0.134	0.132	0.0972	0.0850 to 0.115	101	70.0 to 130	1.50	20.0
BD04993	Barium, Total	mg/L	0.0000160	0.00100	0.100	0.106	0.105	0.106	0.0850 to 0.115	106	70.0 to 130	0.948	20.0
BD04992	Beryllium, Dissolved	mg/L	0.0000163	0.000880	0.100	0.0983	0.0957	0.100	0.0850 to 0.115	98.3	70.0 to 130	2.68	20.0
BD04993	Beryllium, Total	mg/L	0.0000143	0.000880	0.100	0.112	0.113	0.113	0.0850 to 0.115	112	70.0 to 130	0.889	20.0
BD04992	Boron, Dissolved	mg/L	-0.000677	0.0650	1.00	1.16	1.15	1.01	0.850 to 1.15	107	70.0 to 130	0.866	20.0
BD04993	Boron, Total	mg/L	-0.000855	0.0650	1.00	1.02	1.01	1.02	0.850 to 1.15	102	70.0 to 130	0.985	20.0
BD04992	Cadmium, Dissolved	mg/L	-0.0000028	0.000147	0.100	0.0982	0.0973	0.101	0.0850 to 0.115	98.2	70.0 to 130	0.921	20.0
BD04993	Cadmium, Total	mg/L	0.0000024	0.000147	0.100	0.0998	0.0993	0.0992	0.0850 to 0.115	99.8	70.0 to 130	0.502	20.0
BD04992	Calcium, Dissolved	mg/L	-0.0102	0.152	5.00	76.3	72.9	4.99	4.25 to 5.75	208	70.0 to 130	4.56	20.0
BD04993	Calcium, Total	mg/L	-0.00246	0.152	5.00	5.01	4.98	5.09	4.25 to 5.75	100	70.0 to 130	0.601	20.0
BD04993	Chloride	mg/L	0.0525	1.00	10.0	9.90	9.86	9.99	9.00 to 11.0	99.0	80.0 to 120	0.405	20.0
BD04992	Chromium, Dissolved	mg/L	0.0000121	0.000440	0.100	0.0934	0.0943	0.0984	0.0850 to 0.115	93.2	70.0 to 130	0.959	20.0
BD04993	Chromium, Total	mg/L	-0.0000133	0.000440	0.100	0.0992	0.0987	0.0969	0.0850 to 0.115	98.9	70.0 to 130	0.505	20.0
BD04992	Cobalt, Dissolved	mg/L	-0.0000046	0.000147	0.100	0.0970	0.0967	0.101	0.0850 to 0.115	96.9	70.0 to 130	0.310	20.0
BD04993	Cobalt, Total	mg/L	-0.0000001	0.000147	0.100	0.0995	0.101	0.0998	0.0850 to 0.115	99.5	70.0 to 130	1.50	20.0
BD04993	Fluoride	mg/L	0.0255	0.125	2.50	2.61	2.60	2.59	2.25 to 2.75	104	80.0 to 120	0.384	20.0
BD04992	Iron, Dissolved	mg/L	0.000514	0.0176	0.2	0.483	0.481	0.204	0.170 to 0.230	101	70.0 to 130	0.415	20.0
BD04993	Iron, Total	mg/L	0.000603	0.0176	0.2	0.206	0.205	0.204	0.170 to 0.230	103	70.0 to 130	0.487	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/8/23 10:13
Customer ID:
Delivery Date: 3/9/23 11:35

Description: Gorgas Ash Pond - MW-35HO

Laboratory ID Number: BD04990

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04992	Lead, Dissolved	mg/L	0.0000105	0.000147	0.100	0.103	0.103	0.105	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BD04993	Lead, Total	mg/L	0.0000087	0.000147	0.100	0.102	0.106	0.103	0.0850 to 0.115	102	70.0 to 130	3.85	20.0
BD04992	Lithium, Dissolved	mg/L	0.00105	0.0154	0.200	0.362	0.354	0.196	0.170 to 0.230	110	70.0 to 130	2.23	20.0
BD04993	Lithium, Total	mg/L	0.000426	0.0154	0.200	0.203	0.202	0.198	0.170 to 0.230	102	70.0 to 130	0.494	20.0
BD04992	Magnesium, Dissolved	mg/L	0.0161	0.0462	5.00	26.7	26.4	4.89	4.25 to 5.75	96.0	70.0 to 130	1.13	20.0
BD04993	Magnesium, Total	mg/L	0.00694	0.0462	5.00	4.98	4.92	4.95	4.25 to 5.75	99.6	70.0 to 130	1.21	20.0
BD04992	Manganese, Dissolved	mg/L	-0.0000135	0.00033	0.100	0.227	0.223	0.0996	0.0850 to 0.115	95.0	70.0 to 130	1.78	20.0
BD04993	Manganese, Total	mg/L	0.000107	0.00033	0.100	0.101	0.102	0.101	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BD04992	Mercury, Total by CVAA	mg/L	1.000E-05	0.000500	0.004	0.00399	0.004	0.00395	0.00340 to 0.00460	99.8	70.0 to 130	0.250	20.0
BD04992	Molybdenum, Dissolved	mg/L	0.0000290	0.0002	0.100	0.102	0.104	0.0983	0.0850 to 0.115	97.9	70.0 to 130	1.94	20.0
BD04993	Molybdenum, Total	mg/L	0.0000127	0.0002	0.100	0.101	0.101	0.0997	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BD04992	Potassium, Dissolved	mg/L	0.0167	0.367	10.0	44.4	44.5	9.88	8.50 to 11.5	99.0	70.0 to 130	0.225	20.0
BD04993	Potassium, Total	mg/L	0.0242	0.367	10.0	10.0	10.2	10.0	8.50 to 11.5	100	70.0 to 130	1.98	20.0
BD04990	Selenium, Dissolved	mg/L	0.000104	0.00100	0.100	0.100	0.102	0.106	0.0850 to 0.115	100	70.0 to 130	1.98	20.0
BD04993	Selenium, Total	mg/L	-0.0000009	0.00100	0.100	0.101	0.101	0.101	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BD04992	Silicon, Dissolved	mg/L	-0.00169	0.0440	1.00	5.56	5.55	1.01	0.850 to 1.15	100	70.0 to 130	0.180	20.0
BD04993	Silicon, Total	mg/L	-0.000941	0.0440	1.00	1.02	1.02	1.02	0.850 to 1.15	102	70.0 to 130	0.00	20.0
BD04992	Sodium, Dissolved	mg/L	0.00535	0.0880	5.00	747	705	4.70	4.25 to 5.75	1140	70.0 to 130	5.79	20.0
BD04993	Sodium, Total	mg/L	0.00172	0.0880	5.00	4.83	4.79	4.75	4.25 to 5.75	94.8	70.0 to 130	0.832	20.0
BD04993	Sulfate	mg/L	0.0758	2.0	20.0	20.5	20.1	19.9	18.0 to 22.0	102	80.0 to 120	1.97	20.0
BD04992	Thallium, Dissolved	mg/L	-0.0000019	0.000147	0.100	0.102	0.102	0.104	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BD04993	Thallium, Total	mg/L	0.0000024	0.000147	0.100	0.103	0.106	0.103	0.0850 to 0.115	103	70.0 to 130	2.87	20.0
BD04993	Total Organic Carbon	mg/L	0.00581	1.00	10.0	10.8	10.8	10.4		108	80.0 to 120	0.00	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/8/23 10:13
Customer ID:
Delivery Date: 3/9/23 11:35

Description: Gorgas Ash Pond - MW-35HO

Laboratory ID Number: BD04990

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD05362	Alkalinity to pH 4.5	mg CaCO3/L					205	50.3	45.0 to 55.0			0.487	10.0
BD04993	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.05	0.200	2.00	2.27	0.191	1.99	1.80 to 2.20	103	90.0 to 110	6.58	15.0
BD04992	Solids, Dissolved	mg/L	0.0000	25.0			2830	47.0	40.0 to 60.0			2.50	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-34HO

Location Code: WMWGORAP
Collected: 3/8/23 13:04
Customer ID:
Submittal Date: 3/9/23 11:35

Laboratory ID Number: BD04991

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	3/14/23 12:59	3/20/23 13:59		1.015	0.0911	mg/L	0.030000	0.1015	J
* Calcium, Total	3/14/23 12:59	3/20/23 14:18		101.5	64.5	mg/L	7.0035	40.6	
* Iron, Total	3/14/23 12:59	3/20/23 13:59		1.015	1.27	mg/L	0.008120	0.0406	
* Lithium, Total	3/14/23 12:59	3/20/23 13:59		1.015	0.140	mg/L	0.007105	0.01999956	
* Magnesium, Total	3/14/23 12:59	3/20/23 13:59		1.015	21.5	mg/L	0.021315	0.406	
* Silica, Total (calc.)	3/14/23 12:59	3/20/23 13:59		1	10.1	mg/L			
* Silicon, Total	3/14/23 12:59	3/20/23 13:59		1.015	4.74	mg/L	0.02030	0.25375	
* Sodium, Total	3/14/23 12:59	3/20/23 14:18		101.5	694	mg/L	4.060	40.6	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	3/9/23 14:04	3/20/23 14:40		1.015	0.0930	mg/L	0.030000	0.1015	J
* Calcium, Dissolved	3/9/23 14:04	3/20/23 14:56		101.5	75.2	mg/L	7.0035	40.6	
* Iron, Dissolved	3/9/23 14:04	3/20/23 14:40		1.015	0.294	mg/L	0.008120	0.0406	
* Lithium, Dissolved	3/9/23 14:04	3/20/23 14:40		1.015	0.144	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	3/9/23 14:04	3/20/23 14:40		1.015	22.4	mg/L	0.021315	0.406	
* Silica, Dissolved (calc.)	3/9/23 14:04	3/20/23 14:40		1	9.93	mg/L			
* Silicon, Dissolved	3/9/23 14:04	3/20/23 14:40		1.015	4.64	mg/L	0.02030	0.25375	
* Sodium, Dissolved	3/9/23 14:04	3/20/23 14:56		101.5	781	mg/L	4.060	40.6	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/14/23 12:59	3/14/23 16:14		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	4/4/23 08:39	4/4/23 11:54		1.015	0.850	mg/L	0.009135	0.05075	RA
* Arsenic, Total	3/14/23 12:59	3/14/23 16:14		1.015	0.00105	mg/L	0.000081	0.000203	
* Barium, Total	4/4/23 08:39	4/4/23 11:54		1.015	0.0695	mg/L	0.000508	0.001015	
* Beryllium, Total	3/14/23 12:59	3/14/23 16:14		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	3/14/23 12:59	3/14/23 16:14		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	3/14/23 12:59	3/14/23 16:14		1.015	0.000538	mg/L	0.000203	0.001015	J
* Cobalt, Total	3/14/23 12:59	3/14/23 16:14		1.015	0.000590	mg/L	0.000068	0.000203	
* Lead, Total	3/30/23 14:41	3/31/23 10:13		1.015	0.00103	mg/L	0.000068	0.000203	
* Manganese, Total	3/14/23 12:59	3/14/23 16:14		1.015	0.139	mg/L	0.000152	0.001015	
* Molybdenum, Total	3/30/23 14:41	3/31/23 10:13		1.015	0.0104	mg/L	0.000102	0.000203	
* Potassium, Total	3/14/23 12:59	3/14/23 16:14		1.015	36.5	mg/L	0.169505	0.5075	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
Total Aluminum and Total Barium could not be quantified. The 3rd and final analysis is reported.
First analysis Total Aluminum 0.234 mg/L and Total Barium 0.0556 mg/L.
Second analysis Total Aluminum 0.433 mg/L and Total Barium 0.0711 mg/L.

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-34HO

Location Code: WMWGORAP
Collected: 3/8/23 13:04
Customer ID:
Submittal Date: 3/9/23 11:35

Laboratory ID Number: BD04991

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	3/14/23 12:59	3/14/23 16:14		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	3/14/23 12:59	3/14/23 16:14		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	3/9/23 14:04	3/9/23 15:16		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	3/9/23 14:04	3/9/23 15:16		1.015	Not Detected	mg/L	0.006090	0.05075	U
* Arsenic, Dissolved	3/9/23 14:04	3/9/23 15:16		1.015	0.000554	mg/L	0.000081	0.000203	
* Barium, Dissolved	3/9/23 14:04	3/9/23 15:16		1.015	0.0343	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	3/9/23 14:04	3/9/23 15:16		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	3/9/23 14:04	3/9/23 15:16		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	3/9/23 14:04	3/9/23 15:16		1.015	0.000260	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	3/9/23 14:04	3/9/23 15:16		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Dissolved	3/9/23 14:04	3/9/23 15:16		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	3/9/23 14:04	3/9/23 15:16		1.015	0.140	mg/L	0.000152	0.001015	
* Molybdenum, Dissolved	3/9/23 14:04	3/9/23 15:16		1.015	0.00420	mg/L	0.000102	0.000203	
* Potassium, Dissolved	3/9/23 14:04	3/9/23 15:16		1.015	36.2	mg/L	0.169505	0.5075	
* Selenium, Dissolved	3/9/23 14:04	3/9/23 15:16		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	3/9/23 14:04	3/9/23 15:16		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ELH***								
* Mercury, Total by CVAA	3/10/23 11:42	3/10/23 16:31		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	3/9/23 14:44	3/9/23 14:44		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
* Alkalinity to pH 4.5	3/17/23 14:47	3/17/23 15:15		1	242	mg CaCO3/L		0.10	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	3/10/23 11:03	3/14/23 13:50		1	2740	mg/L		250	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
* Bicarbonate Alkalinity, (calc.)	3/17/23 14:47	3/17/23 15:15		1	241	mg CaCO3/L		1	A
* Carbonate Alkalinity, (calc.)	3/17/23 14:47	3/17/23 15:15		1	0.611	mg CaCO3/L		0.5	A
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	3/9/23 17:14	3/9/23 17:14		1	10.3	mg/L	1.00	2	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
Total Aluminum and Total Barium could not be quantified. The 3rd and final analysis is reported.
First analysis Total Aluminum 0.234 mg/L and Total Barium 0.0556 mg/L.
Second analysis Total Aluminum 0.433 mg/L and Total Barium 0.0711 mg/L.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-34HO

Location Code: WMWGORAP
Collected: 3/8/23 13:04
Customer ID:
Submittal Date: 3/9/23 11:35

Laboratory ID Number: BD04991

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	3/14/23 11:01	3/14/23 11:01		50	354	mg/L	25.00	50	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	3/14/23 13:54	3/14/23 13:54		1	0.315	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	3/21/23 12:54	3/21/23 12:54		50	1200	mg/L	30.0	100	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	3/8/23 13:01	3/8/23 13:01			4065.94	uS/cm			FA
pH	3/8/23 13:01	3/8/23 13:01			7.26	SU			FA
Temperature	3/8/23 13:01	3/8/23 13:01			19.39	C			FA
Turbidity	3/8/23 13:01	3/8/23 13:01			9.58	NTU			FA
Sulfide	3/8/23 13:01	3/8/23 13:01			2.0	mg/L			FA

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
Total Aluminum and Total Barium could not be quantified. The 3rd and final analysis is reported.
First analysis Total Aluminum 0.234 mg/L and Total Barium 0.0556 mg/L.
Second analysis Total Aluminum 0.433 mg/L and Total Barium 0.0711 mg/L.

Reported: 4/25/2023
Version: 3.5
COA_CCR

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/8/23 13:04
Customer ID:
Delivery Date: 3/9/23 11:35

Description: Gorgas Ash Pond - MW-34HO

Laboratory ID Number: BD04991

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04992	Aluminum, Dissolved	mg/L	0.0000156	0.0198	0.100	0.102	0.101	0.101	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BD04991	Aluminum, Total	mg/L	0.00134	0.0198	0.100	1.20	1.21	0.104	0.0850 to 0.115	350	70.0 to 130	0.830	20.0
BD04992	Antimony, Dissolved	mg/L	0.000342	0.00100	0.100	0.0951	0.0941	0.0893	0.0850 to 0.115	95.1	70.0 to 130	1.06	20.0
BD04993	Antimony, Total	mg/L	0.000323	0.00100	0.100	0.0980	0.0985	0.0970	0.0850 to 0.115	98.0	70.0 to 130	0.509	20.0
BD04992	Arsenic, Dissolved	mg/L	0.0000116	0.000200	0.100	0.101	0.101	0.0997	0.0850 to 0.115	100	70.0 to 130	0.00	20.0
BD04993	Arsenic, Total	mg/L	0.0000113	0.000200	0.100	0.0990	0.0997	0.0987	0.0850 to 0.115	99.0	70.0 to 130	0.705	20.0
BD04992	Barium, Dissolved	mg/L	-0.0000049	0.00100	0.100	0.134	0.132	0.0972	0.0850 to 0.115	101	70.0 to 130	1.50	20.0
BD04991	Barium, Total	mg/L	0.0000073	0.00100	0.100	0.173	0.172	0.0987	0.0850 to 0.115	104	70.0 to 130	0.580	20.0
BD04992	Beryllium, Dissolved	mg/L	0.0000163	0.000880	0.100	0.0983	0.0957	0.100	0.0850 to 0.115	98.3	70.0 to 130	2.68	20.0
BD04993	Beryllium, Total	mg/L	0.0000143	0.000880	0.100	0.112	0.113	0.113	0.0850 to 0.115	112	70.0 to 130	0.889	20.0
BD04992	Boron, Dissolved	mg/L	-0.000677	0.0650	1.00	1.16	1.15	1.01	0.850 to 1.15	107	70.0 to 130	0.866	20.0
BD04993	Boron, Total	mg/L	-0.000855	0.0650	1.00	1.02	1.01	1.02	0.850 to 1.15	102	70.0 to 130	0.985	20.0
BD04992	Cadmium, Dissolved	mg/L	-0.0000028	0.000147	0.100	0.0982	0.0973	0.101	0.0850 to 0.115	98.2	70.0 to 130	0.921	20.0
BD04993	Cadmium, Total	mg/L	0.0000024	0.000147	0.100	0.0998	0.0993	0.0992	0.0850 to 0.115	99.8	70.0 to 130	0.502	20.0
BD04992	Calcium, Dissolved	mg/L	-0.0102	0.152	5.00	76.3	72.9	4.99	4.25 to 5.75	208	70.0 to 130	4.56	20.0
BD04993	Calcium, Total	mg/L	-0.00246	0.152	5.00	5.01	4.98	5.09	4.25 to 5.75	100	70.0 to 130	0.601	20.0
BD04993	Chloride	mg/L	0.0525	1.00	10.0	9.90	9.86	9.99	9.00 to 11.0	99.0	80.0 to 120	0.405	20.0
BD04992	Chromium, Dissolved	mg/L	0.0000121	0.000440	0.100	0.0934	0.0943	0.0984	0.0850 to 0.115	93.2	70.0 to 130	0.959	20.0
BD04993	Chromium, Total	mg/L	-0.0000133	0.000440	0.100	0.0992	0.0987	0.0969	0.0850 to 0.115	98.9	70.0 to 130	0.505	20.0
BD04992	Cobalt, Dissolved	mg/L	-0.0000046	0.000147	0.100	0.0970	0.0967	0.101	0.0850 to 0.115	96.9	70.0 to 130	0.310	20.0
BD04993	Cobalt, Total	mg/L	-0.0000001	0.000147	0.100	0.0995	0.101	0.0998	0.0850 to 0.115	99.5	70.0 to 130	1.50	20.0
BD04993	Fluoride	mg/L	0.0255	0.125	2.50	2.61	2.60	2.59	2.25 to 2.75	104	80.0 to 120	0.384	20.0
BD04992	Iron, Dissolved	mg/L	0.000514	0.0176	0.2	0.483	0.481	0.204	0.170 to 0.230	101	70.0 to 130	0.415	20.0
BD04993	Iron, Total	mg/L	0.000603	0.0176	0.2	0.206	0.205	0.204	0.170 to 0.230	103	70.0 to 130	0.487	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
Total Aluminum and Total Barium could not be quantified. The 3rd and final analysis is reported.
First analysis Total Aluminum 0.234 mg/L and Total Barium 0.0556 mg/L.
Second analysis Total Aluminum 0.433 mg/L and Total Barium 0.0711 mg/L.

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/8/23 13:04
Customer ID:
Delivery Date: 3/9/23 11:35

Description: Gorgas Ash Pond - MW-34HO

Laboratory ID Number: BD04991

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04992	Lead, Dissolved	mg/L	0.0000105	0.000147	0.100	0.103	0.103	0.105	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BD04992	Lead, Total	mg/L	0.0000070	0.000147	0.100	0.105	0.105	0.101	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BD04992	Lithium, Dissolved	mg/L	0.00105	0.0154	0.200	0.362	0.354	0.196	0.170 to 0.230	110	70.0 to 130	2.23	20.0
BD04993	Lithium, Total	mg/L	0.000426	0.0154	0.200	0.203	0.202	0.198	0.170 to 0.230	102	70.0 to 130	0.494	20.0
BD04992	Magnesium, Dissolved	mg/L	0.0161	0.0462	5.00	26.7	26.4	4.89	4.25 to 5.75	96.0	70.0 to 130	1.13	20.0
BD04993	Magnesium, Total	mg/L	0.00694	0.0462	5.00	4.98	4.92	4.95	4.25 to 5.75	99.6	70.0 to 130	1.21	20.0
BD04992	Manganese, Dissolved	mg/L	-0.0000135	0.00033	0.100	0.227	0.223	0.0996	0.0850 to 0.115	95.0	70.0 to 130	1.78	20.0
BD04993	Manganese, Total	mg/L	0.000107	0.00033	0.100	0.101	0.102	0.101	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BD04992	Mercury, Total by CVAA	mg/L	1.000E-05	0.000500	0.004	0.00399	0.004	0.00395	0.00340 to 0.00460	99.8	70.0 to 130	0.250	20.0
BD04992	Molybdenum, Dissolved	mg/L	0.0000290	0.0002	0.100	0.102	0.104	0.0983	0.0850 to 0.115	97.9	70.0 to 130	1.94	20.0
BD04992	Molybdenum, Total	mg/L	0.0000193	0.0002	0.100	0.112	0.115	0.0990	0.0850 to 0.115	96.0	70.0 to 130	2.64	20.0
BD04992	Potassium, Dissolved	mg/L	0.0167	0.367	10.0	44.4	44.5	9.88	8.50 to 11.5	99.0	70.0 to 130	0.225	20.0
BD04993	Potassium, Total	mg/L	0.0242	0.367	10.0	10.0	10.2	10.0	8.50 to 11.5	100	70.0 to 130	1.98	20.0
BD04992	Selenium, Dissolved	mg/L	0.0000779	0.00100	0.100	0.0972	0.0989	0.101	0.0850 to 0.115	97.2	70.0 to 130	1.73	20.0
BD04993	Selenium, Total	mg/L	-0.0000009	0.00100	0.100	0.101	0.101	0.101	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BD04992	Silicon, Dissolved	mg/L	-0.00169	0.0440	1.00	5.56	5.55	1.01	0.850 to 1.15	100	70.0 to 130	0.180	20.0
BD04993	Silicon, Total	mg/L	-0.000941	0.0440	1.00	1.02	1.02	1.02	0.850 to 1.15	102	70.0 to 130	0.00	20.0
BD04992	Sodium, Dissolved	mg/L	0.00535	0.0880	5.00	747	705	4.70	4.25 to 5.75	1140	70.0 to 130	5.79	20.0
BD04993	Sodium, Total	mg/L	0.00172	0.0880	5.00	4.83	4.79	4.75	4.25 to 5.75	94.8	70.0 to 130	0.832	20.0
BD04993	Sulfate	mg/L	0.0758	2.0	20.0	20.5	20.1	19.9	18.0 to 22.0	102	80.0 to 120	1.97	20.0
BD04992	Thallium, Dissolved	mg/L	-0.0000019	0.000147	0.100	0.102	0.102	0.104	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BD04993	Thallium, Total	mg/L	0.0000024	0.000147	0.100	0.103	0.106	0.103	0.0850 to 0.115	103	70.0 to 130	2.87	20.0
BD04993	Total Organic Carbon	mg/L	0.00581	1.00	10.0	10.8	10.8	10.4		108	80.0 to 120	0.00	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
Total Aluminum and Total Barium could not be quantified. The 3rd and final analysis is reported.
First analysis Total Aluminum 0.234 mg/L and Total Barium 0.0556 mg/L.
Second analysis Total Aluminum 0.433 mg/L and Total Barium 0.0711 mg/L.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/8/23 13:04
Customer ID:
Delivery Date: 3/9/23 11:35

Description: Gorgas Ash Pond - MW-34HO

Laboratory ID Number: BD04991

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD05362	Alkalinity to pH 4.5	mg CaCO3/L					205	50.3	45.0 to 55.0			0.487	10.0
BD04993	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.05	0.200	2.00	2.27	0.191	1.99	1.80 to 2.20	103	90.0 to 110	6.58	15.0
BD04992	Solids, Dissolved	mg/L	0.0000	25.0			2830	47.0	40.0 to 60.0			2.50	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
Total Aluminum and Total Barium could not be quantified. The 3rd and final analysis is reported.
First analysis Total Aluminum 0.234 mg/L and Total Barium 0.0556 mg/L.
Second analysis Total Aluminum 0.433 mg/L and Total Barium 0.0711 mg/L.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-34HO Dup

Location Code: WMWGORAP
Collected: 3/8/23 13:04
Customer ID:
Submittal Date: 3/9/23 11:35

Laboratory ID Number: BD04992

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	3/14/23 12:59	3/20/23 14:02		1.015	0.0987	mg/L	0.030000	0.1015	J
* Calcium, Total	3/14/23 12:59	3/20/23 14:21		101.5	70.3	mg/L	7.0035	40.6	
* Iron, Total	3/14/23 12:59	3/20/23 14:02		1.015	2.23	mg/L	0.008120	0.0406	
* Lithium, Total	3/14/23 12:59	3/20/23 14:02		1.015	0.149	mg/L	0.007105	0.01999956	
* Magnesium, Total	3/14/23 12:59	3/20/23 14:02		1.015	23.5	mg/L	0.021315	0.406	
* Silica, Total (calc.)	3/14/23 12:59	3/20/23 14:02		1	11.7	mg/L			
* Silicon, Total	3/14/23 12:59	3/20/23 14:02		1.015	5.48	mg/L	0.02030	0.25375	
* Sodium, Total	3/14/23 12:59	3/20/23 14:21		101.5	706	mg/L	4.060	40.6	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	3/9/23 14:04	3/20/23 14:43		1.015	0.0925	mg/L	0.030000	0.1015	J
* Calcium, Dissolved	3/9/23 14:04	3/20/23 14:59		101.5	65.9	mg/L	7.0035	40.6	RA
* Iron, Dissolved	3/9/23 14:04	3/20/23 14:43		1.015	0.281	mg/L	0.008120	0.0406	
* Lithium, Dissolved	3/9/23 14:04	3/20/23 14:43		1.015	0.143	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	3/9/23 14:04	3/20/23 14:43		1.015	21.9	mg/L	0.021315	0.406	
* Silica, Dissolved (calc.)	3/9/23 14:04	3/20/23 14:43		1	9.76	mg/L			
* Silicon, Dissolved	3/9/23 14:04	3/20/23 14:43		1.015	4.56	mg/L	0.02030	0.25375	
* Sodium, Dissolved	3/9/23 14:04	3/20/23 14:59		101.5	690	mg/L	4.060	40.6	RA
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/14/23 12:59	3/14/23 16:17		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	4/4/23 08:39	4/6/23 10:26		5.075	1.73	mg/L	0.045675	0.25375	
* Arsenic, Total	3/14/23 12:59	3/14/23 16:17		1.015	0.00144	mg/L	0.000081	0.000203	
* Barium, Total	4/4/23 08:39	4/4/23 12:05		1.015	0.100	mg/L	0.000508	0.001015	
* Beryllium, Total	3/14/23 12:59	3/14/23 16:17		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	3/14/23 12:59	3/14/23 16:17		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	3/14/23 12:59	3/14/23 16:17		1.015	0.000764	mg/L	0.000203	0.001015	J
* Cobalt, Total	3/14/23 12:59	3/14/23 16:17		1.015	0.000804	mg/L	0.000068	0.000203	
* Lead, Total	3/30/23 14:41	3/31/23 10:16		1.015	0.00281	mg/L	0.000068	0.000203	
* Manganese, Total	3/14/23 12:59	3/14/23 16:17		1.015	0.154	mg/L	0.000152	0.001015	
* Molybdenum, Total	3/30/23 14:41	3/31/23 10:16		1.015	0.0160	mg/L	0.000102	0.000203	
* Potassium, Total	3/14/23 12:59	3/14/23 16:17		1.015	41.7	mg/L	0.169505	0.5075	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
Total Aluminum and Total Barium could not be quantified. The 3rd and final analysis is reported.
First analysis Total Aluminum 0.495 mg/L and Total Barium 0.0758 mg/L.
Second analysis Total Aluminum 0.832 mg/L and Total Barium 0.108 mg/L.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-34HO Dup

Location Code: WMWGORAP
Collected: 3/8/23 13:04
Customer ID:
Submittal Date: 3/9/23 11:35

Laboratory ID Number: BD04992

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	3/14/23 12:59	3/14/23 16:17		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	3/14/23 12:59	3/14/23 16:17		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	3/9/23 14:04	3/9/23 15:20		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	3/9/23 14:04	3/9/23 15:20		1.015	Not Detected	mg/L	0.006090	0.05075	U
* Arsenic, Dissolved	3/9/23 14:04	3/9/23 15:20		1.015	0.000559	mg/L	0.000081	0.000203	
* Barium, Dissolved	3/9/23 14:04	3/9/23 15:20		1.015	0.0331	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	3/9/23 14:04	3/9/23 15:20		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	3/9/23 14:04	3/9/23 15:20		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	3/9/23 14:04	3/9/23 15:20		1.015	0.000204	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	3/9/23 14:04	3/9/23 15:20		1.015	0.0000764	mg/L	0.000068	0.000203	J
* Lead, Dissolved	3/9/23 14:04	3/9/23 15:20		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	3/9/23 14:04	3/9/23 15:20		1.015	0.132	mg/L	0.000152	0.001015	
* Molybdenum, Dissolved	3/9/23 14:04	3/9/23 15:20		1.015	0.00412	mg/L	0.000102	0.000203	
* Potassium, Dissolved	3/9/23 14:04	3/9/23 15:20		1.015	34.5	mg/L	0.169505	0.5075	
* Selenium, Dissolved	3/9/23 14:04	3/9/23 15:20		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	3/9/23 14:04	3/9/23 15:20		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ELH***								
* Mercury, Total by CVAA	3/10/23 11:42	3/10/23 16:34		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	3/9/23 14:45	3/9/23 14:45		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
* Alkalinity to pH 4.5	3/17/23 14:47	3/17/23 15:15		1	241	mg CaCO3/L		0.10	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	3/10/23 11:03	3/14/23 13:50		1	2760	mg/L		250	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
* Bicarbonate Alkalinity, (calc.)	3/17/23 14:47	3/17/23 15:15		1	240	mg CaCO3/L		1	A
* Carbonate Alkalinity, (calc.)	3/17/23 14:47	3/17/23 15:15		1	0.568	mg CaCO3/L		0.5	A
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	3/9/23 17:28	3/9/23 17:28		1	10.4	mg/L	1.00	2	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
Total Aluminum and Total Barium could not be quantified. The 3rd and final analysis is reported.
First analysis Total Aluminum 0.495 mg/L and Total Barium 0.0758 mg/L.
Second analysis Total Aluminum 0.832 mg/L and Total Barium 0.108 mg/L.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-34HO Dup

Location Code: WMWGORAP
Collected: 3/8/23 13:04
Customer ID:
Submittal Date: 3/9/23 11:35

Laboratory ID Number: BD04992

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	3/14/23 11:02	3/14/23 11:02		50	356	mg/L	25.00	50	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	3/14/23 13:56	3/14/23 13:56		1	0.309	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	3/21/23 12:55	3/21/23 12:55		50	1230	mg/L	30.0	100	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	3/8/23 13:01	3/8/23 13:01			4065.94	uS/cm			FA
pH	3/8/23 13:01	3/8/23 13:01			7.26	SU			FA
Temperature	3/8/23 13:01	3/8/23 13:01			19.39	C			FA
Turbidity	3/8/23 13:01	3/8/23 13:01			9.58	NTU			FA
Sulfide	3/8/23 13:01	3/8/23 13:01			2.0	mg/L			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
Total Aluminum and Total Barium could not be quantified. The 3rd and final analysis is reported.
First analysis Total Aluminum 0.495 mg/L and Total Barium 0.0758 mg/L.
Second analysis Total Aluminum 0.832 mg/L and Total Barium 0.108 mg/L.

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General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/8/23 13:04
Customer ID:
Delivery Date: 3/9/23 11:35

Description: Gorgas Ash Pond - MW-34HO Dup

Laboratory ID Number: BD04992

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04992	Aluminum, Dissolved	mg/L	0.0000156	0.0198	0.100	0.102	0.101	0.101	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BD04991	Aluminum, Total	mg/L	0.00134	0.0198	0.100	1.20	1.21	0.104	0.0850 to 0.115	350	70.0 to 130	0.830	20.0
BD04992	Antimony, Dissolved	mg/L	0.000342	0.00100	0.100	0.0951	0.0941	0.0893	0.0850 to 0.115	95.1	70.0 to 130	1.06	20.0
BD04993	Antimony, Total	mg/L	0.000323	0.00100	0.100	0.0980	0.0985	0.0970	0.0850 to 0.115	98.0	70.0 to 130	0.509	20.0
BD04992	Arsenic, Dissolved	mg/L	0.0000116	0.000200	0.100	0.101	0.101	0.0997	0.0850 to 0.115	100	70.0 to 130	0.00	20.0
BD04993	Arsenic, Total	mg/L	0.0000113	0.000200	0.100	0.0990	0.0997	0.0987	0.0850 to 0.115	99.0	70.0 to 130	0.705	20.0
BD04992	Barium, Dissolved	mg/L	-0.0000049	0.00100	0.100	0.134	0.132	0.0972	0.0850 to 0.115	101	70.0 to 130	1.50	20.0
BD04991	Barium, Total	mg/L	0.0000073	0.00100	0.100	0.173	0.172	0.0987	0.0850 to 0.115	104	70.0 to 130	0.580	20.0
BD04992	Beryllium, Dissolved	mg/L	0.0000163	0.000880	0.100	0.0983	0.0957	0.100	0.0850 to 0.115	98.3	70.0 to 130	2.68	20.0
BD04993	Beryllium, Total	mg/L	0.0000143	0.000880	0.100	0.112	0.113	0.113	0.0850 to 0.115	112	70.0 to 130	0.889	20.0
BD04992	Boron, Dissolved	mg/L	-0.000677	0.0650	1.00	1.16	1.15	1.01	0.850 to 1.15	107	70.0 to 130	0.866	20.0
BD04993	Boron, Total	mg/L	-0.000855	0.0650	1.00	1.02	1.01	1.02	0.850 to 1.15	102	70.0 to 130	0.985	20.0
BD04992	Cadmium, Dissolved	mg/L	-0.0000028	0.000147	0.100	0.0982	0.0973	0.101	0.0850 to 0.115	98.2	70.0 to 130	0.921	20.0
BD04993	Cadmium, Total	mg/L	0.0000024	0.000147	0.100	0.0998	0.0993	0.0992	0.0850 to 0.115	99.8	70.0 to 130	0.502	20.0
BD04992	Calcium, Dissolved	mg/L	-0.0102	0.152	5.00	76.3	72.9	4.99	4.25 to 5.75	208	70.0 to 130	4.56	20.0
BD04993	Calcium, Total	mg/L	-0.00246	0.152	5.00	5.01	4.98	5.09	4.25 to 5.75	100	70.0 to 130	0.601	20.0
BD04993	Chloride	mg/L	0.0525	1.00	10.0	9.90	9.86	9.99	9.00 to 11.0	99.0	80.0 to 120	0.405	20.0
BD04992	Chromium, Dissolved	mg/L	0.0000121	0.000440	0.100	0.0934	0.0943	0.0984	0.0850 to 0.115	93.2	70.0 to 130	0.959	20.0
BD04993	Chromium, Total	mg/L	-0.0000133	0.000440	0.100	0.0992	0.0987	0.0969	0.0850 to 0.115	98.9	70.0 to 130	0.505	20.0
BD04992	Cobalt, Dissolved	mg/L	-0.0000046	0.000147	0.100	0.0970	0.0967	0.101	0.0850 to 0.115	96.9	70.0 to 130	0.310	20.0
BD04993	Cobalt, Total	mg/L	-0.0000001	0.000147	0.100	0.0995	0.101	0.0998	0.0850 to 0.115	99.5	70.0 to 130	1.50	20.0
BD04993	Fluoride	mg/L	0.0255	0.125	2.50	2.61	2.60	2.59	2.25 to 2.75	104	80.0 to 120	0.384	20.0
BD04992	Iron, Dissolved	mg/L	0.000514	0.0176	0.2	0.483	0.481	0.204	0.170 to 0.230	101	70.0 to 130	0.415	20.0
BD04993	Iron, Total	mg/L	0.000603	0.0176	0.2	0.206	0.205	0.204	0.170 to 0.230	103	70.0 to 130	0.487	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
Total Aluminum and Total Barium could not be quantified. The 3rd and final analysis is reported.
First analysis Total Aluminum 0.495 mg/L and Total Barium 0.0758 mg/L.
Second analysis Total Aluminum 0.832 mg/L and Total Barium 0.108 mg/L.

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/8/23 13:04
Customer ID:
Delivery Date: 3/9/23 11:35

Description: Gorgas Ash Pond - MW-34HO Dup

Laboratory ID Number: BD04992

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04992	Lead, Dissolved	mg/L	0.0000105	0.000147	0.100	0.103	0.103	0.105	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BD04992	Lead, Total	mg/L	0.0000070	0.000147	0.100	0.105	0.105	0.101	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BD04992	Lithium, Dissolved	mg/L	0.00105	0.0154	0.200	0.362	0.354	0.196	0.170 to 0.230	110	70.0 to 130	2.23	20.0
BD04993	Lithium, Total	mg/L	0.000426	0.0154	0.200	0.203	0.202	0.198	0.170 to 0.230	102	70.0 to 130	0.494	20.0
BD04992	Magnesium, Dissolved	mg/L	0.0161	0.0462	5.00	26.7	26.4	4.89	4.25 to 5.75	96.0	70.0 to 130	1.13	20.0
BD04993	Magnesium, Total	mg/L	0.00694	0.0462	5.00	4.98	4.92	4.95	4.25 to 5.75	99.6	70.0 to 130	1.21	20.0
BD04992	Manganese, Dissolved	mg/L	-0.0000135	0.00033	0.100	0.227	0.223	0.0996	0.0850 to 0.115	95.0	70.0 to 130	1.78	20.0
BD04993	Manganese, Total	mg/L	0.000107	0.00033	0.100	0.101	0.102	0.101	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BD04992	Mercury, Total by CVAA	mg/L	1.000E-05	0.000500	0.004	0.00399	0.004	0.00395	0.00340 to 0.00460	99.8	70.0 to 130	0.250	20.0
BD04992	Molybdenum, Dissolved	mg/L	0.0000290	0.0002	0.100	0.102	0.104	0.0983	0.0850 to 0.115	97.9	70.0 to 130	1.94	20.0
BD04992	Molybdenum, Total	mg/L	0.0000193	0.0002	0.100	0.112	0.115	0.0990	0.0850 to 0.115	96.0	70.0 to 130	2.64	20.0
BD04992	Potassium, Dissolved	mg/L	0.0167	0.367	10.0	44.4	44.5	9.88	8.50 to 11.5	99.0	70.0 to 130	0.225	20.0
BD04993	Potassium, Total	mg/L	0.0242	0.367	10.0	10.0	10.2	10.0	8.50 to 11.5	100	70.0 to 130	1.98	20.0
BD04992	Selenium, Dissolved	mg/L	0.0000779	0.00100	0.100	0.0972	0.0989	0.101	0.0850 to 0.115	97.2	70.0 to 130	1.73	20.0
BD04993	Selenium, Total	mg/L	-0.0000009	0.00100	0.100	0.101	0.101	0.101	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BD04992	Silicon, Dissolved	mg/L	-0.00169	0.0440	1.00	5.56	5.55	1.01	0.850 to 1.15	100	70.0 to 130	0.180	20.0
BD04993	Silicon, Total	mg/L	-0.000941	0.0440	1.00	1.02	1.02	1.02	0.850 to 1.15	102	70.0 to 130	0.00	20.0
BD04992	Sodium, Dissolved	mg/L	0.00535	0.0880	5.00	747	705	4.70	4.25 to 5.75	1140	70.0 to 130	5.79	20.0
BD04993	Sodium, Total	mg/L	0.00172	0.0880	5.00	4.83	4.79	4.75	4.25 to 5.75	94.8	70.0 to 130	0.832	20.0
BD04993	Sulfate	mg/L	0.0758	2.0	20.0	20.5	20.1	19.9	18.0 to 22.0	102	80.0 to 120	1.97	20.0
BD04992	Thallium, Dissolved	mg/L	-0.0000019	0.000147	0.100	0.102	0.102	0.104	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BD04993	Thallium, Total	mg/L	0.0000024	0.000147	0.100	0.103	0.106	0.103	0.0850 to 0.115	103	70.0 to 130	2.87	20.0
BD04993	Total Organic Carbon	mg/L	0.00581	1.00	10.0	10.8	10.8	10.4		108	80.0 to 120	0.00	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
Total Aluminum and Total Barium could not be quantified. The 3rd and final analysis is reported.
First analysis Total Aluminum 0.495 mg/L and Total Barium 0.0758 mg/L.
Second analysis Total Aluminum 0.832 mg/L and Total Barium 0.108 mg/L.

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/8/23 13:04
Customer ID:
Delivery Date: 3/9/23 11:35

Description: Gorgas Ash Pond - MW-34HO Dup

Laboratory ID Number: BD04992

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD05362	Alkalinity to pH 4.5	mg CaCO3/L					205	50.3	45.0 to 55.0			0.487	10.0
BD04993	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.05	0.200	2.00	2.27	0.191	1.99	1.80 to 2.20	103	90.0 to 110	6.58	15.0
BD04992	Solids, Dissolved	mg/L	0.0000	25.0			2830	47.0	40.0 to 60.0			2.50	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
Total Aluminum and Total Barium could not be quantified. The 3rd and final analysis is reported.
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Second analysis Total Aluminum 0.832 mg/L and Total Barium 0.108 mg/L.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond Equipment Blank-1

Location Code: WMWGORAPEB
Collected: 3/9/23 07:15
Customer ID:
Submittal Date: 3/9/23 11:35

Laboratory ID Number: BD04993

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	3/14/23 12:59	3/20/23 14:05		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	3/14/23 12:59	3/20/23 14:05		1.015	Not Detected	mg/L	0.070035	0.406	U
* Iron, Total	3/14/23 12:59	3/20/23 14:05		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Total	3/14/23 12:59	3/20/23 14:05		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	3/14/23 12:59	3/20/23 14:05		1.015	Not Detected	mg/L	0.021315	0.406	U
* Silica, Total (calc.)	3/14/23 12:59	3/20/23 14:05		1	Not Detected	mg/L			
* Silicon, Total	3/14/23 12:59	3/20/23 14:05		1.015	Not Detected	mg/L	0.02030	0.25375	U
* Sodium, Total	3/14/23 12:59	3/20/23 14:05		1.015	0.0917	mg/L	0.04060	0.406	J
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/14/23 12:59	3/14/23 16:21		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	3/14/23 12:59	3/14/23 16:21		1.015	Not Detected	mg/L	0.006090	0.05075	U
* Arsenic, Total	3/14/23 12:59	3/14/23 16:21		1.015	Not Detected	mg/L	0.000081	0.000203	U
* Barium, Total	3/14/23 12:59	3/14/23 16:21		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Beryllium, Total	3/14/23 12:59	3/14/23 16:21		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	3/14/23 12:59	3/14/23 16:21		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	3/14/23 12:59	3/14/23 16:21		1.015	0.000298	mg/L	0.000203	0.001015	J
* Cobalt, Total	3/14/23 12:59	3/14/23 16:21		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	3/14/23 12:59	3/14/23 16:21		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	3/14/23 12:59	3/14/23 16:21		1.015	Not Detected	mg/L	0.000152	0.001015	U
* Molybdenum, Total	3/14/23 12:59	3/14/23 16:21		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Total	3/14/23 12:59	3/14/23 16:21		1.015	Not Detected	mg/L	0.169505	0.5075	U
* Selenium, Total	3/14/23 12:59	3/14/23 16:21		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	3/14/23 12:59	3/14/23 16:21		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ELH***								
* Mercury, Total by CVAA	3/10/23 11:42	3/10/23 16:46		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	3/9/23 14:46	3/9/23 14:46		1	0.204	mg/L as N	0.20	0.3	J
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	3/10/23 11:03	3/14/23 13:50		1	Not Detected	mg/L		25	U

MDL's and RL's are adjusted for sample dilution, as applicable

Comments:

Reported: 4/25/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond Equipment Blank-1

Location Code: WMWGORAPEB
Collected: 3/9/23 07:15
Customer ID:
Submittal Date: 3/9/23 11:35

Laboratory ID Number: BD04993

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	3/9/23 17:45	3/9/23 17:45		1	Not Detected	mg/L	1.00	2	U
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	3/14/23 10:57	3/14/23 10:57		1	Not Detected	mg/L	0.50	1	U
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	3/14/23 13:57	3/14/23 13:57		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	3/21/23 12:42	3/21/23 12:42		1	Not Detected	mg/L	0.6	2	U

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments:

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAPEB
Sample Date: 3/9/23 07:15
Customer ID:
Delivery Date: 3/9/23 11:35

Description: Gorgas Ash Pond Equipment Blank-1

Laboratory ID Number: BD04993

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04993	Aluminum, Total	mg/L	0.000762	0.0198	0.100	0.102	0.103	0.101	0.0850 to 0.115	102	70.0 to 130	0.976	20.0
BD04993	Antimony, Total	mg/L	0.000323	0.00100	0.100	0.0980	0.0985	0.0970	0.0850 to 0.115	98.0	70.0 to 130	0.509	20.0
BD04993	Arsenic, Total	mg/L	0.0000113	0.000200	0.100	0.0990	0.0997	0.0987	0.0850 to 0.115	99.0	70.0 to 130	0.705	20.0
BD04993	Barium, Total	mg/L	0.0000160	0.00100	0.100	0.106	0.105	0.106	0.0850 to 0.115	106	70.0 to 130	0.948	20.0
BD04993	Beryllium, Total	mg/L	0.0000143	0.000880	0.100	0.112	0.113	0.113	0.0850 to 0.115	112	70.0 to 130	0.889	20.0
BD04993	Boron, Total	mg/L	-0.000855	0.0650	1.00	1.02	1.01	1.02	0.850 to 1.15	102	70.0 to 130	0.985	20.0
BD04993	Cadmium, Total	mg/L	0.0000024	0.000147	0.100	0.0998	0.0993	0.0992	0.0850 to 0.115	99.8	70.0 to 130	0.502	20.0
BD04993	Calcium, Total	mg/L	-0.00246	0.152	5.00	5.01	4.98	5.09	4.25 to 5.75	100	70.0 to 130	0.601	20.0
BD04993	Chloride	mg/L	0.0525	1.00	10.0	9.90	9.86	9.99	9.00 to 11.0	99.0	80.0 to 120	0.405	20.0
BD04993	Chromium, Total	mg/L	-0.0000133	0.000440	0.100	0.0992	0.0987	0.0969	0.0850 to 0.115	98.9	70.0 to 130	0.505	20.0
BD04993	Cobalt, Total	mg/L	-0.0000001	0.000147	0.100	0.0995	0.101	0.0998	0.0850 to 0.115	99.5	70.0 to 130	1.50	20.0
BD04993	Fluoride	mg/L	0.0255	0.125	2.50	2.61	2.60	2.59	2.25 to 2.75	104	80.0 to 120	0.384	20.0
BD04993	Iron, Total	mg/L	0.000603	0.0176	0.2	0.206	0.205	0.204	0.170 to 0.230	103	70.0 to 130	0.487	20.0
BD04993	Lead, Total	mg/L	0.0000087	0.000147	0.100	0.102	0.106	0.103	0.0850 to 0.115	102	70.0 to 130	3.85	20.0
BD04993	Lithium, Total	mg/L	0.000426	0.0154	0.200	0.203	0.202	0.198	0.170 to 0.230	102	70.0 to 130	0.494	20.0
BD04993	Magnesium, Total	mg/L	0.00694	0.0462	5.00	4.98	4.92	4.95	4.25 to 5.75	99.6	70.0 to 130	1.21	20.0
BD04993	Manganese, Total	mg/L	0.000107	0.00033	0.100	0.101	0.102	0.101	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BD04992	Mercury, Total by CVAA	mg/L	1.000E-05	0.000500	0.004	0.00399	0.004	0.00395	0.00340 to 0.00460	99.8	70.0 to 130	0.250	20.0
BD04993	Molybdenum, Total	mg/L	0.0000127	0.0002	0.100	0.101	0.101	0.0997	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BD04993	Potassium, Total	mg/L	0.0242	0.367	10.0	10.0	10.2	10.0	8.50 to 11.5	100	70.0 to 130	1.98	20.0
BD04993	Selenium, Total	mg/L	-0.0000009	0.00100	0.100	0.101	0.101	0.101	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BD04993	Silicon, Total	mg/L	-0.000941	0.0440	1.00	1.02	1.02	1.02	0.850 to 1.15	102	70.0 to 130	0.00	20.0
BD04993	Sodium, Total	mg/L	0.00172	0.0880	5.00	4.83	4.79	4.75	4.25 to 5.75	94.8	70.0 to 130	0.832	20.0
BD04993	Sulfate	mg/L	0.0758	2.0	20.0	20.5	20.1	19.9	18.0 to 22.0	102	80.0 to 120	1.97	20.0

Comments:

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAPEB
Sample Date: 3/9/23 07:15
Customer ID:
Delivery Date: 3/9/23 11:35

Description: Gorgas Ash Pond Equipment Blank-1

Laboratory ID Number: BD04993

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04993	Thallium, Total	mg/L	0.0000024	0.000147	0.100	0.103	0.106	0.103	0.0850 to 0.115	103	70.0 to 130	2.87	20.0
BD04993	Total Organic Carbon	mg/L	0.00581	1.00	10.0	10.8	10.8	10.4		108	80.0 to 120	0.00	20.0

Comments:

Batch QC Summary

Customer Account: WMWGORAPEB
Sample Date: 3/9/23 07:15
Customer ID:
Delivery Date: 3/9/23 11:35

Description: Gorgas Ash Pond Equipment Blank-1

Laboratory ID Number: BD04993

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04993	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.05	0.200	2.00	2.27	0.191	1.99	1.80 to 2.20	103	90.0 to 110	6.58	15.0
BD04992	Solids, Dissolved	mg/L	0.0000	25.0			2830	47.0	40.0 to 60.0			2.50	10.0

Comments:

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-33HO

Location Code: WMWGORAP
Collected: 3/14/23 12:58
Customer ID:
Submittal Date: 3/16/23 09:17

Laboratory ID Number: BD05362

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	3/17/23 06:40	3/21/23 14:42		1.015	0.0312	mg/L	0.030000	0.1015	J
* Calcium, Total	3/17/23 06:40	3/21/23 14:42		1.015	18.2	mg/L	0.070035	0.406	
* Iron, Total	3/17/23 06:40	3/21/23 14:42		1.015	0.260	mg/L	0.008120	0.0406	
* Lithium, Total	3/17/23 06:40	3/21/23 14:42		1.015	0.0440	mg/L	0.007105	0.01999956	
* Magnesium, Total	3/17/23 06:40	3/21/23 14:42		1.015	7.44	mg/L	0.021315	0.406	
* Molybdenum, Total	3/17/23 06:40	3/21/23 14:42		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Total (calc.)	3/17/23 06:40	3/21/23 14:42		1	18.7	mg/L			
* Silicon, Total	3/17/23 06:40	3/21/23 14:42		1.015	8.76	mg/L	0.02030	0.25375	
* Sodium, Total	3/17/23 06:40	3/21/23 15:32		10.15	83.6	mg/L	0.4060	4.06	RA
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	3/16/23 13:06	3/21/23 15:13		1.015	0.0303	mg/L	0.030000	0.1015	J
* Calcium, Dissolved	3/16/23 13:06	3/21/23 15:13		1.015	17.2	mg/L	0.070035	0.406	
* Iron, Dissolved	3/16/23 13:06	3/21/23 15:13		1.015	0.130	mg/L	0.008120	0.0406	
* Lithium, Dissolved	3/16/23 13:06	3/21/23 15:13		1.015	0.0437	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	3/16/23 13:06	3/21/23 15:13		1.015	7.18	mg/L	0.021315	0.406	
* Molybdenum, Dissolved	3/16/23 13:06	3/21/23 15:13		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Dissolved (calc.)	3/16/23 13:06	3/21/23 15:13		1	18.3	mg/L			
* Silicon, Dissolved	3/16/23 13:06	3/21/23 15:13		1.015	8.57	mg/L	0.02030	0.25375	
* Sodium, Dissolved	3/16/23 13:06	3/21/23 15:23		10.15	75.1	mg/L	0.4060	4.06	RA
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/17/23 06:40	3/20/23 10:52		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Total	3/17/23 06:40	3/20/23 10:52		1.015	0.0512	mg/L	0.009135	0.05075	
* Arsenic, Total	3/17/23 06:40	3/20/23 10:52		1.015	0.000523	mg/L	0.000112	0.000203	
* Barium, Total	3/17/23 06:40	3/20/23 10:52		1.015	0.443	mg/L	0.000508	0.001015	
* Beryllium, Total	3/17/23 06:40	3/20/23 10:52		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	3/17/23 06:40	3/20/23 10:52		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	3/17/23 06:40	3/20/23 10:52		1.015	0.000368	mg/L	0.000203	0.001015	J
* Cobalt, Total	3/17/23 06:40	3/20/23 10:52		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	3/17/23 06:40	3/20/23 10:52		1.015	0.000147	mg/L	0.000068	0.000203	J
* Manganese, Total	3/17/23 06:40	3/20/23 10:52		1.015	0.0240	mg/L	0.000152	0.001015	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-33HO

Location Code: WMWGORAP
Collected: 3/14/23 12:58
Customer ID:
Submittal Date: 3/16/23 09:17

Laboratory ID Number: BD05362

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	3/17/23 06:40	3/20/23 10:52		1.015	3.31	mg/L	0.169505	0.5075	
* Selenium, Total	3/17/23 06:40	3/20/23 10:52		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	3/17/23 06:40	3/20/23 10:52		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	3/16/23 13:06	3/16/23 14:23		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	3/16/23 13:06	3/16/23 14:23		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Dissolved	3/16/23 13:06	3/16/23 14:23		1.015	0.000351	mg/L	0.000112	0.000203	
* Barium, Dissolved	3/16/23 13:06	3/16/23 14:23		1.015	0.458	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	3/16/23 13:06	3/16/23 14:23		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	3/16/23 13:06	3/16/23 14:23		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	3/16/23 13:06	3/16/23 14:23		1.015	0.000266	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	3/16/23 13:06	3/16/23 14:23		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Dissolved	3/16/23 13:06	3/16/23 14:23		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	3/16/23 13:06	3/16/23 14:23		1.015	0.0215	mg/L	0.000152	0.001015	
* Potassium, Dissolved	3/16/23 13:06	3/16/23 14:23		1.015	3.18	mg/L	0.169505	0.5075	
* Selenium, Dissolved	3/16/23 13:06	3/16/23 14:23		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	3/16/23 13:06	3/16/23 14:23		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	3/22/23 16:18	3/22/23 21:03		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	3/21/23 11:24	3/21/23 11:24		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
* Alkalinity to pH 4.5	3/17/23 14:47	3/17/23 15:15		1	206	mg CaCO3/L		0.10	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	3/17/23 10:52	3/22/23 10:55		1	267	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
* Bicarbonate Alkalinity, (calc.)	3/17/23 14:47	3/17/23 15:15		1	204	mg CaCO3/L		1	
* Carbonate Alkalinity, (calc.)	3/17/23 14:47	3/17/23 15:15		1	1.63	mg CaCO3/L		0.5	
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	3/16/23 15:06	3/16/23 15:06		1	2.82	mg/L	1.00	2	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-33HO

Location Code: WMWGORAP
Collected: 3/14/23 12:58
Customer ID:
Submittal Date: 3/16/23 09:17

Laboratory ID Number: BD05362

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: CES***								
* Chloride	3/24/23 09:47	3/24/23 09:47		1	15.3	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: CES***								
* Fluoride	3/28/23 09:30	3/28/23 09:30		1	0.248	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	3/21/23 12:36	3/21/23 12:36		1	15.9	mg/L	0.6	2	
Analytical Method: Field Measurements	***Analyst: AWG***								
Conductivity	3/14/23 12:53	3/14/23 12:53			453.03	uS/cm			FA
pH	3/14/23 12:53	3/14/23 12:53			7.71	SU			FA
Temperature	3/14/23 12:53	3/14/23 12:53			17.36	C			FA
Turbidity	3/14/23 12:53	3/14/23 12:53			8.41	NTU			FA
Sulfide	3/14/23 12:53	3/14/23 12:53			0	mg/L			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/14/23 12:58
Customer ID:
Delivery Date: 3/16/23 09:17

Description: Gorgas Ash Pond - MW-33HO

Laboratory ID Number: BD05362

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD05362	Aluminum, Dissolved	mg/L	0.000119	0.0198	0.100	0.108	0.109	0.103	0.0850 to 0.115	108	70.0 to 130	0.922	20.0
BD05362	Aluminum, Total	mg/L	0.000315	0.0198	0.100	0.157	0.160	0.0981	0.0850 to 0.115	106	70.0 to 130	1.89	20.0
BD05362	Antimony, Dissolved	mg/L	0.000253	0.00100	0.100	0.0977	0.0972	0.0944	0.0850 to 0.115	97.7	70.0 to 130	0.513	20.0
BD05362	Antimony, Total	mg/L	0.000176	0.00100	0.100	0.0938	0.0952	0.0904	0.0850 to 0.115	93.8	70.0 to 130	1.48	20.0
BD05362	Arsenic, Dissolved	mg/L	0.0000064	0.000200	0.100	0.105	0.103	0.103	0.0850 to 0.115	105	70.0 to 130	1.92	20.0
BD05362	Arsenic, Total	mg/L	0.0000163	0.000200	0.100	0.103	0.102	0.104	0.0850 to 0.115	102	70.0 to 130	0.976	20.0
BD05362	Barium, Dissolved	mg/L	0.0000007	0.00100	0.100	0.563	0.559	0.0975	0.0850 to 0.115	105	70.0 to 130	0.713	20.0
BD05362	Barium, Total	mg/L	0.0000041	0.00100	0.100	0.542	0.554	0.0905	0.0850 to 0.115	99.0	70.0 to 130	2.19	20.0
BD05362	Beryllium, Dissolved	mg/L	0.0000226	0.000880	0.100	0.0994	0.103	0.102	0.0850 to 0.115	99.4	70.0 to 130	3.56	20.0
BD05362	Beryllium, Total	mg/L	0.0000157	0.000880	0.100	0.0902	0.0936	0.0931	0.0850 to 0.115	90.2	70.0 to 130	3.70	20.0
BD05362	Boron, Dissolved	mg/L	-0.000287	0.0650	1.00	1.01	1.01	0.945	0.850 to 1.15	98.0	70.0 to 130	0.00	20.0
BD05362	Boron, Total	mg/L	-0.000198	0.0650	1.00	1.01	1.00	0.949	0.850 to 1.15	97.9	70.0 to 130	0.995	20.0
BD05362	Cadmium, Dissolved	mg/L	0.0000026	0.000147	0.100	0.107	0.104	0.101	0.0850 to 0.115	107	70.0 to 130	2.84	20.0
BD05362	Cadmium, Total	mg/L	0.0000038	0.000147	0.100	0.0958	0.0988	0.0982	0.0850 to 0.115	95.8	70.0 to 130	3.08	20.0
BD05362	Calcium, Dissolved	mg/L	0.00365	0.152	5.00	21.9	22.2	4.69	4.25 to 5.75	94.0	70.0 to 130	1.36	20.0
BD05362	Calcium, Total	mg/L	-0.00647	0.152	5.00	22.4	22.5	4.60	4.25 to 5.75	84.0	70.0 to 130	0.445	20.0
BD05372	Chloride	mg/L	0.157	1.00	10.0	17.1	17.2	9.90	9.00 to 11.0	103	80.0 to 120	0.583	20.0
BD05362	Chromium, Dissolved	mg/L	0.0000072	0.000440	0.100	0.101	0.101	0.100	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BD05362	Chromium, Total	mg/L	0.0000864	0.000440	0.100	0.102	0.102	0.102	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BD05362	Cobalt, Dissolved	mg/L	0.0000022	0.000147	0.100	0.106	0.105	0.105	0.0850 to 0.115	106	70.0 to 130	0.948	20.0
BD05362	Cobalt, Total	mg/L	-0.0000077	0.000147	0.100	0.102	0.103	0.103	0.0850 to 0.115	102	70.0 to 130	0.976	20.0
BD05372	Fluoride	mg/L	0.00990	0.125	2.50	2.63	2.66	2.61	2.25 to 2.75	101	80.0 to 120	1.13	20.0
BD05362	Iron, Dissolved	mg/L	-0.00279	0.0176	0.2	0.326	0.327	0.195	0.170 to 0.230	98.0	70.0 to 130	0.306	20.0
BD05362	Iron, Total	mg/L	-0.00260	0.0176	0.2	0.457	0.459	0.191	0.170 to 0.230	98.5	70.0 to 130	0.437	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/14/23 12:58
Customer ID:
Delivery Date: 3/16/23 09:17

Description: Gorgas Ash Pond - MW-33HO

Laboratory ID Number: BD05362

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD05362	Lead, Dissolved	mg/L	0.0000076	0.000147	0.100	0.0999	0.104	0.104	0.0850 to 0.115	99.9	70.0 to 130	4.02	20.0
BD05362	Lead, Total	mg/L	0.0000053	0.000147	0.100	0.106	0.105	0.108	0.0850 to 0.115	106	70.0 to 130	0.948	20.0
BD05362	Lithium, Dissolved	mg/L	0.000006	0.0154	0.200	0.240	0.239	0.188	0.170 to 0.230	98.2	70.0 to 130	0.418	20.0
BD05362	Lithium, Total	mg/L	0.000884	0.0154	0.200	0.241	0.238	0.192	0.170 to 0.230	98.5	70.0 to 130	1.25	20.0
BD05362	Magnesium, Dissolved	mg/L	-0.0111	0.0462	5.00	11.8	12.0	4.68	4.25 to 5.75	92.4	70.0 to 130	1.68	20.0
BD05362	Magnesium, Total	mg/L	-0.00639	0.0462	5.00	12.2	12.1	4.70	4.25 to 5.75	95.2	70.0 to 130	0.823	20.0
BD05362	Manganese, Dissolved	mg/L	0.0000012	0.00033	0.100	0.125	0.124	0.103	0.0850 to 0.115	104	70.0 to 130	0.803	20.0
BD05362	Manganese, Total	mg/L	0.0000075	0.00033	0.100	0.127	0.127	0.103	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BD05362	Mercury, Total by CVAA	mg/L	4.000E-05	0.000500	0.004	0.0038	0.00379	0.00405	0.00340 to 0.00460	95.0	70.0 to 130	0.264	20.0
BD05362	Molybdenum, Dissolved	mg/L	-0.000438	0.0100	0.2	0.200	0.201	0.192	0.170 to 0.230	100	70.0 to 130	0.499	20.0
BD05362	Molybdenum, Total	mg/L	0.000	0.0100	0.2	0.200	0.199	0.194	0.170 to 0.230	100	70.0 to 130	0.501	20.0
BD05362	Potassium, Dissolved	mg/L	0.00337	0.367	10.0	12.9	13.0	9.91	8.50 to 11.5	97.2	70.0 to 130	0.772	20.0
BD05362	Potassium, Total	mg/L	0.00543	0.367	10.0	13.0	13.0	9.94	8.50 to 11.5	96.9	70.0 to 130	0.00	20.0
BD05362	Selenium, Dissolved	mg/L	-0.0000051	0.00100	0.100	0.108	0.107	0.103	0.0850 to 0.115	108	70.0 to 130	0.930	20.0
BD05362	Selenium, Total	mg/L	0.0000229	0.00100	0.100	0.110	0.110	0.113	0.0850 to 0.115	110	70.0 to 130	0.00	20.0
BD05362	Silicon, Dissolved	mg/L	0.000326	0.0440	1.00	9.58	9.61	0.948	0.850 to 1.15	101	70.0 to 130	0.313	20.0
BD05362	Silicon, Total	mg/L	-0.000005	0.0440	1.00	9.71	9.74	0.958	0.850 to 1.15	95.0	70.0 to 130	0.308	20.0
BD05362	Sodium, Dissolved	mg/L	0.0360	0.0880	5.00	83.8	82.2	4.49	4.25 to 5.75	174	70.0 to 130	1.93	20.0
BD05362	Sodium, Total	mg/L	0.00256	0.0880	5.00	80.8	81.8	4.57	4.25 to 5.75	-56.0	70.0 to 130	1.23	20.0
BD04993	Sulfate	mg/L	0.0758	2.0	20.0	20.5	20.1	19.9	18.0 to 22.0	102	80.0 to 120	1.97	20.0
BD05362	Thallium, Dissolved	mg/L	0.0000063	0.000147	0.100	0.0970	0.102	0.102	0.0850 to 0.115	97.0	70.0 to 130	5.03	20.0
BD05362	Thallium, Total	mg/L	0.0000033	0.000147	0.100	0.102	0.101	0.105	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BD05362	Total Organic Carbon	mg/L	0.0187	1.00	10.0	13.4	14.2	10.7		106	80.0 to 120	5.80	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/14/23 12:58
Customer ID:
Delivery Date: 3/16/23 09:17

Description: Gorgas Ash Pond - MW-33HO

Laboratory ID Number: BD05362

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD05362	Alkalinity to pH 4.5	mg CaCO3/L					205	50.3	45.0 to 55.0			0.487	10.0
BD05362	Nitrogen, Nitrate/Nitrite	mg/L as N	0.08	0.200	2.00	1.94	0.049	2.03	1.80 to 2.20	97.0	90.0 to 110	0.00	15.0
BD05362	Solids, Dissolved	mg/L	1.00	25.0			264	47.0	40.0 to 60.0			1.13	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Definitions

Project Number: WMWGORAP_1403

Abbreviation	Description
DF	Dilution Factor
LCS	Lab Control Sample
LFM	Lab Fortified Matrix
MB	Method Blank
MDL	Method Detection Limit; minimum concentration of an analyte that can be determined with 99% confidence that the concentration is greater than zero.
MS	Matrix Spike
MSD	Matrix Spike Duplicate
Prec	Precision (% RPD)
Q	Qualifier; comment used to note deviations or additional information associated with analytical results.
QC	Quality Control
Rec	Recovery of Matrix Spike
RL	Reporting Limit; lowest concentration at which an analyte can be quantitatively measured.
Vio Spec	Violation Specification; regulatory limit which has been exceeded by the sample analyzed.

Qualifier	Description
A	Bicarbonate alkalinity, carbonate alkalinity, hydroxide alkalinity, free carbon dioxide, and/or total carbon dioxide calculations are estimates due to pH>10SU and/or TDS>500mg/L.
FA	Field results were reviewed by the Water Field Group. Refer to APC Field Case Narrative.
J	Reported value is an estimate because concentration is less than reporting limit.
RA	Matrix spike is invalid due to sample concentration.
U	Compound was analyzed, but not detected.

Alabama Power
Lab& Field SERVICES

Chain of Custody Groundwater

APC General Testing Laboratory

☑ Field Complete ☐ Outside Lab
☑ Lab Complete

Lab ETA

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Collector	Dallas Gentry	Requested By	Greg Dyer
		Location	Gorgas Ash Pond

Bottles

1	Metals	500 mL	3	Hg	250 mL	5	TDS/Alkalinity	500 mL	7	N/A	N/A
2	Dissolved Metals	500 mL	4	Nitrite, Nitrate; TOC	250 mL	6	Anions	500 mL	8	N/A	N/A

Comments

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id	pH Check
FB-1	03/08/2023	09:50	5	Field Blank		BD04989	☑
MW-35HO	03/08/2023	10:13	6	Groundwater		BD04990	☑
MW-34HO	03/08/2023	13:04	6	Groundwater		BD04991	☑
MW-34HO dup	03/08/2023	13:04	6	Sample Duplicate		BD04992	☑
EB-1	03/09/2023	07:15	5	Equipment Blank		BD04993	☑
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Relinquished By	Received By	Date/Time
		03/09/2023 10:54

SmarTroll ID	7586-41443-5-2	Cooler Temp	1.8 °C
Turbidity ID	9901-57263-1-1	Thermometer ID	10614-61208-2-1
Sample Event	1403	pH Strip ID	10620-61238-10-4

Bottles/Pre-Preserved Bottles are provided by the GTL

Total Metals and Alkalinity are not performed on Dissolved Sets

Dissolved Metals and Alkalinity are not performed on blanks i.e. Field Blanks or Equipment Blanks

Alabama Power
Lab & Field SERVICES

Chain of Custody Groundwater

APC General Testing Laboratory

☑ Field Complete ☐ Outside Lab
☑ Lab Complete

Lab ETA

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Collector	Anthony Goggins	Requested By	Greg Dyer
		Location	Gorgas Ash Pond

Bottles

1	Metals	500 mL	3	Hg	250 mL	5	TDS/Alkalinity	500 mL	7	N/A	N/A
2	Dissolved Metals	500 mL	4	Nitrite, Nitrate; TOC	250 mL	6	Anions	500 mL	8	N/A	N/A

Comments

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id	pH Check
MW-33HO	03/14/2023	12:58	6	Groundwater		BD05362	☑
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Relinquished By	Received By	Date/Time
		03/16/2023 08:37

SmarTroll ID	7586-41446-5-5	Cooler Temp	0.4 °C
Turbidity ID	9830-57039-1-1	Thermometer ID	10614-61208-2-1
Sample Event	1403	pH Strip ID	7453-40656-10-8

Bottles/Pre-Preserved Bottles are provided by the GTL

Total Metals and Alkalinity are not performed on Dissolved Sets

Dissolved Metals and Alkalinity are not performed on blanks i.e. Field Blanks or Equipment Blanks

Alabama Power
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Chain of Custody
Groundwater
APC General Testing Laboratory

☑ Field Complete
☑ Lab Complete
☑ Outside Lab

Lab ETA:

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Collector	Dallas Gentry	Requested By	Greg Dyer
		Location	Gorgas Ash Pond

Bottles

1	Radium	1 L	3	N/A	N/A	5	N/A	N/A	7	N/A	N/A
2	N/A	N/A	4	N/A	N/A	6	N/A	N/A	8	N/A	N/A

Comments:

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id	pH Check
FB-1	03/08/2023	09:50	1	Field Blank		BD04994	☑
MW-35HO	03/08/2023	10:13	1	Groundwater		BD04995	☑
MW-34HO	03/08/2023	13:04	1	Groundwater		BD04996	☑
MW-34HO dup	03/08/2023	13:04	1	Sample Duplicate		BD04997	☑
EB-1	03/09/2023	07:15	1	Equipment Blank		BD04998	☑
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Relinquished By	Received By	Date/Time
Dallas Gentry		03/09/2023 10:54

SmarTroll ID	7586-41443-5-2	Cooler Temp	N/A
Turbidity ID	9901-57263-1-1	Thermometer ID	N/A
Sample Event	1403	pH Strip ID	10620-61238-10-4

Bottles/Pre-Preserved Bottles are provided by the GTL

Total Metals and Alkalinity are not performed on Dissolved Sets

Dissolved Metals and Alkalinity are not performed on blanks i.e. Field Blanks or Equipment Blanks

9.0

Alabama Power
Lab & Field SERVICES

Chain of Custody Groundwater

APC General Testing Laboratory

☑ Field Complete ☑ Outside Lab
☑ Lab Complete

Lab ETA

Requested Complete Date: Routine
Collector: Anthony Goggins
Results To: Dustin Brooks, Greg Dyer
Requested By: Greg Dyer
Location: Gorgas Ash Pond

Bottles

1	Radium	1 L	3	N/A	N/A	5	N/A	N/A	7	N/A	N/A
2	N/A	N/A	4	N/A	N/A	6	N/A	N/A	8	N/A	N/A

Comments: MS/MSD collected

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id	pH Check
MW-33HO	03/14/2023	12:58	3	Groundwater		BD05363	☑
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Relinquished By	Received By	Date/Time
		03/16/2023 08:37

SmarTroll ID: 7586-41446-5-5
Turbidity ID: 9830-57039-1-1
Sample Event: 1403
Cooler Temp: N/A
Thermometer ID: N/A
pH Strip ID: 7453-40656-10-8

Bottles/Pre-Preserved Bottles are provided by the GTL

Total Metals and Alkalinity are not performed on Dissolved Sets

Dissolved Metals and Alkalinity are not performed on blanks i.e. Field Blanks or Equipment Blanks

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040
205-664-6001

Analytical Report

Sample Group : WMWGORAP_1402

Project/Site : Gorgas Ash Pond
Parrish, AL 35580

For : Southern Company Services
3535 Colonnade Parkway
Birmingham, AL 35243

Attention : Dustin Brooks & Greg Dyer

Released By : Brooke Caton
tbwill@southernco.com
(205) 664-6101

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040
(205) 664-6001

April 12, 2023

Dear Dustin Brooks,

Enclosed are the analytical results for sample(s) received by the laboratory on March 07, 2023.
All results reported herein conform to the laboratory’s most current Quality Assurance Manual. Results marked with an asterisk conform to the most current applicable TNI/NELAC requirements. Exceptions will be noted in the body of the report.

Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2023

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Quality Control: Brooke Caton

Digitally signed by Brooke Caton
Date: 2023.04.12
11:03:54 -05'00'

Supervision: T Durant Maske

Digitally signed by T Durant Maske
DN: cn=T Durant Maske gn=T Durant Maske c=US United States l=US United States e=tdmaske@southernco.com
Reason: I am the author of this document
Location:
Date: 2023-04-12 14:38-05:00

Case Narrative

Total Metals ICP

Gorgas Ash Pond

WMWGORAP_1402

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
BD04765	749271	WMWGORAP_1402
BD04766	749271	WMWGORAP_1402
BD04767	749271	WMWGORAP_1402
BD04768	749271	WMWGORAP_1402

4. All of the above samples were analyzed by EPA 200.7 and prepared by EPA 1638.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- Prior to sample analysis, an initial calibration verification (ICV) was analyzed, and all criteria were met.
- Following the ICV, an initial calibration blank (ICB) was analyzed, and all criteria were met.
- All continued calibration verification (CCV) were within the acceptance criteria for the requested analytes.
- All continued calibration blanks (CCB) were analyzed, and all criteria were met.
- A preparation method blank and laboratory control sample were digested and analyzed with the samples in each digestion batch.
- All laboratory control sample criteria were met.
- The method blank associated with each digestion batch passed all acceptance criteria for all requested analytes.
- All calibration curve requirements were within acceptance criteria.
- All sample internal standard criteria were met.
- The spectral interference check associated with EPA 200.7 was analyzed and all acceptance criteria were met.
- It is noted that the QC summary page typically provides the QC results from the original batch analytical sequence. If dilutions were subsequently performed to bring sample concentrations within the calibration range, any additional QC data from the dilution analyses may need to be obtained from the laboratory. Any qualifications applied to original analyses or dilution re-analyses are based upon QC data available at the time of review.

Matrix Specific Quality Control Procedures:

Revision 5

Similarity of matrix and therefore relevance of matrix specific QC results should not be automatically inferred for any sample other than the sample selected for QC.

- A matrix spike and matrix spike duplicate were digested and analyzed with each ICP batch. All acceptance criteria for accuracy were met.
- A matrix spike and matrix spike duplicate were digested and analyzed with each ICP batch. All acceptance criteria for precision were met.

7. The following sample was diluted due to the analyzed sample concentration being greater than the high standard of the calibration curve:

Sample ID	Analyte	Dilution Factor
BD04765	Sodium	10.15
BD04766	Sodium	10.15

8. The raw data results are shown with dilution factors included.

Case Narrative

Dissolved Metals ICP

Gorgas Ash Pond

WMWGORAP_1402

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
BD04765	749273	WMWGORAP_1402
BD04766	749273	WMWGORAP_1402

4. All of the above samples were analyzed and prepared by EPA 200.7 for dissolved analysis.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- Prior to sample analysis, an initial calibration verification (ICV) was analyzed, and all criteria were met.
- Following the ICV, an initial calibration blank (ICB) was analyzed, and all criteria were met.
- All continued calibration verification (CCV) were within the acceptance criteria for the requested analytes.
- All continued calibration blanks (CCB) were analyzed, and all criteria were met.
- Due to no filtered method blank (MB) or laboratory control sample (LCS) submitted with the sample set, an unfiltered MB and LCS were analyzed with the samples in each batch.
- All laboratory control sample criteria were met.
- The method blank associated with each batch passed all acceptance criteria for all requested analytes.
- All calibration curve requirements were within acceptance criteria.
- All sample internal standard criteria were met.
- The spectral interference check associated with EPA 200.7 was analyzed and all acceptance criteria were met.
- It is noted that the QC summary page typically provides the QC results from the original batch analytical sequence. If dilutions were subsequently performed to bring sample concentrations within the calibration range, any additional QC data from the dilution analyses may need to be obtained from the laboratory. Any qualifications applied to original analyses or dilution re-analyses are based upon QC data available at the time of review.

Matrix Specific Quality Control Procedures:

Similarity of matrix and therefore relevance of matrix specific QC results should not be automatically inferred for any sample other than the sample selected for QC.

Revision 5

- A matrix spike and matrix spike duplicate were analyzed with each ICP batch. All acceptance criteria for accuracy were met except for the following:
    - BD04766 Sodium MS/MSD spike levels were less than 30% of the sample concentrations.
- A matrix spike and matrix spike duplicate were analyzed with each ICP batch. All acceptance criteria for precision were met.

7. The following samples were diluted due to the analyzed sample concentration being greater than the high standard of the calibration curve:

Sample ID	**Analyte**	**Dilution Factor**
BD04765	Sodium	10.15
BD04766	Sodium	10.15

8. The raw data results are shown with dilution factors included.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Case Narrative

Alabama Power

Total Metals ICPMS

Gorgas Ash Pond

WMWGORAP_1402

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	**Batch ID**	**Project ID**
BD04765	749687	WMWGORAP_1402
BD04766	749687	WMWGORAP_1402
BD04767	749687	WMWGORAP_1402
BD04768	749687	WMWGORAP_1402

4. All of the above samples were analyzed by EPA 200.8 and prepared by EPA 1638.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- All tune and calibration met criteria for all requested analytes.
- Prior to sample analysis, an initial calibration verification (ICV) was analyzed, and all criteria were met.
- Following the ICV, an initial calibration blank (ICB) was analyzed and was below the limit of quantitation for all requested analytes.
- All continued calibration verification (CCV) were within the acceptance criteria for the requested analytes.
- All continued calibration blanks (CCB) were below the limit of quantitation for the requested analytes.
- A preparation method blank and laboratory control sample were digested and analyzed with the samples in each digestion batch.
- All laboratory control sample criteria were met.
- The method blank associated with each digestion batch passed all acceptance criteria for all requested analytes.
- The interference check samples associated with EPA 200.8 were analyzed and passed for all requested analytes.
- All sample internal standard criteria were met.
- It is noted that the QC summary page typically provides the QC results from the original batch analytical sequence. If dilutions were subsequently performed to bring sample concentrations within the calibration range, any additional QC data from the dilution analyses may need to be obtained from the laboratory. Any qualifications applied to original analyses or dilution re-analyses are based upon QC data available at the time of review.

Matrix Specific Quality Control Procedures:

Revision 5

Similarity of matrix and therefore relevance of matrix specific QC results should not be automatically inferred for any sample other than the sample selected for QC.

- A matrix spike and matrix spike duplicate were digested and analyzed with each ICPMS batch. All acceptance criteria for accuracy were met.
- A matrix spike and matrix spike duplicate were digested and analyzed with each ICPMS batch. All acceptance criteria for precision were met.

7. All samples were analyzed without a dilution factor.
8. The raw data results are shown with dilution factors included.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Case Narrative

Dissolved Metals ICPMS

Gorgas Ash Pond

WMWGORAP_1402

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
BD04765	749595	WMWGORAP_1402
BD04766	749595	WMWGORAP_1402

4. All of the above samples were analyzed and prepared by EPA 200.8 for dissolved analysis.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- All tune and calibration met criteria for all requested analytes.
- Prior to sample analysis, an initial calibration verification (ICV) was analyzed, and all criteria were met.
- Following the ICV, an initial calibration blank (ICB) was analyzed and was below the limit of quantitation for all requested analytes.
- All continued calibration verification (CCV) were within the acceptance criteria for the requested analytes.
- All continued calibration blanks (CCB) were below the limit of quantitation for the requested analytes.
- Due to no filtered method blank (MB) or laboratory control sample (LCS) submitted with the sample set, an unfiltered MB and LCS were analyzed with the samples in each batch.
- All laboratory control sample criteria were met.
- The method blank associated with each preparation batch passed all acceptance criteria for all requested analytes.
- The interference check samples associated with EPA 200.8 were analyzed and passed for all requested analytes.
- All sample internal standard criteria were met.
- It is noted that the QC summary page typically provides the QC results from the original batch analytical sequence. If dilutions were subsequently performed to bring sample concentrations within the calibration range, any additional QC data from the dilution analyses may need to be obtained from the laboratory. Any qualifications applied to original analyses or dilution re-analyses are based upon QC data available at the time of review.

Matrix Specific Quality Control Procedures:

Similarity of matrix and therefore relevance of matrix specific QC results should not be automatically inferred for any

sample other than the sample selected for QC.

- A matrix spike and matrix spike duplicate were analyzed with each ICPMS batch. All acceptance criteria for accuracy were met.
- A matrix spike and matrix spike duplicate were analyzed with each ICPMS batch. All acceptance criteria for precision were met.

7. All samples were analyzed without a dilution factor.
8. The raw data results are shown with dilution factors included.

Case Narrative

Mercury

Gorgas Ash Pond

WMWGORAP_1402

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
BD04765	749347	WMWGORAP_1402
BD04766	749347	WMWGORAP_1402
BD04767	749347	WMWGORAP_1402
BD04768	749347	WMWGORAP_1402

4. All of the above samples were analyzed and prepared by EPA 245.1.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- Prior to sample analysis, an initial calibration verification (ICV) was analyzed, and all criteria were met.
- Following the ICV, an initial calibration blank (ICB) was analyzed and was below the method detection limit for the requested analyte.
- All continued calibration verification (CCV) were within the acceptance criteria for the requested analyte.
- All continued calibration blanks (CCB) were below the limit of quantitation for the requested analyte.
- A preparation method blank and laboratory control sample were digested and analyzed with the samples in each digestion batch.
- All laboratory control sample criteria were met.
- The method blank associated with each digestion batch was below the limit of quantitation for the requested analyte.
- All calibration met criteria for the requested analyte.
- All response signals were satisfactory.

Matrix Specific Quality Control Procedures:

Similarity of matrix and therefore relevance of matrix specific QC results should not be automatically inferred for any sample other than the sample selected for QC.

- A matrix spike and matrix spike duplicate were digested and analyzed with each analytical batch. All acceptance criteria for accuracy were met.

Revision 5

- A matrix spike and matrix spike duplicate were digested and analyzed with each analytical batch. All acceptance criteria for precision were met.

7. All samples were analyzed without a dilution factor.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Case Narrative

Alabama Power

Total Dissolved Solids

Gorgas Ash Pond

WMWGORAP_1402

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	**Batch ID**	**Project ID**
BD04765	749241	WMWGORAP_1402
BD04766	749241	WMWGORAP_1402
BD04767	749241	WMWGORAP_1402
BD04768	749241	WMWGORAP_1402

4. All of the above samples were prepared and analyzed by Standard Method 2540C.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- A Method Blank was analyzed with each batch. All criteria were met.
- All final weights of samples, standards, and blanks agreed within 0.5mg of the previous weight.
- A sample duplicate was analyzed with each batch, and RPD was ≤ 10%.
- A laboratory control sample was analyzed with each batch. All criteria were met.
- Samples were between 2.5mg and 200mg residue.
- All samples with residue <2.5mg had the maximum volume of 150mL filtered. Affected samples are as follows:
    - BD04767
    - BD04768

Revision 5

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Case Narrative

Alkalinity

Gorgas Ash Pond

WMWGORAP_1402

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	**Batch ID**	**Project ID**
BD04765	750342, 750343, 750344	WMWGORAP_1402
BD04766	750342, 750343, 750344	WMWGORAP_1402

4. All of the above samples were prepared and analyzed by Standard Method 2320B.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- An initial pH check was analyzed with each batch. The acceptance criteria were met.
- A final pH check was analyzed with each batch. The acceptance criteria were met.
- An alkalinity laboratory control sample was analyzed with each batch. Range criteria of within 10% of true value was met.
- An alkalinity sample duplicate was analyzed with each batch. Precision criteria less than 10 RPD was met.

Case Narrative

Anions

Gorgas Ash Pond

WMWGORAP_1402

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
BD04765	749889, 749892, 750395	WMWGORAP_1402
BD04766	749889, 749892, 750395	WMWGORAP_1402
BD04767	749889, 749892, 750395	WMWGORAP_1402
BD04768	749889, 749892, 750395	WMWGORAP_1402

4. All of the above samples were analyzed and prepared by SM4500 Cl E, SM4500 F G, and SM4500 SO4 E.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- All calibration met criteria for the requested analyte.
- Prior to sample analysis, an initial calibration verification (ICV) was analyzed, and all criteria were met.
- Prior to sample analysis, an initial calibration blank (ICB) was analyzed and was below half the limit of quantitation for the requested analyte.
- All continued calibration verification (CCV) were within the acceptance criteria for the requested analyte.
- All continued calibration blanks (CCB) were below the limit of quantitation for the requested analyte.
- It is noted that the QC summary page typically provides the QC results from the original batch analytical sequence. If dilutions were subsequently performed to bring sample concentrations within the calibration range, any additional QC data from the dilution analyses may need to be obtained from the laboratory. Any qualifications applied to original analyses or dilution re-analyses are based upon QC data available at the time of review.

Matrix Specific Quality Control Procedures:

Similarity of matrix and therefore relevance of matrix specific QC results should not be automatically inferred for any sample other than the sample selected for QC.

- A matrix spike and matrix spike duplicate were analyzed with each batch. All acceptance criteria for accuracy were met.

Revision 5

- A matrix spike and matrix spike duplicate were analyzed with each batch. All acceptance criteria for precision were met.

7. The following samples were diluted due to the analyzed sample concentration being greater than the high standard of the calibration curve:

Sample ID	Analyte	Dilution Factor
BD04765	Chloride	4
BD04766	Chloride	4

8. The raw data results are shown with dilution factors included.

Case Narrative

Nitrate-Nitrite

Gorgas Ash Pond

WMWGORAP_1402

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	**Batch ID**	**Project ID**
BD04765	749699	WMWGORAP_1402
BD04766	749699	WMWGORAP_1402
BD04767	749699	WMWGORAP_1402
BD04768	749699	WMWGORAP_1402

4. All of the above samples were prepared and analyzed for NO_x by EPA 353.2.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- Water baseline report was run and met criteria.
- All calibration met criteria for the requested analytes.
- Prior to sample analysis, an initial calibration verification (ICV) was analyzed and met all criteria.
- All continued calibration verification (CCV) were within the acceptance criteria.
- Prior to sample analysis, an initial calibration blank (ICB) was analyzed and were below limit of detection.
- All continued calibration blanks (CCB) were below the limit of detection.

EPA 353.2 Specific QC:

- Prior to sample analysis, Cadmium coil reduction efficiency check met criteria.
- Matrix Specific QC:
    - A sample duplicate was run and criteria for precision was met.
    - A matrix spike was run and criteria for accuracy was met.

7. All samples were analyzed without a dilution factor.
8. The raw data results are shown with dilution factors included.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Case Narrative

Total Organic Carbon

Gorgas Ash Pond

WMWGORAP_1402

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	**Batch ID**	**Project ID**
BD04765	749364	WMWGORAP_1402
BD04766	749364	WMWGORAP_1402
BD04767	749364	WMWGORAP_1402
BD04768	749364	WMWGORAP_1402

4. All of the above samples were prepared and analyzed by Standard Method 5310B.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- All calibration criteria were met.
- Prior to sample analysis, an initial calibration verification (ICV) was analyzed and met all criteria.
- Prior to sample analysis, an initial calibration blank (ICB) was analyzed and was <1/2RL.
- All continued calibration verifications (CCVs) were within the acceptance range.
- All continued calibration blanks (CCBs) were <1/2RL.

Matrix Specific Quality Control Procedures:

- A matrix spike and matrix spike duplicate were analyzed with each batch. All acceptance criteria for accuracy were met.
- A matrix spike and matrix spike duplicate were analyzed with each batch. All acceptance criteria for precision were met.

7. All samples were analyzed without a dilution factor.
8. The raw data results are shown with dilution factors included.

Revision 5

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-44HO

Location Code: WMWGORAP
Collected: 3/6/23 14:16
Customer ID:
Submittal Date: 3/7/23 07:58

Laboratory ID Number: BD04765

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	3/8/23 12:49	3/20/23 12:21		1.015	0.0433	mg/L	0.030000	0.1015	J
* Calcium, Total	3/8/23 12:49	3/20/23 12:21		1.015	1.09	mg/L	0.070035	0.406	
* Iron, Total	3/8/23 12:49	3/20/23 12:21		1.015	0.0133	mg/L	0.008120	0.0406	J
* Lithium, Total	3/8/23 12:49	3/20/23 12:21		1.015	0.0451	mg/L	0.007105	0.01999956	
* Magnesium, Total	3/8/23 12:49	3/20/23 12:21		1.015	0.280	mg/L	0.021315	0.406	J
* Silica, Total (calc.)	3/8/23 12:49	3/20/23 12:21		1	10.7	mg/L			
* Silicon, Total	3/8/23 12:49	3/20/23 12:21		1.015	5.01	mg/L	0.02030	0.25375	
* Sodium, Total	3/8/23 12:49	3/20/23 12:40		10.15	205	mg/L	0.4060	4.06	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	3/8/23 09:34	3/20/23 13:14		1.015	0.0427	mg/L	0.030000	0.1015	J
* Calcium, Dissolved	3/8/23 09:34	3/20/23 13:14		1.015	1.29	mg/L	0.070035	0.406	
* Iron, Dissolved	3/8/23 09:34	3/20/23 13:14		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Dissolved	3/8/23 09:34	3/20/23 13:14		1.015	0.0446	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	3/8/23 09:34	3/20/23 13:14		1.015	0.308	mg/L	0.021315	0.406	J
* Molybdenum, Dissolved	3/8/23 09:34	3/20/23 13:14		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Dissolved (calc.)	3/8/23 09:34	3/20/23 13:14		1	10.7	mg/L			
* Silicon, Dissolved	3/8/23 09:34	3/20/23 13:14		1.015	4.98	mg/L	0.02030	0.25375	
* Sodium, Dissolved	3/8/23 09:34	3/20/23 13:27		10.15	206	mg/L	0.4060	4.06	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/8/23 12:49	3/8/23 14:34		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	3/8/23 12:49	3/8/23 14:34		1.015	0.0244	mg/L	0.006090	0.05075	J
* Arsenic, Total	3/8/23 12:49	3/8/23 14:34		1.015	0.000275	mg/L	0.000081	0.000203	
* Barium, Total	3/8/23 12:49	3/8/23 14:34		1.015	0.0835	mg/L	0.000508	0.001015	
* Beryllium, Total	3/8/23 12:49	3/8/23 14:34		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	3/8/23 12:49	3/8/23 14:34		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	3/8/23 12:49	3/8/23 14:34		1.015	0.000343	mg/L	0.000203	0.001015	J
* Cobalt, Total	3/8/23 12:49	3/8/23 14:34		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	3/8/23 12:49	3/8/23 14:34		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	3/8/23 12:49	3/8/23 14:34		1.015	0.00119	mg/L	0.000152	0.001015	
* Molybdenum, Total	3/8/23 12:49	3/8/23 14:34		1.015	0.00325	mg/L	0.000102	0.000203	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-44HO

Location Code: WMWGORAP
Collected: 3/6/23 14:16
Customer ID:
Submittal Date: 3/7/23 07:58

Laboratory ID Number: BD04765

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	3/8/23 12:49	3/8/23 14:34		1.015	0.553	mg/L	0.169505	0.5075	
* Selenium, Total	3/8/23 12:49	3/8/23 14:34		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	3/8/23 12:49	3/8/23 14:34		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	3/8/23 09:34	3/8/23 11:30		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	3/8/23 09:34	3/8/23 11:30		1.015	0.0104	mg/L	0.006090	0.05075	J
* Arsenic, Dissolved	3/8/23 09:34	3/8/23 11:30		1.015	0.000260	mg/L	0.000081	0.000203	
* Barium, Dissolved	3/8/23 09:34	3/8/23 11:30		1.015	0.0897	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	3/8/23 09:34	3/8/23 11:30		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	3/8/23 09:34	3/8/23 11:30		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	3/8/23 09:34	3/8/23 11:30		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	3/8/23 09:34	3/8/23 11:30		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Dissolved	3/8/23 09:34	3/8/23 11:30		1.015	0.0000702	mg/L	0.000068	0.000203	J
* Manganese, Dissolved	3/8/23 09:34	3/8/23 11:30		1.015	0.00109	mg/L	0.000152	0.001015	
* Potassium, Dissolved	3/8/23 09:34	3/8/23 11:30		1.015	0.889	mg/L	0.169505	0.5075	
* Selenium, Dissolved	3/8/23 09:34	3/8/23 11:30		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	3/8/23 09:34	3/8/23 11:30		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ELH***								
* Mercury, Total by CVAA	3/8/23 17:33	3/8/23 23:57		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	3/9/23 14:10	3/9/23 14:10		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
* Alkalinity to pH 4.5	3/17/23 13:24	3/17/23 13:56		1	369	mg CaCO3/L			
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	3/7/23 13:30	3/9/23 13:32		1	490	mg/L		50	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
* Bicarbonate Alkalinity, (calc.)	3/17/23 13:24	3/17/23 13:56		1	347	mg CaCO3/L			
* Carbonate Alkalinity, (calc.)	3/17/23 13:24	3/17/23 13:56		1	21.6	mg CaCO3/L			
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	3/9/23 14:42	3/9/23 14:42		1	6.47	mg/L	1.00	2	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-44HO

Location Code: WMWGORAP
Collected: 3/6/23 14:16
Customer ID:
Submittal Date: 3/7/23 07:58

Laboratory ID Number: BD04765

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	3/14/23 10:40	3/14/23 10:40		4	33.8	mg/L	2.00	4	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	3/14/23 13:27	3/14/23 13:27		1	0.227	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	3/21/23 12:20	3/21/23 12:20		1	23.1	mg/L	0.6	2	
Analytical Method: Field Measurements	***Analyst: AWG***								
Conductivity	3/6/23 14:13	3/6/23 14:13			858.00	uS/cm			FA
pH	3/6/23 14:13	3/6/23 14:13			9.06	SU			FA
Temperature	3/6/23 14:13	3/6/23 14:13			20.86	C			FA
Turbidity	3/6/23 14:13	3/6/23 14:13			3.94	NTU			FA
Sulfide	3/6/23 14:13	3/6/23 14:13			5	mg/L			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/6/23 14:16
Customer ID:
Delivery Date: 3/7/23 07:58

Description: Gorgas Ash Pond - MW-44HO

Laboratory ID Number: BD04765

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04766	Aluminum, Dissolved	mg/L	0.0000342	0.0198	0.100	0.108	0.107	0.0972	0.0850 to 0.115	97.7	70.0 to 130	0.930	20.0
BD04768	Aluminum, Total	mg/L	0.000622	0.0198	0.100	0.102	0.104	0.103	0.0850 to 0.115	102	70.0 to 130	1.94	20.0
BD04766	Antimony, Dissolved	mg/L	0.000255	0.00100	0.100	0.101	0.0989	0.0986	0.0850 to 0.115	101	70.0 to 130	2.10	20.0
BD04768	Antimony, Total	mg/L	0.000327	0.00100	0.100	0.0907	0.0888	0.0909	0.0850 to 0.115	90.7	70.0 to 130	2.12	20.0
BD04766	Arsenic, Dissolved	mg/L	-0.0000076	0.000200	0.100	0.101	0.101	0.102	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BD04768	Arsenic, Total	mg/L	0.0000064	0.000200	0.100	0.0993	0.0991	0.0998	0.0850 to 0.115	99.3	70.0 to 130	0.202	20.0
BD04766	Barium, Dissolved	mg/L	0.0000014	0.00100	0.100	0.210	0.206	0.113	0.0850 to 0.115	112	70.0 to 130	1.92	20.0
BD04768	Barium, Total	mg/L	0.0000107	0.00100	0.100	0.102	0.0970	0.0986	0.0850 to 0.115	102	70.0 to 130	5.03	20.0
BD04766	Beryllium, Dissolved	mg/L	0.0000146	0.000880	0.100	0.102	0.101	0.0988	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BD04768	Beryllium, Total	mg/L	0.0000080	0.000880	0.100	0.0990	0.0962	0.0973	0.0850 to 0.115	99.0	70.0 to 130	2.87	20.0
BD04766	Boron, Dissolved	mg/L	-0.000654	0.0650	1.00	1.08	1.07	1.02	0.850 to 1.15	104	70.0 to 130	0.930	20.0
BD04768	Boron, Total	mg/L	-0.000659	0.0650	1.00	1.03	1.02	1.02	0.850 to 1.15	103	70.0 to 130	0.976	20.0
BD04766	Cadmium, Dissolved	mg/L	0.0000070	0.000147	0.100	0.103	0.0991	0.105	0.0850 to 0.115	103	70.0 to 130	3.86	20.0
BD04768	Cadmium, Total	mg/L	0.0000024	0.000147	0.100	0.0976	0.0974	0.0987	0.0850 to 0.115	97.6	70.0 to 130	0.205	20.0
BD04766	Calcium, Dissolved	mg/L	-0.0133	0.152	5.00	6.45	6.38	5.13	4.25 to 5.75	101	70.0 to 130	1.09	20.0
BD04768	Calcium, Total	mg/L	-0.0103	0.152	5.00	5.08	5.08	5.09	4.25 to 5.75	102	70.0 to 130	0.00	20.0
BD04768	Chloride	mg/L	0.0397	1.00	10.0	9.90	9.85	9.99	9.00 to 11.0	99.0	80.0 to 120	0.506	20.0
BD04766	Chromium, Dissolved	mg/L	-0.0000586	0.000440	0.100	0.0993	0.0988	0.0984	0.0850 to 0.115	99.3	70.0 to 130	0.505	20.0
BD04768	Chromium, Total	mg/L	0.000318	0.000440	0.100	0.0999	0.101	0.101	0.0850 to 0.115	99.9	70.0 to 130	1.10	20.0
BD04766	Cobalt, Dissolved	mg/L	-0.0000622	0.000147	0.100	0.105	0.104	0.103	0.0850 to 0.115	105	70.0 to 130	0.957	20.0
BD04768	Cobalt, Total	mg/L	0.0000042	0.000147	0.100	0.101	0.103	0.103	0.0850 to 0.115	101	70.0 to 130	1.96	20.0
BD04768	Fluoride	mg/L	0.0214	0.125	2.50	2.57	2.58	2.52	2.25 to 2.75	103	80.0 to 120	0.388	20.0
BD04766	Iron, Dissolved	mg/L	0.00185	0.0176	0.2	0.207	0.206	0.206	0.170 to 0.230	104	70.0 to 130	0.484	20.0
BD04768	Iron, Total	mg/L	0.00387	0.0176	0.2	0.206	0.206	0.204	0.170 to 0.230	103	70.0 to 130	0.00	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/6/23 14:16
Customer ID:
Delivery Date: 3/7/23 07:58

Description: Gorgas Ash Pond - MW-44HO

Laboratory ID Number: BD04765

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04766	Lead, Dissolved	mg/L	0.0000084	0.000147	0.100	0.104	0.103	0.104	0.0850 to 0.115	104	70.0 to 130	0.966	20.0
BD04768	Lead, Total	mg/L	0.0000088	0.000147	0.100	0.105	0.106	0.106	0.0850 to 0.115	105	70.0 to 130	0.948	20.0
BD04766	Lithium, Dissolved	mg/L	0.000334	0.0154	0.200	0.248	0.247	0.198	0.170 to 0.230	101	70.0 to 130	0.404	20.0
BD04768	Lithium, Total	mg/L	-0.000701	0.0154	0.200	0.203	0.203	0.200	0.170 to 0.230	102	70.0 to 130	0.00	20.0
BD04766	Magnesium, Dissolved	mg/L	0.00190	0.0462	5.00	5.32	5.23	4.99	4.25 to 5.75	99.6	70.0 to 130	1.71	20.0
BD04768	Magnesium, Total	mg/L	-0.00265	0.0462	5.00	4.98	4.97	4.97	4.25 to 5.75	99.6	70.0 to 130	0.201	20.0
BD04766	Manganese, Dissolved	mg/L	-0.0000069	0.00033	0.100	0.102	0.101	0.101	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BD04768	Manganese, Total	mg/L	0.0000262	0.00033	0.100	0.101	0.102	0.102	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BD04768	Mercury, Total by CVAA	mg/L	5.000E-05	0.000500	0.004	0.00402	0.00401	0.004	0.00340 to 0.00460	100	70.0 to 130	0.249	20.0
BD04766	Molybdenum, Dissolved	mg/L	-0.000467	0.0100	0.2	0.208	0.207	0.204	0.170 to 0.230	104	70.0 to 130	0.482	20.0
BD04768	Molybdenum, Total	mg/L	0.0000229	0.0002	0.100	0.0997	0.0990	0.100	0.0850 to 0.115	99.7	70.0 to 130	0.705	20.0
BD04766	Potassium, Dissolved	mg/L	0.00189	0.367	10.0	10.4	10.3	9.49	8.50 to 11.5	95.8	70.0 to 130	0.966	20.0
BD04768	Potassium, Total	mg/L	-0.00656	0.367	10.0	9.55	9.63	9.76	8.50 to 11.5	95.5	70.0 to 130	0.834	20.0
BD04766	Selenium, Dissolved	mg/L	0.000114	0.00100	0.100	0.102	0.100	0.0993	0.0850 to 0.115	102	70.0 to 130	1.98	20.0
BD04768	Selenium, Total	mg/L	-0.0000764	0.00100	0.100	0.101	0.101	0.103	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BD04766	Silicon, Dissolved	mg/L	-0.00181	0.0440	1.00	6.01	6.03	1.01	0.850 to 1.15	101	70.0 to 130	0.332	20.0
BD04768	Silicon, Total	mg/L	-0.00108	0.0440	1.00	1.02	1.02	1.00	0.850 to 1.15	102	70.0 to 130	0.00	20.0
BD04766	Sodium, Dissolved	mg/L	0.00222	0.0880	5.00	216	198	4.73	4.25 to 5.75	-120	70.0 to 130	8.70	20.0
BD04768	Sodium, Total	mg/L	0.00102	0.0880	5.00	4.84	4.85	4.78	4.25 to 5.75	96.8	70.0 to 130	0.206	20.0
BD04768	Sulfate	mg/L	-0.0348	2.0	20.0	20.3	20.1	20.0	18.0 to 22.0	102	80.0 to 120	0.990	20.0
BD04766	Thallium, Dissolved	mg/L	-0.000116	0.000147	0.100	0.101	0.103	0.106	0.0850 to 0.115	101	70.0 to 130	1.96	20.0
BD04768	Thallium, Total	mg/L	0.0000084	0.000147	0.100	0.103	0.102	0.105	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BD04768	Total Organic Carbon	mg/L	-0.00825	1.00	10.0	10.5	10.8	10.8		105	80.0 to 120	2.82	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/6/23 14:16
Customer ID:
Delivery Date: 3/7/23 07:58

Description: Gorgas Ash Pond - MW-44HO

Laboratory ID Number: BD04765

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04766	Alkalinity to pH 4.5	mg CaCO3/L					380	50.3	45.0 to 55.0			2.94	10.0
BD04768	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.07	0.200	2.00	1.94	-0.067	1.94	1.80 to 2.20	97.0	90.0 to 110	0.00	15.0
BD04766	Solids, Dissolved	mg/L	0.0000	25.0			506	52.0	40.0 to 60.0			2.00	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-44HO Dup

Location Code: WMWGORAP
Collected: 3/6/23 14:16
Customer ID:
Submittal Date: 3/7/23 07:59

Laboratory ID Number: BD04766

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	3/8/23 12:49	3/20/23 12:24		1.015	0.0434	mg/L	0.030000	0.1015	J
* Calcium, Total	3/8/23 12:49	3/20/23 12:24		1.015	1.11	mg/L	0.070035	0.406	
* Iron, Total	3/8/23 12:49	3/20/23 12:24		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Total	3/8/23 12:49	3/20/23 12:24		1.015	0.0463	mg/L	0.007105	0.01999956	
* Magnesium, Total	3/8/23 12:49	3/20/23 12:24		1.015	0.287	mg/L	0.021315	0.406	J
* Silica, Total (calc.)	3/8/23 12:49	3/20/23 12:24		1	10.8	mg/L			
* Silicon, Total	3/8/23 12:49	3/20/23 12:24		1.015	5.05	mg/L	0.02030	0.25375	
* Sodium, Total	3/8/23 12:49	3/20/23 12:43		10.15	207	mg/L	0.4060	4.06	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	3/8/23 09:34	3/20/23 13:18		1.015	0.0431	mg/L	0.030000	0.1015	J
* Calcium, Dissolved	3/8/23 09:34	3/20/23 13:18		1.015	1.39	mg/L	0.070035	0.406	
* Iron, Dissolved	3/8/23 09:34	3/20/23 13:18		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Dissolved	3/8/23 09:34	3/20/23 13:18		1.015	0.0452	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	3/8/23 09:34	3/20/23 13:18		1.015	0.341	mg/L	0.021315	0.406	J
* Molybdenum, Dissolved	3/8/23 09:34	3/20/23 13:18		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Dissolved (calc.)	3/8/23 09:34	3/20/23 13:18		1	10.7	mg/L			
* Silicon, Dissolved	3/8/23 09:34	3/20/23 13:18		1.015	5.00	mg/L	0.02030	0.25375	
* Sodium, Dissolved	3/8/23 09:34	3/20/23 13:30		10.15	222	mg/L	0.4060	4.06	RA
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/8/23 12:49	3/8/23 14:38		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	3/8/23 12:49	3/8/23 14:38		1.015	0.0235	mg/L	0.006090	0.05075	J
* Arsenic, Total	3/8/23 12:49	3/8/23 14:38		1.015	0.000246	mg/L	0.000081	0.000203	
* Barium, Total	3/8/23 12:49	3/8/23 14:38		1.015	0.0831	mg/L	0.000508	0.001015	
* Beryllium, Total	3/8/23 12:49	3/8/23 14:38		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	3/8/23 12:49	3/8/23 14:38		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	3/8/23 12:49	3/8/23 14:38		1.015	0.000245	mg/L	0.000203	0.001015	J
* Cobalt, Total	3/8/23 12:49	3/8/23 14:38		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	3/8/23 12:49	3/8/23 14:38		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	3/8/23 12:49	3/8/23 14:38		1.015	0.00123	mg/L	0.000152	0.001015	
* Molybdenum, Total	3/8/23 12:49	3/8/23 14:38		1.015	0.00355	mg/L	0.000102	0.000203	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-44HO Dup

Location Code: WMWGORAP
Collected: 3/6/23 14:16
Customer ID:
Submittal Date: 3/7/23 07:59

Laboratory ID Number: BD04766

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	3/8/23 12:49	3/8/23 14:38		1.015	0.592	mg/L	0.169505	0.5075	
* Selenium, Total	3/8/23 12:49	3/8/23 14:38		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	3/8/23 12:49	3/8/23 14:38		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	3/8/23 09:34	3/8/23 11:33		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	3/8/23 09:34	3/8/23 11:33		1.015	0.0103	mg/L	0.006090	0.05075	J
* Arsenic, Dissolved	3/8/23 09:34	3/8/23 11:33		1.015	0.000275	mg/L	0.000081	0.000203	
* Barium, Dissolved	3/8/23 09:34	3/8/23 11:33		1.015	0.0978	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	3/8/23 09:34	3/8/23 11:33		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	3/8/23 09:34	3/8/23 11:33		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	3/8/23 09:34	3/8/23 11:33		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	3/8/23 09:34	3/8/23 11:33		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Dissolved	3/8/23 09:34	3/8/23 11:33		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	3/8/23 09:34	3/8/23 11:33		1.015	0.00116	mg/L	0.000152	0.001015	
* Potassium, Dissolved	3/8/23 09:34	3/8/23 11:33		1.015	0.818	mg/L	0.169505	0.5075	
* Selenium, Dissolved	3/8/23 09:34	3/8/23 11:33		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	3/8/23 09:34	3/8/23 11:33		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ELH***								
* Mercury, Total by CVAA	3/8/23 17:33	3/9/23 00:01		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	3/9/23 14:11	3/9/23 14:11		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
* Alkalinity to pH 4.5	3/17/23 13:24	3/17/23 13:56		1	369	mg CaCO3/L			
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	3/7/23 13:30	3/9/23 13:32		1	496	mg/L		50	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
* Bicarbonate Alkalinity, (calc.)	3/17/23 13:24	3/17/23 13:56		1	353	mg CaCO3/L			
* Carbonate Alkalinity, (calc.)	3/17/23 13:24	3/17/23 13:56		1	16.2	mg CaCO3/L			
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	3/9/23 15:01	3/9/23 15:01		1	6.65	mg/L	1.00	2	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-44HO Dup

Location Code: WMWGORAP
Collected: 3/6/23 14:16
Customer ID:
Submittal Date: 3/7/23 07:59

Laboratory ID Number: BD04766

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	3/14/23 10:41	3/14/23 10:41		4	32.0	mg/L	2.00	4	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	3/14/23 13:28	3/14/23 13:28		1	0.125	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	3/21/23 12:21	3/21/23 12:21		1	22.5	mg/L	0.6	2	
Analytical Method: Field Measurements	***Analyst: AWG***								
Conductivity	3/6/23 14:13	3/6/23 14:13			858.00	uS/cm			FA
pH	3/6/23 14:13	3/6/23 14:13			9.06	SU			FA
Temperature	3/6/23 14:13	3/6/23 14:13			20.86	C			FA
Turbidity	3/6/23 14:13	3/6/23 14:13			3.94	NTU			FA
Sulfide	3/6/23 14:13	3/6/23 14:13			5	mg/L			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/6/23 14:16
Customer ID:
Delivery Date: 3/7/23 07:59

Description: Gorgas Ash Pond - MW-44HO Dup

Laboratory ID Number: BD04766

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04766	Aluminum, Dissolved	mg/L	0.0000342	0.0198	0.100	0.108	0.107	0.0972	0.0850 to 0.115	97.7	70.0 to 130	0.930	20.0
BD04768	Aluminum, Total	mg/L	0.000622	0.0198	0.100	0.102	0.104	0.103	0.0850 to 0.115	102	70.0 to 130	1.94	20.0
BD04766	Antimony, Dissolved	mg/L	0.000255	0.00100	0.100	0.101	0.0989	0.0986	0.0850 to 0.115	101	70.0 to 130	2.10	20.0
BD04768	Antimony, Total	mg/L	0.000327	0.00100	0.100	0.0907	0.0888	0.0909	0.0850 to 0.115	90.7	70.0 to 130	2.12	20.0
BD04766	Arsenic, Dissolved	mg/L	-0.0000076	0.000200	0.100	0.101	0.101	0.102	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BD04768	Arsenic, Total	mg/L	0.0000064	0.000200	0.100	0.0993	0.0991	0.0998	0.0850 to 0.115	99.3	70.0 to 130	0.202	20.0
BD04766	Barium, Dissolved	mg/L	0.0000014	0.00100	0.100	0.210	0.206	0.113	0.0850 to 0.115	112	70.0 to 130	1.92	20.0
BD04768	Barium, Total	mg/L	0.0000107	0.00100	0.100	0.102	0.0970	0.0986	0.0850 to 0.115	102	70.0 to 130	5.03	20.0
BD04766	Beryllium, Dissolved	mg/L	0.0000146	0.000880	0.100	0.102	0.101	0.0988	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BD04768	Beryllium, Total	mg/L	0.0000080	0.000880	0.100	0.0990	0.0962	0.0973	0.0850 to 0.115	99.0	70.0 to 130	2.87	20.0
BD04766	Boron, Dissolved	mg/L	-0.000654	0.0650	1.00	1.08	1.07	1.02	0.850 to 1.15	104	70.0 to 130	0.930	20.0
BD04768	Boron, Total	mg/L	-0.000659	0.0650	1.00	1.03	1.02	1.02	0.850 to 1.15	103	70.0 to 130	0.976	20.0
BD04766	Cadmium, Dissolved	mg/L	0.0000070	0.000147	0.100	0.103	0.0991	0.105	0.0850 to 0.115	103	70.0 to 130	3.86	20.0
BD04768	Cadmium, Total	mg/L	0.0000024	0.000147	0.100	0.0976	0.0974	0.0987	0.0850 to 0.115	97.6	70.0 to 130	0.205	20.0
BD04766	Calcium, Dissolved	mg/L	-0.0133	0.152	5.00	6.45	6.38	5.13	4.25 to 5.75	101	70.0 to 130	1.09	20.0
BD04768	Calcium, Total	mg/L	-0.0103	0.152	5.00	5.08	5.08	5.09	4.25 to 5.75	102	70.0 to 130	0.00	20.0
BD04768	Chloride	mg/L	0.0397	1.00	10.0	9.90	9.85	9.99	9.00 to 11.0	99.0	80.0 to 120	0.506	20.0
BD04766	Chromium, Dissolved	mg/L	-0.0000586	0.000440	0.100	0.0993	0.0988	0.0984	0.0850 to 0.115	99.3	70.0 to 130	0.505	20.0
BD04768	Chromium, Total	mg/L	0.000318	0.000440	0.100	0.0999	0.101	0.101	0.0850 to 0.115	99.9	70.0 to 130	1.10	20.0
BD04766	Cobalt, Dissolved	mg/L	-0.0000622	0.000147	0.100	0.105	0.104	0.103	0.0850 to 0.115	105	70.0 to 130	0.957	20.0
BD04768	Cobalt, Total	mg/L	0.0000042	0.000147	0.100	0.101	0.103	0.103	0.0850 to 0.115	101	70.0 to 130	1.96	20.0
BD04768	Fluoride	mg/L	0.0214	0.125	2.50	2.57	2.58	2.52	2.25 to 2.75	103	80.0 to 120	0.388	20.0
BD04766	Iron, Dissolved	mg/L	0.00185	0.0176	0.2	0.207	0.206	0.206	0.170 to 0.230	104	70.0 to 130	0.484	20.0
BD04768	Iron, Total	mg/L	0.00387	0.0176	0.2	0.206	0.206	0.204	0.170 to 0.230	103	70.0 to 130	0.00	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/6/23 14:16
Customer ID:
Delivery Date: 3/7/23 07:59

Description: Gorgas Ash Pond - MW-44HO Dup

Laboratory ID Number: BD04766

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04766	Lead, Dissolved	mg/L	0.0000084	0.000147	0.100	0.104	0.103	0.104	0.0850 to 0.115	104	70.0 to 130	0.966	20.0
BD04768	Lead, Total	mg/L	0.0000088	0.000147	0.100	0.105	0.106	0.106	0.0850 to 0.115	105	70.0 to 130	0.948	20.0
BD04766	Lithium, Dissolved	mg/L	0.000334	0.0154	0.200	0.248	0.247	0.198	0.170 to 0.230	101	70.0 to 130	0.404	20.0
BD04768	Lithium, Total	mg/L	-0.000701	0.0154	0.200	0.203	0.203	0.200	0.170 to 0.230	102	70.0 to 130	0.00	20.0
BD04766	Magnesium, Dissolved	mg/L	0.00190	0.0462	5.00	5.32	5.23	4.99	4.25 to 5.75	99.6	70.0 to 130	1.71	20.0
BD04768	Magnesium, Total	mg/L	-0.00265	0.0462	5.00	4.98	4.97	4.97	4.25 to 5.75	99.6	70.0 to 130	0.201	20.0
BD04766	Manganese, Dissolved	mg/L	-0.0000069	0.00033	0.100	0.102	0.101	0.101	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BD04768	Manganese, Total	mg/L	0.0000262	0.00033	0.100	0.101	0.102	0.102	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BD04768	Mercury, Total by CVAA	mg/L	5.000E-05	0.000500	0.004	0.00402	0.00401	0.004	0.00340 to 0.00460	100	70.0 to 130	0.249	20.0
BD04766	Molybdenum, Dissolved	mg/L	-0.000467	0.0100	0.2	0.208	0.207	0.204	0.170 to 0.230	104	70.0 to 130	0.482	20.0
BD04768	Molybdenum, Total	mg/L	0.0000229	0.0002	0.100	0.0997	0.0990	0.100	0.0850 to 0.115	99.7	70.0 to 130	0.705	20.0
BD04766	Potassium, Dissolved	mg/L	0.00189	0.367	10.0	10.4	10.3	9.49	8.50 to 11.5	95.8	70.0 to 130	0.966	20.0
BD04768	Potassium, Total	mg/L	-0.00656	0.367	10.0	9.55	9.63	9.76	8.50 to 11.5	95.5	70.0 to 130	0.834	20.0
BD04766	Selenium, Dissolved	mg/L	0.000114	0.00100	0.100	0.102	0.100	0.0993	0.0850 to 0.115	102	70.0 to 130	1.98	20.0
BD04768	Selenium, Total	mg/L	-0.0000764	0.00100	0.100	0.101	0.101	0.103	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BD04766	Silicon, Dissolved	mg/L	-0.00181	0.0440	1.00	6.01	6.03	1.01	0.850 to 1.15	101	70.0 to 130	0.332	20.0
BD04768	Silicon, Total	mg/L	-0.00108	0.0440	1.00	1.02	1.02	1.00	0.850 to 1.15	102	70.0 to 130	0.00	20.0
BD04766	Sodium, Dissolved	mg/L	0.00222	0.0880	5.00	216	198	4.73	4.25 to 5.75	-120	70.0 to 130	8.70	20.0
BD04768	Sodium, Total	mg/L	0.00102	0.0880	5.00	4.84	4.85	4.78	4.25 to 5.75	96.8	70.0 to 130	0.206	20.0
BD04768	Sulfate	mg/L	-0.0348	2.0	20.0	20.3	20.1	20.0	18.0 to 22.0	102	80.0 to 120	0.990	20.0
BD04766	Thallium, Dissolved	mg/L	-0.000116	0.000147	0.100	0.101	0.103	0.106	0.0850 to 0.115	101	70.0 to 130	1.96	20.0
BD04768	Thallium, Total	mg/L	0.0000084	0.000147	0.100	0.103	0.102	0.105	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BD04768	Total Organic Carbon	mg/L	-0.00825	1.00	10.0	10.5	10.8	10.8		105	80.0 to 120	2.82	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 3/6/23 14:16
Customer ID:
Delivery Date: 3/7/23 07:59

Description: Gorgas Ash Pond - MW-44HO Dup

Laboratory ID Number: BD04766

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04766	Alkalinity to pH 4.5	mg CaCO3/L					380	50.3	45.0 to 55.0			2.94	10.0
BD04768	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.07	0.200	2.00	1.94	-0.067	1.94	1.80 to 2.20	97.0	90.0 to 110	0.00	15.0
BD04766	Solids, Dissolved	mg/L	0.0000	25.0			506	52.0	40.0 to 60.0			2.00	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond Field Blank-1

Location Code: WMWGORAPFB
Collected: 3/6/23 14:20
Customer ID:
Submittal Date: 3/7/23 07:59

Laboratory ID Number: BD04767

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	3/8/23 12:49	3/20/23 12:27		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	3/8/23 12:49	3/20/23 12:27		1.015	Not Detected	mg/L	0.070035	0.406	U
* Iron, Total	3/8/23 12:49	3/20/23 12:27		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Total	3/8/23 12:49	3/20/23 12:27		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	3/8/23 12:49	3/20/23 12:27		1.015	Not Detected	mg/L	0.021315	0.406	U
* Silica, Total (calc.)	3/8/23 12:49	3/20/23 12:27		1	Not Detected	mg/L			
* Silicon, Total	3/8/23 12:49	3/20/23 12:27		1.015	Not Detected	mg/L	0.02030	0.25375	U
* Sodium, Total	3/8/23 12:49	3/20/23 12:27		1.015	Not Detected	mg/L	0.04060	0.406	U
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/8/23 12:49	3/8/23 14:41		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	3/8/23 12:49	3/8/23 14:41		1.015	Not Detected	mg/L	0.006090	0.05075	U
* Arsenic, Total	3/8/23 12:49	3/8/23 14:41		1.015	Not Detected	mg/L	0.000081	0.000203	U
* Barium, Total	3/8/23 12:49	3/8/23 14:41		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Beryllium, Total	3/8/23 12:49	3/8/23 14:41		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	3/8/23 12:49	3/8/23 14:41		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	3/8/23 12:49	3/8/23 14:41		1.015	0.000264	mg/L	0.000203	0.001015	J
* Cobalt, Total	3/8/23 12:49	3/8/23 14:41		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	3/8/23 12:49	3/8/23 14:41		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	3/8/23 12:49	3/8/23 14:41		1.015	Not Detected	mg/L	0.000152	0.001015	U
* Molybdenum, Total	3/8/23 12:49	3/8/23 14:41		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Total	3/8/23 12:49	3/8/23 14:41		1.015	Not Detected	mg/L	0.169505	0.5075	U
* Selenium, Total	3/8/23 12:49	3/8/23 14:41		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	3/8/23 12:49	3/8/23 14:41		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ELH***								
* Mercury, Total by CVAA	3/8/23 17:33	3/9/23 00:05		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	3/9/23 14:12	3/9/23 14:12		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	3/7/23 13:30	3/9/23 13:32		1	Not Detected	mg/L		25	U

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments:

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description:	Gorgas Ash Pond Field Blank-1	**Location Code:**	WMWGORAPFB
		Collected:	3/6/23 14:20
		Customer ID:	
Laboratory ID Number:	BD04767	**Submittal Date:**	3/7/23 07:59

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	3/9/23 15:17	3/9/23 15:17		1	Not Detected	mg/L	1.00	2	U
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	3/14/23 10:35	3/14/23 10:35		1	Not Detected	mg/L	0.50	1	U
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	3/14/23 13:29	3/14/23 13:29		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	3/21/23 12:22	3/21/23 12:22		1	Not Detected	mg/L	0.6	2	U

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments:

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAPFB
Sample Date: 3/6/23 14:20
Customer ID:
Delivery Date: 3/7/23 07:59

Description: Gorgas Ash Pond Field Blank-1

Laboratory ID Number: BD04767

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04768	Aluminum, Total	mg/L	0.000622	0.0198	0.100	0.102	0.104	0.103	0.0850 to 0.115	102	70.0 to 130	1.94	20.0
BD04768	Antimony, Total	mg/L	0.000327	0.00100	0.100	0.0907	0.0888	0.0909	0.0850 to 0.115	90.7	70.0 to 130	2.12	20.0
BD04768	Arsenic, Total	mg/L	0.0000064	0.000200	0.100	0.0993	0.0991	0.0998	0.0850 to 0.115	99.3	70.0 to 130	0.202	20.0
BD04768	Barium, Total	mg/L	0.0000107	0.00100	0.100	0.102	0.0970	0.0986	0.0850 to 0.115	102	70.0 to 130	5.03	20.0
BD04768	Beryllium, Total	mg/L	0.0000080	0.000880	0.100	0.0990	0.0962	0.0973	0.0850 to 0.115	99.0	70.0 to 130	2.87	20.0
BD04768	Boron, Total	mg/L	-0.000659	0.0650	1.00	1.03	1.02	1.02	0.850 to 1.15	103	70.0 to 130	0.976	20.0
BD04768	Cadmium, Total	mg/L	0.0000024	0.000147	0.100	0.0976	0.0974	0.0987	0.0850 to 0.115	97.6	70.0 to 130	0.205	20.0
BD04768	Calcium, Total	mg/L	-0.0103	0.152	5.00	5.08	5.08	5.09	4.25 to 5.75	102	70.0 to 130	0.00	20.0
BD04768	Chloride	mg/L	0.0397	1.00	10.0	9.90	9.85	9.99	9.00 to 11.0	99.0	80.0 to 120	0.506	20.0
BD04768	Chromium, Total	mg/L	0.000318	0.000440	0.100	0.0999	0.101	0.101	0.0850 to 0.115	99.9	70.0 to 130	1.10	20.0
BD04768	Cobalt, Total	mg/L	0.0000042	0.000147	0.100	0.101	0.103	0.103	0.0850 to 0.115	101	70.0 to 130	1.96	20.0
BD04768	Fluoride	mg/L	0.0214	0.125	2.50	2.57	2.58	2.52	2.25 to 2.75	103	80.0 to 120	0.388	20.0
BD04768	Iron, Total	mg/L	0.00387	0.0176	0.2	0.206	0.206	0.204	0.170 to 0.230	103	70.0 to 130	0.00	20.0
BD04768	Lead, Total	mg/L	0.0000088	0.000147	0.100	0.105	0.106	0.106	0.0850 to 0.115	105	70.0 to 130	0.948	20.0
BD04768	Lithium, Total	mg/L	-0.000701	0.0154	0.200	0.203	0.203	0.200	0.170 to 0.230	102	70.0 to 130	0.00	20.0
BD04768	Magnesium, Total	mg/L	-0.00265	0.0462	5.00	4.98	4.97	4.97	4.25 to 5.75	99.6	70.0 to 130	0.201	20.0
BD04768	Manganese, Total	mg/L	0.0000262	0.00033	0.100	0.101	0.102	0.102	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BD04768	Mercury, Total by CVAA	mg/L	5.000E-05	0.000500	0.004	0.00402	0.00401	0.004	0.00340 to 0.00460	100	70.0 to 130	0.249	20.0
BD04768	Molybdenum, Total	mg/L	0.0000229	0.0002	0.100	0.0997	0.0990	0.100	0.0850 to 0.115	99.7	70.0 to 130	0.705	20.0
BD04768	Potassium, Total	mg/L	-0.00656	0.367	10.0	9.55	9.63	9.76	8.50 to 11.5	95.5	70.0 to 130	0.834	20.0
BD04768	Selenium, Total	mg/L	-0.0000764	0.00100	0.100	0.101	0.101	0.103	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BD04768	Silicon, Total	mg/L	-0.00108	0.0440	1.00	1.02	1.02	1.00	0.850 to 1.15	102	70.0 to 130	0.00	20.0
BD04768	Sodium, Total	mg/L	0.00102	0.0880	5.00	4.84	4.85	4.78	4.25 to 5.75	96.8	70.0 to 130	0.206	20.0
BD04768	Sulfate	mg/L	-0.0348	2.0	20.0	20.3	20.1	20.0	18.0 to 22.0	102	80.0 to 120	0.990	20.0

Comments:

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAPFB
Sample Date: 3/6/23 14:20
Customer ID:
Delivery Date: 3/7/23 07:59

Description: Gorgas Ash Pond Field Blank-1

Laboratory ID Number: BD04767

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04768	Thallium, Total	mg/L	0.0000084	0.000147	0.100	0.103	0.102	0.105	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BD04768	Total Organic Carbon	mg/L	-0.00825	1.00	10.0	10.5	10.8	10.8		105	80.0 to 120	2.82	20.0

Comments:

Batch QC Summary

Customer Account: WMWGORAPFB
Sample Date: 3/6/23 14:20
Customer ID:
Delivery Date: 3/7/23 07:59

Description: Gorgas Ash Pond Field Blank-1

Laboratory ID Number: BD04767

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04768	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.07	0.200	2.00	1.94	-0.067	1.94	1.80 to 2.20	97.0	90.0 to 110	0.00	15.0
BD04766	Solids, Dissolved	mg/L	0.0000	25.0			506	52.0	40.0 to 60.0			2.00	10.0

Comments:

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond Equipment Blank-1

Location Code: WMWGORAPEB
Collected: 3/6/23 15:15
Customer ID:
Submittal Date: 3/7/23 08:00

Laboratory ID Number: BD04768

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	3/8/23 12:49	3/20/23 12:31		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	3/8/23 12:49	3/20/23 12:31		1.015	Not Detected	mg/L	0.070035	0.406	U
* Iron, Total	3/8/23 12:49	3/20/23 12:31		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Total	3/8/23 12:49	3/20/23 12:31		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	3/8/23 12:49	3/20/23 12:31		1.015	Not Detected	mg/L	0.021315	0.406	U
* Silica, Total (calc.)	3/8/23 12:49	3/20/23 12:31		1	Not Detected	mg/L			
* Silicon, Total	3/8/23 12:49	3/20/23 12:31		1.015	Not Detected	mg/L	0.02030	0.25375	U
* Sodium, Total	3/8/23 12:49	3/20/23 12:31		1.015	Not Detected	mg/L	0.04060	0.406	U
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	3/8/23 12:49	3/8/23 14:45		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	3/8/23 12:49	3/8/23 14:45		1.015	Not Detected	mg/L	0.006090	0.05075	U
* Arsenic, Total	3/8/23 12:49	3/8/23 14:45		1.015	Not Detected	mg/L	0.000081	0.000203	U
* Barium, Total	3/8/23 12:49	3/8/23 14:45		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Beryllium, Total	3/8/23 12:49	3/8/23 14:45		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	3/8/23 12:49	3/8/23 14:45		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	3/8/23 12:49	3/8/23 14:45		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	3/8/23 12:49	3/8/23 14:45		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	3/8/23 12:49	3/8/23 14:45		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	3/8/23 12:49	3/8/23 14:45		1.015	Not Detected	mg/L	0.000152	0.001015	U
* Molybdenum, Total	3/8/23 12:49	3/8/23 14:45		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Total	3/8/23 12:49	3/8/23 14:45		1.015	Not Detected	mg/L	0.169505	0.5075	U
* Selenium, Total	3/8/23 12:49	3/8/23 14:45		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	3/8/23 12:49	3/8/23 14:45		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ELH***								
* Mercury, Total by CVAA	3/8/23 17:33	3/9/23 00:08		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	3/9/23 14:12	3/9/23 14:12		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	3/7/23 13:30	3/9/23 13:32		1	Not Detected	mg/L		25	U

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments:

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond Equipment Blank-1

Location Code: WMWGORAPEB
Collected: 3/6/23 15:15
Customer ID:
Submittal Date: 3/7/23 08:00

Laboratory ID Number: BD04768

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	3/9/23 15:32	3/9/23 15:32		1	Not Detected	mg/L	1.00	2	U
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	3/14/23 10:36	3/14/23 10:36		1	Not Detected	mg/L	0.50	1	U
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	3/14/23 13:30	3/14/23 13:30		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	3/21/23 12:23	3/21/23 12:23		1	Not Detected	mg/L	0.6	2	U

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments:

Reported: 4/12/2023
Version: 3.5
COA_CCR

Batch QC Summary

Customer Account: WMWGORAPEB
Sample Date: 3/6/23 15:15
Customer ID:
Delivery Date: 3/7/23 08:00

Description: Gorgas Ash Pond Equipment Blank-1

Laboratory ID Number: BD04768

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04768	Aluminum, Total	mg/L	0.000622	0.0198	0.100	0.102	0.104	0.103	0.0850 to 0.115	102	70.0 to 130	1.94	20.0
BD04768	Antimony, Total	mg/L	0.000327	0.00100	0.100	0.0907	0.0888	0.0909	0.0850 to 0.115	90.7	70.0 to 130	2.12	20.0
BD04768	Arsenic, Total	mg/L	0.0000064	0.000200	0.100	0.0993	0.0991	0.0998	0.0850 to 0.115	99.3	70.0 to 130	0.202	20.0
BD04768	Barium, Total	mg/L	0.0000107	0.00100	0.100	0.102	0.0970	0.0986	0.0850 to 0.115	102	70.0 to 130	5.03	20.0
BD04768	Beryllium, Total	mg/L	0.0000080	0.000880	0.100	0.0990	0.0962	0.0973	0.0850 to 0.115	99.0	70.0 to 130	2.87	20.0
BD04768	Boron, Total	mg/L	-0.000659	0.0650	1.00	1.03	1.02	1.02	0.850 to 1.15	103	70.0 to 130	0.976	20.0
BD04768	Cadmium, Total	mg/L	0.0000024	0.000147	0.100	0.0976	0.0974	0.0987	0.0850 to 0.115	97.6	70.0 to 130	0.205	20.0
BD04768	Calcium, Total	mg/L	-0.0103	0.152	5.00	5.08	5.08	5.09	4.25 to 5.75	102	70.0 to 130	0.00	20.0
BD04768	Chloride	mg/L	0.0397	1.00	10.0	9.90	9.85	9.99	9.00 to 11.0	99.0	80.0 to 120	0.506	20.0
BD04768	Chromium, Total	mg/L	0.000318	0.000440	0.100	0.0999	0.101	0.101	0.0850 to 0.115	99.9	70.0 to 130	1.10	20.0
BD04768	Cobalt, Total	mg/L	0.0000042	0.000147	0.100	0.101	0.103	0.103	0.0850 to 0.115	101	70.0 to 130	1.96	20.0
BD04768	Fluoride	mg/L	0.0214	0.125	2.50	2.57	2.58	2.52	2.25 to 2.75	103	80.0 to 120	0.388	20.0
BD04768	Iron, Total	mg/L	0.00387	0.0176	0.2	0.206	0.206	0.204	0.170 to 0.230	103	70.0 to 130	0.00	20.0
BD04768	Lead, Total	mg/L	0.0000088	0.000147	0.100	0.105	0.106	0.106	0.0850 to 0.115	105	70.0 to 130	0.948	20.0
BD04768	Lithium, Total	mg/L	-0.000701	0.0154	0.200	0.203	0.203	0.200	0.170 to 0.230	102	70.0 to 130	0.00	20.0
BD04768	Magnesium, Total	mg/L	-0.00265	0.0462	5.00	4.98	4.97	4.97	4.25 to 5.75	99.6	70.0 to 130	0.201	20.0
BD04768	Manganese, Total	mg/L	0.0000262	0.00033	0.100	0.101	0.102	0.102	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BD04768	Mercury, Total by CVAA	mg/L	5.000E-05	0.000500	0.004	0.00402	0.00401	0.004	0.00340 to 0.00460	100	70.0 to 130	0.249	20.0
BD04768	Molybdenum, Total	mg/L	0.0000229	0.0002	0.100	0.0997	0.0990	0.100	0.0850 to 0.115	99.7	70.0 to 130	0.705	20.0
BD04768	Potassium, Total	mg/L	-0.00656	0.367	10.0	9.55	9.63	9.76	8.50 to 11.5	95.5	70.0 to 130	0.834	20.0
BD04768	Selenium, Total	mg/L	-0.0000764	0.00100	0.100	0.101	0.101	0.103	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BD04768	Silicon, Total	mg/L	-0.00108	0.0440	1.00	1.02	1.02	1.00	0.850 to 1.15	102	70.0 to 130	0.00	20.0
BD04768	Sodium, Total	mg/L	0.00102	0.0880	5.00	4.84	4.85	4.78	4.25 to 5.75	96.8	70.0 to 130	0.206	20.0
BD04768	Sulfate	mg/L	-0.0348	2.0	20.0	20.3	20.1	20.0	18.0 to 22.0	102	80.0 to 120	0.990	20.0

Comments:

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGORAPEB
Sample Date: 3/6/23 15:15
Customer ID:
Delivery Date: 3/7/23 08:00

Description: Gorgas Ash Pond Equipment Blank-1

Laboratory ID Number: BD04768

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04768	Thallium, Total	mg/L	0.0000084	0.000147	0.100	0.103	0.102	0.105	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BD04768	Total Organic Carbon	mg/L	-0.00825	1.00	10.0	10.5	10.8	10.8		105	80.0 to 120	2.82	20.0

Comments:

Batch QC Summary

Customer Account: WMWGORAPEB
Sample Date: 3/6/23 15:15
Customer ID:
Delivery Date: 3/7/23 08:00

Description: Gorgas Ash Pond Equipment Blank-1

Laboratory ID Number: BD04768

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04768	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.07	0.200	2.00	1.94	-0.067	1.94	1.80 to 2.20	97.0	90.0 to 110	0.00	15.0
BD04766	Solids, Dissolved	mg/L	0.0000	25.0			506	52.0	40.0 to 60.0			2.00	10.0

Comments:

Definitions

Project Number: WMWGORAP_1402

Abbreviation	Description
DF	Dilution Factor
LCS	Lab Control Sample
LFM	Lab Fortified Matrix
MB	Method Blank
MDL	Method Detection Limit; minimum concentration of an analyte that can be determined with 99% confidence that the concentration is greater than zero.
MS	Matrix Spike
MSD	Matrix Spike Duplicate
Prec	Precision (% RPD)
Q	Qualifier; comment used to note deviations or additional information associated with analytical results.
QC	Quality Control
Rec	Recovery of Matrix Spike
RL	Reporting Limit; lowest concentration at which an analyte can be quantitatively measured.
Vio Spec	Violation Specification; regulatory limit which has been exceeded by the sample analyzed.

Qualifier	Description
FA	Field results were reviewed by the Water Field Group. Refer to APC Field Case Narrative.
J	Reported value is an estimate because concentration is less than reporting limit.
RA	Matrix spike is invalid due to sample concentration.
U	Compound was analyzed, but not detected.

Alabama Power Lab & Field Services

Chain of Custody Groundwater

APC General Testing Laboratory

☑ Field Complete ☐ Outside Lab

☑ Lab Complete

Lab ETA

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Collector	Anthony Goggins	Requested By	Greg Dyer
		Location	Gorgas Ash Pond

Bottles

1	Metals	500 mL	3	Hg	250 mL	5	TDS/Alkalinity	500 mL	7	N/A	N/A
2	Dissolved Metals	500 mL	4	Nitrite, Nitrate; TOC	250 mL	6	Anions	500 mL	8	N/A	N/A

Comments: Updated collection date on all samples to 03/06/23 per sample container. BC 03/07/23

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id	pH Check
MW-44HO	03/06/2023	14:16	6	Groundwater		BD04765	☑
MW-44HO DUP	03/06/2023	14:16	6	Sample Duplicate		BD04766	☑
FB-1	03/06/2023	14:20	5	Field Blank		BD04767	☑
EB-1	03/06/2023	15:15	5	Equipment Blank		BD04768	☑
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Relinquished By	Received By	Date/Time
	Brooke Cotton	03/07/2023 07:49

SmarTroll ID	7586-41446-5-5	Cooler Temp	1.8 ℃
Turbidity ID	9830-57039-1-1	Thermometer ID	10614-61208-2-1
Sample Event	1402	pH Strip ID	10620-61238-10-4

Bottles/Pre-Preserved Bottles are provided by the GTL

Total Metals and Alkalinity are not performed on Dissolved Sets

Dissolved Metals and Alkalinity are not performed on blanks i.e. Field Blanks or Equipment Blanks

Alabama Power
Lab& Field SERVICES

Chain of Custody
Groundwater

APC General Testing Laboratory

☑ Field Complete ☑ Outside Lab
☑ Lab Complete

Lab ETA

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Collector	Anthony Goggins	Requested By	Greg Dyer
		Location	Gorgas Ash Pond

Bottles

1	Radium	1 L	3	N/A	N/A	5	N/A	N/A	7	N/A	N/A
2	N/A	N/A	4	N/A	N/A	6	N/A	N/A	8	N/A	N/A

Comments: Updated collection date on all samples to 03/06/23 per sample container. BC 03/07/23

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id	pH Check
MW-44HO	03/06/2023	14:16	1	Groundwater		BD04769	☑
MW-44HO DUP	03/06/2023	14:16	1	Sample Duplicate		BD04770	☑
FB-1	03/06/2023	14:20	1	Field Blank		BD04771	☑
EB-1	03/06/2023	15:15	1	Equipment Blank		BD04772	☑
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Relinquished By	Received By	Date/Time
	Brooke Carton	03/07/2023 07:50

SmarTroll ID	7586-41446-5-5	Cooler Temp	N/A
Turbidity ID	9830-58	Thermometer ID	N/A
Sample Event	1402	pH Strip ID	10620-61238-10-4

Bottles/Pre-Preserved Bottles are provided by the GTL

Total Metals and Alkalinity are not performed on Dissolved Sets

Dissolved Metals and Alkalinity are not performed on blanks i.e. Field Blanks or Equipment Blanks

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

May 16, 2023

Brooke Caton
Alabama Power
744 Highway 87
Calera, AL 35040

RE: Project: WMWGORAP_1400
Pace Project No.: 30576856

Dear Brooke Caton:

Enclosed are the analytical results for sample(s) received by the laboratory on April 05, 2023. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Greensburg

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Skyler Richmond

Skyler C. Richmond for
Justin P. Horn
justin.horn@pacelabs.com
(724)850-5600
Project Manager

Enclosures

cc: Blaine Denton, Alabama Power
Renee Jernigan, Alabama Power

CERTIFICATIONS

Project: WMWGORAP_1400
Pace Project No.: 30576856

Pace Analytical Services Pennsylvania

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification #: PA01547
Connecticut Certification #: PH-0694
Delaware Certification
EPA Region 4 DW Rad
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Florida: Cert E871149 SEKS WET
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: KY90133
KY WW Permit #: KY0098221
KY WW Permit #: KY0000221
Louisiana DHH/TNI Certification #: LA180012
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: 2017020
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification #: 9991
Missouri Certification #: 235
Montana Certification #: Cert0082
Nebraska Certification #: NE-OS-29-14
Nevada Certification #: PA014572018-1
New Hampshire/TNI Certification #: 297617
New Jersey/TNI Certification #: PA051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Ohio EPA Rad Approval: #41249
Oregon/TNI Certification #: PA200002-010
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: 02867
Texas/TNI Certification #: T104704188-17-3
Utah/TNI Certification #: PA014572017-9
USDA Soil Permit #: P330-17-00091
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Approve List for Rad
Wyoming Certification #: 8TMS-L

SAMPLE SUMMARY

Project: WMWGORAP_1400
Pace Project No.: 30576856

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30576856001	**BD05001 MW-6V**	Water	03/08/23 13:50	04/05/23 10:30
30576856002	**BD05002 MW-6V Dis**	Water	03/08/23 13:50	04/05/23 10:30
30576856003	**BD05384 MW-30HA**	Water	03/13/23 13:20	04/05/23 10:30
30576856004	**BD05385 MW-36V**	Water	03/14/23 11:10	04/05/23 10:30
30576856005	**BD05386 MW-27HR**	Water	03/14/23 13:04	04/05/23 10:30
30576856006	**BD05387 MW-28H**	Water	03/14/23 14:57	04/05/23 10:30
30576856007	**BD05387 MW-28H MS**	Water	03/14/23 14:57	04/05/23 10:30
30576856008	**BD05387 MW-28H MSD**	Water	03/14/23 14:57	04/05/23 10:30
30576856009	**BD05388 MW-37HR**	Water	03/15/23 12:08	04/05/23 10:30
30576856010	**BD05389 MW-47**	Water	03/14/23 13:51	04/05/23 10:30
30576856011	**BD05390 MW-14R**	Water	03/15/23 14:52	04/05/23 10:30
30576856012	**BD05391 MW-36H**	Water	03/15/23 11:17	04/05/23 10:30
30576856013	**BD05392 MW-41HS**	Water	03/13/23 14:40	04/05/23 10:30
30576856014	**BD05393 MW-7**	Water	03/14/23 10:27	04/05/23 10:30
30576856015	**BD05394 MW-6S**	Water	03/14/23 11:52	04/05/23 10:30
30576856016	**BD05395 MW-6S Dup**	Water	03/14/23 11:52	04/05/23 10:30
30576856017	**BD05396 MW-6D**	Water	03/14/23 12:55	04/05/23 10:30
30576856018	**BD05396 MW-6D MS**	Water	03/14/23 12:55	04/05/23 10:30
30576856019	**BD05396 MW-6D MSD**	Water	03/14/23 12:55	04/05/23 10:30
30576856020	**BD05397 MW-23V**	Water	03/14/23 14:00	04/05/23 10:30
30576856021	**BD05398 MW-23H**	Water	03/14/23 14:40	04/05/23 10:30
30576856022	**BD05399 MW-41HD**	Water	03/15/23 10:55	04/05/23 10:30
30576856023	**BD05400 MW-24H**	Water	03/15/23 12:30	04/05/23 10:30
30576856024	**BD05401 MW-24HDup**	Water	03/15/23 12:30	04/05/23 10:30
30576856025	**BD05402 MW-42H**	Water	03/15/23 14:20	04/05/23 10:30
30576856026	**BD05403 FB-1**	Water	03/15/23 14:45	04/05/23 10:30
30576856027	**BD05877 MW-15V**	Water	03/20/23 12:27	04/05/23 10:30
30576856028	**BD05878 FB-3**	Water	03/20/23 14:00	04/05/23 10:30
30576856029	**BD05879 MW-15**	Water	03/20/23 15:06	04/05/23 10:30
30576856030	**BD05880 PZ-16**	Water	03/21/23 08:52	04/05/23 10:30
30576856031	**BD05881 MW-16D**	Water	03/21/23 10:00	04/05/23 10:30
30576856032	**BD05882 MW-16S**	Water	03/21/23 11:30	04/05/23 10:30
30576856033	**BD05883 MW-21**	Water	03/21/23 13:09	04/05/23 10:30
30576856034	**BD05884 MW-21V**	Water	03/21/23 14:40	04/05/23 10:30
30576856035	**BD05885 MW-25HA**	Water	03/22/23 09:30	04/05/23 10:30
30576856036	**BD05886 MW-26H**	Water	03/22/23 11:32	04/05/23 10:30
30576856037	**BD05887 MW-40H**	Water	03/22/23 12:48	04/05/23 10:30

SAMPLE SUMMARY

Project: WMWGORAP_1400
Pace Project No.: 30576856

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30576856038	**BD05888 MW-32H**	Water	03/21/23 10:45	04/05/23 10:30
30576856039	**BD05889 MW-19**	Water	03/21/23 12:30	04/05/23 10:30
30576856040	**BD05889 MW-19MS**	Water	03/21/23 12:30	04/05/23 10:30
30576856041	**BD05889 MW-19 MSD**	Water	03/21/23 12:30	04/05/23 10:30
30576856042	**BD05890 FB-2**	Water	03/21/23 12:50	04/05/23 10:30
30576856043	**BD05891 PZ-22**	Water	03/21/23 13:38	04/05/23 10:30
30576856044	**BD05892 MW-17**	Water	03/22/23 10:28	04/05/23 10:30
30576856045	**BD05892 MW-17 Dup**	Water	03/22/23 10:28	04/05/23 10:30
30576856046	**BD05894 MW-17V**	Water	03/22/23 12:30	04/05/23 10:30
30576856047	**BD05895 FB-5**	Water	03/22/23 12:55	04/05/23 10:30
30576856048	**BD05896 MW-2**	Water	03/22/23 13:58	04/05/23 10:30
30576856049	**BD05897 MW-05R**	Water	03/20/23 14:05	04/05/23 10:30
30576856050	**BD05898 MW-3**	Water	03/21/23 10:55	04/05/23 10:30
30576856051	**BD05899 MW-03V**	Water	03/21/23 14:25	04/05/23 10:30
30576856052	**BD05900 MW-12V**	Water	03/22/23 10:53	04/05/23 10:30
30576856053	**BD05901 MW-12**	Water	03/22/23 13:00	04/05/23 10:30
30576856054	**BD05902 MW-11R**	Water	03/22/23 14:55	04/05/23 10:30
30576856055	**BD05902 MW-11R MS**	Water	03/22/23 14:55	04/05/23 10:30
30576856056	**BD05902 MW-11R MSD**	Water	03/22/23 14:55	04/05/23 10:30
30576856057	**BD05903 FB-4**	Water	03/22/23 15:20	04/05/23 10:30
30576856058	**BD06151 MW-13R**	Water	03/27/23 12:05	04/05/23 10:30
30576856059	**BD06152 MW10R**	Water	03/27/23 14:07	04/05/23 10:30
30576856060	**BD06153 MW-18VR**	Water	03/27/23 15:31	04/05/23 10:30
30576856061	**BD06154 EB-1**	Water	03/27/23 16:00	04/05/23 10:30
30576856062	**BD06155 MW-45V**	Water	03/28/23 08:55	04/05/23 10:30
30576856063	**BD06156 MW-43H**	Water	03/28/23 10:03	04/05/23 10:30
30576856064	**BD06157 MW-46**	Water	03/27/23 10:45	04/05/23 10:30
30576856065	**BD06158 MW-46 Dup**	Water	03/27/23 10:45	04/05/23 10:30
30576856066	**BD06159 MW-01R**	Water	03/27/23 13:02	04/05/23 10:30
30576856067	**BD06160 MW-31H**	Water	03/27/23 15:00	04/05/23 10:30
30576856068	**BD06161 MW-31V**	Water	03/27/23 16:37	04/05/23 10:30
30576856069	**BD06162 MW-29H**	Water	03/28/23 09:30	04/05/23 10:30
30576856070	**BD06163 MW-8**	Water	03/27/23 12:35	04/05/23 10:30
30576856071	**BD06164 MW-09R**	Water	03/27/23 14:40	04/05/23 10:30
30576856072	**BD06165 MW-9V**	Water	03/27/23 16:33	04/05/23 10:30
30576856073	**BD06166 PZ-18R**	Water	03/28/23 10:05	04/05/23 10:30
30576856074	**BD06167 PZ-18R Dup**	Water	03/28/23 10:05	04/05/23 10:30

SAMPLE SUMMARY

Project: WMWGORAP_1400
Pace Project No.: 30576856

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30576856075	**BD06168 MW-18R**	Water	03/28/23 11:10	04/05/23 10:30
30576856076	**BD06169 MW-18R Dup**	Water	03/28/23 11:10	04/05/23 10:30
30576856077	**BD06170 MW-38H**	Water	03/28/23 13:15	04/05/23 10:30
30576856078	**BD06171 FB-6**	Water	03/28/23 14:15	04/05/23 10:30

SAMPLE ANALYTE COUNT

Project: WMWGORAP_1400
Pace Project No.: 30576856

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30576856001	**BD05001 MW-6V**	EPA 9315	JJY	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30576856002	**BD05002 MW-6V Dis**	EPA 9315	JJY	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30576856003	**BD05384 MW-30HA**	EPA 9315	JJY	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30576856004	**BD05385 MW-36V**	EPA 9315	JJY	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30576856005	**BD05386 MW-27HR**	EPA 9315	JJY	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30576856006	**BD05387 MW-28H**	EPA 9315	JJY	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30576856007	**BD05387 MW-28H MS**	EPA 9315	JJY	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
30576856008	**BD05387 MW-28H MSD**	EPA 9315	JJY	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
30576856009	**BD05388 MW-37HR**	EPA 9315	JJY	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30576856010	**BD05389 MW-47**	EPA 9315	JJY	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30576856011	**BD05390 MW-14R**	EPA 9315	JJY	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30576856012	**BD05391 MW-36H**	EPA 9315	JJY	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30576856013	**BD05392 MW-41HS**	EPA 9315	JJY	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA

SAMPLE ANALYTE COUNT

Project: WMWGORAP_1400
Pace Project No.: 30576856

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30576856014	**BD05393 MW-7**	EPA 9315	JJY	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30576856015	**BD05394 MW-6S**	EPA 9315	JJY	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30576856016	**BD05395 MW-6S Dup**	EPA 9315	JJY	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30576856017	**BD05396 MW-6D**	EPA 9315	JJY	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30576856018	**BD05396 MW-6D MS**	EPA 9315	JJY	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
30576856019	**BD05396 MW-6D MSD**	EPA 9315	JJY	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
30576856020	**BD05397 MW-23V**	EPA 9315	JJY	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30576856021	**BD05398 MW-23H**	EPA 9315	JJY	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30576856022	**BD05399 MW-41HD**	EPA 9315	JJY	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30576856023	**BD05400 MW-24H**	EPA 9315	JJY	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30576856024	**BD05401 MW-24HDup**	EPA 9315	JJY	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30576856025	**BD05402 MW-42H**	EPA 9315	JJY	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30576856026	**BD05403 FB-1**	EPA 9315	JJY	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA

SAMPLE ANALYTE COUNT

Project: WMWGORAP_1400
Pace Project No.: 30576856

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30576856027	**BD05877 MW-15V**	EPA 9315	JJY	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30576856028	**BD05878 FB-3**	EPA 9315	JJY	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30576856029	**BD05879 MW-15**	EPA 9315	JJY	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30576856030	**BD05880 PZ-16**	EPA 9315	JJY	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30576856031	**BD05881 MW-16D**	EPA 9315	JJY	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30576856032	**BD05882 MW-16S**	EPA 9315	JJY	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30576856033	**BD05883 MW-21**	EPA 9315	JJY	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30576856034	**BD05884 MW-21V**	EPA 9315	JJY	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30576856035	**BD05885 MW-25HA**	EPA 9315	JJY	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30576856036	**BD05886 MW-26H**	EPA 9315	JJY	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30576856037	**BD05887 MW-40H**	EPA 9315	JJY	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30576856038	**BD05888 MW-32H**	EPA 9315	JJY	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30576856039	**BD05889 MW-19**	EPA 9315	JJY	1	PASI-PA

SAMPLE ANALYTE COUNT

Project: WMWGORAP_1400
Pace Project No.: 30576856

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30576856040	**BD05889 MW-19MS**	EPA 9315	JJY	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
30576856041	**BD05889 MW-19 MSD**	EPA 9315	JJY	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
30576856042	**BD05890 FB-2**	EPA 9315	JJY	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30576856043	**BD05891 PZ-22**	EPA 9315	JJY	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30576856044	**BD05892 MW-17**	EPA 9315	JJY	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30576856045	**BD05892 MW-17 Dup**	EPA 9315	JJY	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30576856046	**BD05894 MW-17V**	EPA 9315	JJY	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30576856047	**BD05895 FB-5**	EPA 9315	JJY	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30576856048	**BD05896 MW-2**	EPA 9315	JJY	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30576856049	**BD05897 MW-05R**	EPA 9315	JJY	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30576856050	**BD05898 MW-3**	EPA 9315	JJY	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30576856051	**BD05899 MW-03V**	EPA 9315	JJY	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30576856052	**BD05900 MW-12V**	EPA 9315	JJY	1	PASI-PA

SAMPLE ANALYTE COUNT

Project: WMWGORAP_1400
Pace Project No.: 30576856

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30576856053	**BD05901 MW-12**	EPA 9315	JJY	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30576856054	**BD05902 MW-11R**	EPA 9315	JJY	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30576856055	**BD05902 MW-11R MS**	EPA 9315	JJY	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
30576856056	**BD05902 MW-11R MSD**	EPA 9315	JJY	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
30576856057	**BD05903 FB-4**	EPA 9315	JJY	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30576856058	**BD06151 MW-13R**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30576856059	**BD06152 MW10R**	EPA 9315	JJY	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30576856060	**BD06153 MW-18VR**	EPA 9315	JJY	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30576856061	**BD06154 EB-1**	EPA 9315	JJY	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30576856062	**BD06155 MW-45V**	EPA 9315	JJY	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30576856063	**BD06156 MW-43H**	EPA 9315	JJY	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30576856064	**BD06157 MW-46**	EPA 9315	JJY	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30576856065	**BD06158 MW-46 Dup**	EPA 9315	JJY	1	PASI-PA

SAMPLE ANALYTE COUNT

Project: WMWGORAP_1400
Pace Project No.: 30576856

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30576856066	**BD06159 MW-01R**	EPA 9315	JJY	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30576856067	**BD06160 MW-31H**	EPA 9315	JJY	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30576856068	**BD06161 MW-31V**	EPA 9315	JJY	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30576856069	**BD06162 MW-29H**	EPA 9315	JJY	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30576856070	**BD06163 MW-8**	EPA 9315	JJY	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30576856071	**BD06164 MW-09R**	EPA 9315	JJY	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30576856072	**BD06165 MW-9V**	EPA 9315	JJY	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30576856073	**BD06166 PZ-18R**	EPA 9315	JJY	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30576856074	**BD06167 PZ-18R Dup**	EPA 9315	JJY	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30576856075	**BD06168 MW-18R**	EPA 9315	JJY	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30576856076	**BD06169 MW-18R Dup**	EPA 9315	JJY	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30576856077	**BD06170 MW-38H**	EPA 9315	JJY	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA

SAMPLE ANALYTE COUNT

Project: WMWGORAP_1400
Pace Project No.: 30576856

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		Total Radium Calculation	JAL	1	PASI-PA
30576856078	**BD06171 FB-6**	EPA 9315	JJY	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA

PASI-PA = Pace Analytical Services - Greensburg

PROJECT NARRATIVE

Project:	WMWGORAP_1400
Pace Project No.:	30576856

Method: **EPA 9315**
Description: 9315 Total Radium
Client: Alabama Power
Date: May 16, 2023

General Information:
78 samples were analyzed for EPA 9315 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

PROJECT NARRATIVE

Project:	WMWGORAP_1400
Pace Project No.:	30576856

Method:	**EPA 9320**
Description:	9320 Radium 228
Client:	Alabama Power
Date:	May 16, 2023

General Information:
78 samples were analyzed for EPA 9320 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

PROJECT NARRATIVE

Project:	WMWGORAP_1400
Pace Project No.:	30576856

Method: **Total Radium Calculation**
Description: Total Radium 228+226
Client: Alabama Power
Date: May 16, 2023

General Information:
70 samples were analyzed for Total Radium Calculation by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORAP_1400
Pace Project No.: 30576856

Sample: BD05001 MW-6V **Lab ID: 30576856001** Collected: 03/08/23 13:50 Received: 04/05/23 10:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.233U ± 0.218 (0.404)** **C:94% T:NA**	pCi/L	05/01/23 09:47	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.123U ± 0.317 (0.709)** **C:75% T:86%**	pCi/L	04/17/23 12:01	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.356U ± 0.535 (1.11)**	pCi/L	05/03/23 13:11	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project:	WMWGORAP_1400
Pace Project No.:	30576856

Sample: BD05002 MW-6V Dis **Lab ID: 30576856002** Collected: 03/08/23 13:50 Received: 04/05/23 10:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
		Pace Analytical Services - Greensburg				
Radium-226	EPA 9315	**0.138U ± 0.163 (0.319)** **C:98% T:NA**	pCi/L	05/01/23 09:47	13982-63-3	
		Pace Analytical Services - Greensburg				
Radium-228	EPA 9320	**0.213U ± 0.279 (0.594)** **C:81% T:88%**	pCi/L	04/17/23 12:01	15262-20-1	
		Pace Analytical Services - Greensburg				
Total Radium	Total Radium Calculation	**0.351U ± 0.442 (0.913)**	pCi/L	05/03/23 13:11	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORAP_1400
Pace Project No.: 30576856

Sample: BD05384 MW-30HA **Lab ID: 30576856003** Collected: 03/13/23 13:20 Received: 04/05/23 10:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.641 ± 0.298 (0.356)** **C:98% T:NA**	pCi/L	05/01/23 09:47	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.322U ± 0.293 (0.590)** **C:84% T:85%**	pCi/L	04/17/23 12:01	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.963 ± 0.591 (0.946)**	pCi/L	05/03/23 13:11	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORAP_1400
Pace Project No.: 30576856

Sample: BD05385 MW-36V **Lab ID: 30576856004** Collected: 03/14/23 11:10 Received: 04/05/23 10:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.157U ± 0.179 (0.354)** **C:96% T:NA**	pCi/L	05/01/23 10:17	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.648 ± 0.345 (0.611)** **C:83% T:87%**	pCi/L	04/17/23 12:01	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.805U ± 0.524 (0.965)**	pCi/L	05/03/23 13:11	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORAP_1400
Pace Project No.: 30576856

Sample: BD05386 MW-27HR **Lab ID: 30576856005** Collected: 03/14/23 13:04 Received: 04/05/23 10:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.357 ± 0.230 (0.338)** **C:102% T:NA**	pCi/L	05/01/23 09:47	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.931 ± 0.433 (0.737)** **C:76% T:87%**	pCi/L	04/17/23 12:01	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.29 ± 0.663 (1.08)**	pCi/L	05/03/23 13:11	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project:	WMWGORAP_1400
Pace Project No.:	30576856

Sample: BD05387 MW-28H **Lab ID: 30576856006** Collected: 03/14/23 14:57 Received: 04/05/23 10:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.106U ± 0.156 (0.333)** **C:97% T:NA**	pCi/L	05/01/23 09:47	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.633U ± 0.405 (0.761)** **C:74% T:83%**	pCi/L	04/17/23 12:01	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.739U ± 0.561 (1.09)**	pCi/L	05/03/23 13:11	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORAP_1400
Pace Project No.: 30576856

Sample: BD05387 MW-28H MS **Lab ID: 30576856007** Collected: 03/14/23 14:57 Received: 04/05/23 10:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**118.69 %REC ± NA (NA) C:NA T:NA**	pCi/L	05/01/23 09:47	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**75.24 %REC ± NA (NA) C:NA T:NA**	pCi/L	04/17/23 12:01	15262-20-1	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORAP_1400
Pace Project No.: 30576856

Sample: BD05387 MW-28H MSD **Lab ID: 30576856008** Collected: 03/14/23 14:57 Received: 04/05/23 10:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
		Pace Analytical Services - Greensburg				
Radium-226	EPA 9315	**123.36 %REC 3.86RPD ± NA (NA)** **C:NA T:NA**	pCi/L	05/01/23 08:42	13982-63-3	
		Pace Analytical Services - Greensburg				
Radium-228	EPA 9320	**74.64 %REC 0.80RPD ± NA (NA)** **C:NA T:NA**	pCi/L	04/17/23 12:01	15262-20-1	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORAP_1400
Pace Project No.: 30576856

Sample: BD05388 MW-37HR **Lab ID: 30576856009** Collected: 03/15/23 12:08 Received: 04/05/23 10:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.199U ± 0.208 (0.403)** **C:94% T:NA**	pCi/L	05/01/23 08:42	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.346U ± 0.343 (0.707)** **C:78% T:81%**	pCi/L	04/17/23 12:01	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.545U ± 0.551 (1.11)**	pCi/L	05/03/23 13:11	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORAP_1400
Pace Project No.: 30576856

Sample: BD05389 MW-47 **Lab ID: 30576856010** Collected: 03/14/23 13:51 Received: 04/05/23 10:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
		Pace Analytical Services - Greensburg				
Radium-226	EPA 9315	**0.149U ± 0.231 (0.512)** **C:98% T:NA**	pCi/L	05/01/23 08:43	13982-63-3	
		Pace Analytical Services - Greensburg				
Radium-228	EPA 9320	**0.618 ± 0.337 (0.596)** **C:78% T:88%**	pCi/L	04/17/23 12:02	15262-20-1	
		Pace Analytical Services - Greensburg				
Total Radium	Total Radium Calculation	**0.767U ± 0.568 (1.11)**	pCi/L	05/03/23 13:11	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORAP_1400
Pace Project No.: 30576856

Sample: BD05390 MW-14R **Lab ID: 30576856011** Collected: 03/15/23 14:52 Received: 04/05/23 10:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.145U ± 0.215 (0.471)** **C:94% T:NA**	pCi/L	05/01/23 08:44	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**-0.0889U ± 0.315 (0.756)** **C:76% T:82%**	pCi/L	04/17/23 12:02	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.145U ± 0.530 (1.23)**	pCi/L	05/03/23 13:11	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project:	WMWGORAP_1400
Pace Project No.:	30576856

Sample: BD05391 MW-36H **Lab ID: 30576856012** Collected: 03/15/23 11:17 Received: 04/05/23 10:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.184U ± 0.187 (0.355)** **C:96% T:NA**	pCi/L	05/01/23 08:45	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.172U ± 0.303 (0.662)** **C:78% T:79%**	pCi/L	04/17/23 12:02	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.356U ± 0.490 (1.02)**	pCi/L	05/03/23 13:11	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORAP_1400
Pace Project No.: 30576856

Sample: BD05392 MW-41HS **Lab ID: 30576856013** Collected: 03/13/23 14:40 Received: 04/05/23 10:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.0339U ± 0.156 (0.401) C:93% T:NA**	pCi/L	05/01/23 08:45	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.271U ± 0.306 (0.639) C:80% T:77%**	pCi/L	04/17/23 12:02	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.305U ± 0.462 (1.04)**	pCi/L	05/03/23 13:11	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORAP_1400
Pace Project No.: 30576856

Sample: BD05393 MW-7 **Lab ID: 30576856014** Collected: 03/14/23 10:27 Received: 04/05/23 10:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.106U ± 0.175 (0.389)** **C:99% T:NA**	pCi/L	05/01/23 08:46	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.245U ± 0.269 (0.558)** **C:78% T:87%**	pCi/L	04/17/23 12:02	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.351U ± 0.444 (0.947)**	pCi/L	05/03/23 13:11	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORAP_1400
Pace Project No.: 30576856

Sample: BD05394 MW-6S **Lab ID: 30576856015** Collected: 03/14/23 11:52 Received: 04/05/23 10:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.248U ± 0.239 (0.467)** **C:95% T:NA**	pCi/L	05/01/23 08:46	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.176U ± 0.331 (0.728)** **C:74% T:77%**	pCi/L	04/17/23 12:02	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.424U ± 0.570 (1.20)**	pCi/L	05/03/23 13:11	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project:	WMWGORAP_1400
Pace Project No.:	30576856

Sample: BD05395 MW-6S Dup **Lab ID: 30576856016** Collected: 03/14/23 11:52 Received: 04/05/23 10:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
		Pace Analytical Services - Greensburg				
Radium-226	EPA 9315	**0.150U ± 0.162 (0.304)** **C:95% T:NA**	pCi/L	05/01/23 08:47	13982-63-3	
		Pace Analytical Services - Greensburg				
Radium-228	EPA 9320	**0.328U ± 0.308 (0.622)** **C:76% T:84%**	pCi/L	04/17/23 12:02	15262-20-1	
		Pace Analytical Services - Greensburg				
Total Radium	Total Radium Calculation	**0.478U ± 0.470 (0.926)**	pCi/L	05/03/23 13:11	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORAP_1400
Pace Project No.: 30576856

Sample: BD05396 MW-6D **Lab ID: 30576856017** Collected: 03/14/23 12:55 Received: 04/05/23 10:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.244U ± 0.217 (0.396)** **C:95% T:NA**	pCi/L	05/01/23 15:46	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.412U ± 0.665 (1.44)** **C:81% T:37%**	pCi/L	04/21/23 12:05	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.656U ± 0.882 (1.84)**	pCi/L	05/03/23 13:11	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORAP_1400
Pace Project No.: 30576856

Sample: BD05396 MW-6D MS **Lab ID: 30576856018** Collected: 03/14/23 12:55 Received: 04/05/23 10:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**109.80 %REC ± NA (NA)** **C:NA T:NA**	pCi/L	05/01/23 15:46	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**97.14 %REC ± NA (NA)** **C:NA T:NA**	pCi/L	04/18/23 10:58	15262-20-1	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORAP_1400
Pace Project No.: 30576856

Sample: BD05396 MW-6D MSD **Lab ID: 30576856019** Collected: 03/14/23 12:55 Received: 04/05/23 10:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**120.38 %REC 9.19RPD ± NA (NA) C:NA T:NA**	pCi/L	05/01/23 15:46	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**81.81 %REC 17.14RPD ± NA (NA) C:NA T:NA**	pCi/L	04/18/23 10:59	15262-20-1	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORAP_1400
Pace Project No.: 30576856

Sample: BD05397 MW-23V **Lab ID: 30576856020** Collected: 03/14/23 14:00 Received: 04/05/23 10:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.0802U ± 0.190 (0.452)** **C:95% T:NA**	pCi/L	05/01/23 08:48	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.237U ± 0.293 (0.619)** **C:83% T:81%**	pCi/L	04/17/23 11:59	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.317U ± 0.483 (1.07)**	pCi/L	05/03/23 13:11	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORAP_1400
Pace Project No.: 30576856

Sample: BD05398 MW-23H **Lab ID: 30576856021** Collected: 03/14/23 14:40 Received: 04/05/23 10:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.259U ± 0.226 (0.400)** **C:95% T:NA**	pCi/L	05/01/23 08:48	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.482U ± 0.305 (0.563)** **C:77% T:87%**	pCi/L	04/17/23 11:59	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.741U ± 0.531 (0.963)**	pCi/L	05/03/23 13:12	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORAP_1400
Pace Project No.: 30576856

Sample: BD05399 MW-41HD **Lab ID: 30576856022** Collected: 03/15/23 10:55 Received: 04/05/23 10:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.0583U ± 0.134 (0.320)** **C:95% T:NA**	pCi/L	05/01/23 15:46	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.476U ± 0.419 (0.847)** **C:73% T:74%**	pCi/L	04/17/23 11:59	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.534U ± 0.553 (1.17)**	pCi/L	05/03/23 13:12	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORAP_1400
Pace Project No.: 30576856

Sample: BD05400 MW-24H **Lab ID: 30576856023** Collected: 03/15/23 12:30 Received: 04/05/23 10:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.507 ± 0.276 (0.372)** **C:99% T:NA**	pCi/L	05/01/23 15:46	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.525U ± 0.358 (0.685)** **C:77% T:87%**	pCi/L	04/18/23 10:59	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.03U ± 0.634 (1.06)**	pCi/L	05/03/23 13:12	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORAP_1400
Pace Project No.: 30576856

Sample: BD05401 MW-24HDup **Lab ID: 30576856024** Collected: 03/15/23 12:30 Received: 04/05/23 10:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.610 ± 0.293 (0.345)** **C:95% T:NA**	pCi/L	05/01/23 15:46	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.190U ± 0.378 (0.832)** **C:77% T:80%**	pCi/L	04/18/23 10:59	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.800U ± 0.671 (1.18)**	pCi/L	05/03/23 13:12	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORAP_1400
Pace Project No.: 30576856

Sample: BD05402 MW-42H **Lab ID: 30576856025** Collected: 03/15/23 14:20 Received: 04/05/23 10:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.0786U ± 0.146 (0.332)** **C:94% T:NA**	pCi/L	05/01/23 15:46	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.562U ± 0.499 (1.01)** **C:77% T:63%**	pCi/L	04/18/23 10:59	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.641U ± 0.645 (1.34)**	pCi/L	05/03/23 13:12	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORAP_1400
Pace Project No.: 30576856

Sample: BD05403 FB-1 **Lab ID: 30576856026** Collected: 03/15/23 14:45 Received: 04/05/23 10:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.00232U ± 0.118 (0.337) C:98% T:NA**	pCi/L	05/01/23 15:46	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.278U ± 0.320 (0.669) C:79% T:82%**	pCi/L	04/18/23 10:59	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.280U ± 0.438 (1.01)**	pCi/L	05/03/23 13:12	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORAP_1400
Pace Project No.: 30576856

Sample: BD05877 MW-15V **Lab ID: 30576856027** Collected: 03/20/23 12:27 Received: 04/05/23 10:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.217U ± 0.259 (0.544)** **C:95% T:NA**	pCi/L	05/01/23 19:12	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.267U ± 0.424 (0.920)** **C:78% T:67%**	pCi/L	04/18/23 10:59	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.484U ± 0.683 (1.46)**	pCi/L	05/03/23 13:12	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project:	WMWGORAP_1400
Pace Project No.:	30576856

Sample: BD05878 FB-3 **Lab ID: 30576856028** Collected: 03/20/23 14:00 Received: 04/05/23 10:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**-0.00285U ± 0.165 (0.454)** **C:92% T:NA**	pCi/L	05/01/23 19:14	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.183U ± 0.336 (0.736)** **C:79% T:80%**	pCi/L	04/18/23 10:59	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.183U ± 0.501 (1.19)**	pCi/L	05/03/23 13:12	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORAP_1400
Pace Project No.: 30576856

Sample: BD05879 MW-15 **Lab ID: 30576856029** Collected: 03/20/23 15:06 Received: 04/05/23 10:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.372U ± 0.252 (0.405)** **C:96% T:NA**	pCi/L	05/01/23 19:15	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.307U ± 0.350 (0.735)** **C:85% T:78%**	pCi/L	04/18/23 10:59	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.679U ± 0.602 (1.14)**	pCi/L	05/03/23 13:12	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORAP_1400
Pace Project No.: 30576856

Sample: BD05880 PZ-16 **Lab ID: 30576856030** Collected: 03/21/23 08:52 Received: 04/05/23 10:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.346U ± 0.232 (0.348)** **C:97% T:NA**	pCi/L	05/01/23 19:15	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.545U ± 0.335 (0.610)** **C:80% T:80%**	pCi/L	04/18/23 11:00	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.891U ± 0.567 (0.958)**	pCi/L	05/03/23 13:12	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORAP_1400
Pace Project No.: 30576856

Sample: BD05881 MW-16D **Lab ID: 30576856031** Collected: 03/21/23 10:00 Received: 04/05/23 10:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.343U ± 0.228 (0.348)** **C:97% T:NA**	pCi/L	05/01/23 19:15	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.518U ± 0.360 (0.687)** **C:77% T:81%**	pCi/L	04/18/23 11:00	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.861U ± 0.588 (1.04)**	pCi/L	05/03/23 13:12	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORAP_1400
Pace Project No.: 30576856

Sample: BD05882 MW-16S **Lab ID: 30576856032** Collected: 03/21/23 11:30 Received: 04/05/23 10:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Pace Analytical Services - Greensburg						
Radium-226	EPA 9315	**0.632 ± 0.316 (0.425)** **C:96% T:NA**	pCi/L	05/01/23 19:15	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	**0.409U ± 0.325 (0.636)** **C:77% T:83%**	pCi/L	04/18/23 11:00	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	**1.04U ± 0.641 (1.06)**	pCi/L	05/03/23 13:12	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORAP_1400
Pace Project No.: 30576856

Sample: BD05883 MW-21 **Lab ID: 30576856033** Collected: 03/21/23 13:09 Received: 04/05/23 10:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.213U ± 0.197 (0.358)** **C:95% T:NA**	pCi/L	05/01/23 16:26	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**-0.0670U ± 0.715 (1.71)** **C:81% T:29%**	pCi/L	04/21/23 12:05	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.213U ± 0.912 (2.07)**	pCi/L	05/03/23 13:12	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORAP_1400
Pace Project No.: 30576856

Sample: BD05884 MW-21V **Lab ID: 30576856034** Collected: 03/21/23 14:40 Received: 04/05/23 10:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.275U ± 0.202 (0.301)** **C:97% T:NA**	pCi/L	05/01/23 19:16	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.790U ± 0.443 (0.797)** **C:73% T:77%**	pCi/L	04/18/23 11:00	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.07U ± 0.645 (1.10)**	pCi/L	05/03/23 13:12	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORAP_1400
Pace Project No.: 30576856

Sample: BD05885 MW-25HA **Lab ID: 30576856035** Collected: 03/22/23 09:30 Received: 04/05/23 10:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.117U ± 0.184 (0.406)** **C:94% T:NA**	pCi/L	05/01/23 16:26	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**1.60U ± 1.27 (2.53)** **C:80% T:24%**	pCi/L	04/21/23 12:05	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.72U ± 1.45 (2.94)**	pCi/L	05/03/23 13:12	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORAP_1400
Pace Project No.: 30576856

Sample: BD05886 MW-26H **Lab ID: 30576856036** Collected: 03/22/23 11:32 Received: 04/05/23 10:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.164U ± 0.196 (0.397)** **C:94% T:NA**	pCi/L	05/01/23 19:16	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.382U ± 0.376 (0.766)** **C:77% T:71%**	pCi/L	04/18/23 11:01	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.546U ± 0.572 (1.16)**	pCi/L	05/03/23 13:12	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORAP_1400
Pace Project No.: 30576856

Sample: BD05887 MW-40H **Lab ID: 30576856037** Collected: 03/22/23 12:48 Received: 04/05/23 10:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.235U ± 0.191 (0.310)** **C:90% T:NA**	pCi/L	05/01/23 19:21	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.537U ± 0.362 (0.690)** **C:77% T:81%**	pCi/L	04/18/23 11:00	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.772U ± 0.553 (1.000)**	pCi/L	05/03/23 13:12	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORAP_1400
Pace Project No.: 30576856

Sample: BD05888 MW-32H **Lab ID: 30576856038** Collected: 03/21/23 10:45 Received: 04/05/23 10:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.0512U ± 0.183 (0.457)** **C:97% T:NA**	pCi/L	05/01/23 19:21	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.452U ± 0.378 (0.747)** **C:75% T:71%**	pCi/L	04/18/23 11:00	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.503U ± 0.561 (1.20)**	pCi/L	05/03/23 13:12	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORAP_1400
Pace Project No.: 30576856

Sample: BD05889 MW-19 **Lab ID: 30576856039** Collected: 03/21/23 12:30 Received: 04/05/23 10:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.108U ± 0.132 (0.266)** **C:97% T:NA**	pCi/L	05/02/23 09:28	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.299U ± 0.414 (0.886)** **C:77% T:74%**	pCi/L	04/19/23 11:44	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.407U ± 0.546 (1.15)**	pCi/L	05/03/23 13:12	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORAP_1400
Pace Project No.: 30576856

Sample: BD05889 MW-19MS **Lab ID: 30576856040** Collected: 03/21/23 12:30 Received: 04/05/23 10:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**112.42 %REC ± NA (NA)** **C:NA T:NA**	pCi/L	05/02/23 09:28	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**97.28 %REC ± NA (NA)** **C:NA T:NA**	pCi/L	04/19/23 11:44	15262-20-1	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORAP_1400
Pace Project No.: 30576856

Sample: BD05889 MW-19 MSD **Lab ID: 30576856041** Collected: 03/21/23 12:30 Received: 04/05/23 10:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**101.96 %REC 9.76RPD ± NA (NA) C:NA T:NA**	pCi/L	05/02/23 09:28	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**109.55 %REC 11.86RPD ± NA (NA) C:NA T:NA**	pCi/L	04/19/23 11:44	15262-20-1	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORAP_1400
Pace Project No.: 30576856

Sample: BD05890 FB-2 **Lab ID: 30576856042** Collected: 03/21/23 12:50 Received: 04/05/23 10:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.210U ± 0.217 (0.420)** **C:92% T:NA**	pCi/L	05/02/23 09:28	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.141U ± 0.302 (0.668)** **C:80% T:89%**	pCi/L	04/18/23 11:00	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.351U ± 0.519 (1.09)**	pCi/L	05/03/23 13:13	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORAP_1400
Pace Project No.: 30576856

Sample: BD05891 PZ-22 **Lab ID: 30576856043** Collected: 03/21/23 13:38 Received: 04/05/23 10:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.258 ± 0.172 (0.252)** **C:95% T:NA**	pCi/L	05/02/23 09:28	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.748U ± 0.486 (0.916)** **C:77% T:70%**	pCi/L	04/19/23 11:44	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.01U ± 0.658 (1.17)**	pCi/L	05/03/23 13:13	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORAP_1400
Pace Project No.: 30576856

Sample: BD05892 MW-17 **Lab ID: 30576856044** Collected: 03/22/23 10:28 Received: 04/05/23 10:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.0464U ± 0.105 (0.250) C:96% T:NA**	pCi/L	05/02/23 09:28	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.556U ± 0.417 (0.814) C:78% T:82%**	pCi/L	04/19/23 11:44	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.602U ± 0.522 (1.06)**	pCi/L	05/03/23 13:13	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORAP_1400
Pace Project No.: 30576856

Sample: BD05892 MW-17 Dup **Lab ID: 30576856045** Collected: 03/22/23 10:28 Received: 04/05/23 10:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.128U ± 0.183 (0.397)** **C:100% T:NA**	pCi/L	05/02/23 09:28	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.222U ± 0.332 (0.715)** **C:77% T:83%**	pCi/L	04/19/23 11:45	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.350U ± 0.515 (1.11)**	pCi/L	05/03/23 13:13	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORAP_1400
Pace Project No.: 30576856

Sample: BD05894 MW-17V **Lab ID: 30576856046** Collected: 03/22/23 12:30 Received: 04/05/23 10:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.364 ± 0.216 (0.299)** **C:98% T:NA**	pCi/L	05/02/23 09:28	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.343U ± 0.421 (0.892)** **C:77% T:75%**	pCi/L	04/19/23 11:45	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.707U ± 0.637 (1.19)**	pCi/L	05/03/23 13:13	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORAP_1400
Pace Project No.: 30576856

Sample: BD05895 FB-5 **Lab ID: 30576856047** Collected: 03/22/23 12:55 Received: 04/05/23 10:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.211U ± 0.161 (0.259)** **C:98% T:NA**	pCi/L	05/02/23 09:28	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.225U ± 0.350 (0.757)** **C:76% T:87%**	pCi/L	04/19/23 11:45	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.436U ± 0.511 (1.02)**	pCi/L	05/03/23 13:13	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORAP_1400
Pace Project No.: 30576856

Sample: BD05896 MW-2 **Lab ID: 30576856048** Collected: 03/22/23 13:58 Received: 04/05/23 10:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**-0.0287U ± 0.120 (0.379)** **C:87% T:NA**	pCi/L	05/02/23 09:28	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.0664U ± 0.324 (0.742)** **C:75% T:82%**	pCi/L	04/19/23 11:45	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.0664U ± 0.444 (1.12)**	pCi/L	05/03/23 13:13	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORAP_1400
Pace Project No.: 30576856

Sample: BD05897 MW-05R **Lab ID: 30576856049** Collected: 03/20/23 14:05 Received: 04/05/23 10:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.167U ± 0.181 (0.370)** **C:104% T:NA**	pCi/L	05/02/23 08:28	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.575U ± 0.493 (0.992)** **C:76% T:69%**	pCi/L	04/19/23 11:45	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.742U ± 0.674 (1.36)**	pCi/L	05/03/23 13:13	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORAP_1400
Pace Project No.: 30576856

Sample: BD05898 MW-3 **Lab ID: 30576856050** Collected: 03/21/23 10:55 Received: 04/05/23 10:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.205U ± 0.153 (0.250)** **C:93% T:NA**	pCi/L	05/01/23 19:17	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.870 ± 0.457 (0.797)** **C:77% T:75%**	pCi/L	04/19/23 11:45	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.08 ± 0.610 (1.05)**	pCi/L	05/03/23 13:13	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORAP_1400
Pace Project No.: 30576856

Sample: BD05899 MW-03V **Lab ID: 30576856051** Collected: 03/21/23 14:25 Received: 04/05/23 10:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.0821U ± 0.129 (0.286)** **C:97% T:NA**	pCi/L	05/01/23 19:17	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.107U ± 0.319 (0.720)** **C:77% T:78%**	pCi/L	04/19/23 11:45	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.189U ± 0.448 (1.01)**	pCi/L	05/03/23 13:13	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project:	WMWGORAP_1400
Pace Project No.:	30576856

Sample: BD05900 MW-12V **Lab ID: 30576856052** Collected: 03/22/23 10:53 Received: 04/05/23 10:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.587 ± 0.240 (0.225)** **C:93% T:NA**	pCi/L	05/02/23 08:32	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.578U ± 0.373 (0.690)** **C:77% T:79%**	pCi/L	04/19/23 11:45	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.17 ± 0.613 (0.915)**	pCi/L	05/03/23 13:13	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORAP_1400
Pace Project No.: 30576856

Sample: BD05901 MW-12 **Lab ID: 30576856053** Collected: 03/22/23 13:00 Received: 04/05/23 10:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.443 ± 0.212 (0.257)** **C:89% T:NA**	pCi/L	05/02/23 08:30	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.735U ± 0.429 (0.780)** **C:78% T:78%**	pCi/L	04/19/23 11:46	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.18 ± 0.641 (1.04)**	pCi/L	05/03/23 13:13	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORAP_1400
Pace Project No.: 30576856

Sample: BD05902 MW-11R **Lab ID: 30576856054** Collected: 03/22/23 14:55 Received: 04/05/23 10:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.292 ± 0.185 (0.283)** **C:88% T:NA**	pCi/L	05/02/23 14:39	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.399U ± 0.373 (0.760)** **C:72% T:93%**	pCi/L	04/19/23 14:52	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.691U ± 0.558 (1.04)**	pCi/L	05/03/23 13:13	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORAP_1400
Pace Project No.: 30576856

Sample: BD05902 MW-11R MS **Lab ID: 30576856055** Collected: 03/22/23 14:55 Received: 04/05/23 10:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
		Pace Analytical Services - Greensburg				
Radium-226	EPA 9315	**113.85 %REC ± NA (NA)** **C:NA T:NA**	pCi/L	05/02/23 14:39	13982-63-3	
		Pace Analytical Services - Greensburg				
Radium-228	EPA 9320	**115.08 %REC ± NA (NA)** **C:NA T:NA**	pCi/L	04/19/23 14:52	15262-20-1	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORAP_1400
Pace Project No.: 30576856

Sample: BD05902 MW-11R MSD **Lab ID: 30576856056** Collected: 03/22/23 14:55 Received: 04/05/23 10:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**113.49 %REC 0.32RPD ± NA (NA) C:NA T:NA**	pCi/L	05/02/23 14:39	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**109.25 %REC 5.20RPD ± NA (NA) C:NA T:NA**	pCi/L	04/19/23 14:52	15262-20-1	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORAP_1400
Pace Project No.: 30576856

Sample: BD05903 FB-4 **Lab ID: 30576856057** Collected: 03/22/23 15:20 Received: 04/05/23 10:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.132U ± 0.149 (0.301)** **C:103% T:NA**	pCi/L	05/02/23 08:32	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.434U ± 0.385 (0.775)** **C:77% T:80%**	pCi/L	04/19/23 11:46	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.566U ± 0.534 (1.08)**	pCi/L	05/03/23 13:13	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORAP_1400
Pace Project No.: 30576856

Sample: BD06151 MW-13R **Lab ID: 30576856058** Collected: 03/27/23 12:05 Received: 04/05/23 10:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.0470U ± 0.0877 (0.200)** **C:79% T:NA**	pCi/L	05/11/23 08:30	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.300U ± 0.405 (0.865)** **C:76% T:78%**	pCi/L	04/19/23 11:46	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.347U ± 0.493 (1.07)**	pCi/L	05/11/23 14:53	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORAP_1400
Pace Project No.: 30576856

Sample: BD06152 MW10R **Lab ID: 30576856059** Collected: 03/27/23 14:07 Received: 04/05/23 10:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.0169U ± 0.122 (0.329)** **C:79% T:NA**	pCi/L	05/02/23 08:32	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.405U ± 0.375 (0.760)** **C:76% T:80%**	pCi/L	04/19/23 11:46	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.422U ± 0.497 (1.09)**	pCi/L	05/03/23 13:13	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORAP_1400
Pace Project No.: 30576856

Sample: BD06153 MW-18VR **Lab ID: 30576856060** Collected: 03/27/23 15:31 Received: 04/05/23 10:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.159U ± 0.151 (0.278)** **C:95% T:NA**	pCi/L	05/01/23 19:22	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.549U ± 0.355 (0.658)** **C:76% T:89%**	pCi/L	04/19/23 11:46	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.708U ± 0.506 (0.936)**	pCi/L	05/03/23 13:13	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORAP_1400
Pace Project No.: 30576856

Sample: BD06154 EB-1 **Lab ID: 30576856061** Collected: 03/27/23 16:00 Received: 04/05/23 10:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.0367U ± 0.119 (0.302)** **C:66% T:NA**	pCi/L	05/01/23 19:26	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**1.07 ± 0.478 (0.780)** **C:79% T:74%**	pCi/L	04/19/23 11:43	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.11 ± 0.597 (1.08)**	pCi/L	05/03/23 13:13	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORAP_1400
Pace Project No.: 30576856

Sample: BD06155 MW-45V **Lab ID: 30576856062** Collected: 03/28/23 08:55 Received: 04/05/23 10:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.225U ± 0.159 (0.239)** **C:94% T:NA**	pCi/L	05/02/23 14:39	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.422U ± 0.324 (0.625)** **C:75% T:86%**	pCi/L	04/19/23 11:43	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.647U ± 0.483 (0.864)**	pCi/L	05/03/23 13:13	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project:	WMWGORAP_1400
Pace Project No.:	30576856

Sample: BD06156 MW-43H **Lab ID: 30576856063** Collected: 03/28/23 10:03 Received: 04/05/23 10:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.228U ± 0.176 (0.295)** **C:99% T:NA**	pCi/L	05/02/23 14:39	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.605U ± 0.424 (0.815)** **C:74% T:81%**	pCi/L	04/19/23 14:52	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.833U ± 0.600 (1.11)**	pCi/L	05/03/23 13:13	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORAP_1400
Pace Project No.: 30576856

Sample: BD06157 MW-46 **Lab ID: 30576856064** Collected: 03/27/23 10:45 Received: 04/05/23 10:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.0303U ± 0.142 (0.360)** **C:83% T:NA**	pCi/L	05/02/23 14:39	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**-0.153U ± 0.326 (0.803)** **C:76% T:86%**	pCi/L	04/19/23 14:53	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.0303U ± 0.468 (1.16)**	pCi/L	05/03/23 13:13	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORAP_1400
Pace Project No.: 30576856

Sample: BD06158 MW-46 Dup **Lab ID: 30576856065** Collected: 03/27/23 10:45 Received: 04/05/23 10:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.230U ± 0.163 (0.255)** **C:98% T:NA**	pCi/L	05/02/23 14:39	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.568U ± 0.416 (0.804)** **C:72% T:80%**	pCi/L	04/19/23 14:53	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.798U ± 0.579 (1.06)**	pCi/L	05/03/23 13:14	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORAP_1400
Pace Project No.: 30576856

Sample: BD06159 MW-01R **Lab ID: 30576856066** Collected: 03/27/23 13:02 Received: 04/05/23 10:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.110U ± 0.120 (0.230)** **C:113% T:NA**	pCi/L	05/02/23 14:39	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.388U ± 0.411 (0.854)** **C:74% T:83%**	pCi/L	04/19/23 14:53	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.498U ± 0.531 (1.08)**	pCi/L	05/03/23 13:14	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORAP_1400
Pace Project No.: 30576856

Sample: BD06160 MW-31H **Lab ID: 30576856067** Collected: 03/27/23 15:00 Received: 04/05/23 10:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**-0.0170U ± 0.0707 (0.224)** **C:99% T:NA**	pCi/L	05/02/23 14:39	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.390U ± 0.404 (0.837)** **C:73% T:82%**	pCi/L	04/19/23 14:53	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.390U ± 0.475 (1.06)**	pCi/L	05/03/23 13:14	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORAP_1400
Pace Project No.: 30576856

Sample: BD06161 MW-31V **Lab ID: 30576856068** Collected: 03/27/23 16:37 Received: 04/05/23 10:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.207U ± 0.190 (0.369)** **C:96% T:NA**	pCi/L	05/02/23 18:07	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.758 ± 0.399 (0.696)** **C:73% T:91%**	pCi/L	04/19/23 14:53	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.965U ± 0.589 (1.07)**	pCi/L	05/03/23 13:14	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project:	WMWGORAP_1400
Pace Project No.:	30576856

Sample: BD06162 MW-29H **Lab ID: 30576856069** Collected: 03/28/23 09:30 Received: 04/05/23 10:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.397U ± 0.273 (0.455)** **C:82% T:NA**	pCi/L	05/02/23 18:08	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**-0.0631U ± 0.374 (0.886)** **C:73% T:81%**	pCi/L	04/19/23 14:53	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.397U ± 0.647 (1.34)**	pCi/L	05/03/23 13:14	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORAP_1400
Pace Project No.: 30576856

Sample: BD06163 MW-8 **Lab ID: 30576856070** Collected: 03/27/23 12:35 Received: 04/05/23 10:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.0395U ± 0.108 (0.265)** **C:93% T:NA**	pCi/L	05/02/23 18:09	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.102U ± 0.349 (0.791)** **C:71% T:81%**	pCi/L	04/19/23 14:53	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.142U ± 0.457 (1.06)**	pCi/L	05/03/23 13:14	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORAP_1400
Pace Project No.: 30576856

Sample: BD06164 MW-09R **Lab ID: 30576856071** Collected: 03/27/23 14:40 Received: 04/05/23 10:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.0761U ± 0.125 (0.279) C:97% T:NA**	pCi/L	05/02/23 18:10	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.187U ± 0.329 (0.720) C:73% T:83%**	pCi/L	04/19/23 14:53	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.263U ± 0.454 (0.999)**	pCi/L	05/03/23 13:14	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORAP_1400
Pace Project No.: 30576856

Sample: BD06165 MW-9V **Lab ID: 30576856072** Collected: 03/27/23 16:33 Received: 04/05/23 10:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.143U ± 0.151 (0.302)** **C:96% T:NA**	pCi/L	05/02/23 18:10	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.271U ± 0.360 (0.766)** **C:69% T:89%**	pCi/L	04/19/23 14:53	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.414U ± 0.511 (1.07)**	pCi/L	05/03/23 13:14	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORAP_1400
Pace Project No.: 30576856

Sample: BD06166 PZ-18R **Lab ID: 30576856073** Collected: 03/28/23 10:05 Received: 04/05/23 10:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.202U ± 0.164 (0.291)** **C:92% T:NA**	pCi/L	05/03/23 08:32	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.324U ± 0.400 (0.845)** **C:68% T:84%**	pCi/L	04/19/23 14:54	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.526U ± 0.564 (1.14)**	pCi/L	05/03/23 13:14	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORAP_1400
Pace Project No.: 30576856

Sample: BD06167 PZ-18R Dup **Lab ID: 30576856074** Collected: 03/28/23 10:05 Received: 04/05/23 10:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
		Pace Analytical Services - Greensburg				
Radium-226	EPA 9315	**0.0962U ± 0.132 (0.280)** **C:96% T:NA**	pCi/L	05/03/23 08:32	13982-63-3	
		Pace Analytical Services - Greensburg				
Radium-228	EPA 9320	**0.0538U ± 0.363 (0.834)** **C:73% T:85%**	pCi/L	04/19/23 14:54	15262-20-1	
		Pace Analytical Services - Greensburg				
Total Radium	Total Radium Calculation	**0.150U ± 0.495 (1.11)**	pCi/L	05/03/23 13:14	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORAP_1400
Pace Project No.: 30576856

Sample: BD06168 MW-18R **Lab ID: 30576856075** Collected: 03/28/23 11:10 Received: 04/05/23 10:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.245 ± 0.166 (0.239)** **C:89% T:NA**	pCi/L	05/02/23 15:49	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.644U ± 0.418 (0.782)** **C:76% T:78%**	pCi/L	04/19/23 14:54	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.889U ± 0.584 (1.02)**	pCi/L	05/03/23 13:14	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project:	WMWGORAP_1400
Pace Project No.:	30576856

Sample: BD06169 MW-18R Dup **Lab ID: 30576856076** Collected: 03/28/23 11:10 Received: 04/05/23 10:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.217 ± 0.147 (0.212)** **C:94% T:NA**	pCi/L	05/03/23 08:32	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.800 ± 0.410 (0.700)** **C:78% T:82%**	pCi/L	04/19/23 14:54	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.02 ± 0.557 (0.912)**	pCi/L	05/03/23 13:14	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORAP_1400
Pace Project No.: 30576856

Sample: BD06170 MW-38H **Lab ID: 30576856077** Collected: 03/28/23 13:15 Received: 04/05/23 10:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.375 ± 0.210 (0.306)** **C:97% T:NA**	pCi/L	05/03/23 08:33	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.127U ± 0.335 (0.751)** **C:76% T:81%**	pCi/L	04/19/23 14:51	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.502U ± 0.545 (1.06)**	pCi/L	05/03/23 13:14	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORAP_1400
Pace Project No.: 30576856

Sample: BD06171 FB-6 **Lab ID: 30576856078** Collected: 03/28/23 14:15 Received: 04/05/23 10:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.0632U ± 0.134 (0.315)** **C:82% T:NA**	pCi/L	05/03/23 08:33	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.342U ± 0.320 (0.641)** **C:78% T:77%**	pCi/L	04/19/23 14:51	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.405U ± 0.454 (0.956)**	pCi/L	05/03/23 13:14	7440-14-4	

QUALITY CONTROL - RADIOCHEMISTRY

Project: WMWGORAP_1400
Pace Project No.: 30576856

QC Batch: 580011
QC Batch Method: EPA 9320
Analysis Method: EPA 9320
Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg

Associated Lab Samples: 30576856039, 30576856040, 30576856041, 30576856043, 30576856044, 30576856045, 30576856046, 30576856047, 30576856048, 30576856049, 30576856050, 30576856051, 30576856052, 30576856053, 30576856057, 30576856058, 30576856059, 30576856060, 30576856061, 30576856062

METHOD BLANK: 2816979
Matrix: Water

Associated Lab Samples: 30576856039, 30576856040, 30576856041, 30576856043, 30576856044, 30576856045, 30576856046, 30576856047, 30576856048, 30576856049, 30576856050, 30576856051, 30576856052, 30576856053, 30576856057, 30576856058, 30576856059, 30576856060, 30576856061, 30576856062

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.364 ± 0.287 (0.553) C:76% T:89%	pCi/L	04/19/23 11:43	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

QUALITY CONTROL - RADIOCHEMISTRY

Project: WMWGORAP_1400
Pace Project No.: 30576856

QC Batch: 579922
QC Batch Method: EPA 9315
Analysis Method: EPA 9315
Analysis Description: 9315 Total Radium
Laboratory: Pace Analytical Services - Greensburg

Associated Lab Samples: 30576856017, 30576856018, 30576856019, 30576856022, 30576856023, 30576856024, 30576856025, 30576856026, 30576856027, 30576856028, 30576856029, 30576856030, 30576856031, 30576856032, 30576856033, 30576856034, 30576856035, 30576856036, 30576856037, 30576856038

METHOD BLANK: 2816637
Matrix: Water

Associated Lab Samples: 30576856017, 30576856018, 30576856019, 30576856022, 30576856023, 30576856024, 30576856025, 30576856026, 30576856027, 30576856028, 30576856029, 30576856030, 30576856031, 30576856032, 30576856033, 30576856034, 30576856035, 30576856036, 30576856037, 30576856038

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.00310 ± 0.0526 (0.148) C:94% T:NA	pCi/L	05/01/23 15:46	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

QUALITY CONTROL - RADIOCHEMISTRY

Project: WMWGORAP_1400
Pace Project No.: 30576856

QC Batch: 579925
QC Batch Method: EPA 9315
Analysis Method: EPA 9315
Analysis Description: 9315 Total Radium
Laboratory: Pace Analytical Services - Greensburg

Associated Lab Samples: 30576856039, 30576856040, 30576856041, 30576856042, 30576856043, 30576856044, 30576856045, 30576856046, 30576856047, 30576856048, 30576856049, 30576856050, 30576856051, 30576856052, 30576856053, 30576856057, 30576856059, 30576856060, 30576856061

METHOD BLANK: 2816645 Matrix: Water

Associated Lab Samples: 30576856039, 30576856040, 30576856041, 30576856042, 30576856043, 30576856044, 30576856045, 30576856046, 30576856047, 30576856048, 30576856049, 30576856050, 30576856051, 30576856052, 30576856053, 30576856057, 30576856059, 30576856060, 30576856061

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.0844 ± 0.0840 (0.152) C:82% T:NA	pCi/L	05/01/23 16:20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

QUALITY CONTROL - RADIOCHEMISTRY

Project: WMWGORAP_1400
Pace Project No.: 30576856

QC Batch:	579926	Analysis Method:	EPA 9315
QC Batch Method:	EPA 9315	Analysis Description:	9315 Total Radium
		Laboratory:	Pace Analytical Services - Greensburg

Associated Lab Samples: 30576856054, 30576856055, 30576856056, 30576856062, 30576856063, 30576856064, 30576856065, 30576856066, 30576856067, 30576856068, 30576856069, 30576856070, 30576856071, 30576856072, 30576856073, 30576856074, 30576856075, 30576856076, 30576856077, 30576856078

METHOD BLANK: 2816646 Matrix: Water

Associated Lab Samples: 30576856054, 30576856055, 30576856056, 30576856062, 30576856063, 30576856064, 30576856065, 30576856066, 30576856067, 30576856068, 30576856069, 30576856070, 30576856071, 30576856072, 30576856073, 30576856074, 30576856075, 30576856076, 30576856077, 30576856078

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	-0.00965 ± 0.0490 (0.153) C:93% T:NA	pCi/L	05/02/23 14:39	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

QUALITY CONTROL - RADIOCHEMISTRY

Project: WMWGORAP_1400
Pace Project No.: 30576856

QC Batch: 585300
QC Batch Method: EPA 9315
Analysis Method: EPA 9315
Analysis Description: 9315 Total Radium
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30576856058

METHOD BLANK: 2842736
Matrix: Water
Associated Lab Samples: 30576856058

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.0664 ± 0.107 (0.236) C:83% T:NA	pCi/L	05/10/23 18:42	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

QUALITY CONTROL - RADIOCHEMISTRY

Project:	WMWGORAP_1400
Pace Project No.:	30576856

QC Batch:	580013	Analysis Method:	EPA 9320
QC Batch Method:	EPA 9320	Analysis Description:	9320 Radium 228
		Laboratory:	Pace Analytical Services - Greensburg

Associated Lab Samples: 30576856054, 30576856055, 30576856056, 30576856063, 30576856064, 30576856065, 30576856066, 30576856067, 30576856068, 30576856069, 30576856070, 30576856071, 30576856072, 30576856073, 30576856074, 30576856075, 30576856076, 30576856077, 30576856078

METHOD BLANK: 2816983 Matrix: Water

Associated Lab Samples: 30576856054, 30576856055, 30576856056, 30576856063, 30576856064, 30576856065, 30576856066, 30576856067, 30576856068, 30576856069, 30576856070, 30576856071, 30576856072, 30576856073, 30576856074, 30576856075, 30576856076, 30576856077, 30576856078

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.615 ± 0.404 (0.747) C:72% T:74%	pCi/L	04/19/23 14:51	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

QUALITY CONTROL - RADIOCHEMISTRY

Project: WMWGORAP_1400
Pace Project No.: 30576856

QC Batch: 580008
QC Batch Method: EPA 9320
Analysis Method: EPA 9320
Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg

Associated Lab Samples: 30576856017, 30576856018, 30576856019, 30576856023, 30576856024, 30576856025, 30576856026, 30576856027, 30576856028, 30576856029, 30576856030, 30576856031, 30576856032, 30576856033, 30576856034, 30576856035, 30576856036, 30576856037, 30576856038, 30576856042

METHOD BLANK: 2816967
Matrix: Water

Associated Lab Samples: 30576856017, 30576856018, 30576856019, 30576856023, 30576856024, 30576856025, 30576856026, 30576856027, 30576856028, 30576856029, 30576856030, 30576856031, 30576856032, 30576856033, 30576856034, 30576856035, 30576856036, 30576856037, 30576856038, 30576856042

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	-0.0687 ± 0.300 (0.725) C:73% T:81%	pCi/L	04/18/23 10:58	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

QUALITY CONTROL - RADIOCHEMISTRY

Project: WMWGORAP_1400
Pace Project No.: 30576856

QC Batch: 580007
QC Batch Method: EPA 9320
Analysis Method: EPA 9320
Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg

Associated Lab Samples: 30576856001, 30576856002, 30576856003, 30576856004, 30576856005, 30576856006, 30576856007, 30576856008, 30576856009, 30576856010, 30576856011, 30576856012, 30576856013, 30576856014, 30576856015, 30576856016, 30576856020, 30576856021, 30576856022

METHOD BLANK: 2816963
Matrix: Water

Associated Lab Samples: 30576856001, 30576856002, 30576856003, 30576856004, 30576856005, 30576856006, 30576856007, 30576856008, 30576856009, 30576856010, 30576856011, 30576856012, 30576856013, 30576856014, 30576856015, 30576856016, 30576856020, 30576856021, 30576856022

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.344 ± 0.365 (0.756) C:71% T:78%	pCi/L	04/17/23 12:02	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

QUALITY CONTROL - RADIOCHEMISTRY

Project: WMWGORAP_1400
Pace Project No.: 30576856

QC Batch: 579919
QC Batch Method: EPA 9315
Analysis Method: EPA 9315
Analysis Description: 9315 Total Radium
Laboratory: Pace Analytical Services - Greensburg

Associated Lab Samples: 30576856001, 30576856002, 30576856003, 30576856004, 30576856005, 30576856006, 30576856007, 30576856008, 30576856009, 30576856010, 30576856011, 30576856012, 30576856013, 30576856014, 30576856015, 30576856016, 30576856020, 30576856021

METHOD BLANK: 2816620
Matrix: Water

Associated Lab Samples: 30576856001, 30576856002, 30576856003, 30576856004, 30576856005, 30576856006, 30576856007, 30576856008, 30576856009, 30576856010, 30576856011, 30576856012, 30576856013, 30576856014, 30576856015, 30576856016, 30576856020, 30576856021

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.0470 ± 0.0673 (0.143) C:97% T:NA	pCi/L	05/01/23 09:47	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

QUALIFIERS

Project:	WMWGORAP_1400
Pace Project No.:	30576856

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Act - Activity

Unc - Uncertainty: For Safe Drinking Water Act (SDWA) analyses, the reported Unc. Is the calculated Count Uncertainty (95% confidence interval) using a coverage factor of 1.96. For all other matrices (non-SDWA), the reported Unc. is the calculated Expanded Uncertainty (aka Combined Standard Uncertainty, CSU), reported at the 95% confidence interval using a coverage factor of 1.96.

Gamma Spec: The Unc. reported for all gamma-spectroscopy analyses (EPA 901.1), is the calculated Expanded Uncertainty (CSU) at the 95.4% confidence interval, using a coverage factor of 2.0.

(MDC) - Minimum Detectable Concentration

Trac - Tracer Recovery (%)

Carr - Carrier Recovery (%)

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: WMWGORAP_1400
Pace Project No.: 30576856

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30576856001	**BD05001 MW-6V**	EPA 9315	579919		
30576856002	**BD05002 MW-6V Dis**	EPA 9315	579919		
30576856003	**BD05384 MW-30HA**	EPA 9315	579919		
30576856004	**BD05385 MW-36V**	EPA 9315	579919		
30576856005	**BD05386 MW-27HR**	EPA 9315	579919		
30576856006	**BD05387 MW-28H**	EPA 9315	579919		
30576856007	**BD05387 MW-28H MS**	EPA 9315	579919		
30576856008	**BD05387 MW-28H MSD**	EPA 9315	579919		
30576856009	**BD05388 MW-37HR**	EPA 9315	579919		
30576856010	**BD05389 MW-47**	EPA 9315	579919		
30576856011	**BD05390 MW-14R**	EPA 9315	579919		
30576856012	**BD05391 MW-36H**	EPA 9315	579919		
30576856013	**BD05392 MW-41HS**	EPA 9315	579919		
30576856014	**BD05393 MW-7**	EPA 9315	579919		
30576856015	**BD05394 MW-6S**	EPA 9315	579919		
30576856016	**BD05395 MW-6S Dup**	EPA 9315	579919		
30576856017	**BD05396 MW-6D**	EPA 9315	579922		
30576856018	**BD05396 MW-6D MS**	EPA 9315	579922		
30576856019	**BD05396 MW-6D MSD**	EPA 9315	579922		
30576856020	**BD05397 MW-23V**	EPA 9315	579919		
30576856021	**BD05398 MW-23H**	EPA 9315	579919		
30576856022	**BD05399 MW-41HD**	EPA 9315	579922		
30576856023	**BD05400 MW-24H**	EPA 9315	579922		
30576856024	**BD05401 MW-24HDup**	EPA 9315	579922		
30576856025	**BD05402 MW-42H**	EPA 9315	579922		
30576856026	**BD05403 FB-1**	EPA 9315	579922		
30576856027	**BD05877 MW-15V**	EPA 9315	579922		
30576856028	**BD05878 FB-3**	EPA 9315	579922		
30576856029	**BD05879 MW-15**	EPA 9315	579922		
30576856030	**BD05880 PZ-16**	EPA 9315	579922		
30576856031	**BD05881 MW-16D**	EPA 9315	579922		
30576856032	**BD05882 MW-16S**	EPA 9315	579922		
30576856033	**BD05883 MW-21**	EPA 9315	579922		
30576856034	**BD05884 MW-21V**	EPA 9315	579922		
30576856035	**BD05885 MW-25HA**	EPA 9315	579922		
30576856036	**BD05886 MW-26H**	EPA 9315	579922		
30576856037	**BD05887 MW-40H**	EPA 9315	579922		
30576856038	**BD05888 MW-32H**	EPA 9315	579922		
30576856039	**BD05889 MW-19**	EPA 9315	579925		
30576856040	**BD05889 MW-19MS**	EPA 9315	579925		
30576856041	**BD05889 MW-19 MSD**	EPA 9315	579925		
30576856042	**BD05890 FB-2**	EPA 9315	579925		
30576856043	**BD05891 PZ-22**	EPA 9315	579925		
30576856044	**BD05892 MW-17**	EPA 9315	579925		
30576856045	**BD05892 MW-17 Dup**	EPA 9315	579925		
30576856046	**BD05894 MW-17V**	EPA 9315	579925		
30576856047	**BD05895 FB-5**	EPA 9315	579925		

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: WMWGORAP_1400
Pace Project No.: 30576856

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30576856048	**BD05896 MW-2**	EPA 9315	579925		
30576856049	**BD05897 MW-05R**	EPA 9315	579925		
30576856050	**BD05898 MW-3**	EPA 9315	579925		
30576856051	**BD05899 MW-03V**	EPA 9315	579925		
30576856052	**BD05900 MW-12V**	EPA 9315	579925		
30576856053	**BD05901 MW-12**	EPA 9315	579925		
30576856054	**BD05902 MW-11R**	EPA 9315	579926		
30576856055	**BD05902 MW-11R MS**	EPA 9315	579926		
30576856056	**BD05902 MW-11R MSD**	EPA 9315	579926		
30576856057	**BD05903 FB-4**	EPA 9315	579925		
30576856058	**BD06151 MW-13R**	EPA 9315	585300		
30576856059	**BD06152 MW10R**	EPA 9315	579925		
30576856060	**BD06153 MW-18VR**	EPA 9315	579925		
30576856061	**BD06154 EB-1**	EPA 9315	579925		
30576856062	**BD06155 MW-45V**	EPA 9315	579926		
30576856063	**BD06156 MW-43H**	EPA 9315	579926		
30576856064	**BD06157 MW-46**	EPA 9315	579926		
30576856065	**BD06158 MW-46 Dup**	EPA 9315	579926		
30576856066	**BD06159 MW-01R**	EPA 9315	579926		
30576856067	**BD06160 MW-31H**	EPA 9315	579926		
30576856068	**BD06161 MW-31V**	EPA 9315	579926		
30576856069	**BD06162 MW-29H**	EPA 9315	579926		
30576856070	**BD06163 MW-8**	EPA 9315	579926		
30576856071	**BD06164 MW-09R**	EPA 9315	579926		
30576856072	**BD06165 MW-9V**	EPA 9315	579926		
30576856073	**BD06166 PZ-18R**	EPA 9315	579926		
30576856074	**BD06167 PZ-18R Dup**	EPA 9315	579926		
30576856075	**BD06168 MW-18R**	EPA 9315	579926		
30576856076	**BD06169 MW-18R Dup**	EPA 9315	579926		
30576856077	**BD06170 MW-38H**	EPA 9315	579926		
30576856078	**BD06171 FB-6**	EPA 9315	579926		
30576856001	**BD05001 MW-6V**	EPA 9320	580007		
30576856002	**BD05002 MW-6V Dis**	EPA 9320	580007		
30576856003	**BD05384 MW-30HA**	EPA 9320	580007		
30576856004	**BD05385 MW-36V**	EPA 9320	580007		
30576856005	**BD05386 MW-27HR**	EPA 9320	580007		
30576856006	**BD05387 MW-28H**	EPA 9320	580007		
30576856007	**BD05387 MW-28H MS**	EPA 9320	580007		
30576856008	**BD05387 MW-28H MSD**	EPA 9320	580007		
30576856009	**BD05388 MW-37HR**	EPA 9320	580007		
30576856010	**BD05389 MW-47**	EPA 9320	580007		
30576856011	**BD05390 MW-14R**	EPA 9320	580007		
30576856012	**BD05391 MW-36H**	EPA 9320	580007		
30576856013	**BD05392 MW-41HS**	EPA 9320	580007		
30576856014	**BD05393 MW-7**	EPA 9320	580007		
30576856015	**BD05394 MW-6S**	EPA 9320	580007		

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: WMWGORAP_1400
Pace Project No.: 30576856

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30576856016	**BD05395 MW-6S Dup**	EPA 9320	580007		
30576856017	**BD05396 MW-6D**	EPA 9320	580008		
30576856018	**BD05396 MW-6D MS**	EPA 9320	580008		
30576856019	**BD05396 MW-6D MSD**	EPA 9320	580008		
30576856020	**BD05397 MW-23V**	EPA 9320	580007		
30576856021	**BD05398 MW-23H**	EPA 9320	580007		
30576856022	**BD05399 MW-41HD**	EPA 9320	580007		
30576856023	**BD05400 MW-24H**	EPA 9320	580008		
30576856024	**BD05401 MW-24HDup**	EPA 9320	580008		
30576856025	**BD05402 MW-42H**	EPA 9320	580008		
30576856026	**BD05403 FB-1**	EPA 9320	580008		
30576856027	**BD05877 MW-15V**	EPA 9320	580008		
30576856028	**BD05878 FB-3**	EPA 9320	580008		
30576856029	**BD05879 MW-15**	EPA 9320	580008		
30576856030	**BD05880 PZ-16**	EPA 9320	580008		
30576856031	**BD05881 MW-16D**	EPA 9320	580008		
30576856032	**BD05882 MW-16S**	EPA 9320	580008		
30576856033	**BD05883 MW-21**	EPA 9320	580008		
30576856034	**BD05884 MW-21V**	EPA 9320	580008		
30576856035	**BD05885 MW-25HA**	EPA 9320	580008		
30576856036	**BD05886 MW-26H**	EPA 9320	580008		
30576856037	**BD05887 MW-40H**	EPA 9320	580008		
30576856038	**BD05888 MW-32H**	EPA 9320	580008		
30576856039	**BD05889 MW-19**	EPA 9320	580011		
30576856040	**BD05889 MW-19MS**	EPA 9320	580011		
30576856041	**BD05889 MW-19 MSD**	EPA 9320	580011		
30576856042	**BD05890 FB-2**	EPA 9320	580008		
30576856043	**BD05891 PZ-22**	EPA 9320	580011		
30576856044	**BD05892 MW-17**	EPA 9320	580011		
30576856045	**BD05892 MW-17 Dup**	EPA 9320	580011		
30576856046	**BD05894 MW-17V**	EPA 9320	580011		
30576856047	**BD05895 FB-5**	EPA 9320	580011		
30576856048	**BD05896 MW-2**	EPA 9320	580011		
30576856049	**BD05897 MW-05R**	EPA 9320	580011		
30576856050	**BD05898 MW-3**	EPA 9320	580011		
30576856051	**BD05899 MW-03V**	EPA 9320	580011		
30576856052	**BD05900 MW-12V**	EPA 9320	580011		
30576856053	**BD05901 MW-12**	EPA 9320	580011		
30576856054	**BD05902 MW-11R**	EPA 9320	580013		
30576856055	**BD05902 MW-11R MS**	EPA 9320	580013		
30576856056	**BD05902 MW-11R MSD**	EPA 9320	580013		
30576856057	**BD05903 FB-4**	EPA 9320	580011		
30576856058	**BD06151 MW-13R**	EPA 9320	580011		
30576856059	**BD06152 MW10R**	EPA 9320	580011		
30576856060	**BD06153 MW-18VR**	EPA 9320	580011		

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project:	WMWGORAP_1400
Pace Project No.:	30576856

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30576856061	**BD06154 EB-1**	EPA 9320	580011		
30576856062	**BD06155 MW-45V**	EPA 9320	580011		
30576856063	**BD06156 MW-43H**	EPA 9320	580013		
30576856064	**BD06157 MW-46**	EPA 9320	580013		
30576856065	**BD06158 MW-46 Dup**	EPA 9320	580013		
30576856066	**BD06159 MW-01R**	EPA 9320	580013		
30576856067	**BD06160 MW-31H**	EPA 9320	580013		
30576856068	**BD06161 MW-31V**	EPA 9320	580013		
30576856069	**BD06162 MW-29H**	EPA 9320	580013		
30576856070	**BD06163 MW-8**	EPA 9320	580013		
30576856071	**BD06164 MW-09R**	EPA 9320	580013		
30576856072	**BD06165 MW-9V**	EPA 9320	580013		
30576856073	**BD06166 PZ-18R**	EPA 9320	580013		
30576856074	**BD06167 PZ-18R Dup**	EPA 9320	580013		
30576856075	**BD06168 MW-18R**	EPA 9320	580013		
30576856076	**BD06169 MW-18R Dup**	EPA 9320	580013		
30576856077	**BD06170 MW-38H**	EPA 9320	580013		
30576856078	**BD06171 FB-6**	EPA 9320	580013		
30576856001	**BD05001 MW-6V**	Total Radium Calculation	585497		
30576856002	**BD05002 MW-6V Dis**	Total Radium Calculation	585497		
30576856003	**BD05384 MW-30HA**	Total Radium Calculation	585497		
30576856004	**BD05385 MW-36V**	Total Radium Calculation	585497		
30576856005	**BD05386 MW-27HR**	Total Radium Calculation	585497		
30576856006	**BD05387 MW-28H**	Total Radium Calculation	585497		
30576856009	**BD05388 MW-37HR**	Total Radium Calculation	585497		
30576856010	**BD05389 MW-47**	Total Radium Calculation	585497		
30576856011	**BD05390 MW-14R**	Total Radium Calculation	585497		
30576856012	**BD05391 MW-36H**	Total Radium Calculation	585497		
30576856013	**BD05392 MW-41HS**	Total Radium Calculation	585497		
30576856014	**BD05393 MW-7**	Total Radium Calculation	585497		
30576856015	**BD05394 MW-6S**	Total Radium Calculation	585497		
30576856016	**BD05395 MW-6S Dup**	Total Radium Calculation	585497		
30576856017	**BD05396 MW-6D**	Total Radium Calculation	585497		
30576856020	**BD05397 MW-23V**	Total Radium Calculation	585497		
30576856021	**BD05398 MW-23H**	Total Radium Calculation	585498		
30576856022	**BD05399 MW-41HD**	Total Radium Calculation	585498		
30576856023	**BD05400 MW-24H**	Total Radium Calculation	585498		
30576856024	**BD05401 MW-24HDup**	Total Radium Calculation	585498		
30576856025	**BD05402 MW-42H**	Total Radium Calculation	585498		
30576856026	**BD05403 FB-1**	Total Radium Calculation	585498		
30576856027	**BD05877 MW-15V**	Total Radium Calculation	585498		
30576856028	**BD05878 FB-3**	Total Radium Calculation	585498		
30576856029	**BD05879 MW-15**	Total Radium Calculation	585498		
30576856030	**BD05880 PZ-16**	Total Radium Calculation	585498		
30576856031	**BD05881 MW-16D**	Total Radium Calculation	585498		
30576856032	**BD05882 MW-16S**	Total Radium Calculation	585498		
30576856033	**BD05883 MW-21**	Total Radium Calculation	585498		

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: WMWGORAP_1400
Pace Project No.: 30576856

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30576856034	**BD05884 MW-21V**	Total Radium Calculation	585498		
30576856035	**BD05885 MW-25HA**	Total Radium Calculation	585498		
30576856036	**BD05886 MW-26H**	Total Radium Calculation	585498		
30576856037	**BD05887 MW-40H**	Total Radium Calculation	585498		
30576856038	**BD05888 MW-32H**	Total Radium Calculation	585498		
30576856039	**BD05889 MW-19**	Total Radium Calculation	585498		
30576856042	**BD05890 FB-2**	Total Radium Calculation	585500		
30576856043	**BD05891 PZ-22**	Total Radium Calculation	585500		
30576856044	**BD05892 MW-17**	Total Radium Calculation	585500		
30576856045	**BD05892 MW-17 Dup**	Total Radium Calculation	585500		
30576856046	**BD05894 MW-17V**	Total Radium Calculation	585500		
30576856047	**BD05895 FB-5**	Total Radium Calculation	585500		
30576856048	**BD05896 MW-2**	Total Radium Calculation	585500		
30576856049	**BD05897 MW-05R**	Total Radium Calculation	585500		
30576856050	**BD05898 MW-3**	Total Radium Calculation	585500		
30576856051	**BD05899 MW-03V**	Total Radium Calculation	585500		
30576856052	**BD05900 MW-12V**	Total Radium Calculation	585500		
30576856053	**BD05901 MW-12**	Total Radium Calculation	585500		
30576856054	**BD05902 MW-11R**	Total Radium Calculation	585500		
30576856057	**BD05903 FB-4**	Total Radium Calculation	585500		
30576856058	**BD06151 MW-13R**	Total Radium Calculation	587608		
30576856059	**BD06152 MW10R**	Total Radium Calculation	585500		
30576856060	**BD06153 MW-18VR**	Total Radium Calculation	585500		
30576856061	**BD06154 EB-1**	Total Radium Calculation	585500		
30576856062	**BD06155 MW-45V**	Total Radium Calculation	585500		
30576856063	**BD06156 MW-43H**	Total Radium Calculation	585500		
30576856064	**BD06157 MW-46**	Total Radium Calculation	585500		
30576856065	**BD06158 MW-46 Dup**	Total Radium Calculation	585501		
30576856066	**BD06159 MW-01R**	Total Radium Calculation	585501		
30576856067	**BD06160 MW-31H**	Total Radium Calculation	585501		
30576856068	**BD06161 MW-31V**	Total Radium Calculation	585501		
30576856069	**BD06162 MW-29H**	Total Radium Calculation	585501		
30576856070	**BD06163 MW-8**	Total Radium Calculation	585501		
30576856071	**BD06164 MW-09R**	Total Radium Calculation	585501		
30576856072	**BD06165 MW-9V**	Total Radium Calculation	585501		
30576856073	**BD06166 PZ-18R**	Total Radium Calculation	585501		
30576856074	**BD06167 PZ-18R Dup**	Total Radium Calculation	585501		
30576856075	**BD06168 MW-18R**	Total Radium Calculation	585501		
30576856076	**BD06169 MW-18R Dup**	Total Radium Calculation	585501		
30576856077	**BD06170 MW-38H**	Total Radium Calculation	585501		
30576856078	**BD06171 FB-6**	Total Radium Calculation	585501		

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page : 1 Of

Section A
Required Client Information:

Company:	Alabama Power Company
Address:	744 Highway 87 GSC Bldg #8 Calera, AL 35040
Email To:	tbwill@southernco.com
Phone:	205-664-6101 Fax:
Requested Due Date:	Normal

Section B
Required Project Information:

Report To:	Brooke Caton
Copy To:	Renee Jernigan & Blaine Denton
Purchase Order #:	APC10755638
Project Name:	Plant Gorgas Ash Pond
Project Number:	WMWGORAP_1400

Section C
Invoice Information:

Attention:	Brooke Caton
Company Name:	Alabama Power Co.
Address:	744 Highway 87 GSC Bldg #8
Pace Quote:	CCR
Pace Project Manager:	Skyler Richmond
Pace Profile #:	16788

Regulatory Agency
State / Location
AL

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique	Description	Station Name Location_Code	Site Name Facility_ID	Sample Duplicate	Matrix Spike/Matrix Spike Duplicate	Field Filtered	MATRIX CODE	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME		# OF CONTAINERS	Preservatives Unpreserved	NaOH+ZnAcetate	HNO3			Y/N Analyses Test	EPA 9315	EPA 9320	Total Radium Sum	Total Sulfide		Residual Chlorine (Y/N)	
1	BD05001	MW-6V	APCO-GS-AP-MW-6V	APCO_Gorgas_AshPond				GW	G	3/8/2023	13:50		1			X				X	X	X				001
2	BD05002	MW-6V Dis	APCO-GS-AP-MW-6V	APCO_Gorgas_AshPond			x	GW	G	3/8/2023	13:50		1			X				X	X	X				002
3	BD05384	MW-30HA	APCO-GS-AP-MW-30HA	APCO_Gorgas_AshPond				GW	G	3/13/2023	13:20		1			X				X	X	X				003
4	BD05385	MW-36V	APCO-GS-AP-MW-36V	APCO_Gorgas_AshPond				GW	G	3/14/2023	11:10		1			X				X	X	X				004
5	BD05386	MW-27HR	APCO-GS-AP-MW-27HR	APCO_Gorgas_AshPond				GW	G	3/14/2023	13:04		1			X				X	X	X				005
6	BD05387	MW-28H	APCO-GS-AP-MW-28H	APCO_Gorgas_AshPond		x		GW	G	3/14/2023	14:57		3			X				X	X	X				006,007,008
7	BD05388	MW-37HR	APCO-GS-AP-MW-37HR	APCO_Gorgas_AshPond				GW	G	3/15/2023	12:08		1			X				X	X	X				009
8	BD05389	MW-47	APCO-GS-AP-MW-47	APCO_Gorgas_AshPond				GW	G	3/15/2023	13:51		1			X				X	X	X				010
9	BD05390	MW-14R	APCO-GS-AP-MW-14R	APCO_Gorgas_AshPond				GW	G	3/15/2023	14:52		1			X				X	X	X				011
10	BD05391	MW-36H	APCO-GS-AP-MW-36H	APCO_Gorgas_AshPond				GW	G	3/15/2023	11:17		1			X				X	X	X				012
11	BD05392	MW-41HS	APCO-GS-AP-MW-41HS	APCO_Gorgas_AshPond				GW	G	3/13/2023	14:40		1			X				X	X	X				013
12	BD05393	MW-7	APCO-GS-AP-MW-7	APCO_Gorgas_AshPond				GW	G	3/14/2023	10:27		1			X				X	X	X				014

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	Brooke Caton/ APC GTL	3/31/2023	9:44							
					4/5/23	10:30				
							TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER:

SIGNATURE of SAMPLER:

DATE Signed:

WO#: 30576856

30576856

CHAIN-OF-CUSTODY / Analytical Request Document

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Page : 2 Of 6

Section A
Required Client Information:

Company:	Alabama Power Company
Address:	744 Highway 87 GSC Bldg #8 Calera, AL 35040
Email To:	tbwill@southernco.com
Phone:	205-664-6101
Fax:	
Requested Due Date:	Normal

Section B
Required Project Information:

Report To:	Brooke Caton
Copy To:	Renee Jernigan & Blaine Denton
Purchase Order #:	**APC10755638**
Project Name:	Plant Gorgas Ash Pond
Project Number:	WMWGORAP_1400

Section C
Invoice Information:

Attention:	Brooke Caton
Company Name:	Alabama Power Co.
Address:	744 Highway 87 GSC Bldg #8
Pace Quote:	CCR
Pace Project Manager:	Skyler Richmond
Pace Profile #:	16788

Regulatory Agency	
State / Location	AL

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique	Description	Station Name Location_Code	Site Name Facility_ID	Sample Duplicate	Matrix Spike/Matrix Spike Duplicate	Field Filtered	MATRIX CODE	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	# OF CONTAINERS	Preservatives Unpreserved	Preservatives NaOH+ZnAcetate	Preservatives HNO3	Y/N Analyses Test	EPA 9315	EPA 9320	Total Radium Sum	Total Sulfide	Residual Chlorine (Y/N)	
1	BD05394	MW-6S	APCO-GS-AP-MW-6S	APCO_Gorgas_AshPond				GW	G	3/14/2023	11:52	1			X		X	X	X			015
2	BD05395	MW-6S Dup	APCO-GS-AP-MW-6S	APCO_Gorgas_AshPond	x			GW	G	3/14/2023	11:52	1			X		X	X	X			016
3	BD05396	MW-6D	APCO-GS-AP-MW-6D	APCO_Gorgas_AshPond		x		GW	G	3/14/2023	12:55	3			X		X	X	X			017,018,019
4	BD05397	MW-23V	APCO-GS-AP-MW-23V	APCO_Gorgas_AshPond				GW	G	3/14/2023	14:00	1			X		X	X	X			020
5	BD05398	MW-23H	APCO-GS-AP-MW-23H	APCO_Gorgas_AshPond				GW	G	3/14/2023	14:40	1			X		X	X	X			021
6	BD05399	MW-41HD	APCO-GS-AP-MW-41HD	APCO_Gorgas_AshPond				GW	G	3/15/2023	10:55	1			X		X	X	X			022
7	BD05400	MW-24H	APCO-GS-AP-MW-24H	APCO_Gorgas_AshPond				GW	G	3/15/2023	12:30	1			X		X	X	X			023
8	BD05401	MW-24H Dup	APCO-GS-AP-MW-24H	APCO_Gorgas_AshPond	x			GW	G	3/15/2023	12:30	1			X		X	X	X			024
9	BD05402	MW-42H	APCO-GS-AP-MW-42H	APCO_Gorgas_AshPond				GW	G	3/15/2023	14:20	1			X		X	X	X			025
10	BD05403	FB-1	APCO-GS-AP-FB-01	APCO_Gorgas_AshPond				GW	G	3/15/2023	14:45	1			X		X	X	X			026
11	BD05877	MW-15V	APCO-GS-AP-MW-15V	APCO_Gorgas_AshPond				GW	G	3/20/2023	12:27	1			X		X	X	X			027
12	BD05878	FB-3	APCO-GS-AP-FB-03	APCO_Gorgas_AshPond				GW	G	3/20/2023	14:00	1			X		X	X	X			028

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	Brooke Caton/ APC GTL	3/31/2023	9:44				
					4/5/23	10:20	

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER:

SIGNATURE of SAMPLER:

DATE Signed:

TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

WO# : 30576856

PM: JPH Due Date: 05/03/23

CLIENT: ALABAMA PWR

CHAIN-OF-CUSTODY / Analytical Request Document

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Page : 3 Of

Section A
Required Client Information:

Company:	Alabama Power Company
Address:	744 Highway 87 GSC Bldg #8 Calera, AL 35040
Email To:	tbwill@southernco.com
Phone:	205-664-6101 Fax:
Requested Due Date:	Normal

Section B
Required Project Information:

Report To:	Brooke Caton
Copy To:	Renee Jernigan & Blaine Denton
Purchase Order #:	APC10755638
Project Name:	Plant Gorgas Ash Pond
Project Number:	WMWGORAP_1400

Section C
Invoice Information:

Attention:	Brooke Caton
Company Name:	Alabama Power Co.
Address:	744 Highway 87 GSC Bldg #8
Pace Quote:	CCR
Pace Project Manager:	Skyler Richmond
Pace Profile #:	16788

Regulatory Agency
State / Location
AL

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique	Description	Station Name Location_Code	Site Name Facility_ID	Sample Duplicate	Matrix Spike/Matrix Spike Duplicate	Field Filtered	MATRIX CODE	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME		# OF CONTAINERS	Preservatives Unpreserved	Preservatives NaOH+ZnAcetate	Preservatives HNO3			Y/N Analyses Test	EPA 9315	EPA 9320	Total Radium Sum	Total Sulfide		Residual Chlorine (Y/N)	
1	BD05879	MW-15	APCO-GS-AP-MW-15	APCO_Gorgas_AshPond				GW	G	3/20/2023	15:06		1			X				X	X	X				029
2	BD05880	PZ-16	APCO-GS-AP-PZ-16	APCO_Gorgas_AshPond				GW	G	3/21/2023	8:52		1			X				X	X	X				030
3	BD05881	MW-16D	APCO-GS-AP-MW-16D	APCO_Gorgas_AshPond				GW	G	3/21/2023	10:00		1			X				X	X	X				031
4	BD05882	MW-16S	APCO-GS-AP-MW-16S	APCO_Gorgas_AshPond				GW	G	3/21/2023	11:30		1			X				X	X	X				032
5	BD05883	MW-21	APCO-GS-AP-MW-21	APCO_Gorgas_AshPond				GW	G	3/21/2023	13:09		1			X				X	X	X				033
6	BD05884	MW-21V	APCO-GS-AP-MW-21V	APCO_Gorgas_AshPond				GW	G	3/21/2023	14:40		1			X				X	X	X				034
7	BD05885	MW-25HA	APCO-GS-AP-MW-25HA	APCO_Gorgas_AshPond				GW	G	3/22/2023	9:30		1			X				X	X	X				035
8	BD05886	MW-26H	APCO-GS-AP-MW-26H	APCO_Gorgas_AshPond				GW	G	3/22/2023	11:32		1			X				X	X	X				036
9	BD05887	MW-40H	APCO-GS-AP-MW-40H	APCO_Gorgas_AshPond				GW	G	3/22/2023	12:48		1			X				X	X	X				037
10	BD05888	MW-32H	APCO-GS-AP-MW-32H	APCO_Gorgas_AshPond				GW	G	3/21/2023	10:45		1			X				X	X	X				038
11	BD05889	MW-19	APCO-GS-AP-MW-19	APCO_Gorgas_AshPond		x		GW	G	3/21/2023	12:30		3			X				X	X	X				039, 040, 04
12	BD05890	FB-2	APCO-GS-AP-FB-02	APCO_Gorgas_AshPond				GW	G	3/21/2023	12:50		1			X				X	X	X				042

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	Brooke Caton/ APC GTL	3/31/2023	9:44							
					4/5/23	10:30				

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER:

SIGNATURE of SAMPLER:

DATE Signed:

TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

WO#: 30576856

PM: JPH Due Date: 05/03/23

CLIENT: ALABAMA PWR

CHAIN-OF-CUSTODY / Analytical Request Document

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Page : 4 Of

Section A
Required Client Information:

Company:	Alabama Power Company
Address:	744 Highway 87 GSC Bldg #8 Calera, AL 35040
Email To:	tbwill@southernco.com
Phone:	205-664-6101 Fax:
Requested Due Date:	Normal

Section B
Required Project Information:

Report To:	Brooke Caton
Copy To:	Renee Jernigan & Blaine Denton
Purchase Order #:	APC10755638
Project Name:	Plant Gorgas Ash Pond
Project Number:	WMWGORAP_1400

Section C
Invoice Information:

Attention:	Brooke Caton
Company Name:	Alabama Power Co.
Address:	744 Highway 87 GSC Bldg #8
Pace Quote:	CCR
Pace Project Manager:	Skyler Richmond
Pace Profile #:	16788

Regulatory Agency
State / Location
AL

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique	Description	Station Name Location_Code	Site Name Facility_ID	Sample Duplicate	Matrix Spike/Matrix Spike Duplicate	Field Filtered	MATRIX CODE	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	# OF CONTAINERS	Preservatives: Unpreserved	Preservatives: NaOH+ZnAcetate	Preservatives: HNO3	Y/N Analyses Test	EPA 9315	EPA 9320	Total Radium Sum	Total Sulfide	Residual Chlorine (Y/N)	
1	BD05891	PZ-22	APCO-GS-AP-PZ-22	APCO_Gorgas_AshPond				GW	G	3/21/2023	13:38	1			X		X	X	X			043
	BD05892	MW-17	APCO-GS-AP-MW-17	APCO_Gorgas_AshPond				GW	G	3/22/2023	10:28	1			X		X	X	X			044
3	BD05893	MW-17Dup	APCO-GS-AP-MW-17	APCO_Gorgas_AshPond	x			GW	G	3/22/2023	10:28	1			X		X	X	X			045
4	BD05894	MW-17V	APCO-GS-AP-MW-17V	APCO_Gorgas_AshPond				GW	G	3/22/2023	12:30	1			X		X	X	X			046
5	BD05895	FB-5	APCO-GS-AP-FB-05	APCO_Gorgas_AshPond				GW	G	3/22/2023	12:55	1			X		X	X	X			047
6	BD05896	MW-2	APCO-GS-AP-MW-2	APCO_Gorgas_AshPond				GW	G	3/22/2023	13:58	1			X		X	X	X			048
7	BD05897	MW-05R	APCO-GS-AP-MW-05R	APCO_Gorgas_AshPond				GW	G	3/20/2023	14:05	1			X		X	X	X			049
8	BD05898	MW-3	APCO-GS-AP-MW-3	APCO_Gorgas_AshPond				GW	G	3/21/2023	10:55	1			X		X	X	X			050
9	BD05899	MW-03V	APCO-GS-AP-MW-03V	APCO_Gorgas_AshPond				GW	G	3/21/2023	14:25	1			X		X	X	X			051
10	BD05900	MW-12V	APCO-GS-AP-MW-12V	APCO_Gorgas_AshPond				GW	G	3/22/2023	10:53	1			X		X	X	X			052
11	BD05901	MW-12	APCO-GS-AP-MW-12	APCO_Gorgas_AshPond				GW	G	3/22/2023	13:00	1			X		X	X	X			053
12	BD05902	MW-11R	APCO-GS-AP-MW-11R	APCO_Gorgas_AshPond		x		GW	G	3/22/2023	14:55	3			X		X	X	X			054, 055, 056

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	Brooke Caton/ APC GTL	3/31/2023	9:44				
					4/05/23	10:30	

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER:

SIGNATURE of SAMPLER:

DATE Signed:

TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

WO#:30576856

PM: JPH Due Date: 05/03/23

CLIENT: ALABAMA PWR

CHAIN-OF-CUSTODY / Analytical Request Document

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Page : 5 Of 6

Section A
Required Client Information:

Company:	Alabama Power Company
Address:	744 Highway 87 GSC Bldg #8 Calera, AL 35040
Email To:	tbwill@southernco.com
Phone:	205-664-6101 Fax:
Requested Due Date:	Normal

Section B
Required Project Information:

Report To:	Brooke Caton
Copy To:	Renee Jernigan & Blaine Denton
Purchase Order #:	APC10755638
Project Name:	Plant Gorgas Ash Pond
Project Number:	WMWGORAP_1400

Section C
Invoice Information:

Attention:	Brooke Caton
Company Name:	Alabama Power Co.
Address:	744 Highway 87 GSC Bldg #8
Pace Quote:	CCR
Pace Project Manager:	Skyler Richmond
Pace Profile #:	16788

Regulatory Agency	
State / Location	AL

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique	Description	Station Name Location_Code	Site Name Facility_ID	Sample Duplicate	Matrix Spike/Matrix Spike Duplicate	Field Filtered	MATRIX CODE	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	# OF CONTAINERS	Preservatives Unpreserved	Preservatives NaOH+ZnAcetate	Preservatives HNO3	Y/N Analyses Test	EPA 9315	EPA 9320	Total Radium Sum	Total Sulfide	Residual Chlorine (Y/N)	
1	BD05903	FB-4	APCO-GS-AP-FB-04	APCO_Gorgas_AshPond				GW	G	3/22/2023	15:20	1			X		X	X	X			057
	BD06151	MW-13R	APCO-GS-AP-MW-13R	APCO_Gorgas_AshPond				GW	G	3/27/2023	12:05	1			X		X	X	X			058
3	BD06152	MW-10R	APCO-GS-AP-MW-10R	APCO_Gorgas_AshPond				GW	G	3/27/2023	14:07	1			X		X	X	X			059
4	BD06153	MW-18VR	APCO-GS-AP-MW-18VR	APCO_Gorgas_AshPond				GW	G	3/27/2023	15:31	1			X		X	X	X			060
5	BD06154	EB-1	APCO-GS-AP-EB-01	APCO_Gorgas_AshPond				GW	G	3/27/2023	16:00	1			X		X	X	X			061
6	BD06155	MW-45V	APCO-GS-AP-MW-45V	APCO_Gorgas_AshPond				GW	G	3/28/2023	8:55	1			X		X	X	X			062
7	BD06156	MW-43H	APCO-GS-AP-MW-43H	APCO_Gorgas_AshPond				GW	G	3/28/2023	10:03	1			X		X	X	X			063
8	BD06157	MW-46	APCO-GS-AP-MW-46	APCO_Gorgas_AshPond				GW	G	3/27/2023	10:45	1			X		X	X	X			064
9	BD06158	MW-46 Dup	APCO-GS-AP-MW-46	APCO_Gorgas_AshPond	x			GW	G	3/27/2023	10:45	1			X		X	X	X			065
10	BD06159	MW-01R	APCO-GS-AP-MW-01R	APCO_Gorgas_AshPond				GW	G	3/27/2023	13:02	1			X		X	X	X			066
11	BD06160	MW-31H	APCO-GS-AP-MW-31H	APCO_Gorgas_AshPond				GW	G	3/27/2023	15:00	1			X		X	X	X			067
12	BD06161	MW-31V	APCO-GS-AP-MW-31V	APCO_Gorgas_AshPond				GW	G	3/27/2023	16:37	1			X		X	X	X			068

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	Brooke Caton/ APC GTL	3/31/2023	9:44							
					4/5/23	10:30				
							TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER:

SIGNATURE of SAMPLER:

DATE Signed:

WO#:30576856

PM: JPH Due Date: 05/03/23

CLIENT: ALABAMA PWR

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Page : 6 **Of** 6

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Email To:	tbwill@southernco.com
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Fax:	
Requested Due Date:	Normal

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Copy To:	Renee Jernigan & Blaine Denton
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Project Name:	Plant Gorgas Ash Pond
Project Number:	WMWGORAP_1400

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Invoice Information:

Attention:	Brooke Caton
Company Name:	Alabama Power Co.
Address:	744 Highway 87 GSC Bldg #8
Pace Quote:	CCR
Pace Project Manager:	Skyler Richmond
Pace Profile #:	16788

Regulatory Agency	
State / Location	AL

Requested Analysis Filtered (Y/N)

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1	BD06162	MW-29H	APCO-GS-AP-MW-29H	APCO_Gorgas_AshPond				GW	G	3/28/2023	9:30	1			X		X	X	X			069
	BD06163	MW-8	APCO-GS-AP-MW-8	APCO_Gorgas_AshPond				GW	G	3/27/2023	12:35	1			X		X	X	X			070
3	BD06164	MW-09R	APCO-GS-AP-MW-09R	APCO_Gorgas_AshPond				GW	G	3/27/2023	14:40	1			X		X	X	X			071
4	BD06165	MW-9V	APCO-GS-AP-MW-9V	APCO_Gorgas_AshPond				GW	G	3/27/2023	16:33	1			X		X	X	X			072
5	BD06166	PZ-18R	APCO-GS-AP-PZ-18R	APCO_Gorgas_AshPond				GW	G	3/28/2023	10:05	1			X		X	X	X			073
6	BD06167	PZ-18R Dup	APCO-GS-AP-PZ-18R	APCO_Gorgas_AshPond	x			GW	G	3/28/2023	10:05	1			X		X	X	X			074
7	BD06168	MW-18R	APCO-GS-AP-MW-18R	APCO_Gorgas_AshPond				GW	G	3/28/2023	11:10	1			X		X	X	X			075
8	BD06169	MW-18R Dup	APCO-GS-AP-MW-18R	APCO_Gorgas_AshPond	x			GW	G	3/28/2023	11:10	1			X		X	X	X			076
9	BD06170	MW-38H	APCO-GS-AP-MW-38H	APCO_Gorgas_AshPond				GW	G	3/28/2023	13:15	1			X		X	X	X			077
10	BD06171	FB-6	APCO-GS-AP-FB-06	APCO_Gorgas_AshPond				GW	G	3/28/2023	14:15	1			X		X	X	X			078
11																						
12																						

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	Brooke Caton/ APC GTL	3/31/2023	9:44							
					4/5/23	10:30				
							TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER:

SIGNATURE of SAMPLER:

DATE Signed:

WO#:30576856

PM: JPH Due Date: 05/03/23

CLIENT: ALABAMA PWR

Pace ANALYTICAL SERVICES

DC#_Title: ENV-FRM-GBUR-0088 v04_Sample Condition Upon Receipt-Pittsburgh

Effective Date: 02/03/2023

WO# : 30576856

PM: JPH **Due Date: 05/03/23**

CLIENT: ALABAMA PWR

Client Name: Alabama Power Company

Courier: ☑ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace

Tracking Number: 636884649797/636884649801/636884649812

Custody Seal on Cooler/Box Present: ☐ Yes ☑ No **Seals Intact:** ☐ Yes ☑ No

Thermometer Used: — **Type of Ice:** Wet Blue [✓ None]

Cooler Temperature: Observed Temp — °C Correction Factor: — °C Final Temp: — °C

Temp should be above freezing to 6°C

Examined By TM

Labeled By TM

Tempped By —

Comments:	Yes	No	NA	**pH paper Lot#** L003124
				D.P.D. Residual Chlorine Lot # —
Chain of Custody Present	✓			1.
Chain of Custody Filled Out:	✓			2.
-Were client corrections present on COC		✓		
Chain of Custody Relinquished	✓			3.
Sampler Name & Signature on COC:		✓		4.
Sample Labels match COC:	✓			5.
-Includes date/time/ID				
Matrix:	WT			
Samples Arrived within Hold Time:	✓			6.
Short Hold Time Analysis (<72hr remaining):		✓		7.
Rush Turn Around Time Requested:		✓		8.
Sufficient Volume:	✓			9.
Correct Containers Used:	✓			10.
-Pace Containers Used	✓			
Containers Intact:	✓			11.
Orthophosphate field filtered:			✓	12.
Hex Cr Aqueous samples field filtered:			✓	13.
Organic Samples checked for dechlorination			✓	14:
Filtered volume received for dissolved tests:			✓	15:
All containers checked for preservation:	✓			16.
exceptions: VOA, coliform, TOC, O&G, Phenolics, Radon, non-aqueous matrix				PHC2
All containers meet method preservation requirements:	✓			Initial when completed TM Date/Time of Preservation Lot# of added Preservative
8260C/D: Headspace in VOA Vials (> 6mm)			✓	17.
624.1: Headspace in VOA Vials (0mm)			✓	18.
Trip Blank Present:			✓	Trip blank custody seal present? YES or NO
Rad Samples Screened <0.5 mrem/hr.	✓			Initial when completed TM Date: 4/8/23 Survey Meter SN: 1563

Comments:

Note: For NC compliance samples with discrepancies, a copy of this form must be sent to the DEHNR Certification office.

PM Review is documented electronically in LIMS through the SRF Review schedule in the Workorder Edit Screen.

DC#_Title: ENV-FRM-GBUR-0072 v02_Sample Container Count Offshore Projects
Effective Date: 1/11/2023

Client ______________

Site Plant Gorgas Ash Pond

Page 1 of 1

Profile Number 16788

Notes ______________

		Amber Glass					Plastic								Vials					Other									
Sample Line Item	Matrix	AG1H	AG3S	AG3U	AG5U	AG5T	BP1N	BP1U	BP2S	BP2U	BP3C	BP3N	BP3S	BP3U	DG9S	VG9H	VG9T	VG9U	VOAK	WGFU	WGKU	ZPLC	GCUB	GJN	12GN	GN	BG1U		
1	WT						1																						
↓																													
78	↓						↓																						

WO#: 30576856

PM: JPH Due Date: 05/03/23
CLIENT: ALABAMA PWR

Container Codes

Glass

GJN	1 Gallon Jug with HNO3	DG9S	40mL amber VOA vial H2SO4
AG5U	100mL amber glass unpreserved	VG9U	40mL clear VOA vial
AG5T	100mL amber glass Na Thiosulfate	VG9T	40mL clear VOA vial Na Thiosulfate
GJN	1 Gallon Jug	VG9H	40mL clear VOA vial HCl
AG1S	1L amber glass H2SO4	JGFU	4oz amber wide jar
AG1H	1L amber glass HCl	WGFU	4oz wide jar unpreserved
AG1T	1L amber glass NA Thiosulfate	BG2U	500mL clear glass unpreserved
BG1U	1L clear glass unpreserved	AG2U	500mL amber glass unpreserved
AG3S	250mL amber glass H2SO4	WGKU	8oz wide jar unpreserved
AG3U	250mL amber glass unpreserved	GN	General

Plastic/Misc.

GCUB	1 gallon cubitainer
12GN	1/2 gallon cubitainer
SP5T	120mL coliform Na Thiosulfate
BP1N	1L plastic HNO3
BP1U	1L plastic unpreserved
BP3S	250mL plastic H2SO4
BP3N	250mL plastic HNO3
BP3U	250mL plastic unpreserved
BP3C	250mL plastic NAOH
BP2S	500mL plastic H2SO4
BP2U	500mL plastic unpreserved

EZI	5g Encore
VOAK	Kit Volatile Solid
I	Wipe/Swab
ZPLC	Siploc Bag

WT	Water
SL	Solid
OL	Non-Aq Liquid
WP	Wipe

Pace Analytical Services, Inc.
Total Alpha Radium QC Assessment

Quality Control Sample Performance Assessment

Pace Analytical
www.pacelabs.com

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test: Ra-226
Analyst: JJY
Date: 4/13/2023
Worklist: 72440
Matrix: DW

Method Blank Assessment	
MB Sample ID	2816620
MB concentration:	0.047
M/B Counting Uncertainty:	0.067
MB MDC:	0.143
MB Numerical Performance Indicator:	1.38
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS72440	**LCSD72440**
Count Date:	5/1/2023	5/1/2023
Spike I.D.:	19-033	19-033
Decay Corrected Spike Concentration (pCi/mL):	24.017	24.017
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.504	0.503
Target Conc. (pCi/L, g, F):	4.761	4.771
Uncertainty (Calculated):	0.057	0.057
Result (pCi/L, g, F):	5.606	4.968
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.508	0.468
Numerical Performance Indicator:	3.24	0.82
Percent Recovery:	117.75%	104.13%
Status vs Numerical Indicator:	N/A	N/A
Status vs Recovery:	Pass	Pass
Upper % Recovery Limits:	125%	125%
Lower % Recovery Limits:	75%	75%

Duplicate Sample Assessment		
Sample I.D.:	LCS72440	
Duplicate Sample I.D.	LCSD72440	
Sample Result (pCi/L, g, F):	5.606	
Sample Result Counting Uncertainty (pCi/L, g, F):	0.508	
Sample Duplicate Result (pCi/L, g, F):	4.968	
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.468	
Are sample and/or duplicate results below RL?	NO	
Duplicate Numerical Performance Indicator:	1.808	
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	12.27%	
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	Pass	
% RPD Limit:	25%	

Sample Matrix Spike Control Assessment	MS/MSD 1	MS/MSD 2
Sample Collection Date:	3/14/2023	
Sample I.D.	30576856006	
Sample MS I.D.	30576856007	
Sample MSD I.D.	30576856008	
Spike I.D.:	19-033	
MS/MSD Decay Corrected Spike Concentration (pCi/mL):	24.019	
Spike Volume Used in MS (mL):	0.20	
Spike Volume Used in MSD (mL):	0.20	
MS Aliquot (L, g, F):	0.206	
MS Target Conc.(pCi/L, g, F):	23.270	
MSD Aliquot (L, g, F):	0.216	
MSD Target Conc. (pCi/L, g, F):	22.202	
MS Spike Uncertainty (calculated):	0.279	
MSD Spike Uncertainty (calculated):	0.266	
Sample Result:	0.106	
Sample Result Counting Uncertainty (pCi/L, g, F):	0.155	
Sample Matrix Spike Result:	27.725	
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):	1.705	
Sample Matrix Spike Duplicate Result:	27.494	
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):	1.687	
MS Numerical Performance Indicator:	4.913	
MSD Numerical Performance Indicator:	5.926	
MS Percent Recovery:	118.69%	
MSD Percent Recovery:	123.36%	
MS Status vs Numerical Indicator:	N/A	
MSD Status vs Numerical Indicator:	N/A	
MS Status vs Recovery:	Pass	
MSD Status vs Recovery:	Pass	
MS/MSD Upper % Recovery Limits:	125%	
MS/MSD Lower % Recovery Limits:	75%	

Matrix Spike/Matrix Spike Duplicate Sample Assessment		
Sample I.D.	30576856006	
Sample MS I.D.	30576856007	
Sample MSD I.D.	30576856008	
Sample Matrix Spike Result:	27.725	
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):	1.705	
Sample Matrix Spike Duplicate Result:	27.494	
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):	1.687	
Duplicate Numerical Performance Indicator:	0.189	
(Based on the Percent Recoveries) MS/ MSD Duplicate RPD:	3.86%	
MS/ MSD Duplicate Status vs Numerical Indicator:	N/A	
MS/ MSD Duplicate Status vs RPD:	Pass	
% RPD Limit:	25%	

Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.

Comments:

LAM 5/1/23

Quality Control Sample Performance Assessment

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Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test: Ra-228
Analyst: ZPC
Date: 4/12/2023
Worklist: 72448
Matrix: WT

Method Blank Assessment	
MB Sample ID	2816963
MB concentration:	0.344
M/B 2 Sigma CSU:	0.365
MB MDC:	0.756
MB Numerical Performance Indicator:	1.85
MB Status vs Numerical Indicator:	Pass
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	N
	LCS72448	LCSD72448
Count Date:	4/17/2023	
Spike I.D.:	22-040	
Decay Corrected Spike Concentration (pCi/mL):	32.876	
Volume Used (mL):	0.10	
Aliquot Volume (L, g, F):	0.806	
Target Conc. (pCi/L, g, F):	4.079	
Uncertainty (Calculated):	0.200	
Result (pCi/L, g, F):	3.020	
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	0.760	
Numerical Performance Indicator:	-2.64	
Percent Recovery:	74.04%	
Status vs Numerical Indicator:	N/A	
Status vs Recovery:	Pass	
Upper % Recovery Limits:	135%	
Lower % Recovery Limits:	60%	

Duplicate Sample Assessment		
Sample I.D.:		Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.		
Sample Result (pCi/L, g, F):		
Sample Result 2 Sigma CSU (pCi/L, g, F):		
Sample Duplicate Result (pCi/L, g, F):		
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):		
Are sample and/or duplicate results below RL?	See Below ##	
Duplicate Numerical Performance Indicator:		
Duplicate RPD:		
Duplicate Status vs Numerical Indicator:		
Duplicate Status vs RPD:		
% RPD Limit:		

Sample Matrix Spike Control Assessment	MS/MSD 1	MS/MSD 2
Sample Collection Date:	3/14/2023	
Sample I.D.	30576856006	
Sample MS I.D.	30576856007	
Sample MSD I.D.	30576856008	
Spike I.D.:	22-040	
MS/MSD Decay Corrected Spike Concentration (pCi/mL):	33.245	
Spike Volume Used in MS (mL):	0.20	
Spike Volume Used in MSD (mL):	0.20	
MS Aliquot (L, g, F):	0.803	
MS Target Conc.(pCi/L, g, F):	8.280	
MSD Aliquot (L, g, F):	0.803	
MSD Target Conc. (pCi/L, g, F):	8.280	
MS Spike Uncertainty (calculated):	0.406	
MSD Spike Uncertainty (calculated):	0.406	
Sample Result:	0.633	
Sample Result 2 Sigma CSU (pCi/L, g, F):	0.405	
Sample Matrix Spike Result:	6.863	
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):	1.408	
Sample Matrix Spike Duplicate Result:	6.813	
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):	1.427	
MS Numerical Performance Indicator:	-2.643	
MSD Numerical Performance Indicator:	-2.677	
MS Percent Recovery:	75.24%	
MSD Percent Recovery:	74.64%	
MS Status vs Numerical Indicator:	Warning	
MSD Status vs Numerical Indicator:	Warning	
MS Status vs Recovery:	Pass	
MSD Status vs Recovery:	Pass	
MS/MSD Upper % Recovery Limits:	135%	
MS/MSD Lower % Recovery Limits:	60%	

Matrix Spike/Matrix Spike Duplicate Sample Assessment		
Sample I.D.	30576856006	
Sample MS I.D.	30576856007	
Sample MSD I.D.	30576856008	
Sample Matrix Spike Result:	6.863	
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):	1.408	
Sample Matrix Spike Duplicate Result:	6.813	
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):	1.427	
Duplicate Numerical Performance Indicator:	0.049	
(Based on the Percent Recoveries) MS/ MSD Duplicate RPD:	0.80%	
MS/ MSD Duplicate Status vs Numerical Indicator:	Pass	
MS/ MSD Duplicate Status vs RPD:	Pass	
% RPD Limit:	36%	

Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.

Comments:

4/18/23

Pace Analytical Services, Inc.
Total Alpha Radium QC Assessment

Quality Control Sample Performance Assessment

Pace Analytical™
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Test: Ra-226
Analyst: JJY
Date: 4/13/2023
Worklist: 72441
Matrix: WT

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2816637
MB concentration:	0.003
M/B 2 Sigma CSU:	0.053
MB MDC:	0.148
MB Numerical Performance Indicator:	0.12
MB Status vs Numerical Indicator:	Pass
MB Status vs. MDC:	N/A

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS72441	**LCSD72441**
Count Date:	5/1/2023	5/1/2023
Spike I.D.:	19-033	19-033
Decay Corrected Spike Concentration (pCi/mL):	24.017	24.017
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.508	0.511
Target Conc. (pCi/L, g, F):	4.732	4.698
Uncertainty (Calculated):	0.057	0.056
Result (pCi/L, g, F):	5.444	5.415
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	0.935	0.928
Numerical Performance Indicator:	1.49	1.51
Percent Recovery:	115.05%	115.26%
Status vs Numerical Indicator:	Pass	Pass
Status vs Recovery:	N/A	N/A
Upper % Recovery Limits:	125%	125%
Lower % Recovery Limits:	75%	75%

Duplicate Sample Assessment		
Sample I.D.:	LCS72441	
Duplicate Sample I.D.	LCSD72441	
Sample Result (pCi/L, g, F):	5.444	
Sample Result 2 Sigma CSU (pCi/L, g, F):	0.935	
Sample Duplicate Result (pCi/L, g, F):	5.415	
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	0.928	
Are sample and/or duplicate results below RL?	NO	
Duplicate Numerical Performance Indicator:	0.043	
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	0.18%	
Duplicate Status vs Numerical Indicator:	Pass	
Duplicate Status vs RPD:	N/A	
% RPD Limit:	25%	

Sample Matrix Spike Control Assessment	MS/MSD 1	MS/MSD 2
Sample Collection Date:	3/14/2023	
Sample I.D.	30576856017	
Sample MS I.D.	30576856018	
Sample MSD I.D.	30576856019	
Spike I.D.:	19-033	
MS/MSD Decay Corrected Spike Concentration (pCi/mL):	24.019	
Spike Volume Used in MS (mL):	0.20	
Spike Volume Used in MSD (mL):	0.20	
MS Aliquot (L, g, F):	0.212	
MS Target Conc.(pCi/L, g, F):	22.632	
MSD Aliquot (L, g, F):	0.205	
MSD Target Conc. (pCi/L, g, F):	23.409	
MS Spike Uncertainty (calculated):	0.272	
MSD Spike Uncertainty (calculated):	0.281	
Sample Result:	0.244	
Sample Result 2 Sigma CSU (pCi/L, g, F):	0.217	
Sample Matrix Spike Result:	25.094	
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):	3.973	
Sample Matrix Spike Duplicate Result:	28.424	
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):	4.472	
MS Numerical Performance Indicator:	1.090	
MSD Numerical Performance Indicator:	2.084	
MS Percent Recovery:	109.80%	
MSD Percent Recovery:	120.38%	
MS Status vs Numerical Indicator:	Pass	
MSD Status vs Numerical Indicator:	Warning	
MS Status vs Recovery:	N/A	
MSD Status vs Recovery:	N/A	
MS/MSD Upper % Recovery Limits:	125%	
MS/MSD Lower % Recovery Limits:	75%	

Matrix Spike/Matrix Spike Duplicate Sample Assessment		
Sample I.D.	30576856017	
Sample MS I.D.	30576856018	
Sample MSD I.D.	30576856019	
Sample Matrix Spike Result:	25.094	
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):	3.973	
Sample Matrix Spike Duplicate Result:	28.424	
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):	4.472	
Duplicate Numerical Performance Indicator:	-1.091	
(Based on the Percent Recoveries) MS/ MSD Duplicate RPD:	9.19%	
MS/ MSD Duplicate Status vs Numerical Indicator:	Pass	
MS/ MSD Duplicate Status vs RPD:	N/A	
% RPD Limit:	25%	

Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.

Comments:

5-2-23

LAM5/2/23

Quality Control Sample Performance Assessment

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test: Ra-228
Analyst: JJS1
Date: 4/14/2023
Worklist: 72449
Matrix: WT

Method Blank Assessment	
MB Sample ID	2816967
MB concentration:	-0.069
M/B 2 Sigma CSU:	0.300
MB MDC:	0.725
MB Numerical Performance Indicator:	-0.45
MB Status vs Numerical Indicator:	Pass
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	N
	LCS72449	**LCSD72449**
Count Date:	4/18/2023	
Spike I.D.:	22-040	
Decay Corrected Spike Concentration (pCi/mL):	32.865	
Volume Used (mL):	0.10	
Aliquot Volume (L, g, F):	0.804	
Target Conc. (pCi/L, g, F):	4.085	
Uncertainty (Calculated):	0.200	
Result (pCi/L, g, F):	4.383	
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	1.012	
Numerical Performance Indicator:	0.57	
Percent Recovery:	107.29%	
Status vs Numerical Indicator:	N/A	
Status vs Recovery:	Pass	
Upper % Recovery Limits:	135%	
Lower % Recovery Limits:	60%	

Duplicate Sample Assessment		
Sample I.D.:		Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.		
Sample Result (pCi/L, g, F):		
Sample Result 2 Sigma CSU (pCi/L, g, F):		
Sample Duplicate Result (pCi/L, g, F):		
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):		
Are sample and/or duplicate results below RL?	See Below ##	
Duplicate Numerical Performance Indicator:		
Duplicate RPD:		
Duplicate Status vs Numerical Indicator:		
Duplicate Status vs RPD:		
% RPD Limit:		

Sample Matrix Spike Control Assessment	MS/MSD 1	MS/MSD 2
Sample Collection Date:	3/14/2023	
Sample I.D.	30576856017	
Sample MS I.D.	30576856018	
Sample MSD I.D.	30576856019	
Spike I.D.:	22-040	
MS/MSD Decay Corrected Spike Concentration (pCi/mL):	33.246	
Spike Volume Used in MS (mL):	0.20	
Spike Volume Used in MSD (mL):	0.20	
MS Aliquot (L, g, F):	0.807	
MS Target Conc.(pCi/L, g, F):	8.237	
MSD Aliquot (L, g, F):	0.809	
MSD Target Conc. (pCi/L, g, F):	8.219	
MS Spike Uncertainty (calculated):	0.404	
MSD Spike Uncertainty (calculated):	0.403	
Sample Result:	0.412	
Sample Result 2 Sigma CSU (pCi/L, g, F):	0.665	
Sample Matrix Spike Result:	8.413	
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):	1.758	
Sample Matrix Spike Duplicate Result:	7.136	
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):	1.518	
MS Numerical Performance Indicator:	-0.240	
MSD Numerical Performance Indicator:	-1.718	
MS Percent Recovery:	97.14%	
MSD Percent Recovery:	81.81%	
MS Status vs Numerical Indicator:	Pass	
MSD Status vs Numerical Indicator:	Pass	
MS Status vs Recovery:	Pass	
MSD Status vs Recovery:	Pass	
MS/MSD Upper % Recovery Limits:	135%	
MS/MSD Lower % Recovery Limits:	60%	

Matrix Spike/Matrix Spike Duplicate Sample Assessment		
Sample I.D.	30576856017	
Sample MS I.D.	30576856018	
Sample MSD I.D.	30576856019	
Sample Matrix Spike Result:	8.413	
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):	1.758	
Sample Matrix Spike Duplicate Result:	7.136	
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):	1.518	
Duplicate Numerical Performance Indicator:	1.078	
(Based on the Percent Recoveries) MS/ MSD Duplicate RPD:	17.14%	
MS/ MSD Duplicate Status vs Numerical Indicator:	Pass	
MS/ MSD Duplicate Status vs RPD:	Pass	
% RPD Limit:	36%	

\## Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.

Comments:

ZC 4.24.23

Pace Analytical Services, Inc.
Total Alpha Radium QC Assessment

Quality Control Sample Performance Assessment

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test:	Ra-226
Analyst:	JJY
Date:	4/17/2023
Worklist:	72442
Matrix:	WT

Method Blank Assessment	
MB Sample ID	2816645
MB concentration:	0.084
M/B 2 Sigma CSU:	0.084
MB MDC:	0.152
MB Numerical Performance Indicator:	1.97
MB Status vs Numerical Indicator:	Pass
MB Status vs. MDC:	N/A

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS72442	**LCSD72442**
Count Date:	5/2/2023	5/2/2023
Spike I.D.:	19-033	19-033
Decay Corrected Spike Concentration (pCi/mL):	24.017	24.017
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.506	0.506
Target Conc. (pCi/L, g, F):	4.748	4.746
Uncertainty (Calculated):	0.057	0.057
Result (pCi/L, g, F):	4.430	4.398
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	0.762	0.755
Numerical Performance Indicator:	-0.81	-0.90
Percent Recovery:	93.32%	92.67%
Status vs Numerical Indicator:	Pass	Pass
Status vs Recovery:	N/A	N/A
Upper % Recovery Limits:	125%	125%
Lower % Recovery Limits:	75%	75%

Duplicate Sample Assessment		
Sample I.D.:	LCS72442	
Duplicate Sample I.D.	LCSD72442	
Sample Result (pCi/L, g, F):	4.430	
Sample Result 2 Sigma CSU (pCi/L, g, F):	0.762	
Sample Duplicate Result (pCi/L, g, F):	4.398	
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	0.755	
Are sample and/or duplicate results below RL?	NO	
Duplicate Numerical Performance Indicator:	0.058	
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	0.70%	
Duplicate Status vs Numerical Indicator:	Pass	
Duplicate Status vs RPD:	N/A	
% RPD Limit:	25%	

Sample Matrix Spike Control Assessment	MS/MSD 1	MS/MSD 2
Sample Collection Date:	3/21/2023	
Sample I.D.	30576856039	
Sample MS I.D.	30576856040	
Sample MSD I.D.	30576856041	
Spike I.D.:	19-033	
MS/MSD Decay Corrected Spike Concentration (pCi/mL):	24.018	
Spike Volume Used in MS (mL):	0.20	
Spike Volume Used in MSD (mL):	0.20	
MS Aliquot (L, g, F):	0.285	
MS Target Conc.(pCi/L, g, F):	16.866	
MSD Aliquot (L, g, F):	0.249	
MSD Target Conc. (pCi/L, g, F):	19.312	
MS Spike Uncertainty (calculated):	0.202	
MSD Spike Uncertainty (calculated):	0.232	
Sample Result:	0.108	
Sample Result 2 Sigma CSU (pCi/L, g, F):	0.132	
Sample Matrix Spike Result:	19.068	
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):	3.012	
Sample Matrix Spike Duplicate Result:	19.798	
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):	3.176	
MS Numerical Performance Indicator:	1.358	
MSD Numerical Performance Indicator:	0.233	
MS Percent Recovery:	112.42%	
MSD Percent Recovery:	101.96%	
MS Status vs Numerical Indicator:	Pass	
MSD Status vs Numerical Indicator:	Pass	
MS Status vs Recovery:	N/A	
MSD Status vs Recovery:	N/A	
MS/MSD Upper % Recovery Limits:	125%	
MS/MSD Lower % Recovery Limits:	75%	

Matrix Spike/Matrix Spike Duplicate Sample Assessment		
Sample I.D.	30576856039	
Sample MS I.D.	30576856040	
Sample MSD I.D.	30576856041	
Sample Matrix Spike Result:	19.068	
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):	3.012	
Sample Matrix Spike Duplicate Result:	19.798	
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):	3.176	
Duplicate Numerical Performance Indicator:	-0.327	
(Based on the Percent Recoveries) MS/ MSD Duplicate RPD:	9.76%	
MS/ MSD Duplicate Status vs Numerical Indicator:	Pass	
MS/ MSD Duplicate Status vs RPD:	N/A	
% RPD Limit:	25%	

Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.

Comments:

uAm 5/2/23

Quality Control Sample Performance Assessment

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Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test:	Ra-228
Analyst:	VAL
Date:	4/14/2023
Worklist:	72450
Matrix:	WT

Method Blank Assessment	
MB Sample ID	2816979
MB concentration:	0.364
M/B 2 Sigma CSU:	0.287
MB MDC:	0.553
MB Numerical Performance Indicator:	2.49
MB Status vs Numerical Indicator:	Warning
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	N
	LCS72450	LCSD72450
Count Date:	4/19/2023	
Spike I.D.:	22-040	
Decay Corrected Spike Concentration (pCi/mL):	32.854	
Volume Used (mL):	0.10	
Aliquot Volume (L, g, F):	0.808	
Target Conc. (pCi/L, g, F):	4.065	
Uncertainty (Calculated):	0.199	
Result (pCi/L, g, F):	3.891	
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	0.926	
Numerical Performance Indicator:	-0.36	
Percent Recovery:	95.72%	
Status vs Numerical Indicator:	N/A	
Status vs Recovery:	Pass	
Upper % Recovery Limits:	135%	
Lower % Recovery Limits:	60%	

Duplicate Sample Assessment		
Sample I.D.:		Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.		
Sample Result (pCi/L, g, F):		
Sample Result 2 Sigma CSU (pCi/L, g, F):		
Sample Duplicate Result (pCi/L, g, F):		
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):		
Are sample and/or duplicate results below RL?	See Below ##	
Duplicate Numerical Performance Indicator:		
Duplicate RPD:		
Duplicate Status vs Numerical Indicator:		
Duplicate Status vs RPD:		
% RPD Limit:		

Sample Matrix Spike Control Assessment	MS/MSD 1	MS/MSD 2
Sample Collection Date:	3/21/2023	
Sample I.D.	30576856039	
Sample MS I.D.	30576856040	
Sample MSD I.D.	30576856041	
Spike I.D.:	22-040	
MS/MSD Decay Corrected Spike Concentration (pCi/mL):	33.170	
Spike Volume Used in MS (mL):	0.20	
Spike Volume Used in MSD (mL):	0.20	
MS Aliquot (L, g, F):	0.805	
MS Target Conc.(pCi/L, g, F):	8.241	
MSD Aliquot (L, g, F):	0.808	
MSD Target Conc. (pCi/L, g, F):	8.206	
MS Spike Uncertainty (calculated):	0.404	
MSD Spike Uncertainty (calculated):	0.402	
Sample Result:	0.299	
Sample Result 2 Sigma CSU (pCi/L, g, F):	0.414	
Sample Matrix Spike Result:	8.316	
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):	1.733	
Sample Matrix Spike Duplicate Result:	9.288	
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):	1.924	
MS Numerical Performance Indicator:	-0.240	
MSD Numerical Performance Indicator:	0.765	
MS Percent Recovery:	97.28%	
MSD Percent Recovery:	109.55%	
MS Status vs Numerical Indicator:	Pass	
MSD Status vs Numerical Indicator:	Pass	
MS Status vs Recovery:	Pass	
MSD Status vs Recovery:	Pass	
MS/MSD Upper % Recovery Limits:	135%	
MS/MSD Lower % Recovery Limits:	60%	

Matrix Spike/Matrix Spike Duplicate Sample Assessment		
Sample I.D.	30576856039	
Sample MS I.D.	30576856040	
Sample MSD I.D.	30576856041	
Sample Matrix Spike Result:	8.316	
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):	1.733	
Sample Matrix Spike Duplicate Result:	9.288	
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):	1.924	
Duplicate Numerical Performance Indicator:	-0.736	
(Based on the Percent Recoveries) MS/ MSD Duplicate RPD:	11.86%	
MS/ MSD Duplicate Status vs Numerical Indicator:	Pass	
MS/ MSD Duplicate Status vs RPD:	Pass	
% RPD Limit:	36%	

Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.

Comments:

4-20-23

4-20-23
JJS

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Quality Control Sample Performance Assessment

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test:	Ra-226
Analyst:	JJY
Date:	4/17/2023
Worklist:	72443
Matrix:	DW

Method Blank Assessment	
MB Sample ID	2816646
MB concentration:	-0.010
M/B Counting Uncertainty:	0.049
MB MDC:	0.153
MB Numerical Performance Indicator:	-0.39
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS72443	LCSD72443
Count Date:	5/2/2023	5/2/2023
Spike I.D.:	19-033	19-033
Decay Corrected Spike Concentration (pCi/mL):	24.017	24.017
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.500	0.503
Target Conc. (pCi/L, g, F):	4.804	4.773
Uncertainty (Calculated):	0.058	0.057
Result (pCi/L, g, F):	5.686	5.378
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.578	0.509
Numerical Performance Indicator:	2.98	2.31
Percent Recovery:	118.37%	112.67%
Status vs Numerical Indicator:	N/A	N/A
Status vs Recovery:	Pass	Pass
Upper % Recovery Limits:	125%	125%
Lower % Recovery Limits:	75%	75%

Duplicate Sample Assessment		
Sample I.D.:	LCS72443	
Duplicate Sample I.D.	LCSD72443	
Sample Result (pCi/L, g, F):	5.686	
Sample Result Counting Uncertainty (pCi/L, g, F):	0.578	
Sample Duplicate Result (pCi/L, g, F):	5.378	
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.509	
Are sample and/or duplicate results below RL?	NO	
Duplicate Numerical Performance Indicator:	0.784	
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	4.93%	
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	Pass	
% RPD Limit:	25%	

Sample Matrix Spike Control Assessment	MS/MSD 1	MS/MSD 2
Sample Collection Date:	3/22/2023	
Sample I.D.	30576856054	
Sample MS I.D.	30576856055	
Sample MSD I.D.	30576856056	
Spike I.D.:	19-033	
MS/MSD Decay Corrected Spike Concentration (pCi/mL):	24.018	
Spike Volume Used in MS (mL):	0.20	
Spike Volume Used in MSD (mL):	0.20	
MS Aliquot (L, g, F):	0.290	
MS Target Conc.(pCi/L, g, F):	16.549	
MSD Aliquot (L, g, F):	0.300	
MSD Target Conc. (pCi/L, g, F):	15.986	
MS Spike Uncertainty (calculated):	0.199	
MSD Spike Uncertainty (calculated):	0.192	
Sample Result:	0.292	
Sample Result Counting Uncertainty (pCi/L, g, F):	0.180	
Sample Matrix Spike Result:	19.133	
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):	1.210	
Sample Matrix Spike Duplicate Result:	18.435	
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):	1.189	
MS Numerical Performance Indicator:	3.626	
MSD Numerical Performance Indicator:	3.471	
MS Percent Recovery:	113.85%	
MSD Percent Recovery:	113.49%	
MS Status vs Numerical Indicator:	N/A	
MSD Status vs Numerical Indicator:	N/A	
MS Status vs Recovery:	Pass	
MSD Status vs Recovery:	Pass	
MS/MSD Upper % Recovery Limits:	125%	
MS/MSD Lower % Recovery Limits:	75%	

Matrix Spike/Matrix Spike Duplicate Sample Assessment		
Sample I.D.	30576856054	
Sample MS I.D.	30576856055	
Sample MSD I.D.	30576856056	
Sample Matrix Spike Result:	19.133	
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):	1.210	
Sample Matrix Spike Duplicate Result:	18.435	
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):	1.189	
Duplicate Numerical Performance Indicator:	0.806	
(Based on the Percent Recoveries) MS/ MSD Duplicate RPD:	0.32%	
MS/ MSD Duplicate Status vs Numerical Indicator:	N/A	
MS/ MSD Duplicate Status vs RPD:	Pass	
% RPD Limit:	25%	

Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.

Comments:

5/3/23

VAm 5/3/23

Quality Control Sample Performance Assessment

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Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test:	Ra-228
Analyst:	ZPC
Date:	4/14/2023
Worklist:	72451
Matrix:	WT

Method Blank Assessment	
MB Sample ID	2816983
MB concentration:	0.615
M/B 2 Sigma CSU:	0.404
MB MDC:	0.747
MB Numerical Performance Indicator:	2.98
MB Status vs Numerical Indicator:	Warning
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	N
	LCS72451	LCSD72451
Count Date:	4/19/2023	
Spike I.D.:	22-040	
Decay Corrected Spike Concentration (pCi/mL):	32.853	
Volume Used (mL):	0.10	
Aliquot Volume (L, g, F):	0.807	
Target Conc. (pCi/L, g, F):	4.073	
Uncertainty (Calculated):	0.200	
Result (pCi/L, g, F):	5.889	
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	1.335	
Numerical Performance Indicator:	2.64	
Percent Recovery:	~~144.60%~~	
Status vs Numerical Indicator:	Warning	
Status vs Recovery:	~~Fail High**~~	
Upper % Recovery Limits:	135%	
Lower % Recovery Limits:	60%	

Duplicate Sample Assessment		
Sample I.D.:	See Below ##	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.		
Sample Result (pCi/L, g, F):		
Sample Result 2 Sigma CSU (pCi/L, g, F):		
Sample Duplicate Result (pCi/L, g, F):		
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):		
Are sample and/or duplicate results below RL?		
Duplicate Numerical Performance Indicator:		
Duplicate RPD:		
Duplicate Status vs Numerical Indicator:		
Duplicate Status vs RPD:		
% RPD Limit:		

Sample Matrix Spike Control Assessment	MS/MSD 1	MS/MSD 2
Sample Collection Date:	3/22/2023	
Sample I.D.	30576856054	
Sample MS I.D.	30576856055	
Sample MSD I.D.	30576856056	
Spike I.D.:	22-040	
MS/MSD Decay Corrected Spike Concentration (pCi/mL):	33.158	
Spike Volume Used in MS (mL):	0.20	
Spike Volume Used in MSD (mL):	0.20	
MS Aliquot (L, g, F):	0.807	
MS Target Conc.(pCi/L, g, F):	8.221	
MSD Aliquot (L, g, F):	0.810	
MSD Target Conc. (pCi/L, g, F):	8.187	
MS Spike Uncertainty (calculated):	0.403	
MSD Spike Uncertainty (calculated):	0.401	
Sample Result:	0.399	
Sample Result 2 Sigma CSU (pCi/L, g, F):	0.373	
Sample Matrix Spike Result:	9.860	
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):	1.993	
Sample Matrix Spike Duplicate Result:	9.344	
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):	1.897	
MS Numerical Performance Indicator:	1.175	
MSD Numerical Performance Indicator:	0.752	
MS Percent Recovery:	115.08%	
MSD Percent Recovery:	109.25%	
MS Status vs Numerical Indicator:	Pass	
MSD Status vs Numerical Indicator:	Pass	
MS Status vs Recovery:	Pass	
MSD Status vs Recovery:	Pass	
MS/MSD Upper % Recovery Limits:	135%	
MS/MSD Lower % Recovery Limits:	60%	

Matrix Spike/Matrix Spike Duplicate Sample Assessment		
Sample I.D.	30576856054	
Sample MS I.D.	30576856055	
Sample MSD I.D.	30576856056	
Sample Matrix Spike Result:	9.860	
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):	1.993	
Sample Matrix Spike Duplicate Result:	9.344	
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):	1.897	
Duplicate Numerical Performance Indicator:	0.368	
(Based on the Percent Recoveries) MS/ MSD Duplicate RPD:	5.20%	
MS/ MSD Duplicate Status vs Numerical Indicator:	Pass	
MS/ MSD Duplicate Status vs RPD:	Pass	
% RPD Limit:	36%	

Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.

Comments:

**~~If all sample results are below MDC, the batch is acceptable, otherwise this batch must be reprepped due to LCS failure.~~

results < RL, LCS passes NI, acceptable

4/20/23

4-20-23
JSS

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Quality Control Sample Performance Assessment

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test: Ra-226
Analyst: SLC
Date: 5/4/2023
Worklist: 72892
Matrix: DW

Method Blank Assessment	
MB Sample ID	2842736
MB concentration:	0.066
M/B Counting Uncertainty:	0.107
MB MDC:	0.236
MB Numerical Performance Indicator:	1.22
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS72892	**LCSD72892**
Count Date:	5/10/2023	5/10/2023
Spike I.D.:	19-033	19-033
Decay Corrected Spike Concentration (pCi/mL):	24.017	24.017
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.502	0.504
Target Conc. (pCi/L, g, F):	4.782	4.766
Uncertainty (Calculated):	0.057	0.057
Result (pCi/L, g, F):	5.728	6.181
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.637	0.628
Numerical Performance Indicator:	2.90	4.40
Percent Recovery:	119.80%	129.68%
Status vs Numerical Indicator:	N/A	N/A
Status vs Recovery:	Pass	Fail High****
Upper % Recovery Limits:	125%	125%
Lower % Recovery Limits:	75%	75%

Duplicate Sample Assessment		
Sample I.D.:	LCS72892	
Duplicate Sample I.D.	LCSD72892	
Sample Result (pCi/L, g, F):	5.728	
Sample Result Counting Uncertainty (pCi/L, g, F):	0.637	
Sample Duplicate Result (pCi/L, g, F):	6.181	
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.628	
Are sample and/or duplicate results below RL?	NO	
Duplicate Numerical Performance Indicator:	-0.992	
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	7.92%	
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	Pass	
% RPD Limit:	25%	

Sample Matrix Spike Control Assessment	MS/MSD 1	MS/MSD 2
Sample Collection Date:		
Sample I.D.		
Sample MS I.D.		
Sample MSD I.D.		
Spike I.D.:		
MS/MSD Decay Corrected Spike Concentration (pCi/mL):		
Spike Volume Used in MS (mL):		
Spike Volume Used in MSD (mL):		
MS Aliquot (L, g, F):		
MS Target Conc.(pCi/L, g, F):		
MSD Aliquot (L, g, F):		
MSD Target Conc. (pCi/L, g, F):		
MS Spike Uncertainty (calculated):		
MSD Spike Uncertainty (calculated):		
Sample Result:		
Sample Result Counting Uncertainty (pCi/L, g, F):		
Sample Matrix Spike Result:		
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):		
Sample Matrix Spike Duplicate Result:		
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):		
MS Numerical Performance Indicator:		
MSD Numerical Performance Indicator:		
MS Percent Recovery:		
MSD Percent Recovery:		
MS Status vs Numerical Indicator:		
MSD Status vs Numerical Indicator:		
MS Status vs Recovery:		
MSD Status vs Recovery:		
MS/MSD Upper % Recovery Limits:		
MS/MSD Lower % Recovery Limits:		

Matrix Spike/Matrix Spike Duplicate Sample Assessment		
Sample I.D.		
Sample MS I.D.		
Sample MSD I.D.		
Sample Matrix Spike Result:		
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):		
Sample Matrix Spike Duplicate Result:		
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):		
Duplicate Numerical Performance Indicator:		
(Based on the Percent Recoveries) MS/ MSD Duplicate RPD:		
MS/ MSD Duplicate Status vs Numerical Indicator:		
MS/ MSD Duplicate Status vs RPD:		
% RPD Limit:		

Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.

Comments:
LCSD %Rec fail high, all samples activity < MDC, JJY 5-11-23
LCSD Acceptable.

JJY 5-11-23

SLC 5/11/23

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

May 16, 2023

Brooke Caton
Alabama Power
744 Highway 87
Calera, AL 35040

RE: Project: WMWGORAP_1403
Pace Project No.: 30579206

Dear Brooke Caton:

Enclosed are the analytical results for sample(s) received by the laboratory on April 14, 2023. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Greensburg

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Skyler C. Richmond
skyler.richmond@pacelabs.com
(724)850-5600
Project Manager

Enclosures

cc: Blaine Denton, Alabama Power
Renee Jernigan, Alabama Power

REPORT OF LABORATORY ANALYSIS

CERTIFICATIONS

Project: WMWGORAP_1403
Pace Project No.: 30579206

Pace Analytical Services Pennsylvania

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification #: PA01547
Connecticut Certification #: PH-0694
Delaware Certification
EPA Region 4 DW Rad
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Florida: Cert E871149 SEKS WET
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: KY90133
KY WW Permit #: KY0098221
KY WW Permit #: KY0000221
Louisiana DHH/TNI Certification #: LA180012
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: 2017020
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification #: 9991
Missouri Certification #: 235
Montana Certification #: Cert0082
Nebraska Certification #: NE-OS-29-14
Nevada Certification #: PA014572018-1
New Hampshire/TNI Certification #: 297617
New Jersey/TNI Certification #: PA051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Ohio EPA Rad Approval: #41249
Oregon/TNI Certification #: PA200002-010
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: 02867
Texas/TNI Certification #: T104704188-17-3
Utah/TNI Certification #: PA014572017-9
USDA Soil Permit #: P330-17-00091
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Approve List for Rad
Wyoming Certification #: 8TMS-L

SAMPLE SUMMARY

Project: WMWGORAP_1403
Pace Project No.: 30579206

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30579206001	**BD04994 FB-1**	Water	03/08/23 09:50	04/14/23 09:35
30579206002	**BD04995 MW-35HO**	Water	03/09/23 10:13	04/14/23 09:35
30579206003	**BD04996 MW-34HO**	Water	03/10/23 13:04	04/14/23 09:35
30579206004	**BD04997 MW-34HO Dup**	Water	03/11/23 13:04	04/14/23 09:35
30579206005	**BD04998 EB-1**	Water	03/09/23 07:15	04/14/23 09:35
30579206006	**BD05363 MW-33HO**	Water	03/14/23 12:58	04/14/23 09:35
30579206007	**BD05363 MW-33HO MS**	Water	03/14/23 12:58	04/14/23 09:35
30579206008	**BD05363 MW-33HO MSD**	Water	03/14/23 12:58	04/14/23 09:35

SAMPLE ANALYTE COUNT

Project: WMWGORAP_1403
Pace Project No.: 30579206

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30579206001	**BD04994 FB-1**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30579206002	**BD04995 MW-35HO**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30579206003	**BD04996 MW-34HO**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30579206004	**BD04997 MW-34HO Dup**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30579206005	**BD04998 EB-1**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30579206006	**BD05363 MW-33HO**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30579206007	**BD05363 MW-33HO MS**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
30579206008	**BD05363 MW-33HO MSD**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA

PASI-PA = Pace Analytical Services - Greensburg

PROJECT NARRATIVE

Project: WMWGORAP_1403
Pace Project No.: 30579206

Method: **EPA 9315**
Description: 9315 Total Radium
Client: Alabama Power
Date: May 16, 2023

General Information:
8 samples were analyzed for EPA 9315 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

PROJECT NARRATIVE

Project: WMWGORAP_1403
Pace Project No.: 30579206

Method: **EPA 9320**
Description: 9320 Radium 228
Client: Alabama Power
Date: May 16, 2023

General Information:
8 samples were analyzed for EPA 9320 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

PROJECT NARRATIVE

Project:	WMWGORAP_1403
Pace Project No.:	30579206

Method: **Total Radium Calculation**
Description: Total Radium 228+226
Client: Alabama Power
Date: May 16, 2023

General Information:

6 samples were analyzed for Total Radium Calculation by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORAP_1403
Pace Project No.: 30579206

Sample: BD04994 FB-1 **Lab ID: 30579206001** Collected: 03/08/23 09:50 Received: 04/14/23 09:35 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.281U ± 0.221 (0.378)** **C:96% T:NA**	pCi/L	05/10/23 17:34	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.272U ± 0.343 (0.727)** **C:83% T:80%**	pCi/L	05/02/23 11:49	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.553U ± 0.564 (1.11)**	pCi/L	05/11/23 14:53	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORAP_1403
Pace Project No.: 30579206

Sample: BD04995 MW-35HO **Lab ID: 30579206002** Collected: 03/09/23 10:13 Received: 04/14/23 09:35 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.0281U ± 0.153 (0.401)** **C:93% T:NA**	pCi/L	05/10/23 17:34	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.550U ± 0.388 (0.754)** **C:84% T:84%**	pCi/L	05/02/23 11:49	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.578U ± 0.541 (1.16)**	pCi/L	05/11/23 14:53	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORAP_1403
Pace Project No.: 30579206

Sample: BD04996 MW-34HO **Lab ID: 30579206003** Collected: 03/10/23 13:04 Received: 04/14/23 09:35 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
		Pace Analytical Services - Greensburg				
Radium-226	EPA 9315	**0.449U ± 0.355 (0.629)** **C:63% T:NA**	pCi/L	05/10/23 17:34	13982-63-3	
		Pace Analytical Services - Greensburg				
Radium-228	EPA 9320	**0.419U ± 0.377 (0.761)** **C:83% T:76%**	pCi/L	05/02/23 11:49	15262-20-1	
		Pace Analytical Services - Greensburg				
Total Radium	Total Radium Calculation	**0.868U ± 0.732 (1.39)**	pCi/L	05/11/23 14:53	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORAP_1403
Pace Project No.: 30579206

Sample: BD04997 MW-34HO Dup **Lab ID: 30579206004** Collected: 03/11/23 13:04 Received: 04/14/23 09:35 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
		Pace Analytical Services - Greensburg				
Radium-226	EPA 9315	**0.516 ± 0.296 (0.390)** **C:78% T:NA**	pCi/L	05/10/23 17:34	13982-63-3	
		Pace Analytical Services - Greensburg				
Radium-228	EPA 9320	**0.882 ± 0.451 (0.756)** **C:81% T:66%**	pCi/L	05/02/23 11:49	15262-20-1	
		Pace Analytical Services - Greensburg				
Total Radium	Total Radium Calculation	**1.40 ± 0.747 (1.15)**	pCi/L	05/11/23 14:53	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project:	WMWGORAP_1403
Pace Project No.:	30579206

Sample: BD04998 EB-1 **Lab ID: 30579206005** Collected: 03/09/23 07:15 Received: 04/14/23 09:35 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.168U ± 0.195 (0.392)** **C:93% T:NA**	pCi/L	05/10/23 17:34	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**2.09 ± 0.640 (0.793)** **C:81% T:79%**	pCi/L	05/02/23 14:59	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**2.26 ± 0.835 (1.19)**	pCi/L	05/11/23 14:53	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORAP_1403
Pace Project No.: 30579206

Sample: BD05363 MW-33HO **Lab ID: 30579206006** Collected: 03/14/23 12:58 Received: 04/14/23 09:35 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Pace Analytical Services - Greensburg						
Radium-226	EPA 9315	**0.627 ± 0.375 (0.591)** **C:71% T:NA**	pCi/L	05/10/23 17:34	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	**2.31 ± 0.644 (0.686)** **C:78% T:87%**	pCi/L	05/02/23 15:00	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	**2.94 ± 1.02 (1.28)**	pCi/L	05/11/23 14:53	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORAP_1403
Pace Project No.: 30579206

Sample: BD05363 MW-33HO MS **Lab ID: 30579206007** Collected: 03/14/23 12:58 Received: 04/14/23 09:35 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**108.86 %REC ± NA (NA)** **C:NA T:NA**	pCi/L	05/10/23 17:34	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**60.88 %REC ± NA (NA)** **C:NA T:NA**	pCi/L	05/02/23 15:00	15262-20-1	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORAP_1403
Pace Project No.: 30579206

Sample: BD05363 MW-33HO MSD **Lab ID: 30579206008** Collected: 03/14/23 12:58 Received: 04/14/23 09:35 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**101.88 %REC 6.62RPD ± NA (NA) C:NA T:NA**	pCi/L	05/10/23 17:34	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**67.10 %REC 9.72RPD ± NA (NA) C:NA T:NA**	pCi/L	05/02/23 15:00	15262-20-1	

QUALITY CONTROL - RADIOCHEMISTRY

Project: WMWGORAP_1403
Pace Project No.: 30579206

QC Batch: 582474
QC Batch Method: EPA 9320
Analysis Method: EPA 9320
Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30579206001, 30579206002, 30579206003, 30579206004, 30579206005, 30579206006, 30579206007, 30579206008

METHOD BLANK: 2828845
Matrix: Water
Associated Lab Samples: 30579206001, 30579206002, 30579206003, 30579206004, 30579206005, 30579206006, 30579206007, 30579206008

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.681 ± 0.349 (0.592) C:81% T:85%	pCi/L	05/02/23 11:49	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

QUALITY CONTROL - RADIOCHEMISTRY

Project: WMWGORAP_1403
Pace Project No.: 30579206

QC Batch:	581620	Analysis Method:	EPA 9315
QC Batch Method:	EPA 9315	Analysis Description:	9315 Total Radium
		Laboratory:	Pace Analytical Services - Greensburg

Associated Lab Samples: 30579206001, 30579206002, 30579206003, 30579206004, 30579206005, 30579206006, 30579206007, 30579206008

METHOD BLANK: 2824612 Matrix: Water

Associated Lab Samples: 30579206001, 30579206002, 30579206003, 30579206004, 30579206005, 30579206006, 30579206007, 30579206008

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.0849 ± 0.0784 (0.140) C:96% T:NA	pCi/L	05/10/23 17:34	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

QUALIFIERS

Project:	WMWGORAP_1403
Pace Project No.:	30579206

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Act - Activity

Unc - Uncertainty: For Safe Drinking Water Act (SDWA) analyses, the reported Unc. Is the calculated Count Uncertainty (95% confidence interval) using a coverage factor of 1.96. For all other matrices (non-SDWA), the reported Unc. is the calculated Expanded Uncertainty (aka Combined Standard Uncertainty, CSU), reported at the 95% confidence interval using a coverage factor of 1.96.

Gamma Spec: The Unc. reported for all gamma-spectroscopy analyses (EPA 901.1), is the calculated Expanded Uncertainty (CSU) at the 95.4% confidence interval, using a coverage factor of 2.0.

(MDC) - Minimum Detectable Concentration

Trac - Tracer Recovery (%)

Carr - Carrier Recovery (%)

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project:	WMWGORAP_1403
Pace Project No.:	30579206

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30579206001	**BD04994 FB-1**	EPA 9315	581620		
30579206002	**BD04995 MW-35HO**	EPA 9315	581620		
30579206003	**BD04996 MW-34HO**	EPA 9315	581620		
30579206004	**BD04997 MW-34HO Dup**	EPA 9315	581620		
30579206005	**BD04998 EB-1**	EPA 9315	581620		
30579206006	**BD05363 MW-33HO**	EPA 9315	581620		
30579206007	**BD05363 MW-33HO MS**	EPA 9315	581620		
30579206008	**BD05363 MW-33HO MSD**	EPA 9315	581620		
30579206001	**BD04994 FB-1**	EPA 9320	582474		
30579206002	**BD04995 MW-35HO**	EPA 9320	582474		
30579206003	**BD04996 MW-34HO**	EPA 9320	582474		
30579206004	**BD04997 MW-34HO Dup**	EPA 9320	582474		
30579206005	**BD04998 EB-1**	EPA 9320	582474		
30579206006	**BD05363 MW-33HO**	EPA 9320	582474		
30579206007	**BD05363 MW-33HO MS**	EPA 9320	582474		
30579206008	**BD05363 MW-33HO MSD**	EPA 9320	582474		
30579206001	**BD04994 FB-1**	Total Radium Calculation	587608		
30579206002	**BD04995 MW-35HO**	Total Radium Calculation	587608		
30579206003	**BD04996 MW-34HO**	Total Radium Calculation	587608		
30579206004	**BD04997 MW-34HO Dup**	Total Radium Calculation	587608		
30579206005	**BD04998 EB-1**	Total Radium Calculation	587608		
30579206006	**BD05363 MW-33HO**	Total Radium Calculation	587608		

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page : 1 Of 1

Section A
Required Client Information:

Company:	Alabama Power Company
Address:	744 Highway 87 GSC Bldg #8 Calera, AL 35040
Email To:	tbwill@southernco.com
Phone:	205-664-6101 Fax:
Requested Due Date:	Normal

Section B
Required Project Information:

Report To:	Brooke Caton
Copy To:	Renee Jernigan & Blaine Denton
Purchase Order #:	APC10755638
Project Name:	Plant Gorgas Ash Pond
Project Number:	WMWGORAP_1403

Section C
Invoice Information:

Attention:	Brooke Caton
Company Name:	Alabama Power Co.
Address:	744 Highway 87 GSC Bldg #8
Pace Quote:	CCR
Pace Project Manager:	Skyler Richmond
Pace Profile #:	16788

Regulatory Agency:

State / Location: AL

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique	Description	Station Name Location_Code	Site Name Facility_ID	Sample Duplicate	Matrix Spike/Matrix Spike Duplicate	Field Filtered	MATRIX CODE	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	# OF CONTAINERS	Preservatives: Unpreserved	Preservatives: NaOH+ZnAcetate	Preservatives: HNO3	Y/N Analyses Test	EPA 9315	EPA 9320	Total Radium Sum	Total Sulfide	Residual Chlorine (Y/N)	
1	BD04994	FB-1	APCO-GS-AP-FB-01	APCO_Gorgas_AshPond				GW	G	3/8/2023	9:50	1			X		X	X	X			001
2	BD04995	MW-35HO	APCO-GS-AP-MW-35HO	APCO_Gorgas_AshPond				GW	G	3/9/2023	10:13	1			X		X	X	X			002
3	BD04996	MW-34HO	APCO-GS-AP-MW-34HO	APCO_Gorgas_AshPond				GW	G	3/10/2023	13:04	1			X		X	X	X			003
4	BD04997	MW-34HO Dup	APCO-GS-AP-MW-34HO	APCO_Gorgas_AshPond	X			GW	G	3/11/2023	13:04	1			X		X	X	X			004
5	BD04998	EB-1	APCO-GS-AP-EB-01	APCO_Gorgas_AshPond				GW	G	3/9/2023	7:15	1			X		X	X	X			005
6	BD05363	MW-33HO	APCO-GS-AP-MW-33HO	APCO_Gorgas_AshPond		x		GW	G	3/14/2023	12:58	3			X		X	X	X			006,007,008
7																						
8																						
9																						
10																						
11																						
12																						

WO# : 30579206

30579206

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	Brooke Caton/ APC GTL	3/17/2023	9:49	Yoandra Rodriguez ASSET	3/24/23	1158	NA	N	Y	Y
	ARV INEL	3/29/23	10:40							
					4/14/23	9:35				

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Anthony Goggins

SIGNATURE of SAMPLER:

DATE Signed:

TEMP in C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Intact (Y/N)

Pace ANALYTICAL SERVICES

DC#_Title: ENV-FRM-GBUR-0088 v04_Sample Condition Upon Receipt-Pittsburgh

Effective Date: 02/03/2023

WO# : 30579206
PM: JPH Due Date: 05/12/23
CLIENT: ALABAMA PWR

Client Name: Alabama Power

Courier: ☑ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace ☐ Ot

Tracking Number: 77180120 2557

Examined By	PS
Labeled By	PS
Temped By	—

Custody Seal on Cooler/Box Present: ☐ Yes ☑ No **Seals Intact:** ☐ Yes ☑ No

Thermometer Used: — **Type of Ice:** Wet Blue [✓ None]

Cooler Temperature: Observed Temp — °C Correction Factor: — °C Final Temp: — °C

Temp should be above freezing to 6°C

pH paper Lot#	D.P.D. Residual Chlorine Lot #
10D3121	—

Comments:	Yes	No	NA	
Chain of Custody Present	✓			1.
Chain of Custody Filled Out:	✓			2.
-Were client corrections present on COC		✓		
Chain of Custody Relinquished	✓			3.
Sampler Name & Signature on COC:		✓		4.
Sample Labels match COC:	✓			5.
-Includes date/time/ID	—			
Matrix:	WT			
Samples Arrived within Hold Time:	✓			6.
Short Hold Time Analysis (<72hr remaining):		✓		7.
Rush Turn Around Time Requested:		✓		8.
Sufficient Volume:	✓			9.
Correct Containers Used:	✓			10.
-Pace Containers Used	✓			
Containers Intact:	✓			11.
Orthophosphate field filtered:			✓	12.
Hex Cr Aqueous samples field filtered:			✓	13.
Organic Samples checked for dechlorination			✓	14:
Filtered volume received for dissolved tests:			✓	15:
All containers checked for preservation:	✓			16.
exceptions: VOA, coliform, TOC, O&G, Phenolics, Radon, non-aqueous matrix				PH<2
All containers meet method preservation requirements:	✓			Initial when completed PS Date/Time of Preservation Lot# of added Preservative
8260C/D: Headspace in VOA Vials (> 6mm)			✓	17.
624.1: Headspace in VOA Vials (0mm)			✓	18.
Trip Blank Present:			✓	Trip blank custody seal present? YES or NO
Rad Samples Screened <0.5 mrem/hr.	✓			Initial when completed PS Date: 4/17/23 Survey Meter SN: 1563

Comments:

Note: For NC compliance samples with discrepancies, a copy of this form must be sent to the DEHNR Certification office.
PM Review is documented electronically in LIMS through the SRF Review schedule in the Workorder Edit Screen.

DC#_Title: ENV-FRM-GBUR-0072 v02_Sample Container Count Offshore Projects
Effective Date: 1/11/2023

Client

Site Plant Gorgas Ash Pond (1403)

Page 1 of 1

Profile Number 16788

Notes 007/008 MS/MSD

		Amber Glass					Plastic								Vials					Other									
Sample Line Item	Matrix	AG1H	AG3S	AG3U	AG5U	AG5T	BP1N	BP1U	BP2S	BP2U	BP3C	BP3N	BP3S	BP3U	DG9S	VG9H	VG9T	VG9U	VOAK	WGFU	WGKU	ZPLC	GCUB	GJN	12GN	GN	BG1U		
001	WT						1																						
002	↓						1																						
003							1																						
004							1																						
005							1																						
006							1																						
007							1																						
008							1																						

WO#:30579206
PM: JPH Due Date: 05/12/23
CLIENT: ALABAMA PWR

Container Codes

Glass

GJN	1 Gallon Jug with HNO3	DG9S	40mL amber VOA vial H2SO4
AG5U	100mL amber glass unpreserved	VG9U	40mL clear VOA vial
AG5T	100mL amber glass Na Thiosulfate	VG9T	40mL clear VOA vial Na Thiosulfate
GJN	1 Gallon Jug	VG9H	40mL clear VOA vial HCl
AG1S	1L amber glass H2SO4	JGFU	4oz amber wide jar
AG1H	1L amber glass HCl	WGFU	4oz wide jar unpreserved
AG1T	1L amber glass NA Thiosulfate	BG2U	500mL clear glass unpreserved
BG1U	1L clear glass unpreserved	AG2U	500mL amber glass unpreserved
AG3S	250mL amber glass H2SO4	WGKU	8oz wide jar unpreserved
AG3U	250mL amber glass unpreserved	GN	General

Plastic/Misc.

GCUB	1 gallon cubitainer
12GN	1/2 gallon cubitainer
SP5T	120mL coliform Na Thiosulfate
BP1N	1L plastic HNO3
BP1U	1L plastic unpreserved
BP3S	250mL plastic H2SO4
BP3N	250mL plastic HNO3
BP3U	250mL plastic unpreserved
BP3C	250mL plastic NAOH
BP2S	500mL plastic H2SO4
BP2U	500mL plastic unpreserved

EZI	5g Encore
VOAK	Kit Volatile Solid
I	Wipe/Swab
ZPLC	Siploc Bag

WT	Water
SL	Solid
OL	Non-Aq Liquid
WP	Wipe

Quality Control Sample Performance Assessment

Test: Ra-226
Analyst: SLC
Date: 4/18/2023
Worklist: 72585
Matrix: DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2824612
MB concentration:	0.085
M/B Counting Uncertainty:	0.077
MB MDC:	0.140
MB Numerical Performance Indicator:	2.15
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	N
	LCS72585	**LCSD72585**
Count Date:	5/11/2023	
Spike I.D.:	19-033	
Decay Corrected Spike Concentration (pCi/mL):	24.017	
Volume Used (mL):	0.10	
Aliquot Volume (L, g, F):	0.502	
Target Conc. (pCi/L, g, F):	4.788	
Uncertainty (Calculated):	0.057	
Result (pCi/L, g, F):	5.179	
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.515	
Numerical Performance Indicator:	1.48	
Percent Recovery:	108.18%	
Status vs Numerical Indicator:	N/A	
Status vs Recovery:	Pass	
Upper % Recovery Limits:	125%	
Lower % Recovery Limits:	75%	

Duplicate Sample Assessment		
Sample I.D.:		
Duplicate Sample I.D.		
Sample Result (pCi/L, g, F):		
Sample Result Counting Uncertainty (pCi/L, g, F):		
Sample Duplicate Result (pCi/L, g, F):		
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):		
Are sample and/or duplicate results below RL?	See Below ##	
Duplicate Numerical Performance Indicator:		
Duplicate RPD:		
Duplicate Status vs Numerical Indicator:		
Duplicate Status vs RPD:		
% RPD Limit:		

Sample Matrix Spike Control Assessment	MS/MSD 1	MS/MSD 2
Sample Collection Date:	3/14/2023	3/6/2023
Sample I.D.	30579206006	30579210002
Sample MS I.D.	30579206007	30579210003
Sample MSD I.D.	30579206008	30579210004
Spike I.D.:	19-033	19-033
MS/MSD Decay Corrected Spike Concentration (pCi/mL):	24.019	24.019
Spike Volume Used in MS (mL):	0.20	0.20
Spike Volume Used in MSD (mL):	0.20	0.20
MS Aliquot (L, g, F):	0.201	0.207
MS Target Conc.(pCi/L, g, F):	23.926	23.154
MSD Aliquot (L, g, F):	0.203	0.207
MSD Target Conc. (pCi/L, g, F):	23.637	23.196
MS Spike Uncertainty (calculated):	0.287	0.278
MSD Spike Uncertainty (calculated):	0.284	0.278
Sample Result:	0.627	0.220
Sample Result Counting Uncertainty (pCi/L, g, F):	0.364	0.283
Sample Matrix Spike Result:	26.675	26.046
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):	1.870	1.708
Sample Matrix Spike Duplicate Result:	24.709	27.128
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):	1.656	1.714
MS Numerical Performance Indicator:	2.158	2.987
MSD Numerical Performance Indicator:	0.508	4.135
MS Percent Recovery:	108.86%	111.54%
MSD Percent Recovery:	101.88%	116.00%
MS Status vs Numerical Indicator:	N/A	N/A
MSD Status vs Numerical Indicator:	N/A	N/A
MS Status vs Recovery:	Pass	Pass
MSD Status vs Recovery:	Pass	Pass
MS/MSD Upper % Recovery Limits:	125%	125%
MS/MSD Lower % Recovery Limits:	75%	75%

Matrix Spike/Matrix Spike Duplicate Sample Assessment		
Sample I.D.	30579206006	30579210002
Sample MS I.D.	30579206007	30579210003
Sample MSD I.D.	30579206008	30579210004
Sample Matrix Spike Result:	26.675	26.046
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):	1.870	1.708
Sample Matrix Spike Duplicate Result:	24.709	27.128
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):	1.656	1.714
Duplicate Numerical Performance Indicator:	1.542	-0.877
(Based on the Percent Recoveries) MS/ MSD Duplicate RPD:	6.62%	3.92%
MS/ MSD Duplicate Status vs Numerical Indicator:	N/A	N/A
MS/ MSD Duplicate Status vs RPD:	Pass	Pass
% RPD Limit:	25%	25%

Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.

Comments:

SLC 5/11/23

Quality Control Sample Performance Assessment

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test: Ra-228
Analyst: JJS1
Date: 4/26/2023
Worklist: 72663
Matrix: WT

Method Blank Assessment	
MB Sample ID	2828845
MB concentration:	0.681
M/B 2 Sigma CSU:	0.349
MB MDC:	0.592
MB Numerical Performance Indicator:	3.82
MB Status vs Numerical Indicator:	Fail*
MB Status vs. MDC:	See Comment*

Laboratory Control Sample Assessment	LCSD (Y or N)?	N
	LCS72663	LCSD72663
Count Date:	5/2/2023	
Spike I.D.:	22-040	
Decay Corrected Spike Concentration (pCi/mL):	32.713	
Volume Used (mL):	0.10	
Aliquot Volume (L, g, F):	0.805	
Target Conc. (pCi/L, g, F):	4.062	
Uncertainty (Calculated):	0.199	
Result (pCi/L, g, F):	3.446	
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	0.801	
Numerical Performance Indicator:	-1.46	
Percent Recovery:	84.84%	
Status vs Numerical Indicator:	N/A	
Status vs Recovery:	Pass	
Upper % Recovery Limits:	135%	
Lower % Recovery Limits:	60%	

Duplicate Sample Assessment		
Sample I.D.:		Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.		
Sample Result (pCi/L, g, F):		
Sample Result 2 Sigma CSU (pCi/L, g, F):		
Sample Duplicate Result (pCi/L, g, F):		
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):		
Are sample and/or duplicate results below RL?	See Below ##	
Duplicate Numerical Performance Indicator:		
Duplicate RPD:		
Duplicate Status vs Numerical Indicator:		
Duplicate Status vs RPD:		
% RPD Limit:		

Sample Matrix Spike Control Assessment	MS/MSD 1	MS/MSD 2
Sample Collection Date:	3/14/2023	3/6/2023
Sample I.D.	30579206006	30579210002
Sample MS I.D.	30579206007	30579210003
Sample MSD I.D.	30579206008	30579210004
Spike I.D.:	22-040	22-040
MS/MSD Decay Corrected Spike Concentration (pCi/mL):	33.246	33.246
Spike Volume Used in MS (mL):	0.20	0.20
Spike Volume Used in MSD (mL):	0.20	0.20
MS Aliquot (L, g, F):	0.807	0.807
MS Target Conc.(pCi/L, g, F):	8.238	8.238
MSD Aliquot (L, g, F):	0.807	0.809
MSD Target Conc. (pCi/L, g, F):	8.235	8.217
MS Spike Uncertainty (calculated):	0.404	0.404
MSD Spike Uncertainty (calculated):	0.403	0.403
Sample Result:	2.307	0.474
Sample Result 2 Sigma CSU (pCi/L, g, F):	0.644	0.314
Sample Matrix Spike Result:	7.322	5.590
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):	1.523	1.178
Sample Matrix Spike Duplicate Result:	7.832	7.449
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):	1.618	1.517
MS Numerical Performance Indicator:	-3.712	-4.768
MSD Numerical Performance Indicator:	-2.971	-1.521
MS Percent Recovery:	60.88%	62.09%
MSD Percent Recovery:	67.10%	84.88%
MS Status vs Numerical Indicator:	Fail****	Fail****
MSD Status vs Numerical Indicator:	Warning	Pass
MS Status vs Recovery:	Pass	Pass
MSD Status vs Recovery:	Pass	Pass
MS/MSD Upper % Recovery Limits:	135%	135%
MS/MSD Lower % Recovery Limits:	60%	60%

Matrix Spike/Matrix Spike Duplicate Sample Assessment		
Sample I.D.	30579206006	30579210002
Sample MS I.D.	30579206007	30579210003
Sample MSD I.D.	30579206008	30579210004
Sample Matrix Spike Result:	7.322	5.590
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):	1.523	1.178
Sample Matrix Spike Duplicate Result:	7.832	7.449
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):	1.618	1.517
Duplicate Numerical Performance Indicator:	-0.450	-1.898
(Based on the Percent Recoveries) MS/ MSD Duplicate RPD:	9.72%	31.01%
MS/ MSD Duplicate Status vs Numerical Indicator:	Pass	Pass
MS/ MSD Duplicate Status vs RPD:	Pass	Pass
% RPD Limit:	36%	36%

Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.

Comments:
*The method blank result is below the reporting limit for this analysis and is acceptable.

MS/MSD pass % recovery criteria

~~****If all other QC criteria pass, this batch is acceptable. The matrix spike duplicate result indicates a possible bias for this sample only and may not be applicable to any other samples in this analytical batch.~~

5/3/23

VAC
5/3/23

JJ 5/3/23

Ra-228 NELAC DW2
Printed: 5/3/2023 11:28 AM

Ra-228_72663_W
Ra-228 (ENV-FRM-GBUR-0295 02).xls

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

May 16, 2023

Brooke Caton
Alabama Power
744 Highway 87
Calera, AL 35040

RE: Project: WMWGORAP_1402
Pace Project No.: 30579210

Dear Brooke Caton:

Enclosed are the analytical results for sample(s) received by the laboratory on April 14, 2023. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Greensburg

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Skyler C. Richmond
skyler.richmond@pacelabs.com
(724)850-5600
Project Manager

Enclosures

cc: Blaine Denton, Alabama Power
Renee Jernigan, Alabama Power

CERTIFICATIONS

Project: WMWGORAP_1402
Pace Project No.: 30579210

Pace Analytical Services Pennsylvania

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification #: PA01547
Connecticut Certification #: PH-0694
Delaware Certification
EPA Region 4 DW Rad
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Florida: Cert E871149 SEKS WET
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: KY90133
KY WW Permit #: KY0098221
KY WW Permit #: KY0000221
Louisiana DHH/TNI Certification #: LA180012
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: 2017020
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification #: 9991
Missouri Certification #: 235
Montana Certification #: Cert0082
Nebraska Certification #: NE-OS-29-14
Nevada Certification #: PA014572018-1
New Hampshire/TNI Certification #: 297617
New Jersey/TNI Certification #: PA051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Ohio EPA Rad Approval: #41249
Oregon/TNI Certification #: PA200002-010
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: 02867
Texas/TNI Certification #: T104704188-17-3
Utah/TNI Certification #: PA014572017-9
USDA Soil Permit #: P330-17-00091
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Approve List for Rad
Wyoming Certification #: 8TMS-L

SAMPLE SUMMARY

Project: WMWGORAP_1402
Pace Project No.: 30579210

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30579210001	**BD04769 MW-44HO**	Water	03/06/23 14:16	04/14/23 09:35
30579210002	**BD04770 MW-44HO Dup**	Water	03/06/23 14:16	04/14/23 09:35
30579210003	**BD04770 MW-44HO Dup MS**	Water	03/06/23 14:16	04/14/23 09:35
30579210004	**BD04770 MW-44HO Dup MSD**	Water	03/06/23 14:16	04/14/23 09:35
30579210005	**BD04771 FB-1**	Water	03/06/23 14:20	04/14/23 09:35
30579210006	**BD04772 EB-1**	Water	03/06/23 15:15	04/14/23 09:35

SAMPLE ANALYTE COUNT

Project: WMWGORAP_1402
Pace Project No.: 30579210

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30579210001	**BD04769 MW-44HO**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30579210002	**BD04770 MW-44HO Dup**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30579210003	**BD04770 MW-44HO Dup MS**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
30579210004	**BD04770 MW-44HO Dup MSD**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
30579210005	**BD04771 FB-1**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30579210006	**BD04772 EB-1**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA

PASI-PA = Pace Analytical Services - Greensburg

PROJECT NARRATIVE

Project:	WMWGORAP_1402
Pace Project No.:	30579210

Method: **EPA 9315**
Description: 9315 Total Radium
Client: Alabama Power
Date: May 16, 2023

General Information:
6 samples were analyzed for EPA 9315 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

PROJECT NARRATIVE

Project:	WMWGORAP_1402
Pace Project No.:	30579210

Method: **EPA 9320**
Description: 9320 Radium 228
Client: Alabama Power
Date: May 16, 2023

General Information:
6 samples were analyzed for EPA 9320 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

PROJECT NARRATIVE

Project:	WMWGORAP_1402
Pace Project No.:	30579210

Method: **Total Radium Calculation**
Description: Total Radium 228+226
Client: Alabama Power
Date: May 16, 2023

General Information:
4 samples were analyzed for Total Radium Calculation by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORAP_1402
Pace Project No.: 30579210

Sample: BD04769 MW-44HO **Lab ID: 30579210001** Collected: 03/06/23 14:16 Received: 04/14/23 09:35 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.387U ± 0.269 (0.421)** **C:81% T:NA**	pCi/L	05/10/23 17:34	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.726 ± 0.383 (0.672)** **C:81% T:90%**	pCi/L	05/02/23 15:00	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.11 ± 0.652 (1.09)**	pCi/L	05/11/23 14:53	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORAP_1402
Pace Project No.: 30579210

Sample: BD04770 MW-44HO Dup **Lab ID: 30579210002** Collected: 03/06/23 14:16 Received: 04/14/23 09:35 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.220U ± 0.284 (0.609)** **C:83% T:NA**	pCi/L	05/11/23 08:27	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.474U ± 0.314 (0.586)** **C:80% T:86%**	pCi/L	05/02/23 12:15	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.694U ± 0.598 (1.20)**	pCi/L	05/11/23 14:53	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORAP_1402
Pace Project No.: 30579210

Sample: BD04770 MW-44HO Dup MS **Lab ID: 30579210003** Collected: 03/06/23 14:16 Received: 04/14/23 09:35 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
		Pace Analytical Services - Greensburg				
Radium-226	EPA 9315	**111.54 %REC ± NA (NA)** **C:NA T:NA**	pCi/L	05/11/23 08:28	13982-63-3	
		Pace Analytical Services - Greensburg				
Radium-228	EPA 9320	**62.09 %REC ± NA (NA)** **C:NA T:NA**	pCi/L	05/02/23 12:15	15262-20-1	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORAP_1402
Pace Project No.: 30579210

Sample: BD04770 MW-44HO Dup MSD **Lab ID: 30579210004** Collected: 03/06/23 14:16 Received: 04/14/23 09:35 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**116.00 %REC 3.92RPD ± NA (NA) C:NA T:NA**	pCi/L	05/11/23 08:29	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**84.88 %REC 31.01RPD ± NA (NA) C:NA T:NA**	pCi/L	05/02/23 12:15	15262-20-1	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORAP_1402
Pace Project No.: 30579210

Sample: BD04771 FB-1 **Lab ID: 30579210005** Collected: 03/06/23 14:20 Received: 04/14/23 09:35 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.258U ± 0.213 (0.366)** **C:92% T:NA**	pCi/L	05/10/23 18:40	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.450U ± 0.330 (0.636)** **C:81% T:81%**	pCi/L	05/02/23 12:15	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.708U ± 0.543 (1.00)**	pCi/L	05/11/23 14:53	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORAP_1402
Pace Project No.: 30579210

Sample: BD04772 EB-1 **Lab ID: 30579210006** Collected: 03/06/23 15:15 Received: 04/14/23 09:35 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.205U ± 0.226 (0.449)** **C:92% T:NA**	pCi/L	05/11/23 08:30	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.463U ± 0.393 (0.799)** **C:83% T:84%**	pCi/L	05/02/23 12:15	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.668U ± 0.619 (1.25)**	pCi/L	05/11/23 14:53	7440-14-4	

QUALITY CONTROL - RADIOCHEMISTRY

Project: WMWGORAP_1402
Pace Project No.: 30579210

QC Batch: 582474
QC Batch Method: EPA 9320
Analysis Method: EPA 9320
Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30579210001, 30579210002, 30579210003, 30579210004, 30579210005, 30579210006

METHOD BLANK: 2828845
Matrix: Water
Associated Lab Samples: 30579210001, 30579210002, 30579210003, 30579210004, 30579210005, 30579210006

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.681 ± 0.349 (0.592) C:81% T:85%	pCi/L	05/02/23 11:49	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

QUALITY CONTROL - RADIOCHEMISTRY

Project:	WMWGORAP_1402
Pace Project No.:	30579210

QC Batch:	581620	Analysis Method:	EPA 9315
QC Batch Method:	EPA 9315	Analysis Description:	9315 Total Radium
		Laboratory:	Pace Analytical Services - Greensburg

Associated Lab Samples: 30579210001, 30579210002, 30579210003, 30579210004, 30579210005, 30579210006

METHOD BLANK: 2824612 Matrix: Water

Associated Lab Samples: 30579210001, 30579210002, 30579210003, 30579210004, 30579210005, 30579210006

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.0849 ± 0.0784 (0.140) C:96% T:NA	pCi/L	05/10/23 17:34	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

QUALIFIERS

Project:	WMWGORAP_1402
Pace Project No.:	30579210

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Act - Activity

Unc - Uncertainty: For Safe Drinking Water Act (SDWA) analyses, the reported Unc. Is the calculated Count Uncertainty (95% confidence interval) using a coverage factor of 1.96. For all other matrices (non-SDWA), the reported Unc. is the calculated Expanded Uncertainty (aka Combined Standard Uncertainty, CSU), reported at the 95% confidence interval using a coverage factor of 1.96.

Gamma Spec: The Unc. reported for all gamma-spectroscopy analyses (EPA 901.1), is the calculated Expanded Uncertainty (CSU) at the 95.4% confidence interval, using a coverage factor of 2.0.

(MDC) - Minimum Detectable Concentration

Trac - Tracer Recovery (%)

Carr - Carrier Recovery (%)

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: WMWGORAP_1402
Pace Project No.: 30579210

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30579210001	**BD04769 MW-44HO**	EPA 9315	581620		
30579210002	**BD04770 MW-44HO Dup**	EPA 9315	581620		
30579210003	**BD04770 MW-44HO Dup MS**	EPA 9315	581620		
30579210004	**BD04770 MW-44HO Dup MSD**	EPA 9315	581620		
30579210005	**BD04771 FB-1**	EPA 9315	581620		
30579210006	**BD04772 EB-1**	EPA 9315	581620		
30579210001	**BD04769 MW-44HO**	EPA 9320	582474		
30579210002	**BD04770 MW-44HO Dup**	EPA 9320	582474		
30579210003	**BD04770 MW-44HO Dup MS**	EPA 9320	582474		
30579210004	**BD04770 MW-44HO Dup MSD**	EPA 9320	582474		
30579210005	**BD04771 FB-1**	EPA 9320	582474		
30579210006	**BD04772 EB-1**	EPA 9320	582474		
30579210001	**BD04769 MW-44HO**	Total Radium Calculation	587608		
30579210002	**BD04770 MW-44HO Dup**	Total Radium Calculation	587608		
30579210005	**BD04771 FB-1**	Total Radium Calculation	587608		
30579210006	**BD04772 EB-1**	Total Radium Calculation	587608		

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page : 1 Of 1

Section A
Required Client Information:

Company:	Alabama Power Company
Address:	744 Highway 87 GSC Bldg #8 Calera, AL 35040
Email To:	tbwill@southernco.com
Phone:	205-664-6101 Fax:
Requested Due Date:	Normal

Section B
Required Project Information:

Report To:	Brooke Caton
Copy To:	Renee Jernigan & Blaine Denton
Purchase Order #:	APC10755638
Project Name:	Plant Gorgas Ash Pond
Project Number:	WMWGORAP_1402

Section C
Invoice Information:

Attention:	Brooke Caton
Company Name:	Alabama Power Co.
Address:	744 Highway 87 GSC Bldg #8
Pace Quote:	CCR
Pace Project Manager:	Skyler Richmond
Pace Profile #:	16788

Regulatory Agency

State / Location: AL

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique	Description	Station Name Location_Code	Site Name Facility_ID	Sample Duplicate	Matrix Spike/Matrix Spike Duplicate	Field Filtered	MATRIX CODE	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	# OF CONTAINERS	Preservatives: Unpreserved	Preservatives: NaOH+ZnAcetate	Preservatives: HNO3	Analyses Test Y/N	EPA 9315	EPA 9320	Total Radium Sum	Total Sulfide	Residual Chlorine (Y/N)	
1	BD04~~765~~ 769	MW-44HO	APCO-GS-AP-MW-44HO	APCO_Gorgas_AshPond				GW	G	3/6/2023	14:16	1			X		X	X	X			001
2	BD04~~766~~ 770	MW-44HO DUP	APCO-GS-AP-MW-44HO	APCO_Gorgas_AshPond	X	x		GW	G	3/6/2023	14:16	3			X		X	X	X			002, 003, 004
3	BD04~~767~~ 771	FB-1	APCO-GS-AP-FB-01	APCO_Gorgas_AshPond				GW	G	3/6/2023	14:20	1			X		X	X	X			005
4	BD04~~768~~ 772	EB-1	APCO-GS-AP-EB-01	APCO_Gorgas_AshPond				GW	G	3/6/2023	15:15	1			X		X	X	X			006
5	BC																					
6	3-17-23																					
7																						
8																						
9																						
10																						
11																						
12																						

WO#: 30579210

30579210

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	Brooke Caton/ APC GTL	3/17/2023	9:43	Yoandra Rodriguez	3/24/23	1158	NA	N	Y	Y
		3/25/23	10:40							
					4/14/23	9:35				
							TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER:

SIGNATURE of SAMPLER:

DATE Signed:

Pace ANALYTICAL SERVICES

DC#_Title: ENV-FRM-GBUR-0088 v04_Sample Condition Upon Receipt-Pittsburgh

Effective Date: 02/03/2023

WO#: 30579210
PM: JPH Due Date: 05/12/23
CLIENT: ALABAMA PWR

Client Name: Alabama Power

Courier: ☑ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace ☐

Tracking Number: 7718 0120 2557

Examined By PS
Labeled By PS
Temped By —

Custody Seal on Cooler/Box Present: ☐ Yes ☒ No **Seals Intact:** ☐ Yes ☒ No

Thermometer Used: — **Type of Ice:** Wet Blue [✓ None]

Cooler Temperature: Observed Temp ___ °C Correction Factor: — °C Final Temp: — °C

Temp should be above freezing to 6°C

Comments:	Yes	No	NA	**pH paper Lot#** 1003121	**D.P.D. Residual Chlorine Lot #** —
Chain of Custody Present	✓			1.	
Chain of Custody Filled Out:	✓			2.	
-Were client corrections present on COC	✓				
Chain of Custody Relinquished	✓			3.	
Sampler Name & Signature on COC:		✓		4.	
Sample Labels match COC:	✓			5.	
-Includes date/time/ID					
Matrix:	WT				
Samples Arrived within Hold Time:	✓			6.	
Short Hold Time Analysis (<72hr remaining):		✓		7.	
Rush Turn Around Time Requested:		✓		8.	
Sufficient Volume:	✓			9.	
Correct Containers Used:	✓			10.	
-Pace Containers Used	✓				
Containers Intact:	✓			11.	
Orthophosphate field filtered:			✓	12.	
Hex Cr Aqueous samples field filtered:			✓	13.	
Organic Samples checked for dechlorination			✓	14:	
Filtered volume received for dissolved tests:			✓	15:	
All containers checked for preservation:	✓			16.	
exceptions: VOA, coliform, TOC, O&G, Phenolics, Radon, non-aqueous matrix				PH<2	
All containers meet method preservation requirements:	✓			Initial when completed PS Lot# of added Preservative	Date/Time of Preservation
8260C/D: Headspace in VOA Vials (> 6mm)			✓	17.	
624.1: Headspace in VOA Vials (0mm)			✓	18.	
Trip Blank Present:			✓	Trip blank custody seal present? YES or NO	
Rad Samples Screened <0.5 mrem/hr.	✓			Initial when completed PS Date: 4/17/23	Survey Meter SN: 1563
Comments:					

Note: For NC compliance samples with discrepancies, a copy of this form must be sent to the DEHNR Certification office.
PM Review is documented electronically in LIMS through the SRF Review schedule in the Workorder Edit Screen.

DC#_Title: ENV-FRM-GBUR-0072 v02_Sample Container Count Offshore Projects
Effective Date: 1/11/2023

Client
Site Plant Gargas Ash Pond (1402)

Page 1 of 1

Profile Number 16788
Notes 003/004 MS/MSD

		Amber Glass					Plastic								Vials					Other									
Sample Line Item	Matrix	AG1H	AG3S	AG3U	AG5U	AG5T	BP1N	BP1U	BP2S	BP2U	BP3C	BP3N	BP3S	BP3U	DG9S	VG9H	VG9T	VG9U	VOAK	WGFU	WGKU	ZPLC	GCUB	GJN	12GN	GN	BG1U		
001	WT						1																						
002	↓						1																						
003	↓						1																						
004	↓						1																						
005	↓						1																						
006	↓						1																						

WO#:30579210
PM: JPH Due Date: 05/12/23
CLIENT: ALABAMA PWR

Container Codes

Glass

GJN	1 Gallon Jug with HNO3	DG9S	40mL amber VOA vial H2SO4
AG5U	100mL amber glass unpreserved	VG9U	40mL clear VOA vial
AG5T	100mL amber glass Na Thiosulfate	VG9T	40mL clear VOA vial Na Thiosulfate
GJN	1 Gallon Jug	VG9H	40mL clear VOA vial HCl
AG1S	1L amber glass H2SO4	JGFU	4oz amber wide jar
AG1H	1L amber glass HCl	WGFU	4oz wide jar unpreserved
AG1T	1L amber glass NA Thiosulfate	BG2U	500mL clear glass unpreserved
BG1U	1L clear glass unpreserved	AG2U	500mL amber glass unpreserved
AG3S	250mL amber glass H2SO4	WGKU	8oz wide jar unpreserved
AG3U	250mL amber glass unpreserved	GN	General

Plastic/Misc.

GCUB	1 gallon cubitainer
12GN	1/2 gallon cubitainer
SP5T	120mL coliform Na Thiosulfate
BP1N	1L plastic HNO3
BP1U	1L plastic unpreserved
BP3S	250mL plastic H2SO4
BP3N	250mL plastic HNO3
BP3U	250mL plastic unpreserved
BP3C	250mL plastic NAOH
BP2S	500mL plastic H2SO4
BP2U	500mL plastic unpreserved

EZI	5g Encore
VOAK	Kit Volatile Soli
I	Wipe/Swab
ZPLC	Siploc Bag

WT	Water
SL	Solid
OL	Non-Aq Liquid
WP	Wipe

Pace Analytical™
www.pacelabs.com

Quality Control Sample Performance Assessment

Test: Ra-226
Analyst: SLC
Date: 4/18/2023
Worklist: 72585
Matrix: DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2824612
MB concentration:	0.085
M/B Counting Uncertainty:	0.077
MB MDC:	0.140
MB Numerical Performance Indicator:	2.15
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	N
	LCS72585	**LCSD72585**
Count Date:	5/11/2023	
Spike I.D.:	19-033	
Decay Corrected Spike Concentration (pCi/mL):	24.017	
Volume Used (mL):	0.10	
Aliquot Volume (L, g, F):	0.502	
Target Conc. (pCi/L, g, F):	4.788	
Uncertainty (Calculated):	0.057	
Result (pCi/L, g, F):	5.179	
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.515	
Numerical Performance Indicator:	1.48	
Percent Recovery:	108.18%	
Status vs Numerical Indicator:	N/A	
Status vs Recovery:	Pass	
Upper % Recovery Limits:	125%	
Lower % Recovery Limits:	75%	

Duplicate Sample Assessment		
Sample I.D.:		
Duplicate Sample I.D.		
Sample Result (pCi/L, g, F):		
Sample Result Counting Uncertainty (pCi/L, g, F):		
Sample Duplicate Result (pCi/L, g, F):		
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):		
Are sample and/or duplicate results below RL?	See Below ##	
Duplicate Numerical Performance Indicator:		
Duplicate RPD:		
Duplicate Status vs Numerical Indicator:		
Duplicate Status vs RPD:		
% RPD Limit:		

Sample Matrix Spike Control Assessment	MS/MSD 1	MS/MSD 2
Sample Collection Date:	3/14/2023	3/6/2023
Sample I.D.	30579206006	30579210002
Sample MS I.D.	30579206007	30579210003
Sample MSD I.D.	30579206008	30579210004
Spike I.D.:	19-033	19-033
MS/MSD Decay Corrected Spike Concentration (pCi/mL):	24.019	24.019
Spike Volume Used in MS (mL):	0.20	0.20
Spike Volume Used in MSD (mL):	0.20	0.20
MS Aliquot (L, g, F):	0.201	0.207
MS Target Conc.(pCi/L, g, F):	23.926	23.154
MSD Aliquot (L, g, F):	0.203	0.207
MSD Target Conc. (pCi/L, g, F):	23.637	23.196
MS Spike Uncertainty (calculated):	0.287	0.278
MSD Spike Uncertainty (calculated):	0.284	0.278
Sample Result:	0.627	0.220
Sample Result Counting Uncertainty (pCi/L, g, F):	0.364	0.283
Sample Matrix Spike Result:	26.675	26.046
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):	1.870	1.708
Sample Matrix Spike Duplicate Result:	24.709	27.128
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):	1.656	1.714
MS Numerical Performance Indicator:	2.158	2.987
MSD Numerical Performance Indicator:	0.508	4.135
MS Percent Recovery:	108.86%	111.54%
MSD Percent Recovery:	101.88%	116.00%
MS Status vs Numerical Indicator:	N/A	N/A
MSD Status vs Numerical Indicator:	N/A	N/A
MS Status vs Recovery:	Pass	Pass
MSD Status vs Recovery:	Pass	Pass
MS/MSD Upper % Recovery Limits:	125%	125%
MS/MSD Lower % Recovery Limits:	75%	75%

Matrix Spike/Matrix Spike Duplicate Sample Assessment		
Sample I.D.	30579206006	30579210002
Sample MS I.D.	30579206007	30579210003
Sample MSD I.D.	30579206008	30579210004
Sample Matrix Spike Result:	26.675	26.046
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):	1.870	1.708
Sample Matrix Spike Duplicate Result:	24.709	27.128
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):	1.656	1.714
Duplicate Numerical Performance Indicator:	1.542	-0.877
(Based on the Percent Recoveries) MS/ MSD Duplicate RPD:	6.62%	3.92%
MS/ MSD Duplicate Status vs Numerical Indicator:	N/A	N/A
MS/ MSD Duplicate Status vs RPD:	Pass	Pass
% RPD Limit:	25%	25%

Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.

Comments:

5/11/23

SLC 5/11/23

Quality Control Sample Performance Assessment

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test: Ra-228
Analyst: JJS1
Date: 4/26/2023
Worklist: 72663
Matrix: WT

Method Blank Assessment	
MB Sample ID	2828845
MB concentration:	0.681
M/B 2 Sigma CSU:	0.349
MB MDC:	0.592
MB Numerical Performance Indicator:	3.82
MB Status vs Numerical Indicator:	Fail*
MB Status vs. MDC:	See Comment*

Laboratory Control Sample Assessment	LCSD (Y or N)?	N
	LCS72663	LCSD72663
Count Date:	5/2/2023	
Spike I.D.:	22-040	
Decay Corrected Spike Concentration (pCi/mL):	32.713	
Volume Used (mL):	0.10	
Aliquot Volume (L, g, F):	0.805	
Target Conc. (pCi/L, g, F):	4.062	
Uncertainty (Calculated):	0.199	
Result (pCi/L, g, F):	3.446	
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	0.801	
Numerical Performance Indicator:	-1.46	
Percent Recovery:	84.84%	
Status vs Numerical Indicator:	N/A	
Status vs Recovery:	Pass	
Upper % Recovery Limits:	135%	
Lower % Recovery Limits:	60%	

Duplicate Sample Assessment		
Sample I.D.:	See Below ##	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.		
Sample Result (pCi/L, g, F):		
Sample Result 2 Sigma CSU (pCi/L, g, F):		
Sample Duplicate Result (pCi/L, g, F):		
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):		
Are sample and/or duplicate results below RL?		
Duplicate Numerical Performance Indicator:		
Duplicate RPD:		
Duplicate Status vs Numerical Indicator:		
Duplicate Status vs RPD:		
% RPD Limit:		

Sample Matrix Spike Control Assessment	MS/MSD 1	MS/MSD 2
Sample Collection Date:	3/14/2023	3/6/2023
Sample I.D.	30579206006	30579210002
Sample MS I.D.	30579206007	30579210003
Sample MSD I.D.	30579206008	30579210004
Spike I.D.:	22-040	22-040
MS/MSD Decay Corrected Spike Concentration (pCi/mL):	33.246	33.246
Spike Volume Used in MS (mL):	0.20	0.20
Spike Volume Used in MSD (mL):	0.20	0.20
MS Aliquot (L, g, F):	0.807	0.807
MS Target Conc.(pCi/L, g, F):	8.238	8.238
MSD Aliquot (L, g, F):	0.807	0.809
MSD Target Conc. (pCi/L, g, F):	8.235	8.217
MS Spike Uncertainty (calculated):	0.404	0.404
MSD Spike Uncertainty (calculated):	0.403	0.403
Sample Result:	2.307	0.474
Sample Result 2 Sigma CSU (pCi/L, g, F):	0.644	0.314
Sample Matrix Spike Result:	7.322	5.590
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):	1.523	1.178
Sample Matrix Spike Duplicate Result:	7.832	7.449
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):	1.618	1.517
MS Numerical Performance Indicator:	-3.712	-4.768
MSD Numerical Performance Indicator:	-2.971	-1.521
MS Percent Recovery:	60.88%	62.09%
MSD Percent Recovery:	67.10%	84.88%
MS Status vs Numerical Indicator:	Fail****	Fail****
MSD Status vs Numerical Indicator:	Warning	Pass
MS Status vs Recovery:	Pass	Pass
MSD Status vs Recovery:	Pass	Pass
MS/MSD Upper % Recovery Limits:	135%	135%
MS/MSD Lower % Recovery Limits:	60%	60%

Matrix Spike/Matrix Spike Duplicate Sample Assessment		
Sample I.D.	30579206006	30579210002
Sample MS I.D.	30579206007	30579210003
Sample MSD I.D.	30579206008	30579210004
Sample Matrix Spike Result:	7.322	5.590
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):	1.523	1.178
Sample Matrix Spike Duplicate Result:	7.832	7.449
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):	1.618	1.517
Duplicate Numerical Performance Indicator:	-0.450	-1.898
(Based on the Percent Recoveries) MS/ MSD Duplicate RPD:	9.72%	31.01%
MS/ MSD Duplicate Status vs Numerical Indicator:	Pass	Pass
MS/ MSD Duplicate Status vs RPD:	Pass	Pass
% RPD Limit:	36%	36%

Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.

Comments:
*The method blank result is below the reporting limit for this analysis and is acceptable.

MS/MSD pass % recovery criteria

~~****If all other QC criteria pass, this batch is acceptable. The matrix spike duplicate result indicates a possible bias for this sample only and may not be applicable to any other samples in this analytical batch.~~

5/3/23

VAC
5/3/23

5/3/23

Alabama Power General Test Laboratory
744 County Road 87, GSC#8
Calera, AL 35040
(205) 664-6032 or 6171
FAX (205) 257-1654

Field Case Narrative

Gorgas Ash Pond

2023 Compliance Event 2

All samples were collected using methods defined in Alabama Power's Water Field Group Low-Flow Groundwater Sampling Procedure and the associated site-specific Sampling and Analysis Plan (SAP).

Turbidity levels less than 10 NTU were not able to be achieved after extended pumping for well MW-6V. A complete sample set for totals analysis was collected followed by a field filtered set for dissolved analysis.

Due to low yield, well MW-32H was sampled using the Minimal Purge Method, as defined in the SAP.

All pH field readings for well MW-16S were qualified due to pH readings falling outside of the bracketed calibration range. The below qualifier was used:

- E – Estimated reported value exceeded calibration range

Field quality control procedures were performed as follows:

- Blanks and Sample Duplicates were collected as described in the SAP.
- Calibration verifications for all required field parameters were performed daily, before and after sample collection.

Alabama Power General Test Laboratory
744 County Road 87, GSC#8
Calera, AL 35040
(205) 664-6032 or 6171
FAX (205) 257-1654

Field Case Narrative

Gorgas Ash Pond

MW-33HO, MW-34HO & MW-35HO 2023 Event 2

All samples were collected using methods defined in Alabama Power’s Water Field Group Low-Flow Groundwater Sampling Procedure and the associated site-specific Sampling and Analysis Plan (SAP).

Field quality control procedures were performed as follows:

- Blanks and Sample Duplicates were collected as described in the SAP.
- Calibration verification for all required field parameters were performed daily, before and after sample collection.

Alabama Power General Test Laboratory
744 County Road 87, GSC#8
Calera, AL 35040
(205) 664-6032 or 6171
FAX (205) 257-1654

Field Case Narrative

Gorgas Ash Pond

MW-44HO (Salter Well) 2023 Event 2

All samples were collected using methods defined in Alabama Power's Water Field Group Low-Flow Groundwater Sampling Procedure and the associated site-specific Sampling and Analysis Plan (SAP).

Field quality control procedures were performed as follows:

- Blanks and Sample Duplicates were collected as described in the SAP.
- Calibration verifications for all required field parameters were performed daily, before and after sample collection.

Water Level Record/Well Inspection Groundwater

APC General Testing Laboratory
General Service Complex Building 8

Y

User Name: Dfgentry

PIN: 123654

Reason:

Submit

Date: 08/29/2023

Location: Gorgas Ash Pond

Collector: Dallas Gentry

Weather: Overcast 80

			In Good Condition					
Well	Time	Water Level (ft)	Locks	Bollards	Pad	Protective Casing	Name Plate	Comment
MW-01R	1222	176.14	☑	☑	☑	☑	☑	Collected by TJD
MW-2	1236	156.52	☑	☑	☑	☑	☑	Collected by TJD
MW-3	0910	147.39	☑	☑	☑	☑	☑	Collected by TJD
MW-03V	0914	158.91	☑	☑	☑	☑	☑	Collected by TJD
MW-4	0927	143.42	☑	☑	☑	☑	☑	Collected by TJD
MW-05R	0941	146.71	☑	☑	☑	☑	☑	Collected by TJD
MW-6S	0956	17.31	☑	☑	☑	☑	☑	Collected by TJD
MW-6D	0958	12.29	☑	☑	☑	☑	☑	Collected by TJD
MW-6V	1002	14.61	☑	☑	☑	☑	☑	Collected by TJD
MW-7	1132	12.39	☑	☑	☑	☑	☑	Collected by TJD
MW-7V	1128	167.86	☑	☑	☑	☑	☑	Collected by TJD
MW-7VR	1130	51.09	☑	☑	☑	☑	☑	Collected by TJD
MW-8	1044	43.82	☑	☑	☑	☑	☑	Collected by TJD
MW-9V	1058	62.76	☑	☑	☑	☑	☑	
MW-09R	1101	63.49	☑	☑	☑	☑	☑	
MW-10R	1043	146.97	☑	☑	☑	☑	☑	
MW-11R	1036	83.28	☑	☑	☑	☑	☑	
MW-12	1024	83.96	☑	☑	☑	☑	☑	
MW-12V	1027	98.00	☑	☑	☑	☑	☑	
MW-13R	1019	107.69	☑	☑	☑	☑	☑	
MW-14R	1007	103.68	☑	☑	☑	☑	☑	
MW-15	0948	78.19	☑	☑	☑	☑	☑	
MW-15V	0945	156.98	☑	☑	☑	☑	☑	
MW-16S	0928	57.80	☑	☑	☑	☑	☑	
MW-16D	0932	144.61	☑	☑	☑	☑	☑	
PZ-16	0934	189.11	☑	☑	☑	☑	☑	
MW-17	1253	180.12	☑	☑	☑	☑	☑	
MW-17V	1257	105.78	☑	☑	☑	☑	☑	
MW-18R	1343	40.51	☑	☑	☑	☑	☑	
MW-18VR	1341	189.24	☑	☑	☑	☑	☑	
PZ-18R	1346	95.42	☑	☑	☑	☑	☑	
MW-19	1405	110.79	☑	☑	☑	☑	☑	Collected by TJD
MW-20	1328	212.81	☑	☑	☑	☑	☑	Collected by TJD

Water Level Record/Well Inspection Groundwater

APC General Testing Laboratory
General Service Complex Building 8

Y

User Name: Dfgentry
PIN: 123654
Reason:

Submit

Date: 08/29/2023
Location: Gorgas Ash Pond
Collector: Dallas Gentry
Weather: Overcast 80

			In Good Condition					
Well	Time	Water Level (ft)	Locks	Bollards	Pad	Protective Casing	Name Plate	Comment
MW-21	1342	172.81	☑	☑	☑	☑	☑	Collected by TJD
MW-21V	1339	182.09	☑	☑	☑	☑	☑	Collected by TJD
PZ-22	1250	259.26	☑	☑	☑	☑	☑	
MW-23H	1015	29.51	☑	☑	☑	☑	☑	Collected by TJD
MW-23V	1013	44.42	☑	☑	☑	☑	☑	Collected by TJD
MW-24H	1031	6.81	☑	☑	☑	☑	☑	Collected by TJD
MW-25H	1052	161.41	☑	☑	☑	☑	☑	Collected by TJD
MW-25HA	1049	177.09	☑	☑	☑	☑	☑	Collected by TJD
MW-26H	1112	97.11	☑	☑	☑	☑	☑	Collected by TJD
MW-27HR	1216	157.08	☑	☑	☑	☑	☑	
MW-28H	1312	161.94	☑	☑	☑	☑	☑	
MW-29H	1330	88.43	☑	☑	☑	☑	☑	
MW-30H	1320	272.28	☑	☑	☑	☑	☑	Collected by TJD
MW-30HA	1313	309.31	☑	☑	☑	☑	☑	Collected by TJD
MW-30HS	1318	47.89	☑	☑	☑	☑	☑	Collected by TJD
MW-31H	1209	238.88	☑	☑	☑	☑	☑	Collected by TJD
MW-31V	1206	281.31	☑	☑	☑	☑	☑	Collected by TJD
MW-32H	1410	260.76	☑	☑	☑	☑	☑	Collected by TJD
MW-33HO	1355	243.16	☑	☑	☑	☑	☑	
MW-34HO	1320	250.61	☑	☑	☑	☑	☑	Grass around well dead in 8 foot radius
MW-35HO	1230	261.14	☑	☑	☑	☑	☑	Grass around well dead in 8 foot radius
MW-36H	1147	239.31	☑	☑	☑	☑	☑	
MW-36V	1153	254.93	☑	☑	☑	☑	☑	Grass around well dead in 8 foot radius
MW-37HR	1000	144.25	☑	☑	☑	☑	☑	Grass around well dead in 8 foot radius
MW-38H	1051	48.48	☑	☑	☑	☑	☑	
MW-39H	1046	247.02	☑	☑	☑	☑	☑	
MW-40H	1102	80.33	☑	☑	☑	☑	☑	Collected by TJD
MW-41HS	1024	21.46	☑	☑	☑	☑	☑	Collected by TJD
MW-41HD	1025	2.06	☑	☑	☑	☑	☑	Collected by TJD
MW-42H	1144	54.02	☑	☑	☑	☑	☑	Collected by TJD
MW-43H	1251	156.11	☑	☑	☑	☑	☑	Collected by TJD
MW-44HO	1257	147.98	☑	☑	☑	☑	☑	Collected by TJD
MW-45V	0900	206.51	☑	☑	☑	☑	☑	Collected by TJD

Water Level Record/Well Inspection

Groundwater

APC General Testing Laboratory
General Service Complex Building 8

Y

User Name: Dfgentry
PIN: 123654
Reason:

Submit

Date: 08/29/2023
Location: Gorgas Ash Pond
Collector: Dallas Gentry
Weather: Overcast 80

			In Good Condition					
Well	Time	Water Level (ft)	Locks	Bollards	Pad	Protective Casing	Name Plate	Comment
MW-46	1219	135.02	☑	☑	☑	☑	☑	Collected by TJD
MW-47	1010	122.46	☑	☑	☑	☑	☑	
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Plant Gorgas Ash Pond
Field Parameter Summary

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO GS-AP-MW-01R	COND	Conductivity	9/13/2023 13:32	685.83	uS/cm
APCO GS-AP-MW-01R	DO	DO	9/13/2023 13:32	0.21	mg/L
APCO GS-AP-MW-01R	DTW	Depth to Water Detail	9/13/2023 13:32	176.85	ft
APCO GS-AP-MW-01R	ORP	Oxidation Reduction Potential	9/13/2023 13:32	-53.09	mv
APCO GS-AP-MW-01R	PH	pH	9/13/2023 13:32	8.34	SU
APCO GS-AP-MW-01R	TEMP	Temperature	9/13/2023 13:32	18.63	C
APCO GS-AP-MW-01R	TURB	Turbidity	9/13/2023 13:32	7.63	NTU
APCO GS-AP-MW-01R	COND	Conductivity	9/13/2023 13:37	684.58	uS/cm
APCO GS-AP-MW-01R	DO	DO	9/13/2023 13:37	0.18	mg/L
APCO GS-AP-MW-01R	DTW	Depth to Water Detail	9/13/2023 13:37	187.68	ft
APCO GS-AP-MW-01R	ORP	Oxidation Reduction Potential	9/13/2023 13:37	-66.5	mv
APCO GS-AP-MW-01R	PH	pH	9/13/2023 13:37	8.44	SU
APCO GS-AP-MW-01R	TEMP	Temperature	9/13/2023 13:37	18.62	C
APCO GS-AP-MW-01R	TURB	Turbidity	9/13/2023 13:37	4.56	NTU
APCO GS-AP-MW-01R	COND	Conductivity	9/13/2023 13:42	681.91	uS/cm
APCO GS-AP-MW-01R	DO	DO	9/13/2023 13:42	0.18	mg/L
APCO GS-AP-MW-01R	DTW	Depth to Water Detail	9/13/2023 13:42	189.62	ft
APCO GS-AP-MW-01R	ORP	Oxidation Reduction Potential	9/13/2023 13:42	-77.17	mv
APCO GS-AP-MW-01R	PH	pH	9/13/2023 13:42	8.46	SU
APCO GS-AP-MW-01R	TEMP	Temperature	9/13/2023 13:42	18.82	C
APCO GS-AP-MW-01R	TURB	Turbidity	9/13/2023 13:42	4.22	NTU
APCO GS-AP-MW-01R	COND	Conductivity	9/13/2023 13:47	676.07	uS/cm
APCO GS-AP-MW-01R	DO	DO	9/13/2023 13:47	0.17	mg/L
APCO GS-AP-MW-01R	DTW	Depth to Water Detail	9/13/2023 13:47	192.86	ft
APCO GS-AP-MW-01R	ORP	Oxidation Reduction Potential	9/13/2023 13:47	-88.93	mv
APCO GS-AP-MW-01R	PH	pH	9/13/2023 13:47	8.49	SU
APCO GS-AP-MW-01R	TEMP	Temperature	9/13/2023 13:47	18.69	C
APCO GS-AP-MW-01R	TURB	Turbidity	9/13/2023 13:47	4.21	NTU
APCO GS-AP-MW-01R	COND	Conductivity	9/13/2023 13:52	689.21	uS/cm
APCO GS-AP-MW-01R	DO	DO	9/13/2023 13:52	0.62	mg/L
APCO GS-AP-MW-01R	DTW	Depth to Water Detail	9/13/2023 13:52	193.22	ft
APCO GS-AP-MW-01R	ORP	Oxidation Reduction Potential	9/13/2023 13:52	-96.47	mv
APCO GS-AP-MW-01R	PH	pH	9/13/2023 13:52	8.45	SU
APCO GS-AP-MW-01R	TEMP	Temperature	9/13/2023 13:52	22.12	C
APCO GS-AP-MW-01R	TURB	Turbidity	9/13/2023 13:52	4.11	NTU
APCO GS-AP-MW-01R	COND	Conductivity	9/13/2023 13:57	693.59	uS/cm
APCO GS-AP-MW-01R	DO	DO	9/13/2023 13:57	0.49	mg/L
APCO GS-AP-MW-01R	DTW	Depth to Water Detail	9/13/2023 13:57	193.39	ft
APCO GS-AP-MW-01R	ORP	Oxidation Reduction Potential	9/13/2023 13:57	-102.49	mv
APCO GS-AP-MW-01R	PH	pH	9/13/2023 13:57	8.49	SU
APCO GS-AP-MW-01R	TEMP	Temperature	9/13/2023 13:57	23.26	C
APCO GS-AP-MW-01R	TURB	Turbidity	9/13/2023 13:57	4.5	NTU
APCO GS-AP-MW-01R	COND	Conductivity	9/13/2023 14:02	708.06	uS/cm
APCO GS-AP-MW-01R	DO	DO	9/13/2023 14:02	0.41	mg/L
APCO GS-AP-MW-01R	DTW	Depth to Water Detail	9/13/2023 14:02	193.6	ft
APCO GS-AP-MW-01R	ORP	Oxidation Reduction Potential	9/13/2023 14:02	-106.38	mv
APCO GS-AP-MW-01R	PH	pH	9/13/2023 14:02	8.51	SU
APCO GS-AP-MW-01R	TEMP	Temperature	9/13/2023 14:02	22.66	C
APCO GS-AP-MW-01R	TURB	Turbidity	9/13/2023 14:02	4.42	NTU
APCO GS-AP-MW-01R	COND	Conductivity	9/13/2023 14:07	675.8	uS/cm
APCO GS-AP-MW-01R	DO	DO	9/13/2023 14:07	0.44	mg/L
APCO GS-AP-MW-01R	DTW	Depth to Water Detail	9/13/2023 14:07	193.82	ft
APCO GS-AP-MW-01R	ORP	Oxidation Reduction Potential	9/13/2023 14:07	-105.57	mv
APCO GS-AP-MW-01R	PH	pH	9/13/2023 14:07	8.56	SU
APCO GS-AP-MW-01R	TEMP	Temperature	9/13/2023 14:07	21.15	C
APCO GS-AP-MW-01R	TURB	Turbidity	9/13/2023 14:07	4.24	NTU
APCO GS-AP-MW-01R	COND	Conductivity	9/13/2023 14:12	649.58	uS/cm
APCO GS-AP-MW-01R	DO	DO	9/13/2023 14:12	0.41	mg/L
APCO GS-AP-MW-01R	DTW	Depth to Water Detail	9/13/2023 14:12	193.98	ft
APCO GS-AP-MW-01R	ORP	Oxidation Reduction Potential	9/13/2023 14:12	-108.28	mv
APCO GS-AP-MW-01R	PH	pH	9/13/2023 14:12	8.61	SU
APCO GS-AP-MW-01R	TEMP	Temperature	9/13/2023 14:12	20.12	C
APCO GS-AP-MW-01R	TURB	Turbidity	9/13/2023 14:12	3.89	NTU
APCO GS-AP-MW-01R	COND	Conductivity	9/13/2023 14:17	642.46	uS/cm

Plant Gorgas Ash Pond
Field Parameter Summary

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO GS-AP-MW-01R	DO	DO	9/13/2023 14:17	0.44	mg/L
APCO GS-AP-MW-01R	DTW	Depth to Water Detail	9/13/2023 14:17	194.1	ft
APCO GS-AP-MW-01R	ORP	Oxidation Reduction Potential	9/13/2023 14:17	-110.43	mv
APCO GS-AP-MW-01R	PH	pH	9/13/2023 14:17	8.63	SU
APCO GS-AP-MW-01R	TEMP	Temperature	9/13/2023 14:17	20	C
APCO GS-AP-MW-01R	TURB	Turbidity	9/13/2023 14:17	3.81	NTU
APCO GS-AP-MW-01R	COND	Conductivity	9/13/2023 14:22	643.14	uS/cm
APCO GS-AP-MW-01R	DO	DO	9/13/2023 14:22	0.42	mg/L
APCO GS-AP-MW-01R	DTW	Depth to Water Detail	9/13/2023 14:22	194.26	ft
APCO GS-AP-MW-01R	ORP	Oxidation Reduction Potential	9/13/2023 14:22	-111.99	mv
APCO GS-AP-MW-01R	PH	pH	9/13/2023 14:22	8.63	SU
APCO GS-AP-MW-01R	SULFIDE	Sulfide	9/13/2023 14:22	0	mg/L
APCO GS-AP-MW-01R	TEMP	Temperature	9/13/2023 14:22	19.74	C
APCO GS-AP-MW-01R	TURB	Turbidity	9/13/2023 14:22	3.58	NTU
APCO GS-AP-MW-03V	COND	Conductivity	9/12/2023 10:56	2483.35	uS/cm
APCO GS-AP-MW-03V	DO	DO	9/12/2023 10:56	0.68	mg/L
APCO GS-AP-MW-03V	DTW	Depth to Water Detail	9/12/2023 10:56	163.46	ft
APCO GS-AP-MW-03V	ORP	Oxidation Reduction Potential	9/12/2023 10:56	-74.37	mv
APCO GS-AP-MW-03V	PH	pH	9/12/2023 10:56	7.21	SU
APCO GS-AP-MW-03V	TEMP	Temperature	9/12/2023 10:56	18.77	C
APCO GS-AP-MW-03V	TURB	Turbidity	9/12/2023 10:56	17.6	NTU
APCO GS-AP-MW-03V	COND	Conductivity	9/12/2023 11:01	4303.59	uS/cm
APCO GS-AP-MW-03V	DO	DO	9/12/2023 11:01	0.37	mg/L
APCO GS-AP-MW-03V	DTW	Depth to Water Detail	9/12/2023 11:01	164.91	ft
APCO GS-AP-MW-03V	ORP	Oxidation Reduction Potential	9/12/2023 11:01	-46.58	mv
APCO GS-AP-MW-03V	PH	pH	9/12/2023 11:01	7.37	SU
APCO GS-AP-MW-03V	TEMP	Temperature	9/12/2023 11:01	18.62	C
APCO GS-AP-MW-03V	TURB	Turbidity	9/12/2023 11:01	12.89	NTU
APCO GS-AP-MW-03V	COND	Conductivity	9/12/2023 11:06	4398.25	uS/cm
APCO GS-AP-MW-03V	DO	DO	9/12/2023 11:06	0.33	mg/L
APCO GS-AP-MW-03V	DTW	Depth to Water Detail	9/12/2023 11:06	165.46	ft
APCO GS-AP-MW-03V	ORP	Oxidation Reduction Potential	9/12/2023 11:06	-51.45	mv
APCO GS-AP-MW-03V	PH	pH	9/12/2023 11:06	7.41	SU
APCO GS-AP-MW-03V	TEMP	Temperature	9/12/2023 11:06	18.58	C
APCO GS-AP-MW-03V	TURB	Turbidity	9/12/2023 11:06	10.1	NTU
APCO GS-AP-MW-03V	COND	Conductivity	9/12/2023 11:11	4330.06	uS/cm
APCO GS-AP-MW-03V	DO	DO	9/12/2023 11:11	0.47	mg/L
APCO GS-AP-MW-03V	DTW	Depth to Water Detail	9/12/2023 11:11	165.46	ft
APCO GS-AP-MW-03V	ORP	Oxidation Reduction Potential	9/12/2023 11:11	-66.61	mv
APCO GS-AP-MW-03V	PH	pH	9/12/2023 11:11	7.42	SU
APCO GS-AP-MW-03V	TEMP	Temperature	9/12/2023 11:11	19.19	C
APCO GS-AP-MW-03V	TURB	Turbidity	9/12/2023 11:11	12.4	NTU
APCO GS-AP-MW-03V	COND	Conductivity	9/12/2023 11:16	4194.21	uS/cm
APCO GS-AP-MW-03V	DO	DO	9/12/2023 11:16	0.68	mg/L
APCO GS-AP-MW-03V	DTW	Depth to Water Detail	9/12/2023 11:16	165.46	ft
APCO GS-AP-MW-03V	ORP	Oxidation Reduction Potential	9/12/2023 11:16	-72.85	mv
APCO GS-AP-MW-03V	PH	pH	9/12/2023 11:16	7.43	SU
APCO GS-AP-MW-03V	TEMP	Temperature	9/12/2023 11:16	19.51	C
APCO GS-AP-MW-03V	TURB	Turbidity	9/12/2023 11:16	13.1	NTU
APCO GS-AP-MW-03V	COND	Conductivity	9/12/2023 11:21	4047.03	uS/cm
APCO GS-AP-MW-03V	DO	DO	9/12/2023 11:21	0.83	mg/L
APCO GS-AP-MW-03V	DTW	Depth to Water Detail	9/12/2023 11:21	165.46	ft
APCO GS-AP-MW-03V	ORP	Oxidation Reduction Potential	9/12/2023 11:21	-75.1	mv
APCO GS-AP-MW-03V	PH	pH	9/12/2023 11:21	7.43	SU
APCO GS-AP-MW-03V	TEMP	Temperature	9/12/2023 11:21	19.86	C
APCO GS-AP-MW-03V	TURB	Turbidity	9/12/2023 11:21	13.1	NTU
APCO GS-AP-MW-03V	COND	Conductivity	9/12/2023 11:26	3469.58	uS/cm
APCO GS-AP-MW-03V	DO	DO	9/12/2023 11:26	0.92	mg/L
APCO GS-AP-MW-03V	DTW	Depth to Water Detail	9/12/2023 11:26	165.46	ft
APCO GS-AP-MW-03V	ORP	Oxidation Reduction Potential	9/12/2023 11:26	-78.67	mv
APCO GS-AP-MW-03V	PH	pH	9/12/2023 11:26	7.44	SU
APCO GS-AP-MW-03V	TEMP	Temperature	9/12/2023 11:26	20.2	C
APCO GS-AP-MW-03V	TURB	Turbidity	9/12/2023 11:26	11.1	NTU
APCO GS-AP-MW-03V	COND	Conductivity	9/12/2023 11:31	3282.49	uS/cm

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO GS-AP-MW-03V	DO	DO	9/12/2023 11:31	1	mg/L
APCO GS-AP-MW-03V	DTW	Depth to Water Detail	9/12/2023 11:31	165.46	ft
APCO GS-AP-MW-03V	ORP	Oxidation Reduction Potential	9/12/2023 11:31	-81.53	mv
APCO GS-AP-MW-03V	PH	pH	9/12/2023 11:31	7.45	SU
APCO GS-AP-MW-03V	TEMP	Temperature	9/12/2023 11:31	20.48	C
APCO GS-AP-MW-03V	TURB	Turbidity	9/12/2023 11:31	9.44	NTU
APCO GS-AP-MW-03V	COND	Conductivity	9/12/2023 11:36	3220.54	uS/cm
APCO GS-AP-MW-03V	DO	DO	9/12/2023 11:36	0.99	mg/L
APCO GS-AP-MW-03V	DTW	Depth to Water Detail	9/12/2023 11:36	165.46	ft
APCO GS-AP-MW-03V	ORP	Oxidation Reduction Potential	9/12/2023 11:36	-76.39	mv
APCO GS-AP-MW-03V	PH	pH	9/12/2023 11:36	7.43	SU
APCO GS-AP-MW-03V	TEMP	Temperature	9/12/2023 11:36	23.24	C
APCO GS-AP-MW-03V	TURB	Turbidity	9/12/2023 11:36	7.82	NTU
APCO GS-AP-MW-03V	COND	Conductivity	9/12/2023 11:41	3189.32	uS/cm
APCO GS-AP-MW-03V	DO	DO	9/12/2023 11:41	0.99	mg/L
APCO GS-AP-MW-03V	DTW	Depth to Water Detail	9/12/2023 11:41	165.46	ft
APCO GS-AP-MW-03V	ORP	Oxidation Reduction Potential	9/12/2023 11:41	-64.69	mv
APCO GS-AP-MW-03V	PH	pH	9/12/2023 11:41	7.39	SU
APCO GS-AP-MW-03V	TEMP	Temperature	9/12/2023 11:41	26.04	C
APCO GS-AP-MW-03V	TURB	Turbidity	9/12/2023 11:41	7.2	NTU
APCO GS-AP-MW-03V	COND	Conductivity	9/12/2023 11:46	3162.59	uS/cm
APCO GS-AP-MW-03V	DO	DO	9/12/2023 11:46	1.58	mg/L
APCO GS-AP-MW-03V	DTW	Depth to Water Detail	9/12/2023 11:46	165.46	ft
APCO GS-AP-MW-03V	ORP	Oxidation Reduction Potential	9/12/2023 11:46	-64.42	mv
APCO GS-AP-MW-03V	PH	pH	9/12/2023 11:46	7.38	SU
APCO GS-AP-MW-03V	TEMP	Temperature	9/12/2023 11:46	26.81	C
APCO GS-AP-MW-03V	TURB	Turbidity	9/12/2023 11:46	8.11	NTU
APCO GS-AP-MW-03V	COND	Conductivity	9/12/2023 11:51	2939.68	uS/cm
APCO GS-AP-MW-03V	DO	DO	9/12/2023 11:51	1.89	mg/L
APCO GS-AP-MW-03V	DTW	Depth to Water Detail	9/12/2023 11:51	165.46	ft
APCO GS-AP-MW-03V	ORP	Oxidation Reduction Potential	9/12/2023 11:51	-72.48	mv
APCO GS-AP-MW-03V	PH	pH	9/12/2023 11:51	7.46	SU
APCO GS-AP-MW-03V	TEMP	Temperature	9/12/2023 11:51	22.37	C
APCO GS-AP-MW-03V	TURB	Turbidity	9/12/2023 11:51	9.78	NTU
APCO GS-AP-MW-03V	COND	Conductivity	9/12/2023 11:56	2779.71	uS/cm
APCO GS-AP-MW-03V	DO	DO	9/12/2023 11:56	1.83	mg/L
APCO GS-AP-MW-03V	DTW	Depth to Water Detail	9/12/2023 11:56	165.46	ft
APCO GS-AP-MW-03V	ORP	Oxidation Reduction Potential	9/12/2023 11:56	-72.29	mv
APCO GS-AP-MW-03V	PH	pH	9/12/2023 11:56	7.48	SU
APCO GS-AP-MW-03V	TEMP	Temperature	9/12/2023 11:56	21.37	C
APCO GS-AP-MW-03V	TURB	Turbidity	9/12/2023 11:56	8.23	NTU
APCO GS-AP-MW-03V	COND	Conductivity	9/12/2023 12:01	2746.37	uS/cm
APCO GS-AP-MW-03V	DO	DO	9/12/2023 12:01	1.78	mg/L
APCO GS-AP-MW-03V	DTW	Depth to Water Detail	9/12/2023 12:01	165.46	ft
APCO GS-AP-MW-03V	ORP	Oxidation Reduction Potential	9/12/2023 12:01	-75.13	mv
APCO GS-AP-MW-03V	PH	pH	9/12/2023 12:01	7.48	SU
APCO GS-AP-MW-03V	TEMP	Temperature	9/12/2023 12:01	21.3	C
APCO GS-AP-MW-03V	TURB	Turbidity	9/12/2023 12:01	6.92	NTU
APCO GS-AP-MW-03V	COND	Conductivity	9/12/2023 12:06	2709.7	uS/cm
APCO GS-AP-MW-03V	DO	DO	9/12/2023 12:06	1.7	mg/L
APCO GS-AP-MW-03V	DTW	Depth to Water Detail	9/12/2023 12:06	165.46	ft
APCO GS-AP-MW-03V	ORP	Oxidation Reduction Potential	9/12/2023 12:06	-76.15	mv
APCO GS-AP-MW-03V	PH	pH	9/12/2023 12:06	7.49	SU
APCO GS-AP-MW-03V	SULFIDE	Sulfide	9/12/2023 12:06	0	mg/L
APCO GS-AP-MW-03V	TEMP	Temperature	9/12/2023 12:06	21.19	C
APCO GS-AP-MW-03V	TURB	Turbidity	9/12/2023 12:06	6.34	NTU
APCO GS-AP-MW-05R	COND	Conductivity	9/12/2023 13:32	2007.84	uS/cm
APCO GS-AP-MW-05R	DO	DO	9/12/2023 13:32	0.69	mg/L
APCO GS-AP-MW-05R	DTW	Depth to Water Detail	9/12/2023 13:32	152.91	ft
APCO GS-AP-MW-05R	ORP	Oxidation Reduction Potential	9/12/2023 13:32	-38.24	mv
APCO GS-AP-MW-05R	PH	pH	9/12/2023 13:32	7.09	SU
APCO GS-AP-MW-05R	TEMP	Temperature	9/12/2023 13:32	19.07	C
APCO GS-AP-MW-05R	TURB	Turbidity	9/12/2023 13:32	3.53	NTU
APCO GS-AP-MW-05R	COND	Conductivity	9/12/2023 13:37	1970.68	uS/cm

Plant Gorgas Ash Pond
Field Parameter Summary

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO GS-AP-MW-05R	DO	DO	9/12/2023 13:37	0.55	mg/L
APCO GS-AP-MW-05R	DTW	Depth to Water Detail	9/12/2023 13:37	154.12	ft
APCO GS-AP-MW-05R	ORP	Oxidation Reduction Potential	9/12/2023 13:37	-50.73	mv
APCO GS-AP-MW-05R	PH	pH	9/12/2023 13:37	7.07	SU
APCO GS-AP-MW-05R	TEMP	Temperature	9/12/2023 13:37	18.63	C
APCO GS-AP-MW-05R	TURB	Turbidity	9/12/2023 13:37	2.4	NTU
APCO GS-AP-MW-05R	COND	Conductivity	9/12/2023 13:42	1879.81	uS/cm
APCO GS-AP-MW-05R	DO	DO	9/12/2023 13:42	0.53	mg/L
APCO GS-AP-MW-05R	DTW	Depth to Water Detail	9/12/2023 13:42	155.58	ft
APCO GS-AP-MW-05R	ORP	Oxidation Reduction Potential	9/12/2023 13:42	-58.09	mv
APCO GS-AP-MW-05R	PH	pH	9/12/2023 13:42	7.04	SU
APCO GS-AP-MW-05R	TEMP	Temperature	9/12/2023 13:42	18.57	C
APCO GS-AP-MW-05R	TURB	Turbidity	9/12/2023 13:42	2.5	NTU
APCO GS-AP-MW-05R	COND	Conductivity	9/12/2023 13:47	1803.92	uS/cm
APCO GS-AP-MW-05R	DO	DO	9/12/2023 13:47	0.47	mg/L
APCO GS-AP-MW-05R	DTW	Depth to Water Detail	9/12/2023 13:47	156.67	ft
APCO GS-AP-MW-05R	ORP	Oxidation Reduction Potential	9/12/2023 13:47	-63.12	mv
APCO GS-AP-MW-05R	PH	pH	9/12/2023 13:47	7.01	SU
APCO GS-AP-MW-05R	TEMP	Temperature	9/12/2023 13:47	18.66	C
APCO GS-AP-MW-05R	TURB	Turbidity	9/12/2023 13:47	2.5	NTU
APCO GS-AP-MW-05R	COND	Conductivity	9/12/2023 13:52	1690.66	uS/cm
APCO GS-AP-MW-05R	DO	DO	9/12/2023 13:52	0.5	mg/L
APCO GS-AP-MW-05R	DTW	Depth to Water Detail	9/12/2023 13:52	157.07	ft
APCO GS-AP-MW-05R	ORP	Oxidation Reduction Potential	9/12/2023 13:52	-66.34	mv
APCO GS-AP-MW-05R	PH	pH	9/12/2023 13:52	6.98	SU
APCO GS-AP-MW-05R	TEMP	Temperature	9/12/2023 13:52	18.58	C
APCO GS-AP-MW-05R	TURB	Turbidity	9/12/2023 13:52	2.77	NTU
APCO GS-AP-MW-05R	COND	Conductivity	9/12/2023 13:57	1592.17	uS/cm
APCO GS-AP-MW-05R	DO	DO	9/12/2023 13:57	0.51	mg/L
APCO GS-AP-MW-05R	DTW	Depth to Water Detail	9/12/2023 13:57	157.31	ft
APCO GS-AP-MW-05R	ORP	Oxidation Reduction Potential	9/12/2023 13:57	-68.35	mv
APCO GS-AP-MW-05R	PH	pH	9/12/2023 13:57	6.96	SU
APCO GS-AP-MW-05R	TEMP	Temperature	9/12/2023 13:57	18.58	C
APCO GS-AP-MW-05R	TURB	Turbidity	9/12/2023 13:57	1.5	NTU
APCO GS-AP-MW-05R	COND	Conductivity	9/12/2023 14:02	1512.51	uS/cm
APCO GS-AP-MW-05R	DO	DO	9/12/2023 14:02	0.61	mg/L
APCO GS-AP-MW-05R	DTW	Depth to Water Detail	9/12/2023 14:02	157.39	ft
APCO GS-AP-MW-05R	ORP	Oxidation Reduction Potential	9/12/2023 14:02	-68.56	mv
APCO GS-AP-MW-05R	PH	pH	9/12/2023 14:02	6.94	SU
APCO GS-AP-MW-05R	TEMP	Temperature	9/12/2023 14:02	18.9	C
APCO GS-AP-MW-05R	TURB	Turbidity	9/12/2023 14:02	1.48	NTU
APCO GS-AP-MW-05R	COND	Conductivity	9/12/2023 14:07	1451.01	uS/cm
APCO GS-AP-MW-05R	DO	DO	9/12/2023 14:07	1.02	mg/L
APCO GS-AP-MW-05R	DTW	Depth to Water Detail	9/12/2023 14:07	157.39	ft
APCO GS-AP-MW-05R	ORP	Oxidation Reduction Potential	9/12/2023 14:07	-67.48	mv
APCO GS-AP-MW-05R	PH	pH	9/12/2023 14:07	6.92	SU
APCO GS-AP-MW-05R	TEMP	Temperature	9/12/2023 14:07	19.18	C
APCO GS-AP-MW-05R	TURB	Turbidity	9/12/2023 14:07	1.58	NTU
APCO GS-AP-MW-05R	COND	Conductivity	9/12/2023 14:12	1322.85	uS/cm
APCO GS-AP-MW-05R	DO	DO	9/12/2023 14:12	1.16	mg/L
APCO GS-AP-MW-05R	DTW	Depth to Water Detail	9/12/2023 14:12	157.39	ft
APCO GS-AP-MW-05R	ORP	Oxidation Reduction Potential	9/12/2023 14:12	-68.72	mv
APCO GS-AP-MW-05R	PH	pH	9/12/2023 14:12	6.9	SU
APCO GS-AP-MW-05R	TEMP	Temperature	9/12/2023 14:12	19.27	C
APCO GS-AP-MW-05R	TURB	Turbidity	9/12/2023 14:12	1.34	NTU
APCO GS-AP-MW-05R	COND	Conductivity	9/12/2023 14:17	1270.54	uS/cm
APCO GS-AP-MW-05R	DO	DO	9/12/2023 14:17	1.27	mg/L
APCO GS-AP-MW-05R	DTW	Depth to Water Detail	9/12/2023 14:17	157.39	ft
APCO GS-AP-MW-05R	ORP	Oxidation Reduction Potential	9/12/2023 14:17	-67.6	mv
APCO GS-AP-MW-05R	PH	pH	9/12/2023 14:17	6.86	SU
APCO GS-AP-MW-05R	TEMP	Temperature	9/12/2023 14:17	19.73	C
APCO GS-AP-MW-05R	TURB	Turbidity	9/12/2023 14:17	0.94	NTU
APCO GS-AP-MW-05R	COND	Conductivity	9/12/2023 14:22	1253.97	uS/cm
APCO GS-AP-MW-05R	DO	DO	9/12/2023 14:22	1.3	mg/L

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO GS-AP-MW-05R	DTW	Depth to Water Detail	9/12/2023 14:22	157.39	ft
APCO GS-AP-MW-05R	ORP	Oxidation Reduction Potential	9/12/2023 14:22	-65.48	mv
APCO GS-AP-MW-05R	PH	pH	9/12/2023 14:22	6.85	SU
APCO GS-AP-MW-05R	TEMP	Temperature	9/12/2023 14:22	19.73	C
APCO GS-AP-MW-05R	TURB	Turbidity	9/12/2023 14:22	0.83	NTU
APCO GS-AP-MW-05R	COND	Conductivity	9/12/2023 14:27	1216.78	uS/cm
APCO GS-AP-MW-05R	DO	DO	9/12/2023 14:27	1.35	mg/L
APCO GS-AP-MW-05R	DTW	Depth to Water Detail	9/12/2023 14:27	157.39	ft
APCO GS-AP-MW-05R	ORP	Oxidation Reduction Potential	9/12/2023 14:27	-64.63	mv
APCO GS-AP-MW-05R	PH	pH	9/12/2023 14:27	6.84	SU
APCO GS-AP-MW-05R	SULFIDE	Sulfide	9/12/2023 14:27	0	mg/L
APCO GS-AP-MW-05R	TEMP	Temperature	9/12/2023 14:27	19.81	C
APCO GS-AP-MW-05R	TURB	Turbidity	9/12/2023 14:27	0.92	NTU
APCO GS-AP-MW-09R	COND	Conductivity	9/13/2023 14:43	606.32	uS/cm
APCO GS-AP-MW-09R	DO	DO	9/13/2023 14:43	0.14	mg/L
APCO GS-AP-MW-09R	DTW	Depth to Water Detail	9/13/2023 14:43	69.81	ft
APCO GS-AP-MW-09R	ORP	Oxidation Reduction Potential	9/13/2023 14:43	-35.74	mv
APCO GS-AP-MW-09R	PH	pH	9/13/2023 14:43	6.61	SU
APCO GS-AP-MW-09R	TEMP	Temperature	9/13/2023 14:43	18.13	C
APCO GS-AP-MW-09R	TURB	Turbidity	9/13/2023 14:43	2.53	NTU
APCO GS-AP-MW-09R	COND	Conductivity	9/13/2023 14:48	538.37	uS/cm
APCO GS-AP-MW-09R	DO	DO	9/13/2023 14:48	0.14	mg/L
APCO GS-AP-MW-09R	DTW	Depth to Water Detail	9/13/2023 14:48	70.09	ft
APCO GS-AP-MW-09R	ORP	Oxidation Reduction Potential	9/13/2023 14:48	-24.24	mv
APCO GS-AP-MW-09R	PH	pH	9/13/2023 14:48	6.52	SU
APCO GS-AP-MW-09R	TEMP	Temperature	9/13/2023 14:48	18.1	C
APCO GS-AP-MW-09R	TURB	Turbidity	9/13/2023 14:48	1.61	NTU
APCO GS-AP-MW-09R	COND	Conductivity	9/13/2023 14:53	493.48	uS/cm
APCO GS-AP-MW-09R	DO	DO	9/13/2023 14:53	0.13	mg/L
APCO GS-AP-MW-09R	DTW	Depth to Water Detail	9/13/2023 14:53	70.22	ft
APCO GS-AP-MW-09R	ORP	Oxidation Reduction Potential	9/13/2023 14:53	-14.79	mv
APCO GS-AP-MW-09R	PH	pH	9/13/2023 14:53	6.44	SU
APCO GS-AP-MW-09R	TEMP	Temperature	9/13/2023 14:53	18.1	C
APCO GS-AP-MW-09R	TURB	Turbidity	9/13/2023 14:53	1.53	NTU
APCO GS-AP-MW-09R	COND	Conductivity	9/13/2023 14:58	461.9	uS/cm
APCO GS-AP-MW-09R	DO	DO	9/13/2023 14:58	0.13	mg/L
APCO GS-AP-MW-09R	DTW	Depth to Water Detail	9/13/2023 14:58	70.32	ft
APCO GS-AP-MW-09R	ORP	Oxidation Reduction Potential	9/13/2023 14:58	-6.36	mv
APCO GS-AP-MW-09R	PH	pH	9/13/2023 14:58	6.38	SU
APCO GS-AP-MW-09R	TEMP	Temperature	9/13/2023 14:58	18.04	C
APCO GS-AP-MW-09R	TURB	Turbidity	9/13/2023 14:58	1.72	NTU
APCO GS-AP-MW-09R	COND	Conductivity	9/13/2023 15:03	439.42	uS/cm
APCO GS-AP-MW-09R	DO	DO	9/13/2023 15:03	0.14	mg/L
APCO GS-AP-MW-09R	DTW	Depth to Water Detail	9/13/2023 15:03	70.36	ft
APCO GS-AP-MW-09R	ORP	Oxidation Reduction Potential	9/13/2023 15:03	0.16	mv
APCO GS-AP-MW-09R	PH	pH	9/13/2023 15:03	6.33	SU
APCO GS-AP-MW-09R	TEMP	Temperature	9/13/2023 15:03	18.14	C
APCO GS-AP-MW-09R	TURB	Turbidity	9/13/2023 15:03	1.65	NTU
APCO GS-AP-MW-09R	COND	Conductivity	9/13/2023 15:08	425.94	uS/cm
APCO GS-AP-MW-09R	DO	DO	9/13/2023 15:08	0.13	mg/L
APCO GS-AP-MW-09R	DTW	Depth to Water Detail	9/13/2023 15:08	70.36	ft
APCO GS-AP-MW-09R	ORP	Oxidation Reduction Potential	9/13/2023 15:08	5.24	mv
APCO GS-AP-MW-09R	PH	pH	9/13/2023 15:08	6.29	SU
APCO GS-AP-MW-09R	TEMP	Temperature	9/13/2023 15:08	18.16	C
APCO GS-AP-MW-09R	TURB	Turbidity	9/13/2023 15:08	1.81	NTU
APCO GS-AP-MW-09R	COND	Conductivity	9/13/2023 15:13	418.3	uS/cm
APCO GS-AP-MW-09R	DO	DO	9/13/2023 15:13	0.13	mg/L
APCO GS-AP-MW-09R	DTW	Depth to Water Detail	9/13/2023 15:13	70.36	ft
APCO GS-AP-MW-09R	ORP	Oxidation Reduction Potential	9/13/2023 15:13	7.24	mv
APCO GS-AP-MW-09R	PH	pH	9/13/2023 15:13	6.29	SU
APCO GS-AP-MW-09R	TEMP	Temperature	9/13/2023 15:13	18.13	C
APCO GS-AP-MW-09R	TURB	Turbidity	9/13/2023 15:13	2.04	NTU
APCO GS-AP-MW-09R	COND	Conductivity	9/13/2023 15:18	409.78	uS/cm
APCO GS-AP-MW-09R	DO	DO	9/13/2023 15:18	0.13	mg/L

Plant Gorgas Ash Pond
Field Parameter Summary

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO GS-AP-MW-09R	DTW	Depth to Water Detail	9/13/2023 15:18	70.36	ft
APCO GS-AP-MW-09R	ORP	Oxidation Reduction Potential	9/13/2023 15:18	10.08	mv
APCO GS-AP-MW-09R	PH	pH	9/13/2023 15:18	6.26	SU
APCO GS-AP-MW-09R	TEMP	Temperature	9/13/2023 15:18	18.09	C
APCO GS-AP-MW-09R	TURB	Turbidity	9/13/2023 15:18	1.84	NTU
APCO GS-AP-MW-09R	COND	Conductivity	9/13/2023 15:23	403.85	uS/cm
APCO GS-AP-MW-09R	DO	DO	9/13/2023 15:23	0.13	mg/L
APCO GS-AP-MW-09R	DTW	Depth to Water Detail	9/13/2023 15:23	70.36	ft
APCO GS-AP-MW-09R	ORP	Oxidation Reduction Potential	9/13/2023 15:23	12.3	mv
APCO GS-AP-MW-09R	PH	pH	9/13/2023 15:23	6.25	SU
APCO GS-AP-MW-09R	SULFIDE	Sulfide	9/13/2023 15:23	0	mg/L
APCO GS-AP-MW-09R	TEMP	Temperature	9/13/2023 15:23	18.07	C
APCO GS-AP-MW-09R	TURB	Turbidity	9/13/2023 15:23	1.61	NTU
APCO GS-AP-MW-10R	COND	Conductivity	9/19/2023 8:38	669.38	uS/cm
APCO GS-AP-MW-10R	DO	DO	9/19/2023 8:38	0.49	mg/L
APCO GS-AP-MW-10R	DTW	Depth to Water Detail	9/19/2023 8:38	151.85	ft
APCO GS-AP-MW-10R	ORP	Oxidation Reduction Potential	9/19/2023 8:38	8.37	mv
APCO GS-AP-MW-10R	PH	pH	9/19/2023 8:38	7.03	SU
APCO GS-AP-MW-10R	TEMP	Temperature	9/19/2023 8:38	18.23	C
APCO GS-AP-MW-10R	TURB	Turbidity	9/19/2023 8:38	5	NTU
APCO GS-AP-MW-10R	COND	Conductivity	9/19/2023 8:43	702.99	uS/cm
APCO GS-AP-MW-10R	DO	DO	9/19/2023 8:43	0.28	mg/L
APCO GS-AP-MW-10R	DTW	Depth to Water Detail	9/19/2023 8:43	153.89	ft
APCO GS-AP-MW-10R	ORP	Oxidation Reduction Potential	9/19/2023 8:43	18.67	mv
APCO GS-AP-MW-10R	PH	pH	9/19/2023 8:43	7.04	SU
APCO GS-AP-MW-10R	TEMP	Temperature	9/19/2023 8:43	18.17	C
APCO GS-AP-MW-10R	TURB	Turbidity	9/19/2023 8:43	5.08	NTU
APCO GS-AP-MW-10R	COND	Conductivity	9/19/2023 8:48	680.23	uS/cm
APCO GS-AP-MW-10R	DO	DO	9/19/2023 8:48	0.24	mg/L
APCO GS-AP-MW-10R	DTW	Depth to Water Detail	9/19/2023 8:48	155.68	ft
APCO GS-AP-MW-10R	ORP	Oxidation Reduction Potential	9/19/2023 8:48	16.71	mv
APCO GS-AP-MW-10R	PH	pH	9/19/2023 8:48	7.05	SU
APCO GS-AP-MW-10R	TEMP	Temperature	9/19/2023 8:48	18.17	C
APCO GS-AP-MW-10R	TURB	Turbidity	9/19/2023 8:48	3.04	NTU
APCO GS-AP-MW-10R	COND	Conductivity	9/19/2023 8:53	650.04	uS/cm
APCO GS-AP-MW-10R	DO	DO	9/19/2023 8:53	0.22	mg/L
APCO GS-AP-MW-10R	DTW	Depth to Water Detail	9/19/2023 8:53	157.06	ft
APCO GS-AP-MW-10R	ORP	Oxidation Reduction Potential	9/19/2023 8:53	4.75	mv
APCO GS-AP-MW-10R	PH	pH	9/19/2023 8:53	7.04	SU
APCO GS-AP-MW-10R	TEMP	Temperature	9/19/2023 8:53	18.19	C
APCO GS-AP-MW-10R	TURB	Turbidity	9/19/2023 8:53	1.23	NTU
APCO GS-AP-MW-10R	COND	Conductivity	9/19/2023 8:58	619.89	uS/cm
APCO GS-AP-MW-10R	DO	DO	9/19/2023 8:58	0.09	mg/L
APCO GS-AP-MW-10R	DTW	Depth to Water Detail	9/19/2023 8:58	158.91	ft
APCO GS-AP-MW-10R	ORP	Oxidation Reduction Potential	9/19/2023 8:58	7.09	mv
APCO GS-AP-MW-10R	PH	pH	9/19/2023 8:58	7.4	SU
APCO GS-AP-MW-10R	TEMP	Temperature	9/19/2023 8:58	19.05	C
APCO GS-AP-MW-10R	TURB	Turbidity	9/19/2023 8:58	1.28	NTU
APCO GS-AP-MW-10R	COND	Conductivity	9/19/2023 9:03	606.02	uS/cm
APCO GS-AP-MW-10R	DO	DO	9/19/2023 9:03	0.85	mg/L
APCO GS-AP-MW-10R	DTW	Depth to Water Detail	9/19/2023 9:03	160.48	ft
APCO GS-AP-MW-10R	ORP	Oxidation Reduction Potential	9/19/2023 9:03	3.7	mv
APCO GS-AP-MW-10R	PH	pH	9/19/2023 9:03	7.68	SU
APCO GS-AP-MW-10R	TEMP	Temperature	9/19/2023 9:03	20.11	C
APCO GS-AP-MW-10R	TURB	Turbidity	9/19/2023 9:03	1.08	NTU
APCO GS-AP-MW-10R	COND	Conductivity	9/19/2023 9:08	572.07	uS/cm
APCO GS-AP-MW-10R	DO	DO	9/19/2023 9:08	0.31	mg/L
APCO GS-AP-MW-10R	DTW	Depth to Water Detail	9/19/2023 9:08	160.15	ft
APCO GS-AP-MW-10R	ORP	Oxidation Reduction Potential	9/19/2023 9:08	-8.76	mv
APCO GS-AP-MW-10R	PH	pH	9/19/2023 9:08	6.98	SU
APCO GS-AP-MW-10R	TEMP	Temperature	9/19/2023 9:08	18.8	C
APCO GS-AP-MW-10R	TURB	Turbidity	9/19/2023 9:08	1.14	NTU
APCO GS-AP-MW-10R	COND	Conductivity	9/19/2023 9:13	512.64	uS/cm
APCO GS-AP-MW-10R	DO	DO	9/19/2023 9:13	0.26	mg/L

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO GS-AP-MW-10R	DTW	Depth to Water Detail	9/19/2023 9:13	160.02	ft
APCO GS-AP-MW-10R	ORP	Oxidation Reduction Potential	9/19/2023 9:13	-20.52	mv
APCO GS-AP-MW-10R	PH	pH	9/19/2023 9:13	7.01	SU
APCO GS-AP-MW-10R	TEMP	Temperature	9/19/2023 9:13	18.85	C
APCO GS-AP-MW-10R	TURB	Turbidity	9/19/2023 9:13	1.02	NTU
APCO GS-AP-MW-10R	COND	Conductivity	9/19/2023 9:18	448.98	uS/cm
APCO GS-AP-MW-10R	DO	DO	9/19/2023 9:18	0.18	mg/L
APCO GS-AP-MW-10R	DTW	Depth to Water Detail	9/19/2023 9:18	159.96	ft
APCO GS-AP-MW-10R	ORP	Oxidation Reduction Potential	9/19/2023 9:18	-27.84	mv
APCO GS-AP-MW-10R	PH	pH	9/19/2023 9:18	6.98	SU
APCO GS-AP-MW-10R	TEMP	Temperature	9/19/2023 9:18	18.56	C
APCO GS-AP-MW-10R	TURB	Turbidity	9/19/2023 9:18	1.19	NTU
APCO GS-AP-MW-10R	COND	Conductivity	9/19/2023 9:23	433.57	uS/cm
APCO GS-AP-MW-10R	DO	DO	9/19/2023 9:23	0.2	mg/L
APCO GS-AP-MW-10R	DTW	Depth to Water Detail	9/19/2023 9:23	159.91	ft
APCO GS-AP-MW-10R	ORP	Oxidation Reduction Potential	9/19/2023 9:23	-31.16	mv
APCO GS-AP-MW-10R	PH	pH	9/19/2023 9:23	6.95	SU
APCO GS-AP-MW-10R	TEMP	Temperature	9/19/2023 9:23	18.77	C
APCO GS-AP-MW-10R	TURB	Turbidity	9/19/2023 9:23	1.14	NTU
APCO GS-AP-MW-10R	COND	Conductivity	9/19/2023 9:28	408.74	uS/cm
APCO GS-AP-MW-10R	DO	DO	9/19/2023 9:28	0.19	mg/L
APCO GS-AP-MW-10R	DTW	Depth to Water Detail	9/19/2023 9:28	159.88	ft
APCO GS-AP-MW-10R	ORP	Oxidation Reduction Potential	9/19/2023 9:28	-32.79	mv
APCO GS-AP-MW-10R	PH	pH	9/19/2023 9:28	6.91	SU
APCO GS-AP-MW-10R	TEMP	Temperature	9/19/2023 9:28	18.86	C
APCO GS-AP-MW-10R	TURB	Turbidity	9/19/2023 9:28	1.01	NTU
APCO GS-AP-MW-10R	COND	Conductivity	9/19/2023 9:33	388.89	uS/cm
APCO GS-AP-MW-10R	DO	DO	9/19/2023 9:33	0.17	mg/L
APCO GS-AP-MW-10R	DTW	Depth to Water Detail	9/19/2023 9:33	159.88	ft
APCO GS-AP-MW-10R	ORP	Oxidation Reduction Potential	9/19/2023 9:33	-33.41	mv
APCO GS-AP-MW-10R	PH	pH	9/19/2023 9:33	6.9	SU
APCO GS-AP-MW-10R	TEMP	Temperature	9/19/2023 9:33	18.83	C
APCO GS-AP-MW-10R	TURB	Turbidity	9/19/2023 9:33	0.96	NTU
APCO GS-AP-MW-10R	COND	Conductivity	9/19/2023 9:38	377.46	uS/cm
APCO GS-AP-MW-10R	DO	DO	9/19/2023 9:38	0.16	mg/L
APCO GS-AP-MW-10R	DTW	Depth to Water Detail	9/19/2023 9:38	159.88	ft
APCO GS-AP-MW-10R	ORP	Oxidation Reduction Potential	9/19/2023 9:38	-37.11	mv
APCO GS-AP-MW-10R	PH	pH	9/19/2023 9:38	6.91	SU
APCO GS-AP-MW-10R	TEMP	Temperature	9/19/2023 9:38	18.89	C
APCO GS-AP-MW-10R	TURB	Turbidity	9/19/2023 9:38	0.92	NTU
APCO GS-AP-MW-10R	COND	Conductivity	9/19/2023 9:43	366.69	uS/cm
APCO GS-AP-MW-10R	DO	DO	9/19/2023 9:43	0.15	mg/L
APCO GS-AP-MW-10R	DTW	Depth to Water Detail	9/19/2023 9:43	159.88	ft
APCO GS-AP-MW-10R	ORP	Oxidation Reduction Potential	9/19/2023 9:43	-38.41	mv
APCO GS-AP-MW-10R	PH	pH	9/19/2023 9:43	6.89	SU
APCO GS-AP-MW-10R	TEMP	Temperature	9/19/2023 9:43	18.95	C
APCO GS-AP-MW-10R	TURB	Turbidity	9/19/2023 9:43	1.04	NTU
APCO GS-AP-MW-10R	COND	Conductivity	9/19/2023 9:48	362.75	uS/cm
APCO GS-AP-MW-10R	DO	DO	9/19/2023 9:48	0.14	mg/L
APCO GS-AP-MW-10R	DTW	Depth to Water Detail	9/19/2023 9:48	159.88	ft
APCO GS-AP-MW-10R	ORP	Oxidation Reduction Potential	9/19/2023 9:48	-39.47	mv
APCO GS-AP-MW-10R	PH	pH	9/19/2023 9:48	6.87	SU
APCO GS-AP-MW-10R	SULFIDE	Sulfide	9/19/2023 9:48	0	mg/L
APCO GS-AP-MW-10R	TEMP	Temperature	9/19/2023 9:48	19.03	C
APCO GS-AP-MW-10R	TURB	Turbidity	9/19/2023 9:48	0.98	NTU
APCO GS-AP-MW-11R	COND	Conductivity	9/19/2023 11:18	456.63	uS/cm
APCO GS-AP-MW-11R	DO	DO	9/19/2023 11:18	0.3	mg/L
APCO GS-AP-MW-11R	DTW	Depth to Water Detail	9/19/2023 11:18	86.02	ft
APCO GS-AP-MW-11R	ORP	Oxidation Reduction Potential	9/19/2023 11:18	-19.13	mv
APCO GS-AP-MW-11R	PH	pH	9/19/2023 11:18	6.54	SU
APCO GS-AP-MW-11R	TEMP	Temperature	9/19/2023 11:18	18.34	C
APCO GS-AP-MW-11R	TURB	Turbidity	9/19/2023 11:18	21.2	NTU
APCO GS-AP-MW-11R	COND	Conductivity	9/19/2023 11:23	456.91	uS/cm
APCO GS-AP-MW-11R	DO	DO	9/19/2023 11:23	0.29	mg/L

Plant Gorgas Ash Pond
Field Parameter Summary

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO GS-AP-MW-11R	DTW	Depth to Water Detail	9/19/2023 11:23	86.02	ft
APCO GS-AP-MW-11R	ORP	Oxidation Reduction Potential	9/19/2023 11:23	-18.47	mv
APCO GS-AP-MW-11R	PH	pH	9/19/2023 11:23	6.54	SU
APCO GS-AP-MW-11R	TEMP	Temperature	9/19/2023 11:23	18.39	C
APCO GS-AP-MW-11R	TURB	Turbidity	9/19/2023 11:23	17	NTU
APCO GS-AP-MW-11R	COND	Conductivity	9/19/2023 11:28	457.99	uS/cm
APCO GS-AP-MW-11R	DO	DO	9/19/2023 11:28	0.29	mg/L
APCO GS-AP-MW-11R	DTW	Depth to Water Detail	9/19/2023 11:28	86.02	ft
APCO GS-AP-MW-11R	ORP	Oxidation Reduction Potential	9/19/2023 11:28	-17.94	mv
APCO GS-AP-MW-11R	PH	pH	9/19/2023 11:28	6.54	SU
APCO GS-AP-MW-11R	TEMP	Temperature	9/19/2023 11:28	18.39	C
APCO GS-AP-MW-11R	TURB	Turbidity	9/19/2023 11:28	16.5	NTU
APCO GS-AP-MW-11R	COND	Conductivity	9/19/2023 11:33	456.15	uS/cm
APCO GS-AP-MW-11R	DO	DO	9/19/2023 11:33	0.3	mg/L
APCO GS-AP-MW-11R	DTW	Depth to Water Detail	9/19/2023 11:33	86.02	ft
APCO GS-AP-MW-11R	ORP	Oxidation Reduction Potential	9/19/2023 11:33	-17.24	mv
APCO GS-AP-MW-11R	PH	pH	9/19/2023 11:33	6.53	SU
APCO GS-AP-MW-11R	TEMP	Temperature	9/19/2023 11:33	18.48	C
APCO GS-AP-MW-11R	TURB	Turbidity	9/19/2023 11:33	14.8	NTU
APCO GS-AP-MW-11R	COND	Conductivity	9/19/2023 11:38	454.1	uS/cm
APCO GS-AP-MW-11R	DO	DO	9/19/2023 11:38	0.29	mg/L
APCO GS-AP-MW-11R	DTW	Depth to Water Detail	9/19/2023 11:38	86.02	ft
APCO GS-AP-MW-11R	ORP	Oxidation Reduction Potential	9/19/2023 11:38	-16.52	mv
APCO GS-AP-MW-11R	PH	pH	9/19/2023 11:38	6.52	SU
APCO GS-AP-MW-11R	TEMP	Temperature	9/19/2023 11:38	18.61	C
APCO GS-AP-MW-11R	TURB	Turbidity	9/19/2023 11:38	13.5	NTU
APCO GS-AP-MW-11R	COND	Conductivity	9/19/2023 11:43	454.2	uS/cm
APCO GS-AP-MW-11R	DO	DO	9/19/2023 11:43	0.29	mg/L
APCO GS-AP-MW-11R	DTW	Depth to Water Detail	9/19/2023 11:43	86.02	ft
APCO GS-AP-MW-11R	ORP	Oxidation Reduction Potential	9/19/2023 11:43	-16.06	mv
APCO GS-AP-MW-11R	PH	pH	9/19/2023 11:43	6.52	SU
APCO GS-AP-MW-11R	TEMP	Temperature	9/19/2023 11:43	18.68	C
APCO GS-AP-MW-11R	TURB	Turbidity	9/19/2023 11:43	14.4	NTU
APCO GS-AP-MW-11R	COND	Conductivity	9/19/2023 11:48	453.72	uS/cm
APCO GS-AP-MW-11R	DO	DO	9/19/2023 11:48	0.29	mg/L
APCO GS-AP-MW-11R	DTW	Depth to Water Detail	9/19/2023 11:48	86.02	ft
APCO GS-AP-MW-11R	ORP	Oxidation Reduction Potential	9/19/2023 11:48	-15.63	mv
APCO GS-AP-MW-11R	PH	pH	9/19/2023 11:48	6.51	SU
APCO GS-AP-MW-11R	TEMP	Temperature	9/19/2023 11:48	18.76	C
APCO GS-AP-MW-11R	TURB	Turbidity	9/19/2023 11:48	15.8	NTU
APCO GS-AP-MW-11R	COND	Conductivity	9/19/2023 11:53	451.79	uS/cm
APCO GS-AP-MW-11R	DO	DO	9/19/2023 11:53	0.3	mg/L
APCO GS-AP-MW-11R	DTW	Depth to Water Detail	9/19/2023 11:53	86.02	ft
APCO GS-AP-MW-11R	ORP	Oxidation Reduction Potential	9/19/2023 11:53	-14.78	mv
APCO GS-AP-MW-11R	PH	pH	9/19/2023 11:53	6.5	SU
APCO GS-AP-MW-11R	TEMP	Temperature	9/19/2023 11:53	18.96	C
APCO GS-AP-MW-11R	TURB	Turbidity	9/19/2023 11:53	10.56	NTU
APCO GS-AP-MW-11R	COND	Conductivity	9/19/2023 11:58	453.04	uS/cm
APCO GS-AP-MW-11R	DO	DO	9/19/2023 11:58	0.28	mg/L
APCO GS-AP-MW-11R	DTW	Depth to Water Detail	9/19/2023 11:58	86.02	ft
APCO GS-AP-MW-11R	ORP	Oxidation Reduction Potential	9/19/2023 11:58	-14.39	mv
APCO GS-AP-MW-11R	PH	pH	9/19/2023 11:58	6.49	SU
APCO GS-AP-MW-11R	SULFIDE	Sulfide	9/19/2023 11:58	0	mg/L
APCO GS-AP-MW-11R	TEMP	Temperature	9/19/2023 11:58	19.02	C
APCO GS-AP-MW-11R	TURB	Turbidity	9/19/2023 11:58	9	NTU
APCO GS-AP-MW-12	COND	Conductivity	9/13/2023 12:22	511.23	uS/cm
APCO GS-AP-MW-12	DO	DO	9/13/2023 12:22	1.22	mg/L
APCO GS-AP-MW-12	DTW	Depth to Water Detail	9/13/2023 12:22	90.86	ft
APCO GS-AP-MW-12	ORP	Oxidation Reduction Potential	9/13/2023 12:22	-150.86	mv
APCO GS-AP-MW-12	PH	pH	9/13/2023 12:22	10.81	SU
APCO GS-AP-MW-12	TEMP	Temperature	9/13/2023 12:22	19.57	C
APCO GS-AP-MW-12	TURB	Turbidity	9/13/2023 12:22	1.75	NTU
APCO GS-AP-MW-12	COND	Conductivity	9/13/2023 12:27	514.99	uS/cm
APCO GS-AP-MW-12	DO	DO	9/13/2023 12:27	1.2	mg/L

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO GS-AP-MW-12	DTW	Depth to Water Detail	9/13/2023 12:27	91.91	ft
APCO GS-AP-MW-12	ORP	Oxidation Reduction Potential	9/13/2023 12:27	-148.22	mv
APCO GS-AP-MW-12	PH	pH	9/13/2023 12:27	11.06	SU
APCO GS-AP-MW-12	TEMP	Temperature	9/13/2023 12:27	19.29	C
APCO GS-AP-MW-12	TURB	Turbidity	9/13/2023 12:27	0.85	NTU
APCO GS-AP-MW-12	COND	Conductivity	9/13/2023 12:32	440.82	uS/cm
APCO GS-AP-MW-12	DO	DO	9/13/2023 12:32	1.11	mg/L
APCO GS-AP-MW-12	DTW	Depth to Water Detail	9/13/2023 12:32	93.05	ft
APCO GS-AP-MW-12	ORP	Oxidation Reduction Potential	9/13/2023 12:32	-143.55	mv
APCO GS-AP-MW-12	PH	pH	9/13/2023 12:32	11	SU
APCO GS-AP-MW-12	TEMP	Temperature	9/13/2023 12:32	19.41	C
APCO GS-AP-MW-12	TURB	Turbidity	9/13/2023 12:32	0.99	NTU
APCO GS-AP-MW-12	COND	Conductivity	9/13/2023 12:37	379.1	uS/cm
APCO GS-AP-MW-12	DO	DO	9/13/2023 12:37	1.04	mg/L
APCO GS-AP-MW-12	DTW	Depth to Water Detail	9/13/2023 12:37	94.2	ft
APCO GS-AP-MW-12	ORP	Oxidation Reduction Potential	9/13/2023 12:37	-140.1	mv
APCO GS-AP-MW-12	PH	pH	9/13/2023 12:37	10.84	SU
APCO GS-AP-MW-12	TEMP	Temperature	9/13/2023 12:37	19.39	C
APCO GS-AP-MW-12	TURB	Turbidity	9/13/2023 12:37	0.39	NTU
APCO GS-AP-MW-12	COND	Conductivity	9/13/2023 12:42	348.94	uS/cm
APCO GS-AP-MW-12	DO	DO	9/13/2023 12:42	1.15	mg/L
APCO GS-AP-MW-12	DTW	Depth to Water Detail	9/13/2023 12:42	94.28	ft
APCO GS-AP-MW-12	ORP	Oxidation Reduction Potential	9/13/2023 12:42	-128.22	mv
APCO GS-AP-MW-12	PH	pH	9/13/2023 12:42	10.6	SU
APCO GS-AP-MW-12	TEMP	Temperature	9/13/2023 12:42	20.8	C
APCO GS-AP-MW-12	TURB	Turbidity	9/13/2023 12:42	0.43	NTU
APCO GS-AP-MW-12	COND	Conductivity	9/13/2023 12:47	327.15	uS/cm
APCO GS-AP-MW-12	DO	DO	9/13/2023 12:47	1.12	mg/L
APCO GS-AP-MW-12	DTW	Depth to Water Detail	9/13/2023 12:47	94.41	ft
APCO GS-AP-MW-12	ORP	Oxidation Reduction Potential	9/13/2023 12:47	-122.9	mv
APCO GS-AP-MW-12	PH	pH	9/13/2023 12:47	10.45	SU
APCO GS-AP-MW-12	TEMP	Temperature	9/13/2023 12:47	21.05	C
APCO GS-AP-MW-12	TURB	Turbidity	9/13/2023 12:47	0.42	NTU
APCO GS-AP-MW-12	COND	Conductivity	9/13/2023 12:52	304.38	uS/cm
APCO GS-AP-MW-12	DO	DO	9/13/2023 12:52	1.08	mg/L
APCO GS-AP-MW-12	DTW	Depth to Water Detail	9/13/2023 12:52	94.53	ft
APCO GS-AP-MW-12	ORP	Oxidation Reduction Potential	9/13/2023 12:52	-120.61	mv
APCO GS-AP-MW-12	PH	pH	9/13/2023 12:52	10.19	SU
APCO GS-AP-MW-12	TEMP	Temperature	9/13/2023 12:52	21.24	C
APCO GS-AP-MW-12	TURB	Turbidity	9/13/2023 12:52	0.51	NTU
APCO GS-AP-MW-12	COND	Conductivity	9/13/2023 12:57	294.59	uS/cm
APCO GS-AP-MW-12	DO	DO	9/13/2023 12:57	0.96	mg/L
APCO GS-AP-MW-12	DTW	Depth to Water Detail	9/13/2023 12:57	94.67	ft
APCO GS-AP-MW-12	ORP	Oxidation Reduction Potential	9/13/2023 12:57	-119.48	mv
APCO GS-AP-MW-12	PH	pH	9/13/2023 12:57	9.85	SU
APCO GS-AP-MW-12	TEMP	Temperature	9/13/2023 12:57	21.17	C
APCO GS-AP-MW-12	TURB	Turbidity	9/13/2023 12:57	0.46	NTU
APCO GS-AP-MW-12	COND	Conductivity	9/13/2023 13:02	297.18	uS/cm
APCO GS-AP-MW-12	DO	DO	9/13/2023 13:02	0.86	mg/L
APCO GS-AP-MW-12	DTW	Depth to Water Detail	9/13/2023 13:02	94.8	ft
APCO GS-AP-MW-12	ORP	Oxidation Reduction Potential	9/13/2023 13:02	-119.08	mv
APCO GS-AP-MW-12	PH	pH	9/13/2023 13:02	9.57	SU
APCO GS-AP-MW-12	TEMP	Temperature	9/13/2023 13:02	21.36	C
APCO GS-AP-MW-12	TURB	Turbidity	9/13/2023 13:02	0.73	NTU
APCO GS-AP-MW-12	COND	Conductivity	9/13/2023 13:07	302.43	uS/cm
APCO GS-AP-MW-12	DO	DO	9/13/2023 13:07	0.8	mg/L
APCO GS-AP-MW-12	DTW	Depth to Water Detail	9/13/2023 13:07	94.91	ft
APCO GS-AP-MW-12	ORP	Oxidation Reduction Potential	9/13/2023 13:07	-116.9	mv
APCO GS-AP-MW-12	PH	pH	9/13/2023 13:07	9.37	SU
APCO GS-AP-MW-12	TEMP	Temperature	9/13/2023 13:07	21.66	C
APCO GS-AP-MW-12	TURB	Turbidity	9/13/2023 13:07	0.64	NTU
APCO GS-AP-MW-12	COND	Conductivity	9/13/2023 13:12	305.89	uS/cm
APCO GS-AP-MW-12	DO	DO	9/13/2023 13:12	0.74	mg/L
APCO GS-AP-MW-12	DTW	Depth to Water Detail	9/13/2023 13:12	94.99	ft

Plant Gorgas Ash Pond
Field Parameter Summary

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO GS-AP-MW-12	ORP	Oxidation Reduction Potential	9/13/2023 13:12	-115.66	mv
APCO GS-AP-MW-12	PH	pH	9/13/2023 13:12	9.24	SU
APCO GS-AP-MW-12	TEMP	Temperature	9/13/2023 13:12	21.86	C
APCO GS-AP-MW-12	TURB	Turbidity	9/13/2023 13:12	0.77	NTU
APCO GS-AP-MW-12	COND	Conductivity	9/13/2023 13:17	312.04	uS/cm
APCO GS-AP-MW-12	DO	DO	9/13/2023 13:17	0.71	mg/L
APCO GS-AP-MW-12	DTW	Depth to Water Detail	9/13/2023 13:17	95.12	ft
APCO GS-AP-MW-12	ORP	Oxidation Reduction Potential	9/13/2023 13:17	-113.5	mv
APCO GS-AP-MW-12	PH	pH	9/13/2023 13:17	9.11	SU
APCO GS-AP-MW-12	TEMP	Temperature	9/13/2023 13:17	21.77	C
APCO GS-AP-MW-12	TURB	Turbidity	9/13/2023 13:17	0.96	NTU
APCO GS-AP-MW-12	COND	Conductivity	9/13/2023 13:22	315.93	uS/cm
APCO GS-AP-MW-12	DO	DO	9/13/2023 13:22	0.69	mg/L
APCO GS-AP-MW-12	DTW	Depth to Water Detail	9/13/2023 13:22	95.24	ft
APCO GS-AP-MW-12	ORP	Oxidation Reduction Potential	9/13/2023 13:22	-112	mv
APCO GS-AP-MW-12	PH	pH	9/13/2023 13:22	9.02	SU
APCO GS-AP-MW-12	TEMP	Temperature	9/13/2023 13:22	21.85	C
APCO GS-AP-MW-12	TURB	Turbidity	9/13/2023 13:22	0.84	NTU
APCO GS-AP-MW-12	COND	Conductivity	9/13/2023 13:27	316.93	uS/cm
APCO GS-AP-MW-12	DO	DO	9/13/2023 13:27	0.67	mg/L
APCO GS-AP-MW-12	DTW	Depth to Water Detail	9/13/2023 13:27	95.33	ft
APCO GS-AP-MW-12	ORP	Oxidation Reduction Potential	9/13/2023 13:27	-112.27	mv
APCO GS-AP-MW-12	PH	pH	9/13/2023 13:27	8.96	SU
APCO GS-AP-MW-12	SULFIDE	Sulfide	9/13/2023 13:27	0	mg/L
APCO GS-AP-MW-12	TEMP	Temperature	9/13/2023 13:27	21.17	C
APCO GS-AP-MW-12	TURB	Turbidity	9/13/2023 13:27	0.83	NTU
APCO GS-AP-MW-12V	COND	Conductivity	9/13/2023 9:54	661.36	uS/cm
APCO GS-AP-MW-12V	DO	DO	9/13/2023 9:54	0.3	mg/L
APCO GS-AP-MW-12V	DTW	Depth to Water Detail	9/13/2023 9:54	103.41	ft
APCO GS-AP-MW-12V	ORP	Oxidation Reduction Potential	9/13/2023 9:54	-136.05	mv
APCO GS-AP-MW-12V	PH	pH	9/13/2023 9:54	11.05	SU
APCO GS-AP-MW-12V	TEMP	Temperature	9/13/2023 9:54	19.43	C
APCO GS-AP-MW-12V	TURB	Turbidity	9/13/2023 9:54	12.3	NTU
APCO GS-AP-MW-12V	COND	Conductivity	9/13/2023 9:59	576.34	uS/cm
APCO GS-AP-MW-12V	DO	DO	9/13/2023 9:59	0.26	mg/L
APCO GS-AP-MW-12V	DTW	Depth to Water Detail	9/13/2023 9:59	104.21	ft
APCO GS-AP-MW-12V	ORP	Oxidation Reduction Potential	9/13/2023 9:59	-134.41	mv
APCO GS-AP-MW-12V	PH	pH	9/13/2023 9:59	10.72	SU
APCO GS-AP-MW-12V	TEMP	Temperature	9/13/2023 9:59	19.4	C
APCO GS-AP-MW-12V	TURB	Turbidity	9/13/2023 9:59	12.5	NTU
APCO GS-AP-MW-12V	COND	Conductivity	9/13/2023 10:04	530.45	uS/cm
APCO GS-AP-MW-12V	DO	DO	9/13/2023 10:04	0.3	mg/L
APCO GS-AP-MW-12V	DTW	Depth to Water Detail	9/13/2023 10:04	104.64	ft
APCO GS-AP-MW-12V	ORP	Oxidation Reduction Potential	9/13/2023 10:04	-131.63	mv
APCO GS-AP-MW-12V	PH	pH	9/13/2023 10:04	10.63	SU
APCO GS-AP-MW-12V	TEMP	Temperature	9/13/2023 10:04	19.7	C
APCO GS-AP-MW-12V	TURB	Turbidity	9/13/2023 10:04	11.4	NTU
APCO GS-AP-MW-12V	COND	Conductivity	9/13/2023 10:09	419.88	uS/cm
APCO GS-AP-MW-12V	DO	DO	9/13/2023 10:09	0.31	mg/L
APCO GS-AP-MW-12V	DTW	Depth to Water Detail	9/13/2023 10:09	105.31	ft
APCO GS-AP-MW-12V	ORP	Oxidation Reduction Potential	9/13/2023 10:09	-134.95	mv
APCO GS-AP-MW-12V	PH	pH	9/13/2023 10:09	10.56	SU
APCO GS-AP-MW-12V	TEMP	Temperature	9/13/2023 10:09	19.53	C
APCO GS-AP-MW-12V	TURB	Turbidity	9/13/2023 10:09	11.5	NTU
APCO GS-AP-MW-12V	COND	Conductivity	9/13/2023 10:14	358.3	uS/cm
APCO GS-AP-MW-12V	DO	DO	9/13/2023 10:14	0.29	mg/L
APCO GS-AP-MW-12V	DTW	Depth to Water Detail	9/13/2023 10:14	106.01	ft
APCO GS-AP-MW-12V	ORP	Oxidation Reduction Potential	9/13/2023 10:14	-135.55	mv
APCO GS-AP-MW-12V	PH	pH	9/13/2023 10:14	10.47	SU
APCO GS-AP-MW-12V	TEMP	Temperature	9/13/2023 10:14	19.55	C
APCO GS-AP-MW-12V	TURB	Turbidity	9/13/2023 10:14	11.4	NTU
APCO GS-AP-MW-12V	COND	Conductivity	9/13/2023 10:19	315.56	uS/cm
APCO GS-AP-MW-12V	DO	DO	9/13/2023 10:19	0.33	mg/L
APCO GS-AP-MW-12V	DTW	Depth to Water Detail	9/13/2023 10:19	106.12	ft

Plant Gorgas Ash Pond
Field Parameter Summary

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO GS-AP-MW-12V	ORP	Oxidation Reduction Potential	9/13/2023 10:19	-131.83	mv
APCO GS-AP-MW-12V	PH	pH	9/13/2023 10:19	10.34	SU
APCO GS-AP-MW-12V	TEMP	Temperature	9/13/2023 10:19	20.01	C
APCO GS-AP-MW-12V	TURB	Turbidity	9/13/2023 10:19	12.09	NTU
APCO GS-AP-MW-12V	COND	Conductivity	9/13/2023 10:24	257.04	uS/cm
APCO GS-AP-MW-12V	DO	DO	9/13/2023 10:24	0.34	mg/L
APCO GS-AP-MW-12V	DTW	Depth to Water Detail	9/13/2023 10:24	106.26	ft
APCO GS-AP-MW-12V	ORP	Oxidation Reduction Potential	9/13/2023 10:24	-132.52	mv
APCO GS-AP-MW-12V	PH	pH	9/13/2023 10:24	10.22	SU
APCO GS-AP-MW-12V	TEMP	Temperature	9/13/2023 10:24	20.27	C
APCO GS-AP-MW-12V	TURB	Turbidity	9/13/2023 10:24	12.51	NTU
APCO GS-AP-MW-12V	COND	Conductivity	9/13/2023 10:29	205.34	uS/cm
APCO GS-AP-MW-12V	DO	DO	9/13/2023 10:29	0.39	mg/L
APCO GS-AP-MW-12V	DTW	Depth to Water Detail	9/13/2023 10:29	106.49	ft
APCO GS-AP-MW-12V	ORP	Oxidation Reduction Potential	9/13/2023 10:29	-134.04	mv
APCO GS-AP-MW-12V	PH	pH	9/13/2023 10:29	9.99	SU
APCO GS-AP-MW-12V	TEMP	Temperature	9/13/2023 10:29	20.34	C
APCO GS-AP-MW-12V	TURB	Turbidity	9/13/2023 10:29	12.56	NTU
APCO GS-AP-MW-12V	COND	Conductivity	9/13/2023 10:34	191.16	uS/cm
APCO GS-AP-MW-12V	DO	DO	9/13/2023 10:34	0.36	mg/L
APCO GS-AP-MW-12V	DTW	Depth to Water Detail	9/13/2023 10:34	106.8	ft
APCO GS-AP-MW-12V	ORP	Oxidation Reduction Potential	9/13/2023 10:34	-135.52	mv
APCO GS-AP-MW-12V	PH	pH	9/13/2023 10:34	9.82	SU
APCO GS-AP-MW-12V	TEMP	Temperature	9/13/2023 10:34	20.23	C
APCO GS-AP-MW-12V	TURB	Turbidity	9/13/2023 10:34	11.82	NTU
APCO GS-AP-MW-12V	COND	Conductivity	9/13/2023 10:39	185.24	uS/cm
APCO GS-AP-MW-12V	DO	DO	9/13/2023 10:39	0.38	mg/L
APCO GS-AP-MW-12V	DTW	Depth to Water Detail	9/13/2023 10:39	106.96	ft
APCO GS-AP-MW-12V	ORP	Oxidation Reduction Potential	9/13/2023 10:39	-137.75	mv
APCO GS-AP-MW-12V	PH	pH	9/13/2023 10:39	9.79	SU
APCO GS-AP-MW-12V	TEMP	Temperature	9/13/2023 10:39	20.05	C
APCO GS-AP-MW-12V	TURB	Turbidity	9/13/2023 10:39	9.48	NTU
APCO GS-AP-MW-12V	COND	Conductivity	9/13/2023 10:44	188.07	uS/cm
APCO GS-AP-MW-12V	DO	DO	9/13/2023 10:44	0.37	mg/L
APCO GS-AP-MW-12V	DTW	Depth to Water Detail	9/13/2023 10:44	107.11	ft
APCO GS-AP-MW-12V	ORP	Oxidation Reduction Potential	9/13/2023 10:44	-138.42	mv
APCO GS-AP-MW-12V	PH	pH	9/13/2023 10:44	9.68	SU
APCO GS-AP-MW-12V	TEMP	Temperature	9/13/2023 10:44	19.95	C
APCO GS-AP-MW-12V	TURB	Turbidity	9/13/2023 10:44	7.71	NTU
APCO GS-AP-MW-12V	COND	Conductivity	9/13/2023 10:49	188.49	uS/cm
APCO GS-AP-MW-12V	DO	DO	9/13/2023 10:49	0.37	mg/L
APCO GS-AP-MW-12V	DTW	Depth to Water Detail	9/13/2023 10:49	107.23	ft
APCO GS-AP-MW-12V	ORP	Oxidation Reduction Potential	9/13/2023 10:49	-139.17	mv
APCO GS-AP-MW-12V	PH	pH	9/13/2023 10:49	9.52	SU
APCO GS-AP-MW-12V	TEMP	Temperature	9/13/2023 10:49	19.99	C
APCO GS-AP-MW-12V	TURB	Turbidity	9/13/2023 10:49	5.35	NTU
APCO GS-AP-MW-12V	COND	Conductivity	9/13/2023 10:54	192.84	uS/cm
APCO GS-AP-MW-12V	DO	DO	9/13/2023 10:54	0.37	mg/L
APCO GS-AP-MW-12V	DTW	Depth to Water Detail	9/13/2023 10:54	107.41	ft
APCO GS-AP-MW-12V	ORP	Oxidation Reduction Potential	9/13/2023 10:54	-142.9	mv
APCO GS-AP-MW-12V	PH	pH	9/13/2023 10:54	9.43	SU
APCO GS-AP-MW-12V	TEMP	Temperature	9/13/2023 10:54	19.97	C
APCO GS-AP-MW-12V	TURB	Turbidity	9/13/2023 10:54	8.81	NTU
APCO GS-AP-MW-12V	COND	Conductivity	9/13/2023 10:59	199.81	uS/cm
APCO GS-AP-MW-12V	DO	DO	9/13/2023 10:59	0.36	mg/L
APCO GS-AP-MW-12V	DTW	Depth to Water Detail	9/13/2023 10:59	107.55	ft
APCO GS-AP-MW-12V	ORP	Oxidation Reduction Potential	9/13/2023 10:59	-146.5	mv
APCO GS-AP-MW-12V	PH	pH	9/13/2023 10:59	9.36	SU
APCO GS-AP-MW-12V	TEMP	Temperature	9/13/2023 10:59	19.87	C
APCO GS-AP-MW-12V	TURB	Turbidity	9/13/2023 10:59	10.41	NTU
APCO GS-AP-MW-12V	COND	Conductivity	9/13/2023 11:04	216.06	uS/cm
APCO GS-AP-MW-12V	DO	DO	9/13/2023 11:04	0.37	mg/L
APCO GS-AP-MW-12V	DTW	Depth to Water Detail	9/13/2023 11:04	107.7	ft
APCO GS-AP-MW-12V	ORP	Oxidation Reduction Potential	9/13/2023 11:04	-147.27	mv

Plant Gorgas Ash Pond
Field Parameter Summary

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO GS-AP-MW-12V	PH	pH	9/13/2023 11:04	9.24	SU
APCO GS-AP-MW-12V	TEMP	Temperature	9/13/2023 11:04	19.88	C
APCO GS-AP-MW-12V	TURB	Turbidity	9/13/2023 11:04	6.8	NTU
APCO GS-AP-MW-12V	COND	Conductivity	9/13/2023 11:09	223.01	uS/cm
APCO GS-AP-MW-12V	DO	DO	9/13/2023 11:09	0.36	mg/L
APCO GS-AP-MW-12V	DTW	Depth to Water Detail	9/13/2023 11:09	107.85	ft
APCO GS-AP-MW-12V	ORP	Oxidation Reduction Potential	9/13/2023 11:09	-147.16	mv
APCO GS-AP-MW-12V	PH	pH	9/13/2023 11:09	9.15	SU
APCO GS-AP-MW-12V	TEMP	Temperature	9/13/2023 11:09	19.92	C
APCO GS-AP-MW-12V	TURB	Turbidity	9/13/2023 11:09	5.46	NTU
APCO GS-AP-MW-12V	COND	Conductivity	9/13/2023 11:14	229.73	uS/cm
APCO GS-AP-MW-12V	DO	DO	9/13/2023 11:14	0.36	mg/L
APCO GS-AP-MW-12V	DTW	Depth to Water Detail	9/13/2023 11:14	107.98	ft
APCO GS-AP-MW-12V	ORP	Oxidation Reduction Potential	9/13/2023 11:14	-147.29	mv
APCO GS-AP-MW-12V	PH	pH	9/13/2023 11:14	9.08	SU
APCO GS-AP-MW-12V	TEMP	Temperature	9/13/2023 11:14	20.15	C
APCO GS-AP-MW-12V	TURB	Turbidity	9/13/2023 11:14	3.38	NTU
APCO GS-AP-MW-12V	COND	Conductivity	9/13/2023 11:19	234.56	uS/cm
APCO GS-AP-MW-12V	DO	DO	9/13/2023 11:19	0.36	mg/L
APCO GS-AP-MW-12V	DTW	Depth to Water Detail	9/13/2023 11:19	107.11	ft
APCO GS-AP-MW-12V	ORP	Oxidation Reduction Potential	9/13/2023 11:19	-147.56	mv
APCO GS-AP-MW-12V	PH	pH	9/13/2023 11:19	9.01	SU
APCO GS-AP-MW-12V	TEMP	Temperature	9/13/2023 11:19	20	C
APCO GS-AP-MW-12V	TURB	Turbidity	9/13/2023 11:19	3.69	NTU
APCO GS-AP-MW-12V	COND	Conductivity	9/13/2023 11:24	237.64	uS/cm
APCO GS-AP-MW-12V	DO	DO	9/13/2023 11:24	0.37	mg/L
APCO GS-AP-MW-12V	DTW	Depth to Water Detail	9/13/2023 11:24	107.23	ft
APCO GS-AP-MW-12V	ORP	Oxidation Reduction Potential	9/13/2023 11:24	-148.19	mv
APCO GS-AP-MW-12V	PH	pH	9/13/2023 11:24	8.95	SU
APCO GS-AP-MW-12V	SULFIDE	Sulfide	9/13/2023 11:24	0	mg/L
APCO GS-AP-MW-12V	TEMP	Temperature	9/13/2023 11:24	19.87	C
APCO GS-AP-MW-12V	TURB	Turbidity	9/13/2023 11:24	2.95	NTU
APCO GS-AP-MW-13R	COND	Conductivity	9/19/2023 10:29	284.56	uS/cm
APCO GS-AP-MW-13R	DO	DO	9/19/2023 10:29	0.2	mg/L
APCO GS-AP-MW-13R	DTW	Depth to Water Detail	9/19/2023 10:29	114.32	ft
APCO GS-AP-MW-13R	ORP	Oxidation Reduction Potential	9/19/2023 10:29	11.18	mv
APCO GS-AP-MW-13R	PH	pH	9/19/2023 10:29	6.15	SU
APCO GS-AP-MW-13R	TEMP	Temperature	9/19/2023 10:29	18.09	C
APCO GS-AP-MW-13R	TURB	Turbidity	9/19/2023 10:29	9.22	NTU
APCO GS-AP-MW-13R	COND	Conductivity	9/19/2023 10:34	280.31	uS/cm
APCO GS-AP-MW-13R	DO	DO	9/19/2023 10:34	0.15	mg/L
APCO GS-AP-MW-13R	DTW	Depth to Water Detail	9/19/2023 10:34	117.91	ft
APCO GS-AP-MW-13R	ORP	Oxidation Reduction Potential	9/19/2023 10:34	15.48	mv
APCO GS-AP-MW-13R	PH	pH	9/19/2023 10:34	6.12	SU
APCO GS-AP-MW-13R	TEMP	Temperature	9/19/2023 10:34	18.12	C
APCO GS-AP-MW-13R	TURB	Turbidity	9/19/2023 10:34	8.81	NTU
APCO GS-AP-MW-13R	COND	Conductivity	9/19/2023 10:39	277.4	uS/cm
APCO GS-AP-MW-13R	DO	DO	9/19/2023 10:39	0.13	mg/L
APCO GS-AP-MW-13R	DTW	Depth to Water Detail	9/19/2023 10:39	120.62	ft
APCO GS-AP-MW-13R	ORP	Oxidation Reduction Potential	9/19/2023 10:39	16.06	mv
APCO GS-AP-MW-13R	PH	pH	9/19/2023 10:39	6.11	SU
APCO GS-AP-MW-13R	TEMP	Temperature	9/19/2023 10:39	18.16	C
APCO GS-AP-MW-13R	TURB	Turbidity	9/19/2023 10:39	4.56	NTU
APCO GS-AP-MW-13R	COND	Conductivity	9/19/2023 10:44	281.79	uS/cm
APCO GS-AP-MW-13R	DO	DO	9/19/2023 10:44	0.31	mg/L
APCO GS-AP-MW-13R	DTW	Depth to Water Detail	9/19/2023 10:44	120.49	ft
APCO GS-AP-MW-13R	ORP	Oxidation Reduction Potential	9/19/2023 10:44	14.95	mv
APCO GS-AP-MW-13R	PH	pH	9/19/2023 10:44	6.11	SU
APCO GS-AP-MW-13R	TEMP	Temperature	9/19/2023 10:44	20.42	C
APCO GS-AP-MW-13R	TURB	Turbidity	9/19/2023 10:44	2.41	NTU
APCO GS-AP-MW-13R	COND	Conductivity	9/19/2023 10:49	280.96	uS/cm
APCO GS-AP-MW-13R	DO	DO	9/19/2023 10:49	0.32	mg/L
APCO GS-AP-MW-13R	DTW	Depth to Water Detail	9/19/2023 10:49	120.41	ft
APCO GS-AP-MW-13R	ORP	Oxidation Reduction Potential	9/19/2023 10:49	13.05	mv

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO GS-AP-MW-13R	PH	pH	9/19/2023 10:49	6.12	SU
APCO GS-AP-MW-13R	TEMP	Temperature	9/19/2023 10:49	20.75	C
APCO GS-AP-MW-13R	TURB	Turbidity	9/19/2023 10:49	1.97	NTU
APCO GS-AP-MW-13R	COND	Conductivity	9/19/2023 10:54	274.13	uS/cm
APCO GS-AP-MW-13R	DO	DO	9/19/2023 10:54	0.32	mg/L
APCO GS-AP-MW-13R	DTW	Depth to Water Detail	9/19/2023 10:54	120.38	ft
APCO GS-AP-MW-13R	ORP	Oxidation Reduction Potential	9/19/2023 10:54	5.49	mv
APCO GS-AP-MW-13R	PH	pH	9/19/2023 10:54	6.15	SU
APCO GS-AP-MW-13R	TEMP	Temperature	9/19/2023 10:54	20.68	C
APCO GS-AP-MW-13R	TURB	Turbidity	9/19/2023 10:54	1.92	NTU
APCO GS-AP-MW-13R	COND	Conductivity	9/19/2023 10:59	275.43	uS/cm
APCO GS-AP-MW-13R	DO	DO	9/19/2023 10:59	0.31	mg/L
APCO GS-AP-MW-13R	DTW	Depth to Water Detail	9/19/2023 10:59	120.35	ft
APCO GS-AP-MW-13R	ORP	Oxidation Reduction Potential	9/19/2023 10:59	-0.6	mv
APCO GS-AP-MW-13R	PH	pH	9/19/2023 10:59	6.17	SU
APCO GS-AP-MW-13R	SULFIDE	Sulfide	9/19/2023 10:59	0	mg/L
APCO GS-AP-MW-13R	TEMP	Temperature	9/19/2023 10:59	20.87	C
APCO GS-AP-MW-13R	TURB	Turbidity	9/19/2023 10:59	1.85	NTU
APCO GS-AP-MW-14R	COND	Conductivity	9/12/2023 12:53	466.25	uS/cm
APCO GS-AP-MW-14R	DO	DO	9/12/2023 12:53	0.59	mg/L
APCO GS-AP-MW-14R	DTW	Depth to Water Detail	9/12/2023 12:53	110.32	ft
APCO GS-AP-MW-14R	ORP	Oxidation Reduction Potential	9/12/2023 12:53	-19.48	mv
APCO GS-AP-MW-14R	PH	pH	9/12/2023 12:53	6.75	SU
APCO GS-AP-MW-14R	TEMP	Temperature	9/12/2023 12:53	19.06	C
APCO GS-AP-MW-14R	TURB	Turbidity	9/12/2023 12:53	5.97	NTU
APCO GS-AP-MW-14R	COND	Conductivity	9/12/2023 12:58	453.48	uS/cm
APCO GS-AP-MW-14R	DO	DO	9/12/2023 12:58	0.69	mg/L
APCO GS-AP-MW-14R	DTW	Depth to Water Detail	9/12/2023 12:58	112.33	ft
APCO GS-AP-MW-14R	ORP	Oxidation Reduction Potential	9/12/2023 12:58	-12.23	mv
APCO GS-AP-MW-14R	PH	pH	9/12/2023 12:58	6.66	SU
APCO GS-AP-MW-14R	TEMP	Temperature	9/12/2023 12:58	19.21	C
APCO GS-AP-MW-14R	TURB	Turbidity	9/12/2023 12:58	6.21	NTU
APCO GS-AP-MW-14R	COND	Conductivity	9/12/2023 13:03	456.42	uS/cm
APCO GS-AP-MW-14R	DO	DO	9/12/2023 13:03	1.72	mg/L
APCO GS-AP-MW-14R	DTW	Depth to Water Detail	9/12/2023 13:03	112.96	ft
APCO GS-AP-MW-14R	ORP	Oxidation Reduction Potential	9/12/2023 13:03	-13.72	mv
APCO GS-AP-MW-14R	PH	pH	9/12/2023 13:03	6.64	SU
APCO GS-AP-MW-14R	TEMP	Temperature	9/12/2023 13:03	22.14	C
APCO GS-AP-MW-14R	TURB	Turbidity	9/12/2023 13:03	5.75	NTU
APCO GS-AP-MW-14R	COND	Conductivity	9/12/2023 13:08	453.39	uS/cm
APCO GS-AP-MW-14R	DO	DO	9/12/2023 13:08	1.5	mg/L
APCO GS-AP-MW-14R	DTW	Depth to Water Detail	9/12/2023 13:08	113.2	ft
APCO GS-AP-MW-14R	ORP	Oxidation Reduction Potential	9/12/2023 13:08	-16.52	mv
APCO GS-AP-MW-14R	PH	pH	9/12/2023 13:08	6.63	SU
APCO GS-AP-MW-14R	TEMP	Temperature	9/12/2023 13:08	22.53	C
APCO GS-AP-MW-14R	TURB	Turbidity	9/12/2023 13:08	5.46	NTU
APCO GS-AP-MW-14R	COND	Conductivity	9/12/2023 13:13	434.08	uS/cm
APCO GS-AP-MW-14R	DO	DO	9/12/2023 13:13	0.77	mg/L
APCO GS-AP-MW-14R	DTW	Depth to Water Detail	9/12/2023 13:13	113.37	ft
APCO GS-AP-MW-14R	ORP	Oxidation Reduction Potential	9/12/2023 13:13	-25.44	mv
APCO GS-AP-MW-14R	PH	pH	9/12/2023 13:13	6.62	SU
APCO GS-AP-MW-14R	TEMP	Temperature	9/12/2023 13:13	21.15	C
APCO GS-AP-MW-14R	TURB	Turbidity	9/12/2023 13:13	4.56	NTU
APCO GS-AP-MW-14R	COND	Conductivity	9/12/2023 13:18	424.55	uS/cm
APCO GS-AP-MW-14R	DO	DO	9/12/2023 13:18	0.62	mg/L
APCO GS-AP-MW-14R	DTW	Depth to Water Detail	9/12/2023 13:18	113.53	ft
APCO GS-AP-MW-14R	ORP	Oxidation Reduction Potential	9/12/2023 13:18	-33.42	mv
APCO GS-AP-MW-14R	PH	pH	9/12/2023 13:18	6.61	SU
APCO GS-AP-MW-14R	TEMP	Temperature	9/12/2023 13:18	21	C
APCO GS-AP-MW-14R	TURB	Turbidity	9/12/2023 13:18	4.7	NTU
APCO GS-AP-MW-14R	COND	Conductivity	9/12/2023 13:23	420.03	uS/cm
APCO GS-AP-MW-14R	DO	DO	9/12/2023 13:23	0.53	mg/L
APCO GS-AP-MW-14R	DTW	Depth to Water Detail	9/12/2023 13:23	113.66	ft
APCO GS-AP-MW-14R	ORP	Oxidation Reduction Potential	9/12/2023 13:23	-39.09	mv

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO GS-AP-MW-14R	PH	pH	9/12/2023 13:23	6.62	SU
APCO GS-AP-MW-14R	TEMP	Temperature	9/12/2023 13:23	20.81	C
APCO GS-AP-MW-14R	TURB	Turbidity	9/12/2023 13:23	4.62	NTU
APCO GS-AP-MW-14R	COND	Conductivity	9/12/2023 13:28	418.54	uS/cm
APCO GS-AP-MW-14R	DO	DO	9/12/2023 13:28	0.48	mg/L
APCO GS-AP-MW-14R	DTW	Depth to Water Detail	9/12/2023 13:28	113.8	ft
APCO GS-AP-MW-14R	ORP	Oxidation Reduction Potential	9/12/2023 13:28	-44.33	mv
APCO GS-AP-MW-14R	PH	pH	9/12/2023 13:28	6.63	SU
APCO GS-AP-MW-14R	SULFIDE	Sulfide	9/12/2023 13:28	1	mg/L
APCO GS-AP-MW-14R	TEMP	Temperature	9/12/2023 13:28	21.38	C
APCO GS-AP-MW-14R	TURB	Turbidity	9/12/2023 13:28	4.81	NTU
APCO GS-AP-MW-15	COND	Conductivity	9/11/2023 10:59	2242.99	uS/cm
APCO GS-AP-MW-15	DO	DO	9/11/2023 10:59	0.18	mg/L
APCO GS-AP-MW-15	DTW	Depth to Water Detail	9/11/2023 10:59	81.9	ft
APCO GS-AP-MW-15	ORP	Oxidation Reduction Potential	9/11/2023 10:59	-114.62	mv
APCO GS-AP-MW-15	PH	pH	9/11/2023 10:59	11.59	SU
APCO GS-AP-MW-15	TEMP	Temperature	9/11/2023 10:59	20.28	C
APCO GS-AP-MW-15	TURB	Turbidity	9/11/2023 10:59	2.29	NTU
APCO GS-AP-MW-15	COND	Conductivity	9/11/2023 11:04	2238.28	uS/cm
APCO GS-AP-MW-15	DO	DO	9/11/2023 11:04	0.11	mg/L
APCO GS-AP-MW-15	DTW	Depth to Water Detail	9/11/2023 11:04	83.42	ft
APCO GS-AP-MW-15	ORP	Oxidation Reduction Potential	9/11/2023 11:04	-68.66	mv
APCO GS-AP-MW-15	PH	pH	9/11/2023 11:04	11.69	SU
APCO GS-AP-MW-15	TEMP	Temperature	9/11/2023 11:04	20.16	C
APCO GS-AP-MW-15	TURB	Turbidity	9/11/2023 11:04	3.21	NTU
APCO GS-AP-MW-15	COND	Conductivity	9/11/2023 11:09	2222.64	uS/cm
APCO GS-AP-MW-15	DO	DO	9/11/2023 11:09	0	mg/L
APCO GS-AP-MW-15	DTW	Depth to Water Detail	9/11/2023 11:09	86.02	ft
APCO GS-AP-MW-15	ORP	Oxidation Reduction Potential	9/11/2023 11:09	-104.85	mv
APCO GS-AP-MW-15	PH	pH	9/11/2023 11:09	11.7	SU
APCO GS-AP-MW-15	TEMP	Temperature	9/11/2023 11:09	20.21	C
APCO GS-AP-MW-15	TURB	Turbidity	9/11/2023 11:09	2.48	NTU
APCO GS-AP-MW-15	COND	Conductivity	9/11/2023 11:14	2198.7	uS/cm
APCO GS-AP-MW-15	DO	DO	9/11/2023 11:14	0.16	mg/L
APCO GS-AP-MW-15	DTW	Depth to Water Detail	9/11/2023 11:14	87.16	ft
APCO GS-AP-MW-15	ORP	Oxidation Reduction Potential	9/11/2023 11:14	-32.12	mv
APCO GS-AP-MW-15	PH	pH	9/11/2023 11:14	11.69	SU
APCO GS-AP-MW-15	TEMP	Temperature	9/11/2023 11:14	20.17	C
APCO GS-AP-MW-15	TURB	Turbidity	9/11/2023 11:14	2.24	NTU
APCO GS-AP-MW-15	COND	Conductivity	9/11/2023 11:19	2166.66	uS/cm
APCO GS-AP-MW-15	DO	DO	9/11/2023 11:19	0.15	mg/L
APCO GS-AP-MW-15	DTW	Depth to Water Detail	9/11/2023 11:19	88.98	ft
APCO GS-AP-MW-15	ORP	Oxidation Reduction Potential	9/11/2023 11:19	-82.37	mv
APCO GS-AP-MW-15	PH	pH	9/11/2023 11:19	11.71	SU
APCO GS-AP-MW-15	TEMP	Temperature	9/11/2023 11:19	20.19	C
APCO GS-AP-MW-15	TURB	Turbidity	9/11/2023 11:19	2.3	NTU
APCO GS-AP-MW-15	COND	Conductivity	9/11/2023 11:24	2134.79	uS/cm
APCO GS-AP-MW-15	DO	DO	9/11/2023 11:24	0.14	mg/L
APCO GS-AP-MW-15	DTW	Depth to Water Detail	9/11/2023 11:24	90.46	ft
APCO GS-AP-MW-15	ORP	Oxidation Reduction Potential	9/11/2023 11:24	-103.97	mv
APCO GS-AP-MW-15	PH	pH	9/11/2023 11:24	11.67	SU
APCO GS-AP-MW-15	TEMP	Temperature	9/11/2023 11:24	20.2	C
APCO GS-AP-MW-15	TURB	Turbidity	9/11/2023 11:24	1.97	NTU
APCO GS-AP-MW-15	COND	Conductivity	9/11/2023 11:29	2132.77	uS/cm
APCO GS-AP-MW-15	DO	DO	9/11/2023 11:29	0.23	mg/L
APCO GS-AP-MW-15	DTW	Depth to Water Detail	9/11/2023 11:29	90.56	ft
APCO GS-AP-MW-15	ORP	Oxidation Reduction Potential	9/11/2023 11:29	-123.74	mv
APCO GS-AP-MW-15	PH	pH	9/11/2023 11:29	11.62	SU
APCO GS-AP-MW-15	TEMP	Temperature	9/11/2023 11:29	22.81	C
APCO GS-AP-MW-15	TURB	Turbidity	9/11/2023 11:29	1.9	NTU
APCO GS-AP-MW-15	COND	Conductivity	9/11/2023 11:34	2116.3	uS/cm
APCO GS-AP-MW-15	DO	DO	9/11/2023 11:34	0.29	mg/L
APCO GS-AP-MW-15	DTW	Depth to Water Detail	9/11/2023 11:34	90.48	ft
APCO GS-AP-MW-15	ORP	Oxidation Reduction Potential	9/11/2023 11:34	-137.56	mv

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO GS-AP-MW-15	PH	pH	9/11/2023 11:34	11.63	SU
APCO GS-AP-MW-15	TEMP	Temperature	9/11/2023 11:34	23.06	C
APCO GS-AP-MW-15	TURB	Turbidity	9/11/2023 11:34	2.02	NTU
APCO GS-AP-MW-15	COND	Conductivity	9/11/2023 11:39	2082.77	uS/cm
APCO GS-AP-MW-15	DO	DO	9/11/2023 11:39	0.29	mg/L
APCO GS-AP-MW-15	DTW	Depth to Water Detail	9/11/2023 11:39	90.41	ft
APCO GS-AP-MW-15	ORP	Oxidation Reduction Potential	9/11/2023 11:39	-145.3	mv
APCO GS-AP-MW-15	PH	pH	9/11/2023 11:39	11.61	SU
APCO GS-AP-MW-15	SULFIDE	Sulfide	9/11/2023 11:39	1	mg/L
APCO GS-AP-MW-15	TEMP	Temperature	9/11/2023 11:39	22.99	C
APCO GS-AP-MW-15	TURB	Turbidity	9/11/2023 11:39	2.09	NTU
APCO GS-AP-MW-15V	COND	Conductivity	9/11/2023 12:33	1698.01	uS/cm
APCO GS-AP-MW-15V	DO	DO	9/11/2023 12:33	0.19	mg/L
APCO GS-AP-MW-15V	DTW	Depth to Water Detail	9/11/2023 12:33	160.23	ft
APCO GS-AP-MW-15V	ORP	Oxidation Reduction Potential	9/11/2023 12:33	-100.3	mv
APCO GS-AP-MW-15V	PH	pH	9/11/2023 12:33	7.93	SU
APCO GS-AP-MW-15V	TEMP	Temperature	9/11/2023 12:33	20.58	C
APCO GS-AP-MW-15V	TURB	Turbidity	9/11/2023 12:33	27.8	NTU
APCO GS-AP-MW-15V	COND	Conductivity	9/11/2023 12:38	1683.6	uS/cm
APCO GS-AP-MW-15V	DO	DO	9/11/2023 12:38	0.15	mg/L
APCO GS-AP-MW-15V	DTW	Depth to Water Detail	9/11/2023 12:38	163.78	ft
APCO GS-AP-MW-15V	ORP	Oxidation Reduction Potential	9/11/2023 12:38	-77.75	mv
APCO GS-AP-MW-15V	PH	pH	9/11/2023 12:38	7.69	SU
APCO GS-AP-MW-15V	TEMP	Temperature	9/11/2023 12:38	20.17	C
APCO GS-AP-MW-15V	TURB	Turbidity	9/11/2023 12:38	12.1	NTU
APCO GS-AP-MW-15V	COND	Conductivity	9/11/2023 12:43	1672.2	uS/cm
APCO GS-AP-MW-15V	DO	DO	9/11/2023 12:43	0.15	mg/L
APCO GS-AP-MW-15V	DTW	Depth to Water Detail	9/11/2023 12:43	164.12	ft
APCO GS-AP-MW-15V	ORP	Oxidation Reduction Potential	9/11/2023 12:43	-69.04	mv
APCO GS-AP-MW-15V	PH	pH	9/11/2023 12:43	7.61	SU
APCO GS-AP-MW-15V	TEMP	Temperature	9/11/2023 12:43	20.68	C
APCO GS-AP-MW-15V	TURB	Turbidity	9/11/2023 12:43	6.23	NTU
APCO GS-AP-MW-15V	COND	Conductivity	9/11/2023 12:48	1630.95	uS/cm
APCO GS-AP-MW-15V	DO	DO	9/11/2023 12:48	0.12	mg/L
APCO GS-AP-MW-15V	DTW	Depth to Water Detail	9/11/2023 12:48	166.43	ft
APCO GS-AP-MW-15V	ORP	Oxidation Reduction Potential	9/11/2023 12:48	-64.28	mv
APCO GS-AP-MW-15V	PH	pH	9/11/2023 12:48	7.59	SU
APCO GS-AP-MW-15V	TEMP	Temperature	9/11/2023 12:48	19.91	C
APCO GS-AP-MW-15V	TURB	Turbidity	9/11/2023 12:48	4.43	NTU
APCO GS-AP-MW-15V	COND	Conductivity	9/11/2023 12:53	1609.78	uS/cm
APCO GS-AP-MW-15V	DO	DO	9/11/2023 12:53	0.13	mg/L
APCO GS-AP-MW-15V	DTW	Depth to Water Detail	9/11/2023 12:53	167.85	ft
APCO GS-AP-MW-15V	ORP	Oxidation Reduction Potential	9/11/2023 12:53	-63.17	mv
APCO GS-AP-MW-15V	PH	pH	9/11/2023 12:53	7.6	SU
APCO GS-AP-MW-15V	TEMP	Temperature	9/11/2023 12:53	19.76	C
APCO GS-AP-MW-15V	TURB	Turbidity	9/11/2023 12:53	3.66	NTU
APCO GS-AP-MW-15V	COND	Conductivity	9/11/2023 12:58	1595.18	uS/cm
APCO GS-AP-MW-15V	DO	DO	9/11/2023 12:58	0.19	mg/L
APCO GS-AP-MW-15V	DTW	Depth to Water Detail	9/11/2023 12:58	167.78	ft
APCO GS-AP-MW-15V	ORP	Oxidation Reduction Potential	9/11/2023 12:58	-63.2	mv
APCO GS-AP-MW-15V	PH	pH	9/11/2023 12:58	7.59	SU
APCO GS-AP-MW-15V	TEMP	Temperature	9/11/2023 12:58	22.63	C
APCO GS-AP-MW-15V	TURB	Turbidity	9/11/2023 12:58	3.71	NTU
APCO GS-AP-MW-15V	COND	Conductivity	9/11/2023 13:03	1574.93	uS/cm
APCO GS-AP-MW-15V	DO	DO	9/11/2023 13:03	0.23	mg/L
APCO GS-AP-MW-15V	DTW	Depth to Water Detail	9/11/2023 13:03	167.59	ft
APCO GS-AP-MW-15V	ORP	Oxidation Reduction Potential	9/11/2023 13:03	-63.67	mv
APCO GS-AP-MW-15V	PH	pH	9/11/2023 13:03	7.61	SU
APCO GS-AP-MW-15V	TEMP	Temperature	9/11/2023 13:03	23.72	C
APCO GS-AP-MW-15V	TURB	Turbidity	9/11/2023 13:03	3.7	NTU
APCO GS-AP-MW-15V	COND	Conductivity	9/11/2023 13:08	1538.03	uS/cm
APCO GS-AP-MW-15V	DO	DO	9/11/2023 13:08	0.23	mg/L
APCO GS-AP-MW-15V	DTW	Depth to Water Detail	9/11/2023 13:08	167.46	ft
APCO GS-AP-MW-15V	ORP	Oxidation Reduction Potential	9/11/2023 13:08	-63.38	mv

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO GS-AP-MW-15V	PH	pH	9/11/2023 13:08	7.64	SU
APCO GS-AP-MW-15V	SULFIDE	Sulfide	9/11/2023 13:08	0	mg/L
APCO GS-AP-MW-15V	TEMP	Temperature	9/11/2023 13:08	23.73	C
APCO GS-AP-MW-15V	TURB	Turbidity	9/11/2023 13:08	3.56	NTU
APCO GS-AP-MW-16D	COND	Conductivity	9/12/2023 10:24	491.12	uS/cm
APCO GS-AP-MW-16D	DO	DO	9/12/2023 10:24	0.29	mg/L
APCO GS-AP-MW-16D	DTW	Depth to Water Detail	9/12/2023 10:24	147.23	ft
APCO GS-AP-MW-16D	ORP	Oxidation Reduction Potential	9/12/2023 10:24	-13.64	mv
APCO GS-AP-MW-16D	PH	pH	9/12/2023 10:24	8.1	SU
APCO GS-AP-MW-16D	TEMP	Temperature	9/12/2023 10:24	19.32	C
APCO GS-AP-MW-16D	TURB	Turbidity	9/12/2023 10:24	6.31	NTU
APCO GS-AP-MW-16D	COND	Conductivity	9/12/2023 10:29	479.81	uS/cm
APCO GS-AP-MW-16D	DO	DO	9/12/2023 10:29	0.21	mg/L
APCO GS-AP-MW-16D	DTW	Depth to Water Detail	9/12/2023 10:29	149.82	ft
APCO GS-AP-MW-16D	ORP	Oxidation Reduction Potential	9/12/2023 10:29	-35.5	mv
APCO GS-AP-MW-16D	PH	pH	9/12/2023 10:29	7.53	SU
APCO GS-AP-MW-16D	TEMP	Temperature	9/12/2023 10:29	19.17	C
APCO GS-AP-MW-16D	TURB	Turbidity	9/12/2023 10:29	4.69	NTU
APCO GS-AP-MW-16D	COND	Conductivity	9/12/2023 10:34	471.1	uS/cm
APCO GS-AP-MW-16D	DO	DO	9/12/2023 10:34	0.18	mg/L
APCO GS-AP-MW-16D	DTW	Depth to Water Detail	9/12/2023 10:34	151.4	ft
APCO GS-AP-MW-16D	ORP	Oxidation Reduction Potential	9/12/2023 10:34	-52.28	mv
APCO GS-AP-MW-16D	PH	pH	9/12/2023 10:34	7.32	SU
APCO GS-AP-MW-16D	TEMP	Temperature	9/12/2023 10:34	18.98	C
APCO GS-AP-MW-16D	TURB	Turbidity	9/12/2023 10:34	4.3	NTU
APCO GS-AP-MW-16D	COND	Conductivity	9/12/2023 10:39	463.92	uS/cm
APCO GS-AP-MW-16D	DO	DO	9/12/2023 10:39	0.15	mg/L
APCO GS-AP-MW-16D	DTW	Depth to Water Detail	9/12/2023 10:39	152.56	ft
APCO GS-AP-MW-16D	ORP	Oxidation Reduction Potential	9/12/2023 10:39	-58.46	mv
APCO GS-AP-MW-16D	PH	pH	9/12/2023 10:39	7.22	SU
APCO GS-AP-MW-16D	TEMP	Temperature	9/12/2023 10:39	18.98	C
APCO GS-AP-MW-16D	TURB	Turbidity	9/12/2023 10:39	3.87	NTU
APCO GS-AP-MW-16D	COND	Conductivity	9/12/2023 10:44	459.9	uS/cm
APCO GS-AP-MW-16D	DO	DO	9/12/2023 10:44	0.19	mg/L
APCO GS-AP-MW-16D	DTW	Depth to Water Detail	9/12/2023 10:44	152.76	ft
APCO GS-AP-MW-16D	ORP	Oxidation Reduction Potential	9/12/2023 10:44	-63.77	mv
APCO GS-AP-MW-16D	PH	pH	9/12/2023 10:44	7.19	SU
APCO GS-AP-MW-16D	TEMP	Temperature	9/12/2023 10:44	20.18	C
APCO GS-AP-MW-16D	TURB	Turbidity	9/12/2023 10:44	3.47	NTU
APCO GS-AP-MW-16D	COND	Conductivity	9/12/2023 10:49	453.39	uS/cm
APCO GS-AP-MW-16D	DO	DO	9/12/2023 10:49	0.19	mg/L
APCO GS-AP-MW-16D	DTW	Depth to Water Detail	9/12/2023 10:49	152.87	ft
APCO GS-AP-MW-16D	ORP	Oxidation Reduction Potential	9/12/2023 10:49	-67.54	mv
APCO GS-AP-MW-16D	PH	pH	9/12/2023 10:49	7.2	SU
APCO GS-AP-MW-16D	TEMP	Temperature	9/12/2023 10:49	19.99	C
APCO GS-AP-MW-16D	TURB	Turbidity	9/12/2023 10:49	3.23	NTU
APCO GS-AP-MW-16D	COND	Conductivity	9/12/2023 10:54	449.81	uS/cm
APCO GS-AP-MW-16D	DO	DO	9/12/2023 10:54	0.18	mg/L
APCO GS-AP-MW-16D	DTW	Depth to Water Detail	9/12/2023 10:54	152.99	ft
APCO GS-AP-MW-16D	ORP	Oxidation Reduction Potential	9/12/2023 10:54	-70.73	mv
APCO GS-AP-MW-16D	PH	pH	9/12/2023 10:54	7.22	SU
APCO GS-AP-MW-16D	SULFIDE	Sulfide	9/12/2023 10:54	0	mg/L
APCO GS-AP-MW-16D	TEMP	Temperature	9/12/2023 10:54	20.05	C
APCO GS-AP-MW-16D	TURB	Turbidity	9/12/2023 10:54	3.12	NTU
APCO GS-AP-MW-16S	COND	Conductivity	9/12/2023 9:03	5388.6	uS/cm
APCO GS-AP-MW-16S	DO	DO	9/12/2023 9:03	3.67	mg/L
APCO GS-AP-MW-16S	DTW	Depth to Water Detail	9/12/2023 9:03	60.56	ft
APCO GS-AP-MW-16S	ORP	Oxidation Reduction Potential	9/12/2023 9:03	-69.04	mv
APCO GS-AP-MW-16S	PH	pH	9/12/2023 9:03	12.07	SU
APCO GS-AP-MW-16S	TEMP	Temperature	9/12/2023 9:03	18.46	C
APCO GS-AP-MW-16S	TURB	Turbidity	9/12/2023 9:03	2.32	NTU
APCO GS-AP-MW-16S	COND	Conductivity	9/12/2023 9:08	5220.1	uS/cm
APCO GS-AP-MW-16S	DO	DO	9/12/2023 9:08	3.4	mg/L
APCO GS-AP-MW-16S	DTW	Depth to Water Detail	9/12/2023 9:08	61.12	ft

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO GS-AP-MW-16S	ORP	Oxidation Reduction Potential	9/12/2023 9:08	-77.22	mv
APCO GS-AP-MW-16S	PH	pH	9/12/2023 9:08	12.1	SU
APCO GS-AP-MW-16S	TEMP	Temperature	9/12/2023 9:08	18.59	C
APCO GS-AP-MW-16S	TURB	Turbidity	9/12/2023 9:08	2.12	NTU
APCO GS-AP-MW-16S	COND	Conductivity	9/12/2023 9:13	4677.53	uS/cm
APCO GS-AP-MW-16S	DO	DO	9/12/2023 9:13	2.17	mg/L
APCO GS-AP-MW-16S	DTW	Depth to Water Detail	9/12/2023 9:13	61.12	ft
APCO GS-AP-MW-16S	ORP	Oxidation Reduction Potential	9/12/2023 9:13	-84.42	mv
APCO GS-AP-MW-16S	PH	pH	9/12/2023 9:13	12.12	SU
APCO GS-AP-MW-16S	TEMP	Temperature	9/12/2023 9:13	18.82	C
APCO GS-AP-MW-16S	TURB	Turbidity	9/12/2023 9:13	1.48	NTU
APCO GS-AP-MW-16S	COND	Conductivity	9/12/2023 9:18	4382.08	uS/cm
APCO GS-AP-MW-16S	DO	DO	9/12/2023 9:18	1.45	mg/L
APCO GS-AP-MW-16S	DTW	Depth to Water Detail	9/12/2023 9:18	61.01	ft
APCO GS-AP-MW-16S	ORP	Oxidation Reduction Potential	9/12/2023 9:18	-90.94	mv
APCO GS-AP-MW-16S	PH	pH	9/12/2023 9:18	12.17	SU
APCO GS-AP-MW-16S	TEMP	Temperature	9/12/2023 9:18	18.77	C
APCO GS-AP-MW-16S	TURB	Turbidity	9/12/2023 9:18	1.65	NTU
APCO GS-AP-MW-16S	COND	Conductivity	9/12/2023 9:23	4213.39	uS/cm
APCO GS-AP-MW-16S	DO	DO	9/12/2023 9:23	1.04	mg/L
APCO GS-AP-MW-16S	DTW	Depth to Water Detail	9/12/2023 9:23	60.89	ft
APCO GS-AP-MW-16S	ORP	Oxidation Reduction Potential	9/12/2023 9:23	-95.2	mv
APCO GS-AP-MW-16S	PH	pH	9/12/2023 9:23	12.2	SU
APCO GS-AP-MW-16S	TEMP	Temperature	9/12/2023 9:23	18.78	C
APCO GS-AP-MW-16S	TURB	Turbidity	9/12/2023 9:23	1.09	NTU
APCO GS-AP-MW-16S	COND	Conductivity	9/12/2023 9:28	4057.1	uS/cm
APCO GS-AP-MW-16S	DO	DO	9/12/2023 9:28	0.78	mg/L
APCO GS-AP-MW-16S	DTW	Depth to Water Detail	9/12/2023 9:28	60.82	ft
APCO GS-AP-MW-16S	ORP	Oxidation Reduction Potential	9/12/2023 9:28	-97.94	mv
APCO GS-AP-MW-16S	PH	pH	9/12/2023 9:28	12.2	SU
APCO GS-AP-MW-16S	TEMP	Temperature	9/12/2023 9:28	18.85	C
APCO GS-AP-MW-16S	TURB	Turbidity	9/12/2023 9:28	1.04	NTU
APCO GS-AP-MW-16S	COND	Conductivity	9/12/2023 9:33	3993.43	uS/cm
APCO GS-AP-MW-16S	DO	DO	9/12/2023 9:33	0.66	mg/L
APCO GS-AP-MW-16S	DTW	Depth to Water Detail	9/12/2023 9:33	60.82	ft
APCO GS-AP-MW-16S	ORP	Oxidation Reduction Potential	9/12/2023 9:33	-100.07	mv
APCO GS-AP-MW-16S	PH	pH	9/12/2023 9:33	12.2	SU
APCO GS-AP-MW-16S	TEMP	Temperature	9/12/2023 9:33	18.91	C
APCO GS-AP-MW-16S	TURB	Turbidity	9/12/2023 9:33	1.16	NTU
APCO GS-AP-MW-16S	COND	Conductivity	9/12/2023 9:38	3933.18	uS/cm
APCO GS-AP-MW-16S	DO	DO	9/12/2023 9:38	0.63	mg/L
APCO GS-AP-MW-16S	DTW	Depth to Water Detail	9/12/2023 9:38	60.82	ft
APCO GS-AP-MW-16S	ORP	Oxidation Reduction Potential	9/12/2023 9:38	-101.8	mv
APCO GS-AP-MW-16S	PH	pH	9/12/2023 9:38	12.19	SU
APCO GS-AP-MW-16S	TEMP	Temperature	9/12/2023 9:38	18.91	C
APCO GS-AP-MW-16S	TURB	Turbidity	9/12/2023 9:38	1.11	NTU
APCO GS-AP-MW-16S	COND	Conductivity	9/12/2023 9:43	3869.21	uS/cm
APCO GS-AP-MW-16S	DO	DO	9/12/2023 9:43	0.62	mg/L
APCO GS-AP-MW-16S	DTW	Depth to Water Detail	9/12/2023 9:43	60.82	ft
APCO GS-AP-MW-16S	ORP	Oxidation Reduction Potential	9/12/2023 9:43	-103.92	mv
APCO GS-AP-MW-16S	PH	pH	9/12/2023 9:43	12.2	SU
APCO GS-AP-MW-16S	SULFIDE	Sulfide	9/12/2023 9:43	0	mg/L
APCO GS-AP-MW-16S	TEMP	Temperature	9/12/2023 9:43	18.79	C
APCO GS-AP-MW-16S	TURB	Turbidity	9/12/2023 9:43	1.08	NTU
APCO GS-AP-MW-17	COND	Conductivity	9/11/2023 13:51	804.75	uS/cm
APCO GS-AP-MW-17	DO	DO	9/11/2023 13:51	0.77	mg/L
APCO GS-AP-MW-17	DTW	Depth to Water Detail	9/11/2023 13:51	181.22	ft
APCO GS-AP-MW-17	ORP	Oxidation Reduction Potential	9/11/2023 13:51	-86.14	mv
APCO GS-AP-MW-17	PH	pH	9/11/2023 13:51	7.97	SU
APCO GS-AP-MW-17	TEMP	Temperature	9/11/2023 13:51	21.82	C
APCO GS-AP-MW-17	TURB	Turbidity	9/11/2023 13:51	1.63	NTU
APCO GS-AP-MW-17	COND	Conductivity	9/11/2023 13:56	834.34	uS/cm
APCO GS-AP-MW-17	DO	DO	9/11/2023 13:56	0.36	mg/L
APCO GS-AP-MW-17	DTW	Depth to Water Detail	9/11/2023 13:56	181.22	ft

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO GS-AP-MW-17	ORP	Oxidation Reduction Potential	9/11/2023 13:56	-115.46	mv
APCO GS-AP-MW-17	PH	pH	9/11/2023 13:56	8.13	SU
APCO GS-AP-MW-17	TEMP	Temperature	9/11/2023 13:56	21.66	C
APCO GS-AP-MW-17	TURB	Turbidity	9/11/2023 13:56	1.54	NTU
APCO GS-AP-MW-17	COND	Conductivity	9/11/2023 14:01	826.34	uS/cm
APCO GS-AP-MW-17	DO	DO	9/11/2023 14:01	0.32	mg/L
APCO GS-AP-MW-17	DTW	Depth to Water Detail	9/11/2023 14:01	181.22	ft
APCO GS-AP-MW-17	ORP	Oxidation Reduction Potential	9/11/2023 14:01	-125.89	mv
APCO GS-AP-MW-17	PH	pH	9/11/2023 14:01	8.15	SU
APCO GS-AP-MW-17	TEMP	Temperature	9/11/2023 14:01	22.13	C
APCO GS-AP-MW-17	TURB	Turbidity	9/11/2023 14:01	1.29	NTU
APCO GS-AP-MW-17	COND	Conductivity	9/11/2023 14:06	800.15	uS/cm
APCO GS-AP-MW-17	DO	DO	9/11/2023 14:06	0.32	mg/L
APCO GS-AP-MW-17	DTW	Depth to Water Detail	9/11/2023 14:06	181.22	ft
APCO GS-AP-MW-17	ORP	Oxidation Reduction Potential	9/11/2023 14:06	-130.18	mv
APCO GS-AP-MW-17	PH	pH	9/11/2023 14:06	8.19	SU
APCO GS-AP-MW-17	SULFIDE	Sulfide	9/11/2023 14:06	0	mg/L
APCO GS-AP-MW-17	TEMP	Temperature	9/11/2023 14:06	21.81	C
APCO GS-AP-MW-17	TURB	Turbidity	9/11/2023 14:06	1.31	NTU
APCO GS-AP-MW-17V	COND	Conductivity	9/11/2023 12:17	557.29	uS/cm
APCO GS-AP-MW-17V	DO	DO	9/11/2023 12:17	0.17	mg/L
APCO GS-AP-MW-17V	DTW	Depth to Water Detail	9/11/2023 12:17	112.25	ft
APCO GS-AP-MW-17V	ORP	Oxidation Reduction Potential	9/11/2023 12:17	-108.49	mv
APCO GS-AP-MW-17V	PH	pH	9/11/2023 12:17	7.56	SU
APCO GS-AP-MW-17V	TEMP	Temperature	9/11/2023 12:17	19.41	C
APCO GS-AP-MW-17V	TURB	Turbidity	9/11/2023 12:17	3.46	NTU
APCO GS-AP-MW-17V	COND	Conductivity	9/11/2023 12:22	554.21	uS/cm
APCO GS-AP-MW-17V	DO	DO	9/11/2023 12:22	0.13	mg/L
APCO GS-AP-MW-17V	DTW	Depth to Water Detail	9/11/2023 12:22	113.4	ft
APCO GS-AP-MW-17V	ORP	Oxidation Reduction Potential	9/11/2023 12:22	-128.22	mv
APCO GS-AP-MW-17V	PH	pH	9/11/2023 12:22	7.59	SU
APCO GS-AP-MW-17V	TEMP	Temperature	9/11/2023 12:22	19.52	C
APCO GS-AP-MW-17V	TURB	Turbidity	9/11/2023 12:22	2.38	NTU
APCO GS-AP-MW-17V	COND	Conductivity	9/11/2023 12:27	549	uS/cm
APCO GS-AP-MW-17V	DO	DO	9/11/2023 12:27	0.11	mg/L
APCO GS-AP-MW-17V	DTW	Depth to Water Detail	9/11/2023 12:27	115.3	ft
APCO GS-AP-MW-17V	ORP	Oxidation Reduction Potential	9/11/2023 12:27	-137.77	mv
APCO GS-AP-MW-17V	PH	pH	9/11/2023 12:27	7.63	SU
APCO GS-AP-MW-17V	TEMP	Temperature	9/11/2023 12:27	19.4	C
APCO GS-AP-MW-17V	TURB	Turbidity	9/11/2023 12:27	1.61	NTU
APCO GS-AP-MW-17V	COND	Conductivity	9/11/2023 12:32	547.4	uS/cm
APCO GS-AP-MW-17V	DO	DO	9/11/2023 12:32	0.1	mg/L
APCO GS-AP-MW-17V	DTW	Depth to Water Detail	9/11/2023 12:32	117.4	ft
APCO GS-AP-MW-17V	ORP	Oxidation Reduction Potential	9/11/2023 12:32	-145.21	mv
APCO GS-AP-MW-17V	PH	pH	9/11/2023 12:32	7.66	SU
APCO GS-AP-MW-17V	TEMP	Temperature	9/11/2023 12:32	19.28	C
APCO GS-AP-MW-17V	TURB	Turbidity	9/11/2023 12:32	1.95	NTU
APCO GS-AP-MW-17V	COND	Conductivity	9/11/2023 12:37	542.93	uS/cm
APCO GS-AP-MW-17V	DO	DO	9/11/2023 12:37	0.09	mg/L
APCO GS-AP-MW-17V	DTW	Depth to Water Detail	9/11/2023 12:37	119.12	ft
APCO GS-AP-MW-17V	ORP	Oxidation Reduction Potential	9/11/2023 12:37	-148.25	mv
APCO GS-AP-MW-17V	PH	pH	9/11/2023 12:37	7.67	SU
APCO GS-AP-MW-17V	TEMP	Temperature	9/11/2023 12:37	19.34	C
APCO GS-AP-MW-17V	TURB	Turbidity	9/11/2023 12:37	4.79	NTU
APCO GS-AP-MW-17V	COND	Conductivity	9/11/2023 12:42	539.82	uS/cm
APCO GS-AP-MW-17V	DO	DO	9/11/2023 12:42	0.09	mg/L
APCO GS-AP-MW-17V	DTW	Depth to Water Detail	9/11/2023 12:42	120.82	ft
APCO GS-AP-MW-17V	ORP	Oxidation Reduction Potential	9/11/2023 12:42	-148.11	mv
APCO GS-AP-MW-17V	PH	pH	9/11/2023 12:42	7.65	SU
APCO GS-AP-MW-17V	TEMP	Temperature	9/11/2023 12:42	19.49	C
APCO GS-AP-MW-17V	TURB	Turbidity	9/11/2023 12:42	1.44	NTU
APCO GS-AP-MW-17V	COND	Conductivity	9/11/2023 12:47	532.69	uS/cm
APCO GS-AP-MW-17V	DO	DO	9/11/2023 12:47	0.08	mg/L
APCO GS-AP-MW-17V	DTW	Depth to Water Detail	9/11/2023 12:47	122.2	ft

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO GS-AP-MW-17V	ORP	Oxidation Reduction Potential	9/11/2023 12:47	-150.07	mv
APCO GS-AP-MW-17V	PH	pH	9/11/2023 12:47	7.67	SU
APCO GS-AP-MW-17V	TEMP	Temperature	9/11/2023 12:47	18.76	C
APCO GS-AP-MW-17V	TURB	Turbidity	9/11/2023 12:47	1.87	NTU
APCO GS-AP-MW-17V	COND	Conductivity	9/11/2023 12:52	536.63	uS/cm
APCO GS-AP-MW-17V	DO	DO	9/11/2023 12:52	0.15	mg/L
APCO GS-AP-MW-17V	DTW	Depth to Water Detail	9/11/2023 12:52	122.4	ft
APCO GS-AP-MW-17V	ORP	Oxidation Reduction Potential	9/11/2023 12:52	-145.4	mv
APCO GS-AP-MW-17V	PH	pH	9/11/2023 12:52	7.66	SU
APCO GS-AP-MW-17V	TEMP	Temperature	9/11/2023 12:52	20	C
APCO GS-AP-MW-17V	TURB	Turbidity	9/11/2023 12:52	1.49	NTU
APCO GS-AP-MW-17V	COND	Conductivity	9/11/2023 12:57	535.9	uS/cm
APCO GS-AP-MW-17V	DO	DO	9/11/2023 12:57	0.15	mg/L
APCO GS-AP-MW-17V	DTW	Depth to Water Detail	9/11/2023 12:57	122.62	ft
APCO GS-AP-MW-17V	ORP	Oxidation Reduction Potential	9/11/2023 12:57	-144.9	mv
APCO GS-AP-MW-17V	PH	pH	9/11/2023 12:57	7.64	SU
APCO GS-AP-MW-17V	TEMP	Temperature	9/11/2023 12:57	21.13	C
APCO GS-AP-MW-17V	TURB	Turbidity	9/11/2023 12:57	1.32	NTU
APCO GS-AP-MW-17V	COND	Conductivity	9/11/2023 13:02	534.44	uS/cm
APCO GS-AP-MW-17V	DO	DO	9/11/2023 13:02	0.15	mg/L
APCO GS-AP-MW-17V	DTW	Depth to Water Detail	9/11/2023 13:02	122.68	ft
APCO GS-AP-MW-17V	ORP	Oxidation Reduction Potential	9/11/2023 13:02	-143.04	mv
APCO GS-AP-MW-17V	PH	pH	9/11/2023 13:02	7.63	SU
APCO GS-AP-MW-17V	TEMP	Temperature	9/11/2023 13:02	21.29	C
APCO GS-AP-MW-17V	TURB	Turbidity	9/11/2023 13:02	1.53	NTU
APCO GS-AP-MW-17V	COND	Conductivity	9/11/2023 13:07	529.9	uS/cm
APCO GS-AP-MW-17V	DO	DO	9/11/2023 13:07	0.15	mg/L
APCO GS-AP-MW-17V	DTW	Depth to Water Detail	9/11/2023 13:07	122.78	ft
APCO GS-AP-MW-17V	ORP	Oxidation Reduction Potential	9/11/2023 13:07	-140.78	mv
APCO GS-AP-MW-17V	PH	pH	9/11/2023 13:07	7.61	SU
APCO GS-AP-MW-17V	SULFIDE	Sulfide	9/11/2023 13:07	0	mg/L
APCO GS-AP-MW-17V	TEMP	Temperature	9/11/2023 13:07	21.32	C
APCO GS-AP-MW-17V	TURB	Turbidity	9/11/2023 13:07	1.64	NTU
APCO GS-AP-MW-18R	COND	Conductivity	9/19/2023 16:23	337.49	uS/cm
APCO GS-AP-MW-18R	DO	DO	9/19/2023 16:23	0.14	mg/L
APCO GS-AP-MW-18R	DTW	Depth to Water Detail	9/19/2023 16:23	41.38	ft
APCO GS-AP-MW-18R	ORP	Oxidation Reduction Potential	9/19/2023 16:23	-32.54	mv
APCO GS-AP-MW-18R	PH	pH	9/19/2023 16:23	6.63	SU
APCO GS-AP-MW-18R	TEMP	Temperature	9/19/2023 16:23	17.63	C
APCO GS-AP-MW-18R	TURB	Turbidity	9/19/2023 16:23	4.89	NTU
APCO GS-AP-MW-18R	COND	Conductivity	9/19/2023 16:28	315.86	uS/cm
APCO GS-AP-MW-18R	DO	DO	9/19/2023 16:28	0.11	mg/L
APCO GS-AP-MW-18R	DTW	Depth to Water Detail	9/19/2023 16:28	41.38	ft
APCO GS-AP-MW-18R	ORP	Oxidation Reduction Potential	9/19/2023 16:28	-31.15	mv
APCO GS-AP-MW-18R	PH	pH	9/19/2023 16:28	6.52	SU
APCO GS-AP-MW-18R	TEMP	Temperature	9/19/2023 16:28	17.61	C
APCO GS-AP-MW-18R	TURB	Turbidity	9/19/2023 16:28	2.84	NTU
APCO GS-AP-MW-18R	COND	Conductivity	9/19/2023 16:33	299.45	uS/cm
APCO GS-AP-MW-18R	DO	DO	9/19/2023 16:33	0.1	mg/L
APCO GS-AP-MW-18R	DTW	Depth to Water Detail	9/19/2023 16:33	41.38	ft
APCO GS-AP-MW-18R	ORP	Oxidation Reduction Potential	9/19/2023 16:33	-27.46	mv
APCO GS-AP-MW-18R	PH	pH	9/19/2023 16:33	6.45	SU
APCO GS-AP-MW-18R	TEMP	Temperature	9/19/2023 16:33	17.57	C
APCO GS-AP-MW-18R	TURB	Turbidity	9/19/2023 16:33	2.96	NTU
APCO GS-AP-MW-18R	COND	Conductivity	9/19/2023 16:38	292.61	uS/cm
APCO GS-AP-MW-18R	DO	DO	9/19/2023 16:38	0.11	mg/L
APCO GS-AP-MW-18R	DTW	Depth to Water Detail	9/19/2023 16:38	41.38	ft
APCO GS-AP-MW-18R	ORP	Oxidation Reduction Potential	9/19/2023 16:38	-26.25	mv
APCO GS-AP-MW-18R	PH	pH	9/19/2023 16:38	6.41	SU
APCO GS-AP-MW-18R	TEMP	Temperature	9/19/2023 16:38	17.55	C
APCO GS-AP-MW-18R	TURB	Turbidity	9/19/2023 16:38	1.56	NTU
APCO GS-AP-MW-18R	COND	Conductivity	9/19/2023 16:43	287.43	uS/cm
APCO GS-AP-MW-18R	DO	DO	9/19/2023 16:43	0.15	mg/L
APCO GS-AP-MW-18R	DTW	Depth to Water Detail	9/19/2023 16:43	41.38	ft

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO GS-AP-MW-18R	ORP	Oxidation Reduction Potential	9/19/2023 16:43	-24.89	mv
APCO GS-AP-MW-18R	PH	pH	9/19/2023 16:43	6.39	SU
APCO GS-AP-MW-18R	SULFIDE	Sulfide	9/19/2023 16:43	0	mg/L
APCO GS-AP-MW-18R	TEMP	Temperature	9/19/2023 16:43	17.53	C
APCO GS-AP-MW-18R	TURB	Turbidity	9/19/2023 16:43	1.32	NTU
APCO GS-AP-MW-18VR	COND	Conductivity	9/19/2023 8:42	390.53	uS/cm
APCO GS-AP-MW-18VR	DO	DO	9/19/2023 8:42	0.08	mg/L
APCO GS-AP-MW-18VR	DTW	Depth to Water Detail	9/19/2023 8:42	193.8	ft
APCO GS-AP-MW-18VR	ORP	Oxidation Reduction Potential	9/19/2023 8:42	-130.22	mv
APCO GS-AP-MW-18VR	PH	pH	9/19/2023 8:42	8.1	SU
APCO GS-AP-MW-18VR	TEMP	Temperature	9/19/2023 8:42	17.41	C
APCO GS-AP-MW-18VR	TURB	Turbidity	9/19/2023 8:42	1.39	NTU
APCO GS-AP-MW-18VR	COND	Conductivity	9/19/2023 8:47	390.33	uS/cm
APCO GS-AP-MW-18VR	DO	DO	9/19/2023 8:47	0.09	mg/L
APCO GS-AP-MW-18VR	DTW	Depth to Water Detail	9/19/2023 8:47	194.1	ft
APCO GS-AP-MW-18VR	ORP	Oxidation Reduction Potential	9/19/2023 8:47	-152.55	mv
APCO GS-AP-MW-18VR	PH	pH	9/19/2023 8:47	8.11	SU
APCO GS-AP-MW-18VR	TEMP	Temperature	9/19/2023 8:47	17.39	C
APCO GS-AP-MW-18VR	TURB	Turbidity	9/19/2023 8:47	1.66	NTU
APCO GS-AP-MW-18VR	COND	Conductivity	9/19/2023 8:52	389.06	uS/cm
APCO GS-AP-MW-18VR	DO	DO	9/19/2023 8:52	0.04	mg/L
APCO GS-AP-MW-18VR	DTW	Depth to Water Detail	9/19/2023 8:52	194.1	ft
APCO GS-AP-MW-18VR	ORP	Oxidation Reduction Potential	9/19/2023 8:52	-169.78	mv
APCO GS-AP-MW-18VR	PH	pH	9/19/2023 8:52	8.19	SU
APCO GS-AP-MW-18VR	TEMP	Temperature	9/19/2023 8:52	17.49	C
APCO GS-AP-MW-18VR	TURB	Turbidity	9/19/2023 8:52	1.53	NTU
APCO GS-AP-MW-18VR	COND	Conductivity	9/19/2023 8:57	388.4	uS/cm
APCO GS-AP-MW-18VR	DO	DO	9/19/2023 8:57	0.03	mg/L
APCO GS-AP-MW-18VR	DTW	Depth to Water Detail	9/19/2023 8:57	194.1	ft
APCO GS-AP-MW-18VR	ORP	Oxidation Reduction Potential	9/19/2023 8:57	-175.83	mv
APCO GS-AP-MW-18VR	PH	pH	9/19/2023 8:57	8.15	SU
APCO GS-AP-MW-18VR	SULFIDE	Sulfide	9/19/2023 8:57	0	mg/L
APCO GS-AP-MW-18VR	TEMP	Temperature	9/19/2023 8:57	17.48	C
APCO GS-AP-MW-18VR	TURB	Turbidity	9/19/2023 8:57	1.38	NTU
APCO GS-AP-MW-19	COND	Conductivity	9/19/2023 7:31	487.14	uS/cm
APCO GS-AP-MW-19	DO	DO	9/19/2023 7:31	0.13	mg/L
APCO GS-AP-MW-19	DTW	Depth to Water Detail	9/19/2023 7:31	111.18	ft
APCO GS-AP-MW-19	ORP	Oxidation Reduction Potential	9/19/2023 7:31	-85.67	mv
APCO GS-AP-MW-19	PH	pH	9/19/2023 7:31	7.58	SU
APCO GS-AP-MW-19	TEMP	Temperature	9/19/2023 7:31	17.15	C
APCO GS-AP-MW-19	TURB	Turbidity	9/19/2023 7:31	1.12	NTU
APCO GS-AP-MW-19	COND	Conductivity	9/19/2023 7:36	488.66	uS/cm
APCO GS-AP-MW-19	DO	DO	9/19/2023 7:36	0.09	mg/L
APCO GS-AP-MW-19	DTW	Depth to Water Detail	9/19/2023 7:36	111.18	ft
APCO GS-AP-MW-19	ORP	Oxidation Reduction Potential	9/19/2023 7:36	-137.62	mv
APCO GS-AP-MW-19	PH	pH	9/19/2023 7:36	7.58	SU
APCO GS-AP-MW-19	TEMP	Temperature	9/19/2023 7:36	17.12	C
APCO GS-AP-MW-19	TURB	Turbidity	9/19/2023 7:36	1.54	NTU
APCO GS-AP-MW-19	COND	Conductivity	9/19/2023 7:41	488.03	uS/cm
APCO GS-AP-MW-19	DO	DO	9/19/2023 7:41	0.07	mg/L
APCO GS-AP-MW-19	DTW	Depth to Water Detail	9/19/2023 7:41	111.18	ft
APCO GS-AP-MW-19	ORP	Oxidation Reduction Potential	9/19/2023 7:41	-144.95	mv
APCO GS-AP-MW-19	PH	pH	9/19/2023 7:41	7.35	SU
APCO GS-AP-MW-19	TEMP	Temperature	9/19/2023 7:41	17.11	C
APCO GS-AP-MW-19	TURB	Turbidity	9/19/2023 7:41	1.8	NTU
APCO GS-AP-MW-19	COND	Conductivity	9/19/2023 7:46	484.81	uS/cm
APCO GS-AP-MW-19	DO	DO	9/19/2023 7:46	0.06	mg/L
APCO GS-AP-MW-19	DTW	Depth to Water Detail	9/19/2023 7:46	111.18	ft
APCO GS-AP-MW-19	ORP	Oxidation Reduction Potential	9/19/2023 7:46	-147.01	mv
APCO GS-AP-MW-19	PH	pH	9/19/2023 7:46	7.33	SU
APCO GS-AP-MW-19	TEMP	Temperature	9/19/2023 7:46	17.11	C
APCO GS-AP-MW-19	TURB	Turbidity	9/19/2023 7:46	2.12	NTU
APCO GS-AP-MW-19	COND	Conductivity	9/19/2023 7:51	481.23	uS/cm
APCO GS-AP-MW-19	DO	DO	9/19/2023 7:51	0.05	mg/L

Plant Gorgas Ash Pond
Field Parameter Summary

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO GS-AP-MW-19	DTW	Depth to Water Detail	9/19/2023 7:51	111.18	ft
APCO GS-AP-MW-19	ORP	Oxidation Reduction Potential	9/19/2023 7:51	-146.08	mv
APCO GS-AP-MW-19	PH	pH	9/19/2023 7:51	7.3	SU
APCO GS-AP-MW-19	SULFIDE	Sulfide	9/19/2023 7:51	0	mg/L
APCO GS-AP-MW-19	TEMP	Temperature	9/19/2023 7:51	17.09	C
APCO GS-AP-MW-19	TURB	Turbidity	9/19/2023 7:51	2.49	NTU
APCO GS-AP-MW-2	COND	Conductivity	9/18/2023 16:47	590.68	uS/cm
APCO GS-AP-MW-2	DO	DO	9/18/2023 16:47	0.28	mg/L
APCO GS-AP-MW-2	DTW	Depth to Water Detail	9/18/2023 16:47	161.25	ft
APCO GS-AP-MW-2	ORP	Oxidation Reduction Potential	9/18/2023 16:47	-233.97	mv
APCO GS-AP-MW-2	PH	pH	9/18/2023 16:47	9.18	SU
APCO GS-AP-MW-2	TEMP	Temperature	9/18/2023 16:47	18.76	C
APCO GS-AP-MW-2	TURB	Turbidity	9/18/2023 16:47	1.1	NTU
APCO GS-AP-MW-2	COND	Conductivity	9/18/2023 16:52	591.15	uS/cm
APCO GS-AP-MW-2	DO	DO	9/18/2023 16:52	0.18	mg/L
APCO GS-AP-MW-2	DTW	Depth to Water Detail	9/18/2023 16:52	161.25	ft
APCO GS-AP-MW-2	ORP	Oxidation Reduction Potential	9/18/2023 16:52	-233.72	mv
APCO GS-AP-MW-2	PH	pH	9/18/2023 16:52	9.1	SU
APCO GS-AP-MW-2	TEMP	Temperature	9/18/2023 16:52	18.54	C
APCO GS-AP-MW-2	TURB	Turbidity	9/18/2023 16:52	1.1	NTU
APCO GS-AP-MW-2	COND	Conductivity	9/18/2023 16:57	590.54	uS/cm
APCO GS-AP-MW-2	DO	DO	9/18/2023 16:57	0.17	mg/L
APCO GS-AP-MW-2	DTW	Depth to Water Detail	9/18/2023 16:57	161.4	ft
APCO GS-AP-MW-2	ORP	Oxidation Reduction Potential	9/18/2023 16:57	-231.05	mv
APCO GS-AP-MW-2	PH	pH	9/18/2023 16:57	9.05	SU
APCO GS-AP-MW-2	TEMP	Temperature	9/18/2023 16:57	18.52	C
APCO GS-AP-MW-2	TURB	Turbidity	9/18/2023 16:57	1.29	NTU
APCO GS-AP-MW-2	COND	Conductivity	9/18/2023 17:02	589.03	uS/cm
APCO GS-AP-MW-2	DO	DO	9/18/2023 17:02	0.15	mg/L
APCO GS-AP-MW-2	DTW	Depth to Water Detail	9/18/2023 17:02	161.6	ft
APCO GS-AP-MW-2	ORP	Oxidation Reduction Potential	9/18/2023 17:02	-229.4	mv
APCO GS-AP-MW-2	PH	pH	9/18/2023 17:02	9.02	SU
APCO GS-AP-MW-2	TEMP	Temperature	9/18/2023 17:02	18.3	C
APCO GS-AP-MW-2	TURB	Turbidity	9/18/2023 17:02	1.44	NTU
APCO GS-AP-MW-2	COND	Conductivity	9/18/2023 17:07	588.28	uS/cm
APCO GS-AP-MW-2	DO	DO	9/18/2023 17:07	0.13	mg/L
APCO GS-AP-MW-2	DTW	Depth to Water Detail	9/18/2023 17:07	161.68	ft
APCO GS-AP-MW-2	ORP	Oxidation Reduction Potential	9/18/2023 17:07	-228.71	mv
APCO GS-AP-MW-2	PH	pH	9/18/2023 17:07	9	SU
APCO GS-AP-MW-2	SULFIDE	Sulfide	9/18/2023 17:07	1	mg/L
APCO GS-AP-MW-2	TEMP	Temperature	9/18/2023 17:07	18.34	C
APCO GS-AP-MW-2	TURB	Turbidity	9/18/2023 17:07	1.44	NTU
APCO GS-AP-MW-21	COND	Conductivity	9/5/2023 10:01	986.26	uS/cm
APCO GS-AP-MW-21	DO	DO	9/5/2023 10:01	0.69	mg/L
APCO GS-AP-MW-21	DTW	Depth to Water Detail	9/5/2023 10:01	174.11	ft
APCO GS-AP-MW-21	ORP	Oxidation Reduction Potential	9/5/2023 10:01	-91.65	mv
APCO GS-AP-MW-21	PH	pH	9/5/2023 10:01	9.75	SU
APCO GS-AP-MW-21	TEMP	Temperature	9/5/2023 10:01	21.31	C
APCO GS-AP-MW-21	TURB	Turbidity	9/5/2023 10:01	6.06	NTU
APCO GS-AP-MW-21	COND	Conductivity	9/5/2023 10:06	1013.26	uS/cm
APCO GS-AP-MW-21	DO	DO	9/5/2023 10:06	0.4	mg/L
APCO GS-AP-MW-21	DTW	Depth to Water Detail	9/5/2023 10:06	174.2	ft
APCO GS-AP-MW-21	ORP	Oxidation Reduction Potential	9/5/2023 10:06	-103.37	mv
APCO GS-AP-MW-21	PH	pH	9/5/2023 10:06	9.95	SU
APCO GS-AP-MW-21	TEMP	Temperature	9/5/2023 10:06	21.41	C
APCO GS-AP-MW-21	TURB	Turbidity	9/5/2023 10:06	6.81	NTU
APCO GS-AP-MW-21	COND	Conductivity	9/5/2023 10:11	1018.17	uS/cm
APCO GS-AP-MW-21	DO	DO	9/5/2023 10:11	0.32	mg/L
APCO GS-AP-MW-21	DTW	Depth to Water Detail	9/5/2023 10:11	174.29	ft
APCO GS-AP-MW-21	ORP	Oxidation Reduction Potential	9/5/2023 10:11	-109.41	mv
APCO GS-AP-MW-21	PH	pH	9/5/2023 10:11	9.97	SU
APCO GS-AP-MW-21	TEMP	Temperature	9/5/2023 10:11	21.53	C
APCO GS-AP-MW-21	TURB	Turbidity	9/5/2023 10:11	5.66	NTU
APCO GS-AP-MW-21	COND	Conductivity	9/5/2023 10:16	1012.17	uS/cm

Plant Gorgas Ash Pond
Field Parameter Summary

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO GS-AP-MW-21	DO	DO	9/5/2023 10:16	0.3	mg/L
APCO GS-AP-MW-21	DTW	Depth to Water Detail	9/5/2023 10:16	174.32	ft
APCO GS-AP-MW-21	ORP	Oxidation Reduction Potential	9/5/2023 10:16	-112.06	mv
APCO GS-AP-MW-21	PH	pH	9/5/2023 10:16	9.92	SU
APCO GS-AP-MW-21	TEMP	Temperature	9/5/2023 10:16	21.86	C
APCO GS-AP-MW-21	TURB	Turbidity	9/5/2023 10:16	5.34	NTU
APCO GS-AP-MW-21	COND	Conductivity	9/5/2023 10:21	990.18	uS/cm
APCO GS-AP-MW-21	DO	DO	9/5/2023 10:21	0.29	mg/L
APCO GS-AP-MW-21	DTW	Depth to Water Detail	9/5/2023 10:21	174.35	ft
APCO GS-AP-MW-21	ORP	Oxidation Reduction Potential	9/5/2023 10:21	-111.42	mv
APCO GS-AP-MW-21	PH	pH	9/5/2023 10:21	9.81	SU
APCO GS-AP-MW-21	SULFIDE	Sulfide	9/5/2023 10:21	2	mg/L
APCO GS-AP-MW-21	TEMP	Temperature	9/5/2023 10:21	21.81	C
APCO GS-AP-MW-21	TURB	Turbidity	9/5/2023 10:21	5.22	NTU
APCO GS-AP-MW-21V	COND	Conductivity	9/5/2023 11:11	2986.77	uS/cm
APCO GS-AP-MW-21V	DO	DO	9/5/2023 11:11	0.19	mg/L
APCO GS-AP-MW-21V	DTW	Depth to Water Detail	9/5/2023 11:11	185.16	ft
APCO GS-AP-MW-21V	ORP	Oxidation Reduction Potential	9/5/2023 11:11	-68.82	mv
APCO GS-AP-MW-21V	PH	pH	9/5/2023 11:11	7.45	SU
APCO GS-AP-MW-21V	TEMP	Temperature	9/5/2023 11:11	20.07	C
APCO GS-AP-MW-21V	TURB	Turbidity	9/5/2023 11:11	10.24	NTU
APCO GS-AP-MW-21V	COND	Conductivity	9/5/2023 11:16	2915.4	uS/cm
APCO GS-AP-MW-21V	DO	DO	9/5/2023 11:16	0.15	mg/L
APCO GS-AP-MW-21V	DTW	Depth to Water Detail	9/5/2023 11:16	188.9	ft
APCO GS-AP-MW-21V	ORP	Oxidation Reduction Potential	9/5/2023 11:16	-77.83	mv
APCO GS-AP-MW-21V	PH	pH	9/5/2023 11:16	7.44	SU
APCO GS-AP-MW-21V	TEMP	Temperature	9/5/2023 11:16	20.35	C
APCO GS-AP-MW-21V	TURB	Turbidity	9/5/2023 11:16	9.81	NTU
APCO GS-AP-MW-21V	COND	Conductivity	9/5/2023 11:21	2835.4	uS/cm
APCO GS-AP-MW-21V	DO	DO	9/5/2023 11:21	0.12	mg/L
APCO GS-AP-MW-21V	DTW	Depth to Water Detail	9/5/2023 11:21	191.52	ft
APCO GS-AP-MW-21V	ORP	Oxidation Reduction Potential	9/5/2023 11:21	-86.98	mv
APCO GS-AP-MW-21V	PH	pH	9/5/2023 11:21	7.47	SU
APCO GS-AP-MW-21V	TEMP	Temperature	9/5/2023 11:21	19.57	C
APCO GS-AP-MW-21V	TURB	Turbidity	9/5/2023 11:21	7.56	NTU
APCO GS-AP-MW-21V	COND	Conductivity	9/5/2023 11:26	2904.59	uS/cm
APCO GS-AP-MW-21V	DO	DO	9/5/2023 11:26	0.21	mg/L
APCO GS-AP-MW-21V	DTW	Depth to Water Detail	9/5/2023 11:26	192.66	ft
APCO GS-AP-MW-21V	ORP	Oxidation Reduction Potential	9/5/2023 11:26	-96.84	mv
APCO GS-AP-MW-21V	PH	pH	9/5/2023 11:26	7.48	SU
APCO GS-AP-MW-21V	TEMP	Temperature	9/5/2023 11:26	22.17	C
APCO GS-AP-MW-21V	TURB	Turbidity	9/5/2023 11:26	6.89	NTU
APCO GS-AP-MW-21V	COND	Conductivity	9/5/2023 11:31	2882.16	uS/cm
APCO GS-AP-MW-21V	DO	DO	9/5/2023 11:31	0.22	mg/L
APCO GS-AP-MW-21V	DTW	Depth to Water Detail	9/5/2023 11:31	193.08	ft
APCO GS-AP-MW-21V	ORP	Oxidation Reduction Potential	9/5/2023 11:31	-104.64	mv
APCO GS-AP-MW-21V	PH	pH	9/5/2023 11:31	7.49	SU
APCO GS-AP-MW-21V	TEMP	Temperature	9/5/2023 11:31	22.3	C
APCO GS-AP-MW-21V	TURB	Turbidity	9/5/2023 11:31	6.4	NTU
APCO GS-AP-MW-21V	COND	Conductivity	9/5/2023 11:36	2871.38	uS/cm
APCO GS-AP-MW-21V	DO	DO	9/5/2023 11:36	0.2	mg/L
APCO GS-AP-MW-21V	DTW	Depth to Water Detail	9/5/2023 11:36	193.71	ft
APCO GS-AP-MW-21V	ORP	Oxidation Reduction Potential	9/5/2023 11:36	-112.44	mv
APCO GS-AP-MW-21V	PH	pH	9/5/2023 11:36	7.48	SU
APCO GS-AP-MW-21V	TEMP	Temperature	9/5/2023 11:36	22.97	C
APCO GS-AP-MW-21V	TURB	Turbidity	9/5/2023 11:36	4.55	NTU
APCO GS-AP-MW-21V	COND	Conductivity	9/5/2023 11:41	2846.78	uS/cm
APCO GS-AP-MW-21V	DO	DO	9/5/2023 11:41	0.18	mg/L
APCO GS-AP-MW-21V	DTW	Depth to Water Detail	9/5/2023 11:41	194.4	ft
APCO GS-AP-MW-21V	ORP	Oxidation Reduction Potential	9/5/2023 11:41	-119.95	mv
APCO GS-AP-MW-21V	PH	pH	9/5/2023 11:41	7.49	SU
APCO GS-AP-MW-21V	TEMP	Temperature	9/5/2023 11:41	23.34	C
APCO GS-AP-MW-21V	TURB	Turbidity	9/5/2023 11:41	4.71	NTU
APCO GS-AP-MW-21V	COND	Conductivity	9/5/2023 11:46	2834.55	uS/cm

Plant Gorgas Ash Pond
Field Parameter Summary

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO GS-AP-MW-21V	DO	DO	9/5/2023 11:46	0.17	mg/L
APCO GS-AP-MW-21V	DTW	Depth to Water Detail	9/5/2023 11:46	195.1	ft
APCO GS-AP-MW-21V	ORP	Oxidation Reduction Potential	9/5/2023 11:46	-127.03	mv
APCO GS-AP-MW-21V	PH	pH	9/5/2023 11:46	7.5	SU
APCO GS-AP-MW-21V	TEMP	Temperature	9/5/2023 11:46	23.91	C
APCO GS-AP-MW-21V	TURB	Turbidity	9/5/2023 11:46	4.66	NTU
APCO GS-AP-MW-21V	COND	Conductivity	9/5/2023 11:51	2780.23	uS/cm
APCO GS-AP-MW-21V	DO	DO	9/5/2023 11:51	0.16	mg/L
APCO GS-AP-MW-21V	DTW	Depth to Water Detail	9/5/2023 11:51	195.48	ft
APCO GS-AP-MW-21V	ORP	Oxidation Reduction Potential	9/5/2023 11:51	-133.17	mv
APCO GS-AP-MW-21V	PH	pH	9/5/2023 11:51	7.53	SU
APCO GS-AP-MW-21V	TEMP	Temperature	9/5/2023 11:51	23.72	C
APCO GS-AP-MW-21V	TURB	Turbidity	9/5/2023 11:51	4.5	NTU
APCO GS-AP-MW-21V	COND	Conductivity	9/5/2023 11:56	2765.37	uS/cm
APCO GS-AP-MW-21V	DO	DO	9/5/2023 11:56	0.16	mg/L
APCO GS-AP-MW-21V	DTW	Depth to Water Detail	9/5/2023 11:56	196	ft
APCO GS-AP-MW-21V	ORP	Oxidation Reduction Potential	9/5/2023 11:56	-139.05	mv
APCO GS-AP-MW-21V	PH	pH	9/5/2023 11:56	7.54	SU
APCO GS-AP-MW-21V	TEMP	Temperature	9/5/2023 11:56	24.44	C
APCO GS-AP-MW-21V	TURB	Turbidity	9/5/2023 11:56	4.38	NTU
APCO GS-AP-MW-21V	COND	Conductivity	9/5/2023 12:01	2798.99	uS/cm
APCO GS-AP-MW-21V	DO	DO	9/5/2023 12:01	0.18	mg/L
APCO GS-AP-MW-21V	DTW	Depth to Water Detail	9/5/2023 12:01	196.38	ft
APCO GS-AP-MW-21V	ORP	Oxidation Reduction Potential	9/5/2023 12:01	-144.95	mv
APCO GS-AP-MW-21V	PH	pH	9/5/2023 12:01	7.55	SU
APCO GS-AP-MW-21V	TEMP	Temperature	9/5/2023 12:01	26.01	C
APCO GS-AP-MW-21V	TURB	Turbidity	9/5/2023 12:01	4.12	NTU
APCO GS-AP-MW-21V	COND	Conductivity	9/5/2023 12:06	2789.04	uS/cm
APCO GS-AP-MW-21V	DO	DO	9/5/2023 12:06	0.18	mg/L
APCO GS-AP-MW-21V	DTW	Depth to Water Detail	9/5/2023 12:06	196.6	ft
APCO GS-AP-MW-21V	ORP	Oxidation Reduction Potential	9/5/2023 12:06	-149.59	mv
APCO GS-AP-MW-21V	PH	pH	9/5/2023 12:06	7.56	SU
APCO GS-AP-MW-21V	TEMP	Temperature	9/5/2023 12:06	26.46	C
APCO GS-AP-MW-21V	TURB	Turbidity	9/5/2023 12:06	4.81	NTU
APCO GS-AP-MW-21V	COND	Conductivity	9/5/2023 12:11	2713.3	uS/cm
APCO GS-AP-MW-21V	DO	DO	9/5/2023 12:11	0.18	mg/L
APCO GS-AP-MW-21V	DTW	Depth to Water Detail	9/5/2023 12:11	196.8	ft
APCO GS-AP-MW-21V	ORP	Oxidation Reduction Potential	9/5/2023 12:11	-153.43	mv
APCO GS-AP-MW-21V	PH	pH	9/5/2023 12:11	7.58	SU
APCO GS-AP-MW-21V	TEMP	Temperature	9/5/2023 12:11	26.08	C
APCO GS-AP-MW-21V	TURB	Turbidity	9/5/2023 12:11	5.12	NTU
APCO GS-AP-MW-21V	COND	Conductivity	9/5/2023 12:16	2642.82	uS/cm
APCO GS-AP-MW-21V	DO	DO	9/5/2023 12:16	0.17	mg/L
APCO GS-AP-MW-21V	DTW	Depth to Water Detail	9/5/2023 12:16	197.01	ft
APCO GS-AP-MW-21V	ORP	Oxidation Reduction Potential	9/5/2023 12:16	-156.77	mv
APCO GS-AP-MW-21V	PH	pH	9/5/2023 12:16	7.59	SU
APCO GS-AP-MW-21V	TEMP	Temperature	9/5/2023 12:16	25.59	C
APCO GS-AP-MW-21V	TURB	Turbidity	9/5/2023 12:16	4.78	NTU
APCO GS-AP-MW-21V	COND	Conductivity	9/5/2023 12:21	2620.32	uS/cm
APCO GS-AP-MW-21V	DO	DO	9/5/2023 12:21	0.16	mg/L
APCO GS-AP-MW-21V	DTW	Depth to Water Detail	9/5/2023 12:21	197.18	ft
APCO GS-AP-MW-21V	ORP	Oxidation Reduction Potential	9/5/2023 12:21	-160.01	mv
APCO GS-AP-MW-21V	PH	pH	9/5/2023 12:21	7.61	SU
APCO GS-AP-MW-21V	TEMP	Temperature	9/5/2023 12:21	25.91	C
APCO GS-AP-MW-21V	TURB	Turbidity	9/5/2023 12:21	4.22	NTU
APCO GS-AP-MW-21V	COND	Conductivity	9/5/2023 12:26	2589.55	uS/cm
APCO GS-AP-MW-21V	DO	DO	9/5/2023 12:26	0.16	mg/L
APCO GS-AP-MW-21V	DTW	Depth to Water Detail	9/5/2023 12:26	197.36	ft
APCO GS-AP-MW-21V	ORP	Oxidation Reduction Potential	9/5/2023 12:26	-162.64	mv
APCO GS-AP-MW-21V	PH	pH	9/5/2023 12:26	7.61	SU
APCO GS-AP-MW-21V	TEMP	Temperature	9/5/2023 12:26	25.87	C
APCO GS-AP-MW-21V	TURB	Turbidity	9/5/2023 12:26	4.3	NTU
APCO GS-AP-MW-21V	COND	Conductivity	9/5/2023 12:31	2513.06	uS/cm
APCO GS-AP-MW-21V	DO	DO	9/5/2023 12:31	0.16	mg/L

Plant Gorgas Ash Pond
Field Parameter Summary

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO GS-AP-MW-21V	DTW	Depth to Water Detail	9/5/2023 12:31	197.49	ft
APCO GS-AP-MW-21V	ORP	Oxidation Reduction Potential	9/5/2023 12:31	-164.69	mv
APCO GS-AP-MW-21V	PH	pH	9/5/2023 12:31	7.63	SU
APCO GS-AP-MW-21V	TEMP	Temperature	9/5/2023 12:31	24.77	C
APCO GS-AP-MW-21V	TURB	Turbidity	9/5/2023 12:31	4.11	NTU
APCO GS-AP-MW-21V	COND	Conductivity	9/5/2023 12:36	2475.7	uS/cm
APCO GS-AP-MW-21V	DO	DO	9/5/2023 12:36	0.15	mg/L
APCO GS-AP-MW-21V	DTW	Depth to Water Detail	9/5/2023 12:36	197.63	ft
APCO GS-AP-MW-21V	ORP	Oxidation Reduction Potential	9/5/2023 12:36	-167.47	mv
APCO GS-AP-MW-21V	PH	pH	9/5/2023 12:36	7.65	SU
APCO GS-AP-MW-21V	TEMP	Temperature	9/5/2023 12:36	25.15	C
APCO GS-AP-MW-21V	TURB	Turbidity	9/5/2023 12:36	4.32	NTU
APCO GS-AP-MW-21V	COND	Conductivity	9/5/2023 12:41	2353.78	uS/cm
APCO GS-AP-MW-21V	DO	DO	9/5/2023 12:41	0.15	mg/L
APCO GS-AP-MW-21V	DTW	Depth to Water Detail	9/5/2023 12:41	197.82	ft
APCO GS-AP-MW-21V	ORP	Oxidation Reduction Potential	9/5/2023 12:41	-169.87	mv
APCO GS-AP-MW-21V	PH	pH	9/5/2023 12:41	7.68	SU
APCO GS-AP-MW-21V	TEMP	Temperature	9/5/2023 12:41	23.78	C
APCO GS-AP-MW-21V	TURB	Turbidity	9/5/2023 12:41	4.09	NTU
APCO GS-AP-MW-21V	COND	Conductivity	9/5/2023 12:46	2364.11	uS/cm
APCO GS-AP-MW-21V	DO	DO	9/5/2023 12:46	0.13	mg/L
APCO GS-AP-MW-21V	DTW	Depth to Water Detail	9/5/2023 12:46	197.98	ft
APCO GS-AP-MW-21V	ORP	Oxidation Reduction Potential	9/5/2023 12:46	-172.45	mv
APCO GS-AP-MW-21V	PH	pH	9/5/2023 12:46	7.68	SU
APCO GS-AP-MW-21V	TEMP	Temperature	9/5/2023 12:46	24.95	C
APCO GS-AP-MW-21V	TURB	Turbidity	9/5/2023 12:46	3.98	NTU
APCO GS-AP-MW-21V	COND	Conductivity	9/5/2023 12:51	2326.14	uS/cm
APCO GS-AP-MW-21V	DO	DO	9/5/2023 12:51	0.14	mg/L
APCO GS-AP-MW-21V	DTW	Depth to Water Detail	9/5/2023 12:51	198.1	ft
APCO GS-AP-MW-21V	ORP	Oxidation Reduction Potential	9/5/2023 12:51	-174	mv
APCO GS-AP-MW-21V	PH	pH	9/5/2023 12:51	7.68	SU
APCO GS-AP-MW-21V	SULFIDE	Sulfide	9/5/2023 12:51	0	mg/L
APCO GS-AP-MW-21V	TEMP	Temperature	9/5/2023 12:51	24.72	C
APCO GS-AP-MW-21V	TURB	Turbidity	9/5/2023 12:51	4.05	NTU
APCO GS-AP-MW-23H	COND	Conductivity	9/6/2023 10:51	764.39	uS/cm
APCO GS-AP-MW-23H	DO	DO	9/6/2023 10:51	0.64	mg/L
APCO GS-AP-MW-23H	DTW	Depth to Water Detail	9/6/2023 10:51	30.39	ft
APCO GS-AP-MW-23H	ORP	Oxidation Reduction Potential	9/6/2023 10:51	9.52	mv
APCO GS-AP-MW-23H	PH	pH	9/6/2023 10:51	5.57	SU
APCO GS-AP-MW-23H	TEMP	Temperature	9/6/2023 10:51	18.55	C
APCO GS-AP-MW-23H	TURB	Turbidity	9/6/2023 10:51	5.96	NTU
APCO GS-AP-MW-23H	COND	Conductivity	9/6/2023 10:56	764.59	uS/cm
APCO GS-AP-MW-23H	DO	DO	9/6/2023 10:56	0.61	mg/L
APCO GS-AP-MW-23H	DTW	Depth to Water Detail	9/6/2023 10:56	30.39	ft
APCO GS-AP-MW-23H	ORP	Oxidation Reduction Potential	9/6/2023 10:56	20.29	mv
APCO GS-AP-MW-23H	PH	pH	9/6/2023 10:56	5.45	SU
APCO GS-AP-MW-23H	TEMP	Temperature	9/6/2023 10:56	18.47	C
APCO GS-AP-MW-23H	TURB	Turbidity	9/6/2023 10:56	3.55	NTU
APCO GS-AP-MW-23H	COND	Conductivity	9/6/2023 11:01	768.24	uS/cm
APCO GS-AP-MW-23H	DO	DO	9/6/2023 11:01	0.47	mg/L
APCO GS-AP-MW-23H	DTW	Depth to Water Detail	9/6/2023 11:01	30.39	ft
APCO GS-AP-MW-23H	ORP	Oxidation Reduction Potential	9/6/2023 11:01	20.53	mv
APCO GS-AP-MW-23H	PH	pH	9/6/2023 11:01	5.44	SU
APCO GS-AP-MW-23H	TEMP	Temperature	9/6/2023 11:01	18.5	C
APCO GS-AP-MW-23H	TURB	Turbidity	9/6/2023 11:01	4.21	NTU
APCO GS-AP-MW-23H	COND	Conductivity	9/6/2023 11:06	768.3	uS/cm
APCO GS-AP-MW-23H	DO	DO	9/6/2023 11:06	0.37	mg/L
APCO GS-AP-MW-23H	DTW	Depth to Water Detail	9/6/2023 11:06	30.39	ft
APCO GS-AP-MW-23H	ORP	Oxidation Reduction Potential	9/6/2023 11:06	19.19	mv
APCO GS-AP-MW-23H	PH	pH	9/6/2023 11:06	5.46	SU
APCO GS-AP-MW-23H	TEMP	Temperature	9/6/2023 11:06	18.43	C
APCO GS-AP-MW-23H	TURB	Turbidity	9/6/2023 11:06	2.89	NTU
APCO GS-AP-MW-23H	COND	Conductivity	9/6/2023 11:11	768.24	uS/cm
APCO GS-AP-MW-23H	DO	DO	9/6/2023 11:11	0.32	mg/L

Plant Gorgas Ash Pond
Field Parameter Summary

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO GS-AP-MW-23H	DTW	Depth to Water Detail	9/6/2023 11:11	30.39	ft
APCO GS-AP-MW-23H	ORP	Oxidation Reduction Potential	9/6/2023 11:11	17.7	mv
APCO GS-AP-MW-23H	PH	pH	9/6/2023 11:11	5.49	SU
APCO GS-AP-MW-23H	SULFIDE	Sulfide	9/6/2023 11:11	0	mg/L
APCO GS-AP-MW-23H	TEMP	Temperature	9/6/2023 11:11	18.47	C
APCO GS-AP-MW-23H	TURB	Turbidity	9/6/2023 11:11	3.25	NTU
APCO GS-AP-MW-23V	COND	Conductivity	9/6/2023 11:52	727.03	uS/cm
APCO GS-AP-MW-23V	DO	DO	9/6/2023 11:52	0.25	mg/L
APCO GS-AP-MW-23V	DTW	Depth to Water Detail	9/6/2023 11:52	44.4	ft
APCO GS-AP-MW-23V	ORP	Oxidation Reduction Potential	9/6/2023 11:52	-77.37	mv
APCO GS-AP-MW-23V	PH	pH	9/6/2023 11:52	6.86	SU
APCO GS-AP-MW-23V	TEMP	Temperature	9/6/2023 11:52	18.03	C
APCO GS-AP-MW-23V	TURB	Turbidity	9/6/2023 11:52	2.43	NTU
APCO GS-AP-MW-23V	COND	Conductivity	9/6/2023 11:57	617.86	uS/cm
APCO GS-AP-MW-23V	DO	DO	9/6/2023 11:57	0.19	mg/L
APCO GS-AP-MW-23V	DTW	Depth to Water Detail	9/6/2023 11:57	45.21	ft
APCO GS-AP-MW-23V	ORP	Oxidation Reduction Potential	9/6/2023 11:57	-39.54	mv
APCO GS-AP-MW-23V	PH	pH	9/6/2023 11:57	6.13	SU
APCO GS-AP-MW-23V	TEMP	Temperature	9/6/2023 11:57	18.01	C
APCO GS-AP-MW-23V	TURB	Turbidity	9/6/2023 11:57	2.93	NTU
APCO GS-AP-MW-23V	COND	Conductivity	9/6/2023 12:02	591.4	uS/cm
APCO GS-AP-MW-23V	DO	DO	9/6/2023 12:02	0.17	mg/L
APCO GS-AP-MW-23V	DTW	Depth to Water Detail	9/6/2023 12:02	45.26	ft
APCO GS-AP-MW-23V	ORP	Oxidation Reduction Potential	9/6/2023 12:02	-38.47	mv
APCO GS-AP-MW-23V	PH	pH	9/6/2023 12:02	6.06	SU
APCO GS-AP-MW-23V	TEMP	Temperature	9/6/2023 12:02	17.98	C
APCO GS-AP-MW-23V	TURB	Turbidity	9/6/2023 12:02	2.18	NTU
APCO GS-AP-MW-23V	COND	Conductivity	9/6/2023 12:07	578.18	uS/cm
APCO GS-AP-MW-23V	DO	DO	9/6/2023 12:07	0.18	mg/L
APCO GS-AP-MW-23V	DTW	Depth to Water Detail	9/6/2023 12:07	45.26	ft
APCO GS-AP-MW-23V	ORP	Oxidation Reduction Potential	9/6/2023 12:07	-41.16	mv
APCO GS-AP-MW-23V	PH	pH	9/6/2023 12:07	6.07	SU
APCO GS-AP-MW-23V	TEMP	Temperature	9/6/2023 12:07	17.97	C
APCO GS-AP-MW-23V	TURB	Turbidity	9/6/2023 12:07	1.94	NTU
APCO GS-AP-MW-23V	COND	Conductivity	9/6/2023 12:12	570.87	uS/cm
APCO GS-AP-MW-23V	DO	DO	9/6/2023 12:12	0.18	mg/L
APCO GS-AP-MW-23V	DTW	Depth to Water Detail	9/6/2023 12:12	45.26	ft
APCO GS-AP-MW-23V	ORP	Oxidation Reduction Potential	9/6/2023 12:12	-45.55	mv
APCO GS-AP-MW-23V	PH	pH	9/6/2023 12:12	6.12	SU
APCO GS-AP-MW-23V	SULFIDE	Sulfide	9/6/2023 12:12	0	mg/L
APCO GS-AP-MW-23V	TEMP	Temperature	9/6/2023 12:12	17.99	C
APCO GS-AP-MW-23V	TURB	Turbidity	9/6/2023 12:12	1.86	NTU
APCO GS-AP-MW-24H	COND	Conductivity	9/6/2023 13:46	390.16	uS/cm
APCO GS-AP-MW-24H	DO	DO	9/6/2023 13:46	0.25	mg/L
APCO GS-AP-MW-24H	DTW	Depth to Water Detail	9/6/2023 13:46	6.76	ft
APCO GS-AP-MW-24H	ORP	Oxidation Reduction Potential	9/6/2023 13:46	-2.18	mv
APCO GS-AP-MW-24H	PH	pH	9/6/2023 13:46	5.59	SU
APCO GS-AP-MW-24H	TEMP	Temperature	9/6/2023 13:46	19.66	C
APCO GS-AP-MW-24H	TURB	Turbidity	9/6/2023 13:46	4.27	NTU
APCO GS-AP-MW-24H	COND	Conductivity	9/6/2023 13:51	393.21	uS/cm
APCO GS-AP-MW-24H	DO	DO	9/6/2023 13:51	0.23	mg/L
APCO GS-AP-MW-24H	DTW	Depth to Water Detail	9/6/2023 13:51	6.76	ft
APCO GS-AP-MW-24H	ORP	Oxidation Reduction Potential	9/6/2023 13:51	2.83	mv
APCO GS-AP-MW-24H	PH	pH	9/6/2023 13:51	5.51	SU
APCO GS-AP-MW-24H	TEMP	Temperature	9/6/2023 13:51	19.58	C
APCO GS-AP-MW-24H	TURB	Turbidity	9/6/2023 13:51	2.74	NTU
APCO GS-AP-MW-24H	COND	Conductivity	9/6/2023 13:56	396.04	uS/cm
APCO GS-AP-MW-24H	DO	DO	9/6/2023 13:56	0.22	mg/L
APCO GS-AP-MW-24H	DTW	Depth to Water Detail	9/6/2023 13:56	6.76	ft
APCO GS-AP-MW-24H	ORP	Oxidation Reduction Potential	9/6/2023 13:56	2.94	mv
APCO GS-AP-MW-24H	PH	pH	9/6/2023 13:56	5.53	SU
APCO GS-AP-MW-24H	TEMP	Temperature	9/6/2023 13:56	19.5	C
APCO GS-AP-MW-24H	TURB	Turbidity	9/6/2023 13:56	2.98	NTU
APCO GS-AP-MW-24H	COND	Conductivity	9/6/2023 14:01	396.88	uS/cm

Plant Gorgas Ash Pond
Field Parameter Summary

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO GS-AP-MW-24H	DO	DO	9/6/2023 14:01	0.22	mg/L
APCO GS-AP-MW-24H	DTW	Depth to Water Detail	9/6/2023 14:01	6.76	ft
APCO GS-AP-MW-24H	ORP	Oxidation Reduction Potential	9/6/2023 14:01	1.61	mv
APCO GS-AP-MW-24H	PH	pH	9/6/2023 14:01	5.56	SU
APCO GS-AP-MW-24H	SULFIDE	Sulfide	9/6/2023 14:01	0	mg/L
APCO GS-AP-MW-24H	TEMP	Temperature	9/6/2023 14:01	19.54	C
APCO GS-AP-MW-24H	TURB	Turbidity	9/6/2023 14:01	2.72	NTU
APCO GS-AP-MW-25HA	COND	Conductivity	9/18/2023 12:14	1571.24	uS/cm
APCO GS-AP-MW-25HA	DO	DO	9/18/2023 12:14		mg/L
APCO GS-AP-MW-25HA	DTW	Depth to Water Detail	9/18/2023 12:14	176.91	ft
APCO GS-AP-MW-25HA	ORP	Oxidation Reduction Potential	9/18/2023 12:14		mv
APCO GS-AP-MW-25HA	PH	pH	9/18/2023 12:14		SU
APCO GS-AP-MW-25HA	TEMP	Temperature	9/18/2023 12:14		C
APCO GS-AP-MW-25HA	TURB	Turbidity	9/18/2023 12:14	8.64	NTU
APCO GS-AP-MW-25HA	COND	Conductivity	9/18/2023 12:19	1185.75	uS/cm
APCO GS-AP-MW-25HA	DO	DO	9/18/2023 12:19	0.28	mg/L
APCO GS-AP-MW-25HA	DTW	Depth to Water Detail	9/18/2023 12:19	179.22	ft
APCO GS-AP-MW-25HA	ORP	Oxidation Reduction Potential	9/18/2023 12:19	-149.8	mv
APCO GS-AP-MW-25HA	PH	pH	9/18/2023 12:19	7.91	SU
APCO GS-AP-MW-25HA	TEMP	Temperature	9/18/2023 12:19	20.36	C
APCO GS-AP-MW-25HA	TURB	Turbidity	9/18/2023 12:19	9.12	NTU
APCO GS-AP-MW-25HA	COND	Conductivity	9/18/2023 12:24	1202.57	uS/cm
APCO GS-AP-MW-25HA	DO	DO	9/18/2023 12:24	0.13	mg/L
APCO GS-AP-MW-25HA	DTW	Depth to Water Detail	9/18/2023 12:24	179.6	ft
APCO GS-AP-MW-25HA	ORP	Oxidation Reduction Potential	9/18/2023 12:24	-195.28	mv
APCO GS-AP-MW-25HA	PH	pH	9/18/2023 12:24	8.38	SU
APCO GS-AP-MW-25HA	TEMP	Temperature	9/18/2023 12:24	21.72	C
APCO GS-AP-MW-25HA	TURB	Turbidity	9/18/2023 12:24	8.51	NTU
APCO GS-AP-MW-25HA	COND	Conductivity	9/18/2023 12:29	1101.42	uS/cm
APCO GS-AP-MW-25HA	DO	DO	9/18/2023 12:29	0.1	mg/L
APCO GS-AP-MW-25HA	DTW	Depth to Water Detail	9/18/2023 12:29	179.78	ft
APCO GS-AP-MW-25HA	ORP	Oxidation Reduction Potential	9/18/2023 12:29	-215.96	mv
APCO GS-AP-MW-25HA	PH	pH	9/18/2023 12:29	8.66	SU
APCO GS-AP-MW-25HA	TEMP	Temperature	9/18/2023 12:29	21.7	C
APCO GS-AP-MW-25HA	TURB	Turbidity	9/18/2023 12:29	7.56	NTU
APCO GS-AP-MW-25HA	COND	Conductivity	9/18/2023 12:34	1300.6	uS/cm
APCO GS-AP-MW-25HA	DO	DO	9/18/2023 12:34	0.08	mg/L
APCO GS-AP-MW-25HA	DTW	Depth to Water Detail	9/18/2023 12:34	179.93	ft
APCO GS-AP-MW-25HA	ORP	Oxidation Reduction Potential	9/18/2023 12:34	-222.29	mv
APCO GS-AP-MW-25HA	PH	pH	9/18/2023 12:34	8.75	SU
APCO GS-AP-MW-25HA	TEMP	Temperature	9/18/2023 12:34	21.36	C
APCO GS-AP-MW-25HA	TURB	Turbidity	9/18/2023 12:34	7.14	NTU
APCO GS-AP-MW-25HA	COND	Conductivity	9/18/2023 12:39	1269.2	uS/cm
APCO GS-AP-MW-25HA	DO	DO	9/18/2023 12:39	0.07	mg/L
APCO GS-AP-MW-25HA	DTW	Depth to Water Detail	9/18/2023 12:39	180.09	ft
APCO GS-AP-MW-25HA	ORP	Oxidation Reduction Potential	9/18/2023 12:39	-224.12	mv
APCO GS-AP-MW-25HA	PH	pH	9/18/2023 12:39	8.78	SU
APCO GS-AP-MW-25HA	TEMP	Temperature	9/18/2023 12:39	20.87	C
APCO GS-AP-MW-25HA	TURB	Turbidity	9/18/2023 12:39	6.22	NTU
APCO GS-AP-MW-25HA	COND	Conductivity	9/18/2023 12:44	1234.22	uS/cm
APCO GS-AP-MW-25HA	DO	DO	9/18/2023 12:44	0.06	mg/L
APCO GS-AP-MW-25HA	DTW	Depth to Water Detail	9/18/2023 12:44	180.21	ft
APCO GS-AP-MW-25HA	ORP	Oxidation Reduction Potential	9/18/2023 12:44	-227.54	mv
APCO GS-AP-MW-25HA	PH	pH	9/18/2023 12:44	8.81	SU
APCO GS-AP-MW-25HA	TEMP	Temperature	9/18/2023 12:44	21.39	C
APCO GS-AP-MW-25HA	TURB	Turbidity	9/18/2023 12:44	5.97	NTU
APCO GS-AP-MW-25HA	COND	Conductivity	9/18/2023 12:49	1332.19	uS/cm
APCO GS-AP-MW-25HA	DO	DO	9/18/2023 12:49	0.06	mg/L
APCO GS-AP-MW-25HA	DTW	Depth to Water Detail	9/18/2023 12:49	180.35	ft
APCO GS-AP-MW-25HA	ORP	Oxidation Reduction Potential	9/18/2023 12:49	-230	mv
APCO GS-AP-MW-25HA	PH	pH	9/18/2023 12:49	8.83	SU
APCO GS-AP-MW-25HA	TEMP	Temperature	9/18/2023 12:49	21.15	C
APCO GS-AP-MW-25HA	TURB	Turbidity	9/18/2023 12:49	5.78	NTU
APCO GS-AP-MW-25HA	COND	Conductivity	9/18/2023 12:54	1308.91	uS/cm

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO GS-AP-MW-25HA	DO	DO	9/18/2023 12:54	0.06	mg/L
APCO GS-AP-MW-25HA	DTW	Depth to Water Detail	9/18/2023 12:54	180.47	ft
APCO GS-AP-MW-25HA	ORP	Oxidation Reduction Potential	9/18/2023 12:54	-232.4	mv
APCO GS-AP-MW-25HA	PH	pH	9/18/2023 12:54	8.84	SU
APCO GS-AP-MW-25HA	TEMP	Temperature	9/18/2023 12:54	20.94	C
APCO GS-AP-MW-25HA	TURB	Turbidity	9/18/2023 12:54	5.55	NTU
APCO GS-AP-MW-25HA	COND	Conductivity	9/18/2023 12:59	1281.3	uS/cm
APCO GS-AP-MW-25HA	DO	DO	9/18/2023 12:59	0.05	mg/L
APCO GS-AP-MW-25HA	DTW	Depth to Water Detail	9/18/2023 12:59	180.59	ft
APCO GS-AP-MW-25HA	ORP	Oxidation Reduction Potential	9/18/2023 12:59	-234.53	mv
APCO GS-AP-MW-25HA	PH	pH	9/18/2023 12:59	8.84	SU
APCO GS-AP-MW-25HA	TEMP	Temperature	9/18/2023 12:59	21.18	C
APCO GS-AP-MW-25HA	TURB	Turbidity	9/18/2023 12:59	5.61	NTU
APCO GS-AP-MW-25HA	COND	Conductivity	9/18/2023 13:04	1124.56	uS/cm
APCO GS-AP-MW-25HA	DO	DO	9/18/2023 13:04	0.04	mg/L
APCO GS-AP-MW-25HA	DTW	Depth to Water Detail	9/18/2023 13:04	180.72	ft
APCO GS-AP-MW-25HA	ORP	Oxidation Reduction Potential	9/18/2023 13:04	-238.1	mv
APCO GS-AP-MW-25HA	PH	pH	9/18/2023 13:04	8.85	SU
APCO GS-AP-MW-25HA	TEMP	Temperature	9/18/2023 13:04	21.27	C
APCO GS-AP-MW-25HA	TURB	Turbidity	9/18/2023 13:04	5.15	NTU
APCO GS-AP-MW-25HA	COND	Conductivity	9/18/2023 13:09	1116.79	uS/cm
APCO GS-AP-MW-25HA	DO	DO	9/18/2023 13:09	0.03	mg/L
APCO GS-AP-MW-25HA	DTW	Depth to Water Detail	9/18/2023 13:09	180.82	ft
APCO GS-AP-MW-25HA	ORP	Oxidation Reduction Potential	9/18/2023 13:09	-241.8	mv
APCO GS-AP-MW-25HA	PH	pH	9/18/2023 13:09	8.86	SU
APCO GS-AP-MW-25HA	TEMP	Temperature	9/18/2023 13:09	20.82	C
APCO GS-AP-MW-25HA	TURB	Turbidity	9/18/2023 13:09	5.24	NTU
APCO GS-AP-MW-25HA	COND	Conductivity	9/18/2023 13:14	1202.72	uS/cm
APCO GS-AP-MW-25HA	DO	DO	9/18/2023 13:14	0.05	mg/L
APCO GS-AP-MW-25HA	DTW	Depth to Water Detail	9/18/2023 13:14	180.91	ft
APCO GS-AP-MW-25HA	ORP	Oxidation Reduction Potential	9/18/2023 13:14	-245.85	mv
APCO GS-AP-MW-25HA	PH	pH	9/18/2023 13:14	8.87	SU
APCO GS-AP-MW-25HA	TEMP	Temperature	9/18/2023 13:14	20.89	C
APCO GS-AP-MW-25HA	TURB	Turbidity	9/18/2023 13:14	5.19	NTU
APCO GS-AP-MW-25HA	COND	Conductivity	9/18/2023 13:19	1180.96	uS/cm
APCO GS-AP-MW-25HA	DO	DO	9/18/2023 13:19	0.06	mg/L
APCO GS-AP-MW-25HA	DTW	Depth to Water Detail	9/18/2023 13:19	180.96	ft
APCO GS-AP-MW-25HA	ORP	Oxidation Reduction Potential	9/18/2023 13:19	-248.61	mv
APCO GS-AP-MW-25HA	PH	pH	9/18/2023 13:19	8.85	SU
APCO GS-AP-MW-25HA	TEMP	Temperature	9/18/2023 13:19	21.22	C
APCO GS-AP-MW-25HA	TURB	Turbidity	9/18/2023 13:19	4.95	NTU
APCO GS-AP-MW-25HA	COND	Conductivity	9/18/2023 13:24	1053.83	uS/cm
APCO GS-AP-MW-25HA	DO	DO	9/18/2023 13:24	0.04	mg/L
APCO GS-AP-MW-25HA	DTW	Depth to Water Detail	9/18/2023 13:24	181.02	ft
APCO GS-AP-MW-25HA	ORP	Oxidation Reduction Potential	9/18/2023 13:24	-253.38	mv
APCO GS-AP-MW-25HA	PH	pH	9/18/2023 13:24	8.86	SU
APCO GS-AP-MW-25HA	TEMP	Temperature	9/18/2023 13:24	21.37	C
APCO GS-AP-MW-25HA	TURB	Turbidity	9/18/2023 13:24	4.98	NTU
APCO GS-AP-MW-25HA	COND	Conductivity	9/18/2023 13:29	1123.04	uS/cm
APCO GS-AP-MW-25HA	DO	DO	9/18/2023 13:29	0.04	mg/L
APCO GS-AP-MW-25HA	DTW	Depth to Water Detail	9/18/2023 13:29	181.05	ft
APCO GS-AP-MW-25HA	ORP	Oxidation Reduction Potential	9/18/2023 13:29	-257.5	mv
APCO GS-AP-MW-25HA	PH	pH	9/18/2023 13:29	8.88	SU
APCO GS-AP-MW-25HA	TEMP	Temperature	9/18/2023 13:29	21.06	C
APCO GS-AP-MW-25HA	TURB	Turbidity	9/18/2023 13:29	5.02	NTU
APCO GS-AP-MW-25HA	COND	Conductivity	9/18/2023 13:34	1192.97	uS/cm
APCO GS-AP-MW-25HA	DO	DO	9/18/2023 13:34	0.04	mg/L
APCO GS-AP-MW-25HA	DTW	Depth to Water Detail	9/18/2023 13:34	181.08	ft
APCO GS-AP-MW-25HA	ORP	Oxidation Reduction Potential	9/18/2023 13:34	-260.94	mv
APCO GS-AP-MW-25HA	PH	pH	9/18/2023 13:34	8.87	SU
APCO GS-AP-MW-25HA	TEMP	Temperature	9/18/2023 13:34	21.17	C
APCO GS-AP-MW-25HA	TURB	Turbidity	9/18/2023 13:34	4.89	NTU
APCO GS-AP-MW-25HA	COND	Conductivity	9/18/2023 13:39	1080.55	uS/cm
APCO GS-AP-MW-25HA	DO	DO	9/18/2023 13:39	0.04	mg/L

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO GS-AP-MW-25HA	DTW	Depth to Water Detail	9/18/2023 13:39	181.08	ft
APCO GS-AP-MW-25HA	ORP	Oxidation Reduction Potential	9/18/2023 13:39	-263.28	mv
APCO GS-AP-MW-25HA	PH	pH	9/18/2023 13:39	8.84	SU
APCO GS-AP-MW-25HA	TEMP	Temperature	9/18/2023 13:39	21.64	C
APCO GS-AP-MW-25HA	TURB	Turbidity	9/18/2023 13:39	4.94	NTU
APCO GS-AP-MW-25HA	COND	Conductivity	9/18/2023 13:44	1132.99	uS/cm
APCO GS-AP-MW-25HA	DO	DO	9/18/2023 13:44	0.03	mg/L
APCO GS-AP-MW-25HA	DTW	Depth to Water Detail	9/18/2023 13:44	181.08	ft
APCO GS-AP-MW-25HA	ORP	Oxidation Reduction Potential	9/18/2023 13:44	-268.51	mv
APCO GS-AP-MW-25HA	PH	pH	9/18/2023 13:44	8.88	SU
APCO GS-AP-MW-25HA	TEMP	Temperature	9/18/2023 13:44	20.93	C
APCO GS-AP-MW-25HA	TURB	Turbidity	9/18/2023 13:44	4.8	NTU
APCO GS-AP-MW-25HA	COND	Conductivity	9/18/2023 13:49	1103.73	uS/cm
APCO GS-AP-MW-25HA	DO	DO	9/18/2023 13:49	0.03	mg/L
APCO GS-AP-MW-25HA	DTW	Depth to Water Detail	9/18/2023 13:49	181.08	ft
APCO GS-AP-MW-25HA	ORP	Oxidation Reduction Potential	9/18/2023 13:49	-272.73	mv
APCO GS-AP-MW-25HA	PH	pH	9/18/2023 13:49	8.88	SU
APCO GS-AP-MW-25HA	SULFIDE	Sulfide	9/18/2023 13:49	2	mg/L
APCO GS-AP-MW-25HA	TEMP	Temperature	9/18/2023 13:49	21.09	C
APCO GS-AP-MW-25HA	TURB	Turbidity	9/18/2023 13:49	4.76	NTU
APCO GS-AP-MW-26H	COND	Conductivity	9/18/2023 14:07	485.4	uS/cm
APCO GS-AP-MW-26H	DO	DO	9/18/2023 14:07	0.84	mg/L
APCO GS-AP-MW-26H	DTW	Depth to Water Detail	9/18/2023 14:07	116.85	ft
APCO GS-AP-MW-26H	ORP	Oxidation Reduction Potential	9/18/2023 14:07	-109.93	mv
APCO GS-AP-MW-26H	PH	pH	9/18/2023 14:07	7.31	SU
APCO GS-AP-MW-26H	TEMP	Temperature	9/18/2023 14:07	20.24	C
APCO GS-AP-MW-26H	TURB	Turbidity	9/18/2023 14:07	2.38	NTU
APCO GS-AP-MW-26H	COND	Conductivity	9/18/2023 14:12	478.1	uS/cm
APCO GS-AP-MW-26H	DO	DO	9/18/2023 14:12	0.77	mg/L
APCO GS-AP-MW-26H	DTW	Depth to Water Detail	9/18/2023 14:12	117.13	ft
APCO GS-AP-MW-26H	ORP	Oxidation Reduction Potential	9/18/2023 14:12	-115.39	mv
APCO GS-AP-MW-26H	PH	pH	9/18/2023 14:12	7.29	SU
APCO GS-AP-MW-26H	TEMP	Temperature	9/18/2023 14:12	19.97	C
APCO GS-AP-MW-26H	TURB	Turbidity	9/18/2023 14:12	1.5	NTU
APCO GS-AP-MW-26H	COND	Conductivity	9/18/2023 14:17	475.95	uS/cm
APCO GS-AP-MW-26H	DO	DO	9/18/2023 14:17	0.74	mg/L
APCO GS-AP-MW-26H	DTW	Depth to Water Detail	9/18/2023 14:17	117.4	ft
APCO GS-AP-MW-26H	ORP	Oxidation Reduction Potential	9/18/2023 14:17	-117.51	mv
APCO GS-AP-MW-26H	PH	pH	9/18/2023 14:17	7.28	SU
APCO GS-AP-MW-26H	TEMP	Temperature	9/18/2023 14:17	19.82	C
APCO GS-AP-MW-26H	TURB	Turbidity	9/18/2023 14:17	2.37	NTU
APCO GS-AP-MW-26H	COND	Conductivity	9/18/2023 14:22	471.57	uS/cm
APCO GS-AP-MW-26H	DO	DO	9/18/2023 14:22	0.71	mg/L
APCO GS-AP-MW-26H	DTW	Depth to Water Detail	9/18/2023 14:22	117.61	ft
APCO GS-AP-MW-26H	ORP	Oxidation Reduction Potential	9/18/2023 14:22	-117.07	mv
APCO GS-AP-MW-26H	PH	pH	9/18/2023 14:22	7.27	SU
APCO GS-AP-MW-26H	TEMP	Temperature	9/18/2023 14:22	19.7	C
APCO GS-AP-MW-26H	TURB	Turbidity	9/18/2023 14:22	1.59	NTU
APCO GS-AP-MW-26H	COND	Conductivity	9/18/2023 14:27	469.48	uS/cm
APCO GS-AP-MW-26H	DO	DO	9/18/2023 14:27	0.69	mg/L
APCO GS-AP-MW-26H	DTW	Depth to Water Detail	9/18/2023 14:27	117.76	ft
APCO GS-AP-MW-26H	ORP	Oxidation Reduction Potential	9/18/2023 14:27	-115.47	mv
APCO GS-AP-MW-26H	PH	pH	9/18/2023 14:27	7.26	SU
APCO GS-AP-MW-26H	TEMP	Temperature	9/18/2023 14:27	19.73	C
APCO GS-AP-MW-26H	TURB	Turbidity	9/18/2023 14:27	1.98	NTU
APCO GS-AP-MW-26H	COND	Conductivity	9/18/2023 14:32	468.41	uS/cm
APCO GS-AP-MW-26H	DO	DO	9/18/2023 14:32	0.68	mg/L
APCO GS-AP-MW-26H	DTW	Depth to Water Detail	9/18/2023 14:32	117.87	ft
APCO GS-AP-MW-26H	ORP	Oxidation Reduction Potential	9/18/2023 14:32	-113.15	mv
APCO GS-AP-MW-26H	PH	pH	9/18/2023 14:32	7.25	SU
APCO GS-AP-MW-26H	SULFIDE	Sulfide	9/18/2023 14:32	0	mg/L
APCO GS-AP-MW-26H	TEMP	Temperature	9/18/2023 14:32	19.76	C
APCO GS-AP-MW-26H	TURB	Turbidity	9/18/2023 14:32	1.94	NTU
APCO GS-AP-MW-27HR	COND	Conductivity	9/6/2023 8:14	3620.27	uS/cm

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO GS-AP-MW-27HR	DO	DO	9/6/2023 8:14	0.46	mg/L
APCO GS-AP-MW-27HR	DTW	Depth to Water Detail	9/6/2023 8:14	163.35	ft
APCO GS-AP-MW-27HR	ORP	Oxidation Reduction Potential	9/6/2023 8:14	-36.14	mv
APCO GS-AP-MW-27HR	PH	pH	9/6/2023 8:14	7.48	SU
APCO GS-AP-MW-27HR	TEMP	Temperature	9/6/2023 8:14	18.4	C
APCO GS-AP-MW-27HR	TURB	Turbidity	9/6/2023 8:14	17.1	NTU
APCO GS-AP-MW-27HR	COND	Conductivity	9/6/2023 8:19	5425.44	uS/cm
APCO GS-AP-MW-27HR	DO	DO	9/6/2023 8:19	0.17	mg/L
APCO GS-AP-MW-27HR	DTW	Depth to Water Detail	9/6/2023 8:19	165.86	ft
APCO GS-AP-MW-27HR	ORP	Oxidation Reduction Potential	9/6/2023 8:19	-42.99	mv
APCO GS-AP-MW-27HR	PH	pH	9/6/2023 8:19	7.19	SU
APCO GS-AP-MW-27HR	TEMP	Temperature	9/6/2023 8:19	18.29	C
APCO GS-AP-MW-27HR	TURB	Turbidity	9/6/2023 8:19	12.3	NTU
APCO GS-AP-MW-27HR	COND	Conductivity	9/6/2023 8:24	4720.52	uS/cm
APCO GS-AP-MW-27HR	DO	DO	9/6/2023 8:24	0.13	mg/L
APCO GS-AP-MW-27HR	DTW	Depth to Water Detail	9/6/2023 8:24	168.52	ft
APCO GS-AP-MW-27HR	ORP	Oxidation Reduction Potential	9/6/2023 8:24	-52.72	mv
APCO GS-AP-MW-27HR	PH	pH	9/6/2023 8:24	7.22	SU
APCO GS-AP-MW-27HR	TEMP	Temperature	9/6/2023 8:24	18.32	C
APCO GS-AP-MW-27HR	TURB	Turbidity	9/6/2023 8:24	9.96	NTU
APCO GS-AP-MW-27HR	COND	Conductivity	9/6/2023 8:29	3008.02	uS/cm
APCO GS-AP-MW-27HR	DO	DO	9/6/2023 8:29	0.13	mg/L
APCO GS-AP-MW-27HR	DTW	Depth to Water Detail	9/6/2023 8:29	171.08	ft
APCO GS-AP-MW-27HR	ORP	Oxidation Reduction Potential	9/6/2023 8:29	-57.88	mv
APCO GS-AP-MW-27HR	PH	pH	9/6/2023 8:29	7.38	SU
APCO GS-AP-MW-27HR	TEMP	Temperature	9/6/2023 8:29	18.34	C
APCO GS-AP-MW-27HR	TURB	Turbidity	9/6/2023 8:29	6.87	NTU
APCO GS-AP-MW-27HR	COND	Conductivity	9/6/2023 8:34	2912.5	uS/cm
APCO GS-AP-MW-27HR	DO	DO	9/6/2023 8:34	0.19	mg/L
APCO GS-AP-MW-27HR	DTW	Depth to Water Detail	9/6/2023 8:34	172.92	ft
APCO GS-AP-MW-27HR	ORP	Oxidation Reduction Potential	9/6/2023 8:34	-59.2	mv
APCO GS-AP-MW-27HR	PH	pH	9/6/2023 8:34	7.37	SU
APCO GS-AP-MW-27HR	TEMP	Temperature	9/6/2023 8:34	18.43	C
APCO GS-AP-MW-27HR	TURB	Turbidity	9/6/2023 8:34	6.32	NTU
APCO GS-AP-MW-27HR	COND	Conductivity	9/6/2023 8:39	2990.5	uS/cm
APCO GS-AP-MW-27HR	DO	DO	9/6/2023 8:39	0.25	mg/L
APCO GS-AP-MW-27HR	DTW	Depth to Water Detail	9/6/2023 8:39	172.96	ft
APCO GS-AP-MW-27HR	ORP	Oxidation Reduction Potential	9/6/2023 8:39	-62.4	mv
APCO GS-AP-MW-27HR	PH	pH	9/6/2023 8:39	7.36	SU
APCO GS-AP-MW-27HR	TEMP	Temperature	9/6/2023 8:39	20.07	C
APCO GS-AP-MW-27HR	TURB	Turbidity	9/6/2023 8:39	6.45	NTU
APCO GS-AP-MW-27HR	COND	Conductivity	9/6/2023 8:44	2999.52	uS/cm
APCO GS-AP-MW-27HR	DO	DO	9/6/2023 8:44	0.24	mg/L
APCO GS-AP-MW-27HR	DTW	Depth to Water Detail	9/6/2023 8:44	173	ft
APCO GS-AP-MW-27HR	ORP	Oxidation Reduction Potential	9/6/2023 8:44	-64.67	mv
APCO GS-AP-MW-27HR	PH	pH	9/6/2023 8:44	7.36	SU
APCO GS-AP-MW-27HR	TEMP	Temperature	9/6/2023 8:44	20.04	C
APCO GS-AP-MW-27HR	TURB	Turbidity	9/6/2023 8:44	5.98	NTU
APCO GS-AP-MW-27HR	COND	Conductivity	9/6/2023 8:49	2983.56	uS/cm
APCO GS-AP-MW-27HR	DO	DO	9/6/2023 8:49	0.24	mg/L
APCO GS-AP-MW-27HR	DTW	Depth to Water Detail	9/6/2023 8:49	173.02	ft
APCO GS-AP-MW-27HR	ORP	Oxidation Reduction Potential	9/6/2023 8:49	-66.79	mv
APCO GS-AP-MW-27HR	PH	pH	9/6/2023 8:49	7.35	SU
APCO GS-AP-MW-27HR	SULFIDE	Sulfide	9/6/2023 8:49	2	mg/L
APCO GS-AP-MW-27HR	TEMP	Temperature	9/6/2023 8:49	19.75	C
APCO GS-AP-MW-27HR	TURB	Turbidity	9/6/2023 8:49	5.92	NTU
APCO GS-AP-MW-28H	COND	Conductivity	9/11/2023 16:16	868.26	uS/cm
APCO GS-AP-MW-28H	DO	DO	9/11/2023 16:16	0.39	mg/L
APCO GS-AP-MW-28H	DTW	Depth to Water Detail	9/11/2023 16:16	163.1	ft
APCO GS-AP-MW-28H	ORP	Oxidation Reduction Potential	9/11/2023 16:16	-106.27	mv
APCO GS-AP-MW-28H	PH	pH	9/11/2023 16:16	7.71	SU
APCO GS-AP-MW-28H	TEMP	Temperature	9/11/2023 16:16	20.33	C
APCO GS-AP-MW-28H	TURB	Turbidity	9/11/2023 16:16	1.59	NTU
APCO GS-AP-MW-28H	COND	Conductivity	9/11/2023 16:21	829	uS/cm

Plant Gorgas Ash Pond
Field Parameter Summary

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO GS-AP-MW-28H	DO	DO	9/11/2023 16:21	0.22	mg/L
APCO GS-AP-MW-28H	DTW	Depth to Water Detail	9/11/2023 16:21	163.1	ft
APCO GS-AP-MW-28H	ORP	Oxidation Reduction Potential	9/11/2023 16:21	-133.53	mv
APCO GS-AP-MW-28H	PH	pH	9/11/2023 16:21	7.93	SU
APCO GS-AP-MW-28H	TEMP	Temperature	9/11/2023 16:21	20.5	C
APCO GS-AP-MW-28H	TURB	Turbidity	9/11/2023 16:21	1.92	NTU
APCO GS-AP-MW-28H	COND	Conductivity	9/11/2023 16:26	779.35	uS/cm
APCO GS-AP-MW-28H	DO	DO	9/11/2023 16:26	0.2	mg/L
APCO GS-AP-MW-28H	DTW	Depth to Water Detail	9/11/2023 16:26	163.1	ft
APCO GS-AP-MW-28H	ORP	Oxidation Reduction Potential	9/11/2023 16:26	-144.57	mv
APCO GS-AP-MW-28H	PH	pH	9/11/2023 16:26	8.03	SU
APCO GS-AP-MW-28H	TEMP	Temperature	9/11/2023 16:26	20.58	C
APCO GS-AP-MW-28H	TURB	Turbidity	9/11/2023 16:26	1.79	NTU
APCO GS-AP-MW-28H	COND	Conductivity	9/11/2023 16:31	751.45	uS/cm
APCO GS-AP-MW-28H	DO	DO	9/11/2023 16:31	0.2	mg/L
APCO GS-AP-MW-28H	DTW	Depth to Water Detail	9/11/2023 16:31	163.1	ft
APCO GS-AP-MW-28H	ORP	Oxidation Reduction Potential	9/11/2023 16:31	-149.6	mv
APCO GS-AP-MW-28H	PH	pH	9/11/2023 16:31	8.09	SU
APCO GS-AP-MW-28H	TEMP	Temperature	9/11/2023 16:31	20.48	C
APCO GS-AP-MW-28H	TURB	Turbidity	9/11/2023 16:31	1.83	NTU
APCO GS-AP-MW-28H	COND	Conductivity	9/11/2023 16:36	738.18	uS/cm
APCO GS-AP-MW-28H	DO	DO	9/11/2023 16:36	0.22	mg/L
APCO GS-AP-MW-28H	DTW	Depth to Water Detail	9/11/2023 16:36	163.1	ft
APCO GS-AP-MW-28H	ORP	Oxidation Reduction Potential	9/11/2023 16:36	-151.53	mv
APCO GS-AP-MW-28H	PH	pH	9/11/2023 16:36	8.13	SU
APCO GS-AP-MW-28H	TEMP	Temperature	9/11/2023 16:36	20.95	C
APCO GS-AP-MW-28H	TURB	Turbidity	9/11/2023 16:36	1.55	NTU
APCO GS-AP-MW-28H	COND	Conductivity	9/11/2023 16:41	727.55	uS/cm
APCO GS-AP-MW-28H	DO	DO	9/11/2023 16:41	0.23	mg/L
APCO GS-AP-MW-28H	DTW	Depth to Water Detail	9/11/2023 16:41	163.1	ft
APCO GS-AP-MW-28H	ORP	Oxidation Reduction Potential	9/11/2023 16:41	-151.78	mv
APCO GS-AP-MW-28H	PH	pH	9/11/2023 16:41	8.16	SU
APCO GS-AP-MW-28H	SULFIDE	Sulfide	9/11/2023 16:41	0	mg/L
APCO GS-AP-MW-28H	TEMP	Temperature	9/11/2023 16:41	21.38	C
APCO GS-AP-MW-28H	TURB	Turbidity	9/11/2023 16:41	1.17	NTU
APCO GS-AP-MW-29H	COND	Conductivity	9/13/2023 9:42	705.48	uS/cm
APCO GS-AP-MW-29H	DO	DO	9/13/2023 9:42	0.27	mg/L
APCO GS-AP-MW-29H	DTW	Depth to Water Detail	9/13/2023 9:42	91.45	ft
APCO GS-AP-MW-29H	ORP	Oxidation Reduction Potential	9/13/2023 9:42	21.02	mv
APCO GS-AP-MW-29H	PH	pH	9/13/2023 9:42	7.53	SU
APCO GS-AP-MW-29H	TEMP	Temperature	9/13/2023 9:42	18.84	C
APCO GS-AP-MW-29H	TURB	Turbidity	9/13/2023 9:42	1.42	NTU
APCO GS-AP-MW-29H	COND	Conductivity	9/13/2023 9:47	679.94	uS/cm
APCO GS-AP-MW-29H	DO	DO	9/13/2023 9:47	0.2	mg/L
APCO GS-AP-MW-29H	DTW	Depth to Water Detail	9/13/2023 9:47	92.15	ft
APCO GS-AP-MW-29H	ORP	Oxidation Reduction Potential	9/13/2023 9:47	-8.95	mv
APCO GS-AP-MW-29H	PH	pH	9/13/2023 9:47	7.6	SU
APCO GS-AP-MW-29H	TEMP	Temperature	9/13/2023 9:47	18.59	C
APCO GS-AP-MW-29H	TURB	Turbidity	9/13/2023 9:47	1.68	NTU
APCO GS-AP-MW-29H	COND	Conductivity	9/13/2023 9:52	646.12	uS/cm
APCO GS-AP-MW-29H	DO	DO	9/13/2023 9:52	0.16	mg/L
APCO GS-AP-MW-29H	DTW	Depth to Water Detail	9/13/2023 9:52	92.6	ft
APCO GS-AP-MW-29H	ORP	Oxidation Reduction Potential	9/13/2023 9:52	-55.87	mv
APCO GS-AP-MW-29H	PH	pH	9/13/2023 9:52	7.68	SU
APCO GS-AP-MW-29H	TEMP	Temperature	9/13/2023 9:52	18.75	C
APCO GS-AP-MW-29H	TURB	Turbidity	9/13/2023 9:52	1.37	NTU
APCO GS-AP-MW-29H	COND	Conductivity	9/13/2023 9:57	622.16	uS/cm
APCO GS-AP-MW-29H	DO	DO	9/13/2023 9:57	0.14	mg/L
APCO GS-AP-MW-29H	DTW	Depth to Water Detail	9/13/2023 9:57	93.1	ft
APCO GS-AP-MW-29H	ORP	Oxidation Reduction Potential	9/13/2023 9:57	-90.17	mv
APCO GS-AP-MW-29H	PH	pH	9/13/2023 9:57	7.72	SU
APCO GS-AP-MW-29H	TEMP	Temperature	9/13/2023 9:57	18.81	C
APCO GS-AP-MW-29H	TURB	Turbidity	9/13/2023 9:57	1.17	NTU
APCO GS-AP-MW-29H	COND	Conductivity	9/13/2023 10:02	600.08	uS/cm

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO GS-AP-MW-29H	DO	DO	9/13/2023 10:02	0.12	mg/L
APCO GS-AP-MW-29H	DTW	Depth to Water Detail	9/13/2023 10:02	93.1	ft
APCO GS-AP-MW-29H	ORP	Oxidation Reduction Potential	9/13/2023 10:02	-116.52	mv
APCO GS-AP-MW-29H	PH	pH	9/13/2023 10:02	7.78	SU
APCO GS-AP-MW-29H	TEMP	Temperature	9/13/2023 10:02	18.7	C
APCO GS-AP-MW-29H	TURB	Turbidity	9/13/2023 10:02	1.26	NTU
APCO GS-AP-MW-29H	COND	Conductivity	9/13/2023 10:07	584.9	uS/cm
APCO GS-AP-MW-29H	DO	DO	9/13/2023 10:07	0.11	mg/L
APCO GS-AP-MW-29H	DTW	Depth to Water Detail	9/13/2023 10:07	93.1	ft
APCO GS-AP-MW-29H	ORP	Oxidation Reduction Potential	9/13/2023 10:07	-133.7	mv
APCO GS-AP-MW-29H	PH	pH	9/13/2023 10:07	7.83	SU
APCO GS-AP-MW-29H	TEMP	Temperature	9/13/2023 10:07	18.81	C
APCO GS-AP-MW-29H	TURB	Turbidity	9/13/2023 10:07	1.58	NTU
APCO GS-AP-MW-29H	COND	Conductivity	9/13/2023 10:12	573.57	uS/cm
APCO GS-AP-MW-29H	DO	DO	9/13/2023 10:12	0.1	mg/L
APCO GS-AP-MW-29H	DTW	Depth to Water Detail	9/13/2023 10:12	93.25	ft
APCO GS-AP-MW-29H	ORP	Oxidation Reduction Potential	9/13/2023 10:12	-142.61	mv
APCO GS-AP-MW-29H	PH	pH	9/13/2023 10:12	7.83	SU
APCO GS-AP-MW-29H	SULFIDE	Sulfide	9/13/2023 10:12	0	mg/L
APCO GS-AP-MW-29H	TEMP	Temperature	9/13/2023 10:12	18.75	C
APCO GS-AP-MW-29H	TURB	Turbidity	9/13/2023 10:12	1.61	NTU
APCO GS-AP-MW-3	COND	Conductivity	9/12/2023 9:47	435.19	uS/cm
APCO GS-AP-MW-3	DO	DO	9/12/2023 9:47	0.49	mg/L
APCO GS-AP-MW-3	DTW	Depth to Water Detail	9/12/2023 9:47	155.71	ft
APCO GS-AP-MW-3	ORP	Oxidation Reduction Potential	9/12/2023 9:47	-37.61	mv
APCO GS-AP-MW-3	PH	pH	9/12/2023 9:47	7.77	SU
APCO GS-AP-MW-3	TEMP	Temperature	9/12/2023 9:47	18.31	C
APCO GS-AP-MW-3	TURB	Turbidity	9/12/2023 9:47	3.23	NTU
APCO GS-AP-MW-3	COND	Conductivity	9/12/2023 9:52	434.74	uS/cm
APCO GS-AP-MW-3	DO	DO	9/12/2023 9:52	0.5	mg/L
APCO GS-AP-MW-3	DTW	Depth to Water Detail	9/12/2023 9:52	156.31	ft
APCO GS-AP-MW-3	ORP	Oxidation Reduction Potential	9/12/2023 9:52	-50.07	mv
APCO GS-AP-MW-3	PH	pH	9/12/2023 9:52	7.81	SU
APCO GS-AP-MW-3	TEMP	Temperature	9/12/2023 9:52	18.22	C
APCO GS-AP-MW-3	TURB	Turbidity	9/12/2023 9:52	2.23	NTU
APCO GS-AP-MW-3	COND	Conductivity	9/12/2023 9:57	435.46	uS/cm
APCO GS-AP-MW-3	DO	DO	9/12/2023 9:57	0.51	mg/L
APCO GS-AP-MW-3	DTW	Depth to Water Detail	9/12/2023 9:57	157.02	ft
APCO GS-AP-MW-3	ORP	Oxidation Reduction Potential	9/12/2023 9:57	-59.47	mv
APCO GS-AP-MW-3	PH	pH	9/12/2023 9:57	7.84	SU
APCO GS-AP-MW-3	TEMP	Temperature	9/12/2023 9:57	18.21	C
APCO GS-AP-MW-3	TURB	Turbidity	9/12/2023 9:57	2.04	NTU
APCO GS-AP-MW-3	COND	Conductivity	9/12/2023 10:02	437.14	uS/cm
APCO GS-AP-MW-3	DO	DO	9/12/2023 10:02	0.58	mg/L
APCO GS-AP-MW-3	DTW	Depth to Water Detail	9/12/2023 10:02	157.11	ft
APCO GS-AP-MW-3	ORP	Oxidation Reduction Potential	9/12/2023 10:02	-64.85	mv
APCO GS-AP-MW-3	PH	pH	9/12/2023 10:02	7.85	SU
APCO GS-AP-MW-3	TEMP	Temperature	9/12/2023 10:02	18.58	C
APCO GS-AP-MW-3	TURB	Turbidity	9/12/2023 10:02	2.91	NTU
APCO GS-AP-MW-3	COND	Conductivity	9/12/2023 10:07	439.27	uS/cm
APCO GS-AP-MW-3	DO	DO	9/12/2023 10:07	0.58	mg/L
APCO GS-AP-MW-3	DTW	Depth to Water Detail	9/12/2023 10:07	157.26	ft
APCO GS-AP-MW-3	ORP	Oxidation Reduction Potential	9/12/2023 10:07	-72.5	mv
APCO GS-AP-MW-3	PH	pH	9/12/2023 10:07	7.86	SU
APCO GS-AP-MW-3	SULFIDE	Sulfide	9/12/2023 10:07	0	mg/L
APCO GS-AP-MW-3	TEMP	Temperature	9/12/2023 10:07	18.64	C
APCO GS-AP-MW-3	TURB	Turbidity	9/12/2023 10:07	2.59	NTU
APCO GS-AP-MW-30HA	COND	Conductivity	9/5/2023 14:11	959.71	uS/cm
APCO GS-AP-MW-30HA	DO	DO	9/5/2023 14:11	3.59	mg/L
APCO GS-AP-MW-30HA	DTW	Depth to Water Detail	9/5/2023 14:11	311.76	ft
APCO GS-AP-MW-30HA	ORP	Oxidation Reduction Potential	9/5/2023 14:11	-31.58	mv
APCO GS-AP-MW-30HA	PH	pH	9/5/2023 14:11	6.95	SU
APCO GS-AP-MW-30HA	TEMP	Temperature	9/5/2023 14:11	23.99	C
APCO GS-AP-MW-30HA	TURB	Turbidity	9/5/2023 14:11	19.2	NTU

Plant Gorgas Ash Pond
Field Parameter Summary

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO GS-AP-MW-30HA	COND	Conductivity	9/5/2023 14:16	946.89	uS/cm
APCO GS-AP-MW-30HA	DO	DO	9/5/2023 14:16	2.1	mg/L
APCO GS-AP-MW-30HA	DTW	Depth to Water Detail	9/5/2023 14:16	312.89	ft
APCO GS-AP-MW-30HA	ORP	Oxidation Reduction Potential	9/5/2023 14:16	-36.19	mv
APCO GS-AP-MW-30HA	PH	pH	9/5/2023 14:16	6.94	SU
APCO GS-AP-MW-30HA	TEMP	Temperature	9/5/2023 14:16	23.77	C
APCO GS-AP-MW-30HA	TURB	Turbidity	9/5/2023 14:16	7.01	NTU
APCO GS-AP-MW-30HA	COND	Conductivity	9/5/2023 14:21	909.92	uS/cm
APCO GS-AP-MW-30HA	DO	DO	9/5/2023 14:21	1.04	mg/L
APCO GS-AP-MW-30HA	DTW	Depth to Water Detail	9/5/2023 14:21	313.7	ft
APCO GS-AP-MW-30HA	ORP	Oxidation Reduction Potential	9/5/2023 14:21	-59.41	mv
APCO GS-AP-MW-30HA	PH	pH	9/5/2023 14:21	7.09	SU
APCO GS-AP-MW-30HA	TEMP	Temperature	9/5/2023 14:21	23.46	C
APCO GS-AP-MW-30HA	TURB	Turbidity	9/5/2023 14:21	8.43	NTU
APCO GS-AP-MW-30HA	COND	Conductivity	9/5/2023 14:26	870.45	uS/cm
APCO GS-AP-MW-30HA	DO	DO	9/5/2023 14:26	0.67	mg/L
APCO GS-AP-MW-30HA	DTW	Depth to Water Detail	9/5/2023 14:26	314.45	ft
APCO GS-AP-MW-30HA	ORP	Oxidation Reduction Potential	9/5/2023 14:26	-76.93	mv
APCO GS-AP-MW-30HA	PH	pH	9/5/2023 14:26	7.26	SU
APCO GS-AP-MW-30HA	TEMP	Temperature	9/5/2023 14:26	23.15	C
APCO GS-AP-MW-30HA	TURB	Turbidity	9/5/2023 14:26	26.1	NTU
APCO GS-AP-MW-30HA	COND	Conductivity	9/5/2023 14:31	869.65	uS/cm
APCO GS-AP-MW-30HA	DO	DO	9/5/2023 14:31	0.6	mg/L
APCO GS-AP-MW-30HA	DTW	Depth to Water Detail	9/5/2023 14:31	315.12	ft
APCO GS-AP-MW-30HA	ORP	Oxidation Reduction Potential	9/5/2023 14:31	-88.61	mv
APCO GS-AP-MW-30HA	PH	pH	9/5/2023 14:31	7.32	SU
APCO GS-AP-MW-30HA	TEMP	Temperature	9/5/2023 14:31	23.34	C
APCO GS-AP-MW-30HA	TURB	Turbidity	9/5/2023 14:31	41.2	NTU
APCO GS-AP-MW-30HA	COND	Conductivity	9/5/2023 14:36	879.12	uS/cm
APCO GS-AP-MW-30HA	DO	DO	9/5/2023 14:36	0.63	mg/L
APCO GS-AP-MW-30HA	DTW	Depth to Water Detail	9/5/2023 14:36	315.89	ft
APCO GS-AP-MW-30HA	ORP	Oxidation Reduction Potential	9/5/2023 14:36	-96.08	mv
APCO GS-AP-MW-30HA	PH	pH	9/5/2023 14:36	7.33	SU
APCO GS-AP-MW-30HA	TEMP	Temperature	9/5/2023 14:36	23.35	C
APCO GS-AP-MW-30HA	TURB	Turbidity	9/5/2023 14:36	32.1	NTU
APCO GS-AP-MW-30HA	COND	Conductivity	9/5/2023 14:41	895.51	uS/cm
APCO GS-AP-MW-30HA	DO	DO	9/5/2023 14:41	0.5	mg/L
APCO GS-AP-MW-30HA	DTW	Depth to Water Detail	9/5/2023 14:41	316.11	ft
APCO GS-AP-MW-30HA	ORP	Oxidation Reduction Potential	9/5/2023 14:41	-102.74	mv
APCO GS-AP-MW-30HA	PH	pH	9/5/2023 14:41	7.32	SU
APCO GS-AP-MW-30HA	TEMP	Temperature	9/5/2023 14:41	24.43	C
APCO GS-AP-MW-30HA	TURB	Turbidity	9/5/2023 14:41	26.8	NTU
APCO GS-AP-MW-30HA	COND	Conductivity	9/5/2023 14:46	886.59	uS/cm
APCO GS-AP-MW-30HA	DO	DO	9/5/2023 14:46	0.6	mg/L
APCO GS-AP-MW-30HA	DTW	Depth to Water Detail	9/5/2023 14:46	316.32	ft
APCO GS-AP-MW-30HA	ORP	Oxidation Reduction Potential	9/5/2023 14:46	-106.36	mv
APCO GS-AP-MW-30HA	PH	pH	9/5/2023 14:46	7.32	SU
APCO GS-AP-MW-30HA	TEMP	Temperature	9/5/2023 14:46	24.12	C
APCO GS-AP-MW-30HA	TURB	Turbidity	9/5/2023 14:46	24.4	NTU
APCO GS-AP-MW-30HA	COND	Conductivity	9/5/2023 14:51	885.07	uS/cm
APCO GS-AP-MW-30HA	DO	DO	9/5/2023 14:51	0.65	mg/L
APCO GS-AP-MW-30HA	DTW	Depth to Water Detail	9/5/2023 14:51	316.54	ft
APCO GS-AP-MW-30HA	ORP	Oxidation Reduction Potential	9/5/2023 14:51	-108.51	mv
APCO GS-AP-MW-30HA	PH	pH	9/5/2023 14:51	7.32	SU
APCO GS-AP-MW-30HA	TEMP	Temperature	9/5/2023 14:51	23.96	C
APCO GS-AP-MW-30HA	TURB	Turbidity	9/5/2023 14:51	21.5	NTU
APCO GS-AP-MW-30HA	COND	Conductivity	9/5/2023 14:56	904.75	uS/cm
APCO GS-AP-MW-30HA	DO	DO	9/5/2023 14:56	0.74	mg/L
APCO GS-AP-MW-30HA	DTW	Depth to Water Detail	9/5/2023 14:56	316.68	ft
APCO GS-AP-MW-30HA	ORP	Oxidation Reduction Potential	9/5/2023 14:56	-111.22	mv
APCO GS-AP-MW-30HA	PH	pH	9/5/2023 14:56	7.3	SU
APCO GS-AP-MW-30HA	TEMP	Temperature	9/5/2023 14:56	25.88	C
APCO GS-AP-MW-30HA	TURB	Turbidity	9/5/2023 14:56	19.8	NTU
APCO GS-AP-MW-30HA	COND	Conductivity	9/5/2023 15:01	926.86	uS/cm

Plant Gorgas Ash Pond
Field Parameter Summary

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO GS-AP-MW-30HA	DO	DO	9/5/2023 15:01	0.76	mg/L
APCO GS-AP-MW-30HA	DTW	Depth to Water Detail	9/5/2023 15:01	316.8	ft
APCO GS-AP-MW-30HA	ORP	Oxidation Reduction Potential	9/5/2023 15:01	-116.24	mv
APCO GS-AP-MW-30HA	PH	pH	9/5/2023 15:01	7.31	SU
APCO GS-AP-MW-30HA	TEMP	Temperature	9/5/2023 15:01	27.97	C
APCO GS-AP-MW-30HA	TURB	Turbidity	9/5/2023 15:01	19.1	NTU
APCO GS-AP-MW-30HA	COND	Conductivity	9/5/2023 15:06	953.04	uS/cm
APCO GS-AP-MW-30HA	DO	DO	9/5/2023 15:06	0.93	mg/L
APCO GS-AP-MW-30HA	DTW	Depth to Water Detail	9/5/2023 15:06	316.96	ft
APCO GS-AP-MW-30HA	ORP	Oxidation Reduction Potential	9/5/2023 15:06	-122.6	mv
APCO GS-AP-MW-30HA	PH	pH	9/5/2023 15:06	7.36	SU
APCO GS-AP-MW-30HA	TEMP	Temperature	9/5/2023 15:06	30.48	C
APCO GS-AP-MW-30HA	TURB	Turbidity	9/5/2023 15:06	15.5	NTU
APCO GS-AP-MW-30HA	COND	Conductivity	9/5/2023 15:11	922.07	uS/cm
APCO GS-AP-MW-30HA	DO	DO	9/5/2023 15:11	0.73	mg/L
APCO GS-AP-MW-30HA	DTW	Depth to Water Detail	9/5/2023 15:11	317.11	ft
APCO GS-AP-MW-30HA	ORP	Oxidation Reduction Potential	9/5/2023 15:11	-123.24	mv
APCO GS-AP-MW-30HA	PH	pH	9/5/2023 15:11	7.41	SU
APCO GS-AP-MW-30HA	TEMP	Temperature	9/5/2023 15:11	26.27	C
APCO GS-AP-MW-30HA	TURB	Turbidity	9/5/2023 15:11	13.3	NTU
APCO GS-AP-MW-30HA	COND	Conductivity	9/5/2023 15:16	907.93	uS/cm
APCO GS-AP-MW-30HA	DO	DO	9/5/2023 15:16	0.57	mg/L
APCO GS-AP-MW-30HA	DTW	Depth to Water Detail	9/5/2023 15:16	317.18	ft
APCO GS-AP-MW-30HA	ORP	Oxidation Reduction Potential	9/5/2023 15:16	-118.71	mv
APCO GS-AP-MW-30HA	PH	pH	9/5/2023 15:16	7.35	SU
APCO GS-AP-MW-30HA	TEMP	Temperature	9/5/2023 15:16	24.74	C
APCO GS-AP-MW-30HA	TURB	Turbidity	9/5/2023 15:16	12.9	NTU
APCO GS-AP-MW-30HA	COND	Conductivity	9/5/2023 15:21	893.63	uS/cm
APCO GS-AP-MW-30HA	DO	DO	9/5/2023 15:21	0.59	mg/L
APCO GS-AP-MW-30HA	DTW	Depth to Water Detail	9/5/2023 15:21	317.22	ft
APCO GS-AP-MW-30HA	ORP	Oxidation Reduction Potential	9/5/2023 15:21	-117.15	mv
APCO GS-AP-MW-30HA	PH	pH	9/5/2023 15:21	7.32	SU
APCO GS-AP-MW-30HA	TEMP	Temperature	9/5/2023 15:21	23.97	C
APCO GS-AP-MW-30HA	TURB	Turbidity	9/5/2023 15:21	9.47	NTU
APCO GS-AP-MW-30HA	COND	Conductivity	9/5/2023 15:26	891.52	uS/cm
APCO GS-AP-MW-30HA	DO	DO	9/5/2023 15:26	0.6	mg/L
APCO GS-AP-MW-30HA	DTW	Depth to Water Detail	9/5/2023 15:26	317.24	ft
APCO GS-AP-MW-30HA	ORP	Oxidation Reduction Potential	9/5/2023 15:26	-117.29	mv
APCO GS-AP-MW-30HA	PH	pH	9/5/2023 15:26	7.32	SU
APCO GS-AP-MW-30HA	TEMP	Temperature	9/5/2023 15:26	24.13	C
APCO GS-AP-MW-30HA	TURB	Turbidity	9/5/2023 15:26	10.15	NTU
APCO GS-AP-MW-30HA	COND	Conductivity	9/5/2023 15:31	883.3	uS/cm
APCO GS-AP-MW-30HA	DO	DO	9/5/2023 15:31	0.53	mg/L
APCO GS-AP-MW-30HA	DTW	Depth to Water Detail	9/5/2023 15:31	317.28	ft
APCO GS-AP-MW-30HA	ORP	Oxidation Reduction Potential	9/5/2023 15:31	-117.4	mv
APCO GS-AP-MW-30HA	PH	pH	9/5/2023 15:31	7.32	SU
APCO GS-AP-MW-30HA	SULFIDE	Sulfide	9/5/2023 15:31	0	mg/L
APCO GS-AP-MW-30HA	TEMP	Temperature	9/5/2023 15:31	23.62	C
APCO GS-AP-MW-30HA	TURB	Turbidity	9/5/2023 15:31	8.96	NTU
APCO GS-AP-MW-31H	COND	Conductivity	9/13/2023 9:24	702.11	uS/cm
APCO GS-AP-MW-31H	DO	DO	9/13/2023 9:24	4.7	mg/L
APCO GS-AP-MW-31H	DTW	Depth to Water Detail	9/13/2023 9:24	240.13	ft
APCO GS-AP-MW-31H	ORP	Oxidation Reduction Potential	9/13/2023 9:24	20.14	mv
APCO GS-AP-MW-31H	PH	pH	9/13/2023 9:24	7.28	SU
APCO GS-AP-MW-31H	TEMP	Temperature	9/13/2023 9:24	22.13	C
APCO GS-AP-MW-31H	TURB	Turbidity	9/13/2023 9:24	3.49	NTU
APCO GS-AP-MW-31H	COND	Conductivity	9/13/2023 9:29	703.27	uS/cm
APCO GS-AP-MW-31H	DO	DO	9/13/2023 9:29	1.18	mg/L
APCO GS-AP-MW-31H	DTW	Depth to Water Detail	9/13/2023 9:29	240.81	ft
APCO GS-AP-MW-31H	ORP	Oxidation Reduction Potential	9/13/2023 9:29	-40.96	mv
APCO GS-AP-MW-31H	PH	pH	9/13/2023 9:29	7.31	SU
APCO GS-AP-MW-31H	TEMP	Temperature	9/13/2023 9:29	19.69	C
APCO GS-AP-MW-31H	TURB	Turbidity	9/13/2023 9:29	3.12	NTU
APCO GS-AP-MW-31H	COND	Conductivity	9/13/2023 9:34	900.45	uS/cm

Plant Gorgas Ash Pond
Field Parameter Summary

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO GS-AP-MW-31H	DO	DO	9/13/2023 9:34	0.36	mg/L
APCO GS-AP-MW-31H	DTW	Depth to Water Detail	9/13/2023 9:34	241.56	ft
APCO GS-AP-MW-31H	ORP	Oxidation Reduction Potential	9/13/2023 9:34	-91.3	mv
APCO GS-AP-MW-31H	PH	pH	9/13/2023 9:34	7.98	SU
APCO GS-AP-MW-31H	TEMP	Temperature	9/13/2023 9:34	19.71	C
APCO GS-AP-MW-31H	TURB	Turbidity	9/13/2023 9:34	2.99	NTU
APCO GS-AP-MW-31H	COND	Conductivity	9/13/2023 9:39	1004.3	uS/cm
APCO GS-AP-MW-31H	DO	DO	9/13/2023 9:39	0.21	mg/L
APCO GS-AP-MW-31H	DTW	Depth to Water Detail	9/13/2023 9:39	242.29	ft
APCO GS-AP-MW-31H	ORP	Oxidation Reduction Potential	9/13/2023 9:39	-102.32	mv
APCO GS-AP-MW-31H	PH	pH	9/13/2023 9:39	8.14	SU
APCO GS-AP-MW-31H	TEMP	Temperature	9/13/2023 9:39	19.16	C
APCO GS-AP-MW-31H	TURB	Turbidity	9/13/2023 9:39	2.95	NTU
APCO GS-AP-MW-31H	COND	Conductivity	9/13/2023 9:44	1022.66	uS/cm
APCO GS-AP-MW-31H	DO	DO	9/13/2023 9:44	0.17	mg/L
APCO GS-AP-MW-31H	DTW	Depth to Water Detail	9/13/2023 9:44	242.71	ft
APCO GS-AP-MW-31H	ORP	Oxidation Reduction Potential	9/13/2023 9:44	-110.14	mv
APCO GS-AP-MW-31H	PH	pH	9/13/2023 9:44	8.18	SU
APCO GS-AP-MW-31H	TEMP	Temperature	9/13/2023 9:44	19.14	C
APCO GS-AP-MW-31H	TURB	Turbidity	9/13/2023 9:44	3.08	NTU
APCO GS-AP-MW-31H	COND	Conductivity	9/13/2023 9:49	1010.93	uS/cm
APCO GS-AP-MW-31H	DO	DO	9/13/2023 9:49	0.17	mg/L
APCO GS-AP-MW-31H	DTW	Depth to Water Detail	9/13/2023 9:49	243.02	ft
APCO GS-AP-MW-31H	ORP	Oxidation Reduction Potential	9/13/2023 9:49	-116.9	mv
APCO GS-AP-MW-31H	PH	pH	9/13/2023 9:49	8.21	SU
APCO GS-AP-MW-31H	TEMP	Temperature	9/13/2023 9:49	19.13	C
APCO GS-AP-MW-31H	TURB	Turbidity	9/13/2023 9:49	3.04	NTU
APCO GS-AP-MW-31H	COND	Conductivity	9/13/2023 9:54	981.32	uS/cm
APCO GS-AP-MW-31H	DO	DO	9/13/2023 9:54	0.14	mg/L
APCO GS-AP-MW-31H	DTW	Depth to Water Detail	9/13/2023 9:54	243.23	ft
APCO GS-AP-MW-31H	ORP	Oxidation Reduction Potential	9/13/2023 9:54	-125.84	mv
APCO GS-AP-MW-31H	PH	pH	9/13/2023 9:54	8.28	SU
APCO GS-AP-MW-31H	TEMP	Temperature	9/13/2023 9:54	19.27	C
APCO GS-AP-MW-31H	TURB	Turbidity	9/13/2023 9:54	2.91	NTU
APCO GS-AP-MW-31H	COND	Conductivity	9/13/2023 9:59	948.85	uS/cm
APCO GS-AP-MW-31H	DO	DO	9/13/2023 9:59	0.15	mg/L
APCO GS-AP-MW-31H	DTW	Depth to Water Detail	9/13/2023 9:59	243.39	ft
APCO GS-AP-MW-31H	ORP	Oxidation Reduction Potential	9/13/2023 9:59	-133.61	mv
APCO GS-AP-MW-31H	PH	pH	9/13/2023 9:59	8.33	SU
APCO GS-AP-MW-31H	TEMP	Temperature	9/13/2023 9:59	19.5	C
APCO GS-AP-MW-31H	TURB	Turbidity	9/13/2023 9:59	2.85	NTU
APCO GS-AP-MW-31H	COND	Conductivity	9/13/2023 10:04	912.47	uS/cm
APCO GS-AP-MW-31H	DO	DO	9/13/2023 10:04	0.11	mg/L
APCO GS-AP-MW-31H	DTW	Depth to Water Detail	9/13/2023 10:04	243.59	ft
APCO GS-AP-MW-31H	ORP	Oxidation Reduction Potential	9/13/2023 10:04	-140.48	mv
APCO GS-AP-MW-31H	PH	pH	9/13/2023 10:04	8.38	SU
APCO GS-AP-MW-31H	TEMP	Temperature	9/13/2023 10:04	18.94	C
APCO GS-AP-MW-31H	TURB	Turbidity	9/13/2023 10:04	2.9	NTU
APCO GS-AP-MW-31H	COND	Conductivity	9/13/2023 10:09	875.92	uS/cm
APCO GS-AP-MW-31H	DO	DO	9/13/2023 10:09	0.11	mg/L
APCO GS-AP-MW-31H	DTW	Depth to Water Detail	9/13/2023 10:09	243.75	ft
APCO GS-AP-MW-31H	ORP	Oxidation Reduction Potential	9/13/2023 10:09	-146.19	mv
APCO GS-AP-MW-31H	PH	pH	9/13/2023 10:09	8.41	SU
APCO GS-AP-MW-31H	TEMP	Temperature	9/13/2023 10:09	18.87	C
APCO GS-AP-MW-31H	TURB	Turbidity	9/13/2023 10:09	3.09	NTU
APCO GS-AP-MW-31H	COND	Conductivity	9/13/2023 10:14	864.16	uS/cm
APCO GS-AP-MW-31H	DO	DO	9/13/2023 10:14	0.11	mg/L
APCO GS-AP-MW-31H	DTW	Depth to Water Detail	9/13/2023 10:14	242.89	ft
APCO GS-AP-MW-31H	ORP	Oxidation Reduction Potential	9/13/2023 10:14	-153.61	mv
APCO GS-AP-MW-31H	PH	pH	9/13/2023 10:14	8.46	SU
APCO GS-AP-MW-31H	TEMP	Temperature	9/13/2023 10:14	19.24	C
APCO GS-AP-MW-31H	TURB	Turbidity	9/13/2023 10:14	3.15	NTU
APCO GS-AP-MW-31H	COND	Conductivity	9/13/2023 10:19	849.69	uS/cm
APCO GS-AP-MW-31H	DO	DO	9/13/2023 10:19	0.1	mg/L

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO GS-AP-MW-31H	DTW	Depth to Water Detail	9/13/2023 10:19	243.01	ft
APCO GS-AP-MW-31H	ORP	Oxidation Reduction Potential	9/13/2023 10:19	-159.2	mv
APCO GS-AP-MW-31H	PH	pH	9/13/2023 10:19	8.49	SU
APCO GS-AP-MW-31H	SULFIDE	Sulfide	9/13/2023 10:19	1	mg/L
APCO GS-AP-MW-31H	TEMP	Temperature	9/13/2023 10:19	19.18	C
APCO GS-AP-MW-31H	TURB	Turbidity	9/13/2023 10:19	3.11	NTU
APCO GS-AP-MW-31V	COND	Conductivity	9/13/2023 11:22	1517.62	uS/cm
APCO GS-AP-MW-31V	DO	DO	9/13/2023 11:22	2.65	mg/L
APCO GS-AP-MW-31V	DTW	Depth to Water Detail	9/13/2023 11:22	284.51	ft
APCO GS-AP-MW-31V	ORP	Oxidation Reduction Potential	9/13/2023 11:22	-36.72	mv
APCO GS-AP-MW-31V	PH	pH	9/13/2023 11:22	7.38	SU
APCO GS-AP-MW-31V	TEMP	Temperature	9/13/2023 11:22	18.92	C
APCO GS-AP-MW-31V	TURB	Turbidity	9/13/2023 11:22	3.9	NTU
APCO GS-AP-MW-31V	COND	Conductivity	9/13/2023 11:27	2213.15	uS/cm
APCO GS-AP-MW-31V	DO	DO	9/13/2023 11:27	1.01	mg/L
APCO GS-AP-MW-31V	DTW	Depth to Water Detail	9/13/2023 11:27	287.35	ft
APCO GS-AP-MW-31V	ORP	Oxidation Reduction Potential	9/13/2023 11:27	-38.92	mv
APCO GS-AP-MW-31V	PH	pH	9/13/2023 11:27	7.37	SU
APCO GS-AP-MW-31V	TEMP	Temperature	9/13/2023 11:27	19.31	C
APCO GS-AP-MW-31V	TURB	Turbidity	9/13/2023 11:27	3.22	NTU
APCO GS-AP-MW-31V	COND	Conductivity	9/13/2023 11:32	2417.94	uS/cm
APCO GS-AP-MW-31V	DO	DO	9/13/2023 11:32	0.44	mg/L
APCO GS-AP-MW-31V	DTW	Depth to Water Detail	9/13/2023 11:32	288.89	ft
APCO GS-AP-MW-31V	ORP	Oxidation Reduction Potential	9/13/2023 11:32	-36.79	mv
APCO GS-AP-MW-31V	PH	pH	9/13/2023 11:32	7.43	SU
APCO GS-AP-MW-31V	TEMP	Temperature	9/13/2023 11:32	19.02	C
APCO GS-AP-MW-31V	TURB	Turbidity	9/13/2023 11:32	3.12	NTU
APCO GS-AP-MW-31V	COND	Conductivity	9/13/2023 11:37	2456.19	uS/cm
APCO GS-AP-MW-31V	DO	DO	9/13/2023 11:37	0.33	mg/L
APCO GS-AP-MW-31V	DTW	Depth to Water Detail	9/13/2023 11:37	289.78	ft
APCO GS-AP-MW-31V	ORP	Oxidation Reduction Potential	9/13/2023 11:37	-35.61	mv
APCO GS-AP-MW-31V	PH	pH	9/13/2023 11:37	7.45	SU
APCO GS-AP-MW-31V	TEMP	Temperature	9/13/2023 11:37	18.87	C
APCO GS-AP-MW-31V	TURB	Turbidity	9/13/2023 11:37	2.91	NTU
APCO GS-AP-MW-31V	COND	Conductivity	9/13/2023 11:42	2431.2	uS/cm
APCO GS-AP-MW-31V	DO	DO	9/13/2023 11:42	0.29	mg/L
APCO GS-AP-MW-31V	DTW	Depth to Water Detail	9/13/2023 11:42	290.91	ft
APCO GS-AP-MW-31V	ORP	Oxidation Reduction Potential	9/13/2023 11:42	-35.15	mv
APCO GS-AP-MW-31V	PH	pH	9/13/2023 11:42	7.47	SU
APCO GS-AP-MW-31V	TEMP	Temperature	9/13/2023 11:42	18.79	C
APCO GS-AP-MW-31V	TURB	Turbidity	9/13/2023 11:42	2.65	NTU
APCO GS-AP-MW-31V	COND	Conductivity	9/13/2023 11:47	2473.01	uS/cm
APCO GS-AP-MW-31V	DO	DO	9/13/2023 11:47	0.4	mg/L
APCO GS-AP-MW-31V	DTW	Depth to Water Detail	9/13/2023 11:47	291.73	ft
APCO GS-AP-MW-31V	ORP	Oxidation Reduction Potential	9/13/2023 11:47	-36.71	mv
APCO GS-AP-MW-31V	PH	pH	9/13/2023 11:47	7.47	SU
APCO GS-AP-MW-31V	TEMP	Temperature	9/13/2023 11:47	20.03	C
APCO GS-AP-MW-31V	TURB	Turbidity	9/13/2023 11:47	2.46	NTU
APCO GS-AP-MW-31V	COND	Conductivity	9/13/2023 11:52	2494.18	uS/cm
APCO GS-AP-MW-31V	DO	DO	9/13/2023 11:52	0.4	mg/L
APCO GS-AP-MW-31V	DTW	Depth to Water Detail	9/13/2023 11:52	291.94	ft
APCO GS-AP-MW-31V	ORP	Oxidation Reduction Potential	9/13/2023 11:52	-36.47	mv
APCO GS-AP-MW-31V	PH	pH	9/13/2023 11:52	7.49	SU
APCO GS-AP-MW-31V	TEMP	Temperature	9/13/2023 11:52	20.44	C
APCO GS-AP-MW-31V	TURB	Turbidity	9/13/2023 11:52	2.4	NTU
APCO GS-AP-MW-31V	COND	Conductivity	9/13/2023 11:57	2484.97	uS/cm
APCO GS-AP-MW-31V	DO	DO	9/13/2023 11:57	0.41	mg/L
APCO GS-AP-MW-31V	DTW	Depth to Water Detail	9/13/2023 11:57	292.14	ft
APCO GS-AP-MW-31V	ORP	Oxidation Reduction Potential	9/13/2023 11:57	-36.8	mv
APCO GS-AP-MW-31V	PH	pH	9/13/2023 11:57	7.5	SU
APCO GS-AP-MW-31V	TEMP	Temperature	9/13/2023 11:57	20.59	C
APCO GS-AP-MW-31V	TURB	Turbidity	9/13/2023 11:57	2.6	NTU
APCO GS-AP-MW-31V	COND	Conductivity	9/13/2023 12:02	2473.32	uS/cm
APCO GS-AP-MW-31V	DO	DO	9/13/2023 12:02	0.42	mg/L

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO GS-AP-MW-31V	DTW	Depth to Water Detail	9/13/2023 12:02	292.25	ft
APCO GS-AP-MW-31V	ORP	Oxidation Reduction Potential	9/13/2023 12:02	-37.13	mv
APCO GS-AP-MW-31V	PH	pH	9/13/2023 12:02	7.5	SU
APCO GS-AP-MW-31V	TEMP	Temperature	9/13/2023 12:02	20.64	C
APCO GS-AP-MW-31V	TURB	Turbidity	9/13/2023 12:02	2.51	NTU
APCO GS-AP-MW-31V	COND	Conductivity	9/13/2023 12:07	2475.52	uS/cm
APCO GS-AP-MW-31V	DO	DO	9/13/2023 12:07	0.43	mg/L
APCO GS-AP-MW-31V	DTW	Depth to Water Detail	9/13/2023 12:07	292.38	ft
APCO GS-AP-MW-31V	ORP	Oxidation Reduction Potential	9/13/2023 12:07	-37.64	mv
APCO GS-AP-MW-31V	PH	pH	9/13/2023 12:07	7.49	SU
APCO GS-AP-MW-31V	SULFIDE	Sulfide	9/13/2023 12:07	0	mg/L
APCO GS-AP-MW-31V	TEMP	Temperature	9/13/2023 12:07	21.02	C
APCO GS-AP-MW-31V	TURB	Turbidity	9/13/2023 12:07	2.34	NTU
APCO GS-AP-MW-32H	COND	Conductivity	9/13/2023 11:23	541.94	uS/cm
APCO GS-AP-MW-32H	DO	DO	9/13/2023 11:23	1.43	mg/L
APCO GS-AP-MW-32H	DTW	Depth to Water Detail	9/13/2023 11:23	263.05	ft
APCO GS-AP-MW-32H	ORP	Oxidation Reduction Potential	9/13/2023 11:23	-155.43	mv
APCO GS-AP-MW-32H	PH	pH	9/13/2023 11:23	7.71	SU
APCO GS-AP-MW-32H	TEMP	Temperature	9/13/2023 11:23	23.3	C
APCO GS-AP-MW-32H	TURB	Turbidity	9/13/2023 11:23	2.02	NTU
APCO GS-AP-MW-32H	COND	Conductivity	9/13/2023 11:41	550.45	uS/cm
APCO GS-AP-MW-32H	DO	DO	9/13/2023 11:41	0.91	mg/L
APCO GS-AP-MW-32H	DTW	Depth to Water Detail	9/13/2023 11:41	263.45	ft
APCO GS-AP-MW-32H	ORP	Oxidation Reduction Potential	9/13/2023 11:41	-79.48	mv
APCO GS-AP-MW-32H	PH	pH	9/13/2023 11:41	8.07	SU
APCO GS-AP-MW-32H	SULFIDE	Sulfide	9/13/2023 11:41	0	mg/L
APCO GS-AP-MW-32H	TEMP	Temperature	9/13/2023 11:41	24.98	C
APCO GS-AP-MW-32H	TURB	Turbidity	9/13/2023 11:41	2.64	NTU
APCO GS-AP-MW-33HO	COND	Conductivity	8/30/2023 11:33	494.15	uS/cm
APCO GS-AP-MW-33HO	DO	DO	8/30/2023 11:33	6.95	mg/L
APCO GS-AP-MW-33HO	DTW	Depth to Water Detail	8/30/2023 11:33	243.68	ft
APCO GS-AP-MW-33HO	ORP	Oxidation Reduction Potential	8/30/2023 11:33	133.73	mv
APCO GS-AP-MW-33HO	PH	pH	8/30/2023 11:33	7.35	SU
APCO GS-AP-MW-33HO	TEMP	Temperature	8/30/2023 11:33	29.45	C
APCO GS-AP-MW-33HO	TURB	Turbidity	8/30/2023 11:33	21.12	NTU
APCO GS-AP-MW-33HO	COND	Conductivity	8/30/2023 11:38	509.63	uS/cm
APCO GS-AP-MW-33HO	DO	DO	8/30/2023 11:38	6.79	mg/L
APCO GS-AP-MW-33HO	DTW	Depth to Water Detail	8/30/2023 11:38	243.81	ft
APCO GS-AP-MW-33HO	ORP	Oxidation Reduction Potential	8/30/2023 11:38	98.68	mv
APCO GS-AP-MW-33HO	PH	pH	8/30/2023 11:38	7.28	SU
APCO GS-AP-MW-33HO	TEMP	Temperature	8/30/2023 11:38	28.42	C
APCO GS-AP-MW-33HO	TURB	Turbidity	8/30/2023 11:38	18.2	NTU
APCO GS-AP-MW-33HO	COND	Conductivity	8/30/2023 11:43	503.93	uS/cm
APCO GS-AP-MW-33HO	DO	DO	8/30/2023 11:43	6.39	mg/L
APCO GS-AP-MW-33HO	DTW	Depth to Water Detail	8/30/2023 11:43	243.92	ft
APCO GS-AP-MW-33HO	ORP	Oxidation Reduction Potential	8/30/2023 11:43	81.42	mv
APCO GS-AP-MW-33HO	PH	pH	8/30/2023 11:43	7.26	SU
APCO GS-AP-MW-33HO	TEMP	Temperature	8/30/2023 11:43	28.77	C
APCO GS-AP-MW-33HO	TURB	Turbidity	8/30/2023 11:43	16.9	NTU
APCO GS-AP-MW-33HO	COND	Conductivity	8/30/2023 11:48	501.88	uS/cm
APCO GS-AP-MW-33HO	DO	DO	8/30/2023 11:48	6.43	mg/L
APCO GS-AP-MW-33HO	DTW	Depth to Water Detail	8/30/2023 11:48	244.02	ft
APCO GS-AP-MW-33HO	ORP	Oxidation Reduction Potential	8/30/2023 11:48	89.03	mv
APCO GS-AP-MW-33HO	PH	pH	8/30/2023 11:48	7.25	SU
APCO GS-AP-MW-33HO	TEMP	Temperature	8/30/2023 11:48	29.3	C
APCO GS-AP-MW-33HO	TURB	Turbidity	8/30/2023 11:48	21.2	NTU
APCO GS-AP-MW-33HO	COND	Conductivity	8/30/2023 11:53	495.24	uS/cm
APCO GS-AP-MW-33HO	DO	DO	8/30/2023 11:53	6.35	mg/L
APCO GS-AP-MW-33HO	DTW	Depth to Water Detail	8/30/2023 11:53	244.14	ft
APCO GS-AP-MW-33HO	ORP	Oxidation Reduction Potential	8/30/2023 11:53	79.01	mv
APCO GS-AP-MW-33HO	PH	pH	8/30/2023 11:53	7.24	SU
APCO GS-AP-MW-33HO	TEMP	Temperature	8/30/2023 11:53	29.64	C
APCO GS-AP-MW-33HO	TURB	Turbidity	8/30/2023 11:53	16.8	NTU
APCO GS-AP-MW-33HO	COND	Conductivity	8/30/2023 11:58	484.67	uS/cm

Plant Gorgas Ash Pond
Field Parameter Summary

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO GS-AP-MW-33HO	DO	DO	8/30/2023 11:58	6.17	mg/L
APCO GS-AP-MW-33HO	DTW	Depth to Water Detail	8/30/2023 11:58	244.28	ft
APCO GS-AP-MW-33HO	ORP	Oxidation Reduction Potential	8/30/2023 11:58	73.28	mv
APCO GS-AP-MW-33HO	PH	pH	8/30/2023 11:58	7.24	SU
APCO GS-AP-MW-33HO	TEMP	Temperature	8/30/2023 11:58	29.87	C
APCO GS-AP-MW-33HO	TURB	Turbidity	8/30/2023 11:58	14.4	NTU
APCO GS-AP-MW-33HO	COND	Conductivity	8/30/2023 12:03	448.89	uS/cm
APCO GS-AP-MW-33HO	DO	DO	8/30/2023 12:03	4.96	mg/L
APCO GS-AP-MW-33HO	DTW	Depth to Water Detail	8/30/2023 12:03	244.45	ft
APCO GS-AP-MW-33HO	ORP	Oxidation Reduction Potential	8/30/2023 12:03	77.4	mv
APCO GS-AP-MW-33HO	PH	pH	8/30/2023 12:03	7.11	SU
APCO GS-AP-MW-33HO	TEMP	Temperature	8/30/2023 12:03	30.89	C
APCO GS-AP-MW-33HO	TURB	Turbidity	8/30/2023 12:03	12.1	NTU
APCO GS-AP-MW-33HO	COND	Conductivity	8/30/2023 12:08	446.92	uS/cm
APCO GS-AP-MW-33HO	DO	DO	8/30/2023 12:08	4.42	mg/L
APCO GS-AP-MW-33HO	DTW	Depth to Water Detail	8/30/2023 12:08	244.64	ft
APCO GS-AP-MW-33HO	ORP	Oxidation Reduction Potential	8/30/2023 12:08	77.96	mv
APCO GS-AP-MW-33HO	PH	pH	8/30/2023 12:08	7.05	SU
APCO GS-AP-MW-33HO	TEMP	Temperature	8/30/2023 12:08	29.24	C
APCO GS-AP-MW-33HO	TURB	Turbidity	8/30/2023 12:08	14.4	NTU
APCO GS-AP-MW-33HO	COND	Conductivity	8/30/2023 12:13	443.58	uS/cm
APCO GS-AP-MW-33HO	DO	DO	8/30/2023 12:13	4.35	mg/L
APCO GS-AP-MW-33HO	DTW	Depth to Water Detail	8/30/2023 12:13	244.76	ft
APCO GS-AP-MW-33HO	ORP	Oxidation Reduction Potential	8/30/2023 12:13	76.28	mv
APCO GS-AP-MW-33HO	PH	pH	8/30/2023 12:13	7.07	SU
APCO GS-AP-MW-33HO	TEMP	Temperature	8/30/2023 12:13	29.21	C
APCO GS-AP-MW-33HO	TURB	Turbidity	8/30/2023 12:13	16.1	NTU
APCO GS-AP-MW-33HO	COND	Conductivity	8/30/2023 12:18	444.15	uS/cm
APCO GS-AP-MW-33HO	DO	DO	8/30/2023 12:18	4.3	mg/L
APCO GS-AP-MW-33HO	DTW	Depth to Water Detail	8/30/2023 12:18	244.84	ft
APCO GS-AP-MW-33HO	ORP	Oxidation Reduction Potential	8/30/2023 12:18	72.65	mv
APCO GS-AP-MW-33HO	PH	pH	8/30/2023 12:18	7.08	SU
APCO GS-AP-MW-33HO	TEMP	Temperature	8/30/2023 12:18	29	C
APCO GS-AP-MW-33HO	TURB	Turbidity	8/30/2023 12:18	14.3	NTU
APCO GS-AP-MW-33HO	COND	Conductivity	8/30/2023 12:23	443.27	uS/cm
APCO GS-AP-MW-33HO	DO	DO	8/30/2023 12:23	3.96	mg/L
APCO GS-AP-MW-33HO	DTW	Depth to Water Detail	8/30/2023 12:23	244.95	ft
APCO GS-AP-MW-33HO	ORP	Oxidation Reduction Potential	8/30/2023 12:23	65.98	mv
APCO GS-AP-MW-33HO	PH	pH	8/30/2023 12:23	7.09	SU
APCO GS-AP-MW-33HO	TEMP	Temperature	8/30/2023 12:23	29.2	C
APCO GS-AP-MW-33HO	TURB	Turbidity	8/30/2023 12:23	12.8	NTU
APCO GS-AP-MW-33HO	COND	Conductivity	8/30/2023 12:28	448.74	uS/cm
APCO GS-AP-MW-33HO	DO	DO	8/30/2023 12:28	3.69	mg/L
APCO GS-AP-MW-33HO	DTW	Depth to Water Detail	8/30/2023 12:28	245.09	ft
APCO GS-AP-MW-33HO	ORP	Oxidation Reduction Potential	8/30/2023 12:28	62.62	mv
APCO GS-AP-MW-33HO	PH	pH	8/30/2023 12:28	7.13	SU
APCO GS-AP-MW-33HO	TEMP	Temperature	8/30/2023 12:28	29.74	C
APCO GS-AP-MW-33HO	TURB	Turbidity	8/30/2023 12:28	18.1	NTU
APCO GS-AP-MW-33HO	COND	Conductivity	8/30/2023 12:33	464.24	uS/cm
APCO GS-AP-MW-33HO	DO	DO	8/30/2023 12:33	3.41	mg/L
APCO GS-AP-MW-33HO	DTW	Depth to Water Detail	8/30/2023 12:33	245.19	ft
APCO GS-AP-MW-33HO	ORP	Oxidation Reduction Potential	8/30/2023 12:33	63.26	mv
APCO GS-AP-MW-33HO	PH	pH	8/30/2023 12:33	7.14	SU
APCO GS-AP-MW-33HO	TEMP	Temperature	8/30/2023 12:33	29.25	C
APCO GS-AP-MW-33HO	TURB	Turbidity	8/30/2023 12:33	18.4	NTU
APCO GS-AP-MW-33HO	COND	Conductivity	8/30/2023 12:38	476.71	uS/cm
APCO GS-AP-MW-33HO	DO	DO	8/30/2023 12:38	2.85	mg/L
APCO GS-AP-MW-33HO	DTW	Depth to Water Detail	8/30/2023 12:38	245.32	ft
APCO GS-AP-MW-33HO	ORP	Oxidation Reduction Potential	8/30/2023 12:38	58.17	mv
APCO GS-AP-MW-33HO	PH	pH	8/30/2023 12:38	7.23	SU
APCO GS-AP-MW-33HO	TEMP	Temperature	8/30/2023 12:38	28.76	C
APCO GS-AP-MW-33HO	TURB	Turbidity	8/30/2023 12:38	13.8	NTU
APCO GS-AP-MW-33HO	COND	Conductivity	8/30/2023 12:43	485.1	uS/cm
APCO GS-AP-MW-33HO	DO	DO	8/30/2023 12:43	2.61	mg/L

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO GS-AP-MW-33HO	DTW	Depth to Water Detail	8/30/2023 12:43	245.5	ft
APCO GS-AP-MW-33HO	ORP	Oxidation Reduction Potential	8/30/2023 12:43	55.16	mv
APCO GS-AP-MW-33HO	PH	pH	8/30/2023 12:43	7.26	SU
APCO GS-AP-MW-33HO	TEMP	Temperature	8/30/2023 12:43	28.96	C
APCO GS-AP-MW-33HO	TURB	Turbidity	8/30/2023 12:43	12.4	NTU
APCO GS-AP-MW-33HO	COND	Conductivity	8/30/2023 12:48	502.59	uS/cm
APCO GS-AP-MW-33HO	DO	DO	8/30/2023 12:48	2.6	mg/L
APCO GS-AP-MW-33HO	DTW	Depth to Water Detail	8/30/2023 12:48	245.71	ft
APCO GS-AP-MW-33HO	ORP	Oxidation Reduction Potential	8/30/2023 12:48	51.01	mv
APCO GS-AP-MW-33HO	PH	pH	8/30/2023 12:48	7.28	SU
APCO GS-AP-MW-33HO	TEMP	Temperature	8/30/2023 12:48	28.98	C
APCO GS-AP-MW-33HO	TURB	Turbidity	8/30/2023 12:48	11.9	NTU
APCO GS-AP-MW-33HO	COND	Conductivity	8/30/2023 12:53	528.32	uS/cm
APCO GS-AP-MW-33HO	DO	DO	8/30/2023 12:53	2.51	mg/L
APCO GS-AP-MW-33HO	DTW	Depth to Water Detail	8/30/2023 12:53	245.86	ft
APCO GS-AP-MW-33HO	ORP	Oxidation Reduction Potential	8/30/2023 12:53	45.61	mv
APCO GS-AP-MW-33HO	PH	pH	8/30/2023 12:53	7.34	SU
APCO GS-AP-MW-33HO	TEMP	Temperature	8/30/2023 12:53	28.75	C
APCO GS-AP-MW-33HO	TURB	Turbidity	8/30/2023 12:53	10.36	NTU
APCO GS-AP-MW-33HO	COND	Conductivity	8/30/2023 12:58	545.68	uS/cm
APCO GS-AP-MW-33HO	DO	DO	8/30/2023 12:58	1.14	mg/L
APCO GS-AP-MW-33HO	DTW	Depth to Water Detail	8/30/2023 12:58	246.02	ft
APCO GS-AP-MW-33HO	ORP	Oxidation Reduction Potential	8/30/2023 12:58	40.53	mv
APCO GS-AP-MW-33HO	PH	pH	8/30/2023 12:58	7.4	SU
APCO GS-AP-MW-33HO	TEMP	Temperature	8/30/2023 12:58	28.82	C
APCO GS-AP-MW-33HO	TURB	Turbidity	8/30/2023 12:58	12.3	NTU
APCO GS-AP-MW-33HO	COND	Conductivity	8/30/2023 13:03	555.34	uS/cm
APCO GS-AP-MW-33HO	DO	DO	8/30/2023 13:03	2.17	mg/L
APCO GS-AP-MW-33HO	DTW	Depth to Water Detail	8/30/2023 13:03	246.14	ft
APCO GS-AP-MW-33HO	ORP	Oxidation Reduction Potential	8/30/2023 13:03	37.14	mv
APCO GS-AP-MW-33HO	PH	pH	8/30/2023 13:03	7.4	SU
APCO GS-AP-MW-33HO	TEMP	Temperature	8/30/2023 13:03	28.96	C
APCO GS-AP-MW-33HO	TURB	Turbidity	8/30/2023 13:03	11.45	NTU
APCO GS-AP-MW-33HO	COND	Conductivity	8/30/2023 13:08	572.74	uS/cm
APCO GS-AP-MW-33HO	DO	DO	8/30/2023 13:08	1.98	mg/L
APCO GS-AP-MW-33HO	DTW	Depth to Water Detail	8/30/2023 13:08	246.28	ft
APCO GS-AP-MW-33HO	ORP	Oxidation Reduction Potential	8/30/2023 13:08	32	mv
APCO GS-AP-MW-33HO	PH	pH	8/30/2023 13:08	7.44	SU
APCO GS-AP-MW-33HO	TEMP	Temperature	8/30/2023 13:08	29.1	C
APCO GS-AP-MW-33HO	TURB	Turbidity	8/30/2023 13:08	11.72	NTU
APCO GS-AP-MW-33HO	COND	Conductivity	8/30/2023 13:13	578.7	uS/cm
APCO GS-AP-MW-33HO	DO	DO	8/30/2023 13:13	1.31	mg/L
APCO GS-AP-MW-33HO	DTW	Depth to Water Detail	8/30/2023 13:13	246.37	ft
APCO GS-AP-MW-33HO	ORP	Oxidation Reduction Potential	8/30/2023 13:13	28.21	mv
APCO GS-AP-MW-33HO	PH	pH	8/30/2023 13:13	7.48	SU
APCO GS-AP-MW-33HO	TEMP	Temperature	8/30/2023 13:13	29.62	C
APCO GS-AP-MW-33HO	TURB	Turbidity	8/30/2023 13:13	10.39	NTU
APCO GS-AP-MW-33HO	COND	Conductivity	8/30/2023 13:18	585.16	uS/cm
APCO GS-AP-MW-33HO	DO	DO	8/30/2023 13:18	1.04	mg/L
APCO GS-AP-MW-33HO	DTW	Depth to Water Detail	8/30/2023 13:18	246.5	ft
APCO GS-AP-MW-33HO	ORP	Oxidation Reduction Potential	8/30/2023 13:18	95.34	mv
APCO GS-AP-MW-33HO	PH	pH	8/30/2023 13:18	7.5	SU
APCO GS-AP-MW-33HO	TEMP	Temperature	8/30/2023 13:18	30.48	C
APCO GS-AP-MW-33HO	TURB	Turbidity	8/30/2023 13:18	10.16	NTU
APCO GS-AP-MW-33HO	COND	Conductivity	8/30/2023 13:23	590.02	uS/cm
APCO GS-AP-MW-33HO	DO	DO	8/30/2023 13:23	1.08	mg/L
APCO GS-AP-MW-33HO	DTW	Depth to Water Detail	8/30/2023 13:23	246.59	ft
APCO GS-AP-MW-33HO	ORP	Oxidation Reduction Potential	8/30/2023 13:23	26.56	mv
APCO GS-AP-MW-33HO	PH	pH	8/30/2023 13:23	7.53	SU
APCO GS-AP-MW-33HO	TEMP	Temperature	8/30/2023 13:23	30.48	C
APCO GS-AP-MW-33HO	TURB	Turbidity	8/30/2023 13:23	9.22	NTU
APCO GS-AP-MW-33HO	COND	Conductivity	8/30/2023 13:28	589.44	uS/cm
APCO GS-AP-MW-33HO	DO	DO	8/30/2023 13:28	1.14	mg/L
APCO GS-AP-MW-33HO	DTW	Depth to Water Detail	8/30/2023 13:28	246.7	ft

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO GS-AP-MW-33HO	ORP	Oxidation Reduction Potential	8/30/2023 13:28	9.93	mv
APCO GS-AP-MW-33HO	PH	pH	8/30/2023 13:28	7.55	SU
APCO GS-AP-MW-33HO	TEMP	Temperature	8/30/2023 13:28	30.36	C
APCO GS-AP-MW-33HO	TURB	Turbidity	8/30/2023 13:28	10.49	NTU
APCO GS-AP-MW-33HO	COND	Conductivity	8/30/2023 13:33	587.66	uS/cm
APCO GS-AP-MW-33HO	DO	DO	8/30/2023 13:33	1.12	mg/L
APCO GS-AP-MW-33HO	DTW	Depth to Water Detail	8/30/2023 13:33	246.8	ft
APCO GS-AP-MW-33HO	ORP	Oxidation Reduction Potential	8/30/2023 13:33	-0.42	mv
APCO GS-AP-MW-33HO	PH	pH	8/30/2023 13:33	7.56	SU
APCO GS-AP-MW-33HO	TEMP	Temperature	8/30/2023 13:33	30	C
APCO GS-AP-MW-33HO	TURB	Turbidity	8/30/2023 13:33	10.11	NTU
APCO GS-AP-MW-33HO	COND	Conductivity	8/30/2023 13:38	586.51	uS/cm
APCO GS-AP-MW-33HO	DO	DO	8/30/2023 13:38	0.47	mg/L
APCO GS-AP-MW-33HO	DTW	Depth to Water Detail	8/30/2023 13:38	246.92	ft
APCO GS-AP-MW-33HO	ORP	Oxidation Reduction Potential	8/30/2023 13:38	-8.2	mv
APCO GS-AP-MW-33HO	PH	pH	8/30/2023 13:38	7.56	SU
APCO GS-AP-MW-33HO	TEMP	Temperature	8/30/2023 13:38	29.62	C
APCO GS-AP-MW-33HO	TURB	Turbidity	8/30/2023 13:38	9.86	NTU
APCO GS-AP-MW-33HO	COND	Conductivity	8/30/2023 13:43	591.2	uS/cm
APCO GS-AP-MW-33HO	DO	DO	8/30/2023 13:43	0.99	mg/L
APCO GS-AP-MW-33HO	DTW	Depth to Water Detail	8/30/2023 13:43	247	ft
APCO GS-AP-MW-33HO	ORP	Oxidation Reduction Potential	8/30/2023 13:43	-16.84	mv
APCO GS-AP-MW-33HO	PH	pH	8/30/2023 13:43	7.56	SU
APCO GS-AP-MW-33HO	TEMP	Temperature	8/30/2023 13:43	29.32	C
APCO GS-AP-MW-33HO	TURB	Turbidity	8/30/2023 13:43	9.12	NTU
APCO GS-AP-MW-33HO	COND	Conductivity	8/30/2023 13:48	589.23	uS/cm
APCO GS-AP-MW-33HO	DO	DO	8/30/2023 13:48	0.83	mg/L
APCO GS-AP-MW-33HO	DTW	Depth to Water Detail	8/30/2023 13:48	247.11	ft
APCO GS-AP-MW-33HO	ORP	Oxidation Reduction Potential	8/30/2023 13:48	-24.57	mv
APCO GS-AP-MW-33HO	PH	pH	8/30/2023 13:48	7.57	SU
APCO GS-AP-MW-33HO	TEMP	Temperature	8/30/2023 13:48	28.88	C
APCO GS-AP-MW-33HO	TURB	Turbidity	8/30/2023 13:48	8.8	NTU
APCO GS-AP-MW-33HO	COND	Conductivity	8/30/2023 13:53	589.38	uS/cm
APCO GS-AP-MW-33HO	DO	DO	8/30/2023 13:53	1.01	mg/L
APCO GS-AP-MW-33HO	DTW	Depth to Water Detail	8/30/2023 13:53	247.19	ft
APCO GS-AP-MW-33HO	ORP	Oxidation Reduction Potential	8/30/2023 13:53	-31.66	mv
APCO GS-AP-MW-33HO	PH	pH	8/30/2023 13:53	7.58	SU
APCO GS-AP-MW-33HO	SULFIDE	Sulfide	8/30/2023 13:53	2	mg/L
APCO GS-AP-MW-33HO	TEMP	Temperature	8/30/2023 13:53	28.45	C
APCO GS-AP-MW-33HO	TURB	Turbidity	8/30/2023 13:53	8.74	NTU
APCO GS-AP-MW-34HO	COND	Conductivity	8/31/2023 6:44	2638.48	uS/cm
APCO GS-AP-MW-34HO	DO	DO	8/31/2023 6:44	7.12	mg/L
APCO GS-AP-MW-34HO	DTW	Depth to Water Detail	8/31/2023 6:44	251.34	ft
APCO GS-AP-MW-34HO	ORP	Oxidation Reduction Potential	8/31/2023 6:44	73.06	mv
APCO GS-AP-MW-34HO	PH	pH	8/31/2023 6:44	7.05	SU
APCO GS-AP-MW-34HO	TEMP	Temperature	8/31/2023 6:44	19.28	C
APCO GS-AP-MW-34HO	TURB	Turbidity	8/31/2023 6:44	42.1	NTU
APCO GS-AP-MW-34HO	COND	Conductivity	8/31/2023 6:49	2613.61	uS/cm
APCO GS-AP-MW-34HO	DO	DO	8/31/2023 6:49	6.72	mg/L
APCO GS-AP-MW-34HO	DTW	Depth to Water Detail	8/31/2023 6:49	252.02	ft
APCO GS-AP-MW-34HO	ORP	Oxidation Reduction Potential	8/31/2023 6:49	79.77	mv
APCO GS-AP-MW-34HO	PH	pH	8/31/2023 6:49	6.96	SU
APCO GS-AP-MW-34HO	TEMP	Temperature	8/31/2023 6:49	19.12	C
APCO GS-AP-MW-34HO	TURB	Turbidity	8/31/2023 6:49	21.2	NTU
APCO GS-AP-MW-34HO	COND	Conductivity	8/31/2023 6:54	2594.69	uS/cm
APCO GS-AP-MW-34HO	DO	DO	8/31/2023 6:54	6.61	mg/L
APCO GS-AP-MW-34HO	DTW	Depth to Water Detail	8/31/2023 6:54	252.29	ft
APCO GS-AP-MW-34HO	ORP	Oxidation Reduction Potential	8/31/2023 6:54	82.69	mv
APCO GS-AP-MW-34HO	PH	pH	8/31/2023 6:54	6.94	SU
APCO GS-AP-MW-34HO	TEMP	Temperature	8/31/2023 6:54	18.9	C
APCO GS-AP-MW-34HO	TURB	Turbidity	8/31/2023 6:54	16.6	NTU
APCO GS-AP-MW-34HO	COND	Conductivity	8/31/2023 6:59	2569.35	uS/cm
APCO GS-AP-MW-34HO	DO	DO	8/31/2023 6:59	6.11	mg/L
APCO GS-AP-MW-34HO	DTW	Depth to Water Detail	8/31/2023 6:59	252.48	ft

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO GS-AP-MW-34HO	ORP	Oxidation Reduction Potential	8/31/2023 6:59	86.17	mv
APCO GS-AP-MW-34HO	PH	pH	8/31/2023 6:59	6.88	SU
APCO GS-AP-MW-34HO	TEMP	Temperature	8/31/2023 6:59	19.01	C
APCO GS-AP-MW-34HO	TURB	Turbidity	8/31/2023 6:59	10.39	NTU
APCO GS-AP-MW-34HO	COND	Conductivity	8/31/2023 7:04	2546.88	uS/cm
APCO GS-AP-MW-34HO	DO	DO	8/31/2023 7:04	5.68	mg/L
APCO GS-AP-MW-34HO	DTW	Depth to Water Detail	8/31/2023 7:04	252.63	ft
APCO GS-AP-MW-34HO	ORP	Oxidation Reduction Potential	8/31/2023 7:04	88.17	mv
APCO GS-AP-MW-34HO	PH	pH	8/31/2023 7:04	6.85	SU
APCO GS-AP-MW-34HO	TEMP	Temperature	8/31/2023 7:04	19.12	C
APCO GS-AP-MW-34HO	TURB	Turbidity	8/31/2023 7:04	8.09	NTU
APCO GS-AP-MW-34HO	COND	Conductivity	8/31/2023 7:09	2544.14	uS/cm
APCO GS-AP-MW-34HO	DO	DO	8/31/2023 7:09	5.43	mg/L
APCO GS-AP-MW-34HO	DTW	Depth to Water Detail	8/31/2023 7:09	252.9	ft
APCO GS-AP-MW-34HO	ORP	Oxidation Reduction Potential	8/31/2023 7:09	89.52	mv
APCO GS-AP-MW-34HO	PH	pH	8/31/2023 7:09	6.83	SU
APCO GS-AP-MW-34HO	TEMP	Temperature	8/31/2023 7:09	19.51	C
APCO GS-AP-MW-34HO	TURB	Turbidity	8/31/2023 7:09	9.22	NTU
APCO GS-AP-MW-34HO	COND	Conductivity	8/31/2023 7:14	2545.19	uS/cm
APCO GS-AP-MW-34HO	DO	DO	8/31/2023 7:14	5.06	mg/L
APCO GS-AP-MW-34HO	DTW	Depth to Water Detail	8/31/2023 7:14	253.24	ft
APCO GS-AP-MW-34HO	ORP	Oxidation Reduction Potential	8/31/2023 7:14	84.86	mv
APCO GS-AP-MW-34HO	PH	pH	8/31/2023 7:14	6.81	SU
APCO GS-AP-MW-34HO	TEMP	Temperature	8/31/2023 7:14	19.85	C
APCO GS-AP-MW-34HO	TURB	Turbidity	8/31/2023 7:14	8.12	NTU
APCO GS-AP-MW-34HO	COND	Conductivity	8/31/2023 7:19	2542.77	uS/cm
APCO GS-AP-MW-34HO	DO	DO	8/31/2023 7:19	5.05	mg/L
APCO GS-AP-MW-34HO	DTW	Depth to Water Detail	8/31/2023 7:19	253.4	ft
APCO GS-AP-MW-34HO	ORP	Oxidation Reduction Potential	8/31/2023 7:19	33.53	mv
APCO GS-AP-MW-34HO	PH	pH	8/31/2023 7:19	6.8	SU
APCO GS-AP-MW-34HO	TEMP	Temperature	8/31/2023 7:19	20	C
APCO GS-AP-MW-34HO	TURB	Turbidity	8/31/2023 7:19	7.98	NTU
APCO GS-AP-MW-34HO	COND	Conductivity	8/31/2023 7:24	2551.64	uS/cm
APCO GS-AP-MW-34HO	DO	DO	8/31/2023 7:24	3.92	mg/L
APCO GS-AP-MW-34HO	DTW	Depth to Water Detail	8/31/2023 7:24	253.55	ft
APCO GS-AP-MW-34HO	ORP	Oxidation Reduction Potential	8/31/2023 7:24	-33.93	mv
APCO GS-AP-MW-34HO	PH	pH	8/31/2023 7:24	6.84	SU
APCO GS-AP-MW-34HO	TEMP	Temperature	8/31/2023 7:24	20.36	C
APCO GS-AP-MW-34HO	TURB	Turbidity	8/31/2023 7:24	7.89	NTU
APCO GS-AP-MW-34HO	COND	Conductivity	8/31/2023 7:29	2559.64	uS/cm
APCO GS-AP-MW-34HO	DO	DO	8/31/2023 7:29	3.94	mg/L
APCO GS-AP-MW-34HO	DTW	Depth to Water Detail	8/31/2023 7:29	253.72	ft
APCO GS-AP-MW-34HO	ORP	Oxidation Reduction Potential	8/31/2023 7:29	-50.43	mv
APCO GS-AP-MW-34HO	PH	pH	8/31/2023 7:29	6.91	SU
APCO GS-AP-MW-34HO	TEMP	Temperature	8/31/2023 7:29	20.39	C
APCO GS-AP-MW-34HO	TURB	Turbidity	8/31/2023 7:29	8.08	NTU
APCO GS-AP-MW-34HO	COND	Conductivity	8/31/2023 7:34	2586.88	uS/cm
APCO GS-AP-MW-34HO	DO	DO	8/31/2023 7:34	3.52	mg/L
APCO GS-AP-MW-34HO	DTW	Depth to Water Detail	8/31/2023 7:34	253.87	ft
APCO GS-AP-MW-34HO	ORP	Oxidation Reduction Potential	8/31/2023 7:34	-64.6	mv
APCO GS-AP-MW-34HO	PH	pH	8/31/2023 7:34	6.98	SU
APCO GS-AP-MW-34HO	TEMP	Temperature	8/31/2023 7:34	20.61	C
APCO GS-AP-MW-34HO	TURB	Turbidity	8/31/2023 7:34	8.12	NTU
APCO GS-AP-MW-34HO	COND	Conductivity	8/31/2023 7:39	2616.23	uS/cm
APCO GS-AP-MW-34HO	DO	DO	8/31/2023 7:39	3.37	mg/L
APCO GS-AP-MW-34HO	DTW	Depth to Water Detail	8/31/2023 7:39	253.99	ft
APCO GS-AP-MW-34HO	ORP	Oxidation Reduction Potential	8/31/2023 7:39	-74.23	mv
APCO GS-AP-MW-34HO	PH	pH	8/31/2023 7:39	7.04	SU
APCO GS-AP-MW-34HO	TEMP	Temperature	8/31/2023 7:39	20.84	C
APCO GS-AP-MW-34HO	TURB	Turbidity	8/31/2023 7:39	7.63	NTU
APCO GS-AP-MW-34HO	COND	Conductivity	8/31/2023 7:44	2645.91	uS/cm
APCO GS-AP-MW-34HO	DO	DO	8/31/2023 7:44	3.06	mg/L
APCO GS-AP-MW-34HO	DTW	Depth to Water Detail	8/31/2023 7:44	254.14	ft
APCO GS-AP-MW-34HO	ORP	Oxidation Reduction Potential	8/31/2023 7:44	-86.68	mv

Plant Gorgas Ash Pond
Field Parameter Summary

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO GS-AP-MW-34HO	PH	pH	8/31/2023 7:44	7.1	SU
APCO GS-AP-MW-34HO	TEMP	Temperature	8/31/2023 7:44	21.09	C
APCO GS-AP-MW-34HO	TURB	Turbidity	8/31/2023 7:44	7.77	NTU
APCO GS-AP-MW-34HO	COND	Conductivity	8/31/2023 7:49	2742.26	uS/cm
APCO GS-AP-MW-34HO	DO	DO	8/31/2023 7:49	2.09	mg/L
APCO GS-AP-MW-34HO	DTW	Depth to Water Detail	8/31/2023 7:49	254.26	ft
APCO GS-AP-MW-34HO	ORP	Oxidation Reduction Potential	8/31/2023 7:49	-101.23	mv
APCO GS-AP-MW-34HO	PH	pH	8/31/2023 7:49	7.21	SU
APCO GS-AP-MW-34HO	TEMP	Temperature	8/31/2023 7:49	21.81	C
APCO GS-AP-MW-34HO	TURB	Turbidity	8/31/2023 7:49	7.4	NTU
APCO GS-AP-MW-34HO	COND	Conductivity	8/31/2023 7:54	2773.82	uS/cm
APCO GS-AP-MW-34HO	DO	DO	8/31/2023 7:54	1.84	mg/L
APCO GS-AP-MW-34HO	DTW	Depth to Water Detail	8/31/2023 7:54	254.44	ft
APCO GS-AP-MW-34HO	ORP	Oxidation Reduction Potential	8/31/2023 7:54	-110.33	mv
APCO GS-AP-MW-34HO	PH	pH	8/31/2023 7:54	7.24	SU
APCO GS-AP-MW-34HO	TEMP	Temperature	8/31/2023 7:54	21.84	C
APCO GS-AP-MW-34HO	TURB	Turbidity	8/31/2023 7:54	6.9	NTU
APCO GS-AP-MW-34HO	COND	Conductivity	8/31/2023 7:59	3208.48	uS/cm
APCO GS-AP-MW-34HO	DO	DO	8/31/2023 7:59	1.26	mg/L
APCO GS-AP-MW-34HO	DTW	Depth to Water Detail	8/31/2023 7:59	254.52	ft
APCO GS-AP-MW-34HO	ORP	Oxidation Reduction Potential	8/31/2023 7:59	-121.54	mv
APCO GS-AP-MW-34HO	PH	pH	8/31/2023 7:59	7.31	SU
APCO GS-AP-MW-34HO	TEMP	Temperature	8/31/2023 7:59	22.09	C
APCO GS-AP-MW-34HO	TURB	Turbidity	8/31/2023 7:59	7.02	NTU
APCO GS-AP-MW-34HO	COND	Conductivity	8/31/2023 8:04	3277.3	uS/cm
APCO GS-AP-MW-34HO	DO	DO	8/31/2023 8:04	1.23	mg/L
APCO GS-AP-MW-34HO	DTW	Depth to Water Detail	8/31/2023 8:04	254.58	ft
APCO GS-AP-MW-34HO	ORP	Oxidation Reduction Potential	8/31/2023 8:04	-131.6	mv
APCO GS-AP-MW-34HO	PH	pH	8/31/2023 8:04	7.37	SU
APCO GS-AP-MW-34HO	TEMP	Temperature	8/31/2023 8:04	22.5	C
APCO GS-AP-MW-34HO	TURB	Turbidity	8/31/2023 8:04	6.89	NTU
APCO GS-AP-MW-34HO	COND	Conductivity	8/31/2023 8:09	3317.18	uS/cm
APCO GS-AP-MW-34HO	DO	DO	8/31/2023 8:09	1.17	mg/L
APCO GS-AP-MW-34HO	DTW	Depth to Water Detail	8/31/2023 8:09	254.62	ft
APCO GS-AP-MW-34HO	ORP	Oxidation Reduction Potential	8/31/2023 8:09	-138.6	mv
APCO GS-AP-MW-34HO	PH	pH	8/31/2023 8:09	7.42	SU
APCO GS-AP-MW-34HO	SULFIDE	Sulfide	8/31/2023 8:09	2	mg/L
APCO GS-AP-MW-34HO	TEMP	Temperature	8/31/2023 8:09	22.17	C
APCO GS-AP-MW-34HO	TURB	Turbidity	8/31/2023 8:09	7.47	NTU
APCO GS-AP-MW-35HO	COND	Conductivity	8/31/2023 10:13	415.04	uS/cm
APCO GS-AP-MW-35HO	DO	DO	8/31/2023 10:13	1.08	mg/L
APCO GS-AP-MW-35HO	DTW	Depth to Water Detail	8/31/2023 10:13	264.88	ft
APCO GS-AP-MW-35HO	ORP	Oxidation Reduction Potential	8/31/2023 10:13	-82.93	mv
APCO GS-AP-MW-35HO	PH	pH	8/31/2023 10:13	8.13	SU
APCO GS-AP-MW-35HO	TEMP	Temperature	8/31/2023 10:13	22.32	C
APCO GS-AP-MW-35HO	TURB	Turbidity	8/31/2023 10:13	8.98	NTU
APCO GS-AP-MW-35HO	COND	Conductivity	8/31/2023 10:18	420.18	uS/cm
APCO GS-AP-MW-35HO	DO	DO	8/31/2023 10:18	1.59	mg/L
APCO GS-AP-MW-35HO	DTW	Depth to Water Detail	8/31/2023 10:18	265.38	ft
APCO GS-AP-MW-35HO	ORP	Oxidation Reduction Potential	8/31/2023 10:18	-84.48	mv
APCO GS-AP-MW-35HO	PH	pH	8/31/2023 10:18	8.19	SU
APCO GS-AP-MW-35HO	TEMP	Temperature	8/31/2023 10:18	21.4	C
APCO GS-AP-MW-35HO	TURB	Turbidity	8/31/2023 10:18	6.36	NTU
APCO GS-AP-MW-35HO	COND	Conductivity	8/31/2023 10:23	447.73	uS/cm
APCO GS-AP-MW-35HO	DO	DO	8/31/2023 10:23	1.44	mg/L
APCO GS-AP-MW-35HO	DTW	Depth to Water Detail	8/31/2023 10:23	265.84	ft
APCO GS-AP-MW-35HO	ORP	Oxidation Reduction Potential	8/31/2023 10:23	-65.32	mv
APCO GS-AP-MW-35HO	PH	pH	8/31/2023 10:23	8.16	SU
APCO GS-AP-MW-35HO	TEMP	Temperature	8/31/2023 10:23	21.52	C
APCO GS-AP-MW-35HO	TURB	Turbidity	8/31/2023 10:23	6.18	NTU
APCO GS-AP-MW-35HO	COND	Conductivity	8/31/2023 10:28	453.43	uS/cm
APCO GS-AP-MW-35HO	DO	DO	8/31/2023 10:28	1.47	mg/L
APCO GS-AP-MW-35HO	DTW	Depth to Water Detail	8/31/2023 10:28	265.92	ft
APCO GS-AP-MW-35HO	ORP	Oxidation Reduction Potential	8/31/2023 10:28	-85.27	mv

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO GS-AP-MW-35HO	PH	pH	8/31/2023 10:28	8.23	SU
APCO GS-AP-MW-35HO	TEMP	Temperature	8/31/2023 10:28	21.39	C
APCO GS-AP-MW-35HO	TURB	Turbidity	8/31/2023 10:28	5.64	NTU
APCO GS-AP-MW-35HO	COND	Conductivity	8/31/2023 10:33	454.32	uS/cm
APCO GS-AP-MW-35HO	DO	DO	8/31/2023 10:33	0.79	mg/L
APCO GS-AP-MW-35HO	DTW	Depth to Water Detail	8/31/2023 10:33	266	ft
APCO GS-AP-MW-35HO	ORP	Oxidation Reduction Potential	8/31/2023 10:33	-86.71	mv
APCO GS-AP-MW-35HO	PH	pH	8/31/2023 10:33	8.23	SU
APCO GS-AP-MW-35HO	TEMP	Temperature	8/31/2023 10:33	21.97	C
APCO GS-AP-MW-35HO	TURB	Turbidity	8/31/2023 10:33	5.71	NTU
APCO GS-AP-MW-35HO	COND	Conductivity	8/31/2023 10:38	452.85	uS/cm
APCO GS-AP-MW-35HO	DO	DO	8/31/2023 10:38	0.57	mg/L
APCO GS-AP-MW-35HO	DTW	Depth to Water Detail	8/31/2023 10:38	266.06	ft
APCO GS-AP-MW-35HO	ORP	Oxidation Reduction Potential	8/31/2023 10:38	-88.2	mv
APCO GS-AP-MW-35HO	PH	pH	8/31/2023 10:38	8.24	SU
APCO GS-AP-MW-35HO	TEMP	Temperature	8/31/2023 10:38	21.32	C
APCO GS-AP-MW-35HO	TURB	Turbidity	8/31/2023 10:38	5.6	NTU
APCO GS-AP-MW-35HO	COND	Conductivity	8/31/2023 10:43	450.99	uS/cm
APCO GS-AP-MW-35HO	DO	DO	8/31/2023 10:43	0.49	mg/L
APCO GS-AP-MW-35HO	DTW	Depth to Water Detail	8/31/2023 10:43	266.1	ft
APCO GS-AP-MW-35HO	ORP	Oxidation Reduction Potential	8/31/2023 10:43	-90.05	mv
APCO GS-AP-MW-35HO	PH	pH	8/31/2023 10:43	8.24	SU
APCO GS-AP-MW-35HO	TEMP	Temperature	8/31/2023 10:43	20.94	C
APCO GS-AP-MW-35HO	TURB	Turbidity	8/31/2023 10:43	6.04	NTU
APCO GS-AP-MW-35HO	COND	Conductivity	8/31/2023 10:48	452.55	uS/cm
APCO GS-AP-MW-35HO	DO	DO	8/31/2023 10:48	0.52	mg/L
APCO GS-AP-MW-35HO	DTW	Depth to Water Detail	8/31/2023 10:48	266.14	ft
APCO GS-AP-MW-35HO	ORP	Oxidation Reduction Potential	8/31/2023 10:48	-92.22	mv
APCO GS-AP-MW-35HO	PH	pH	8/31/2023 10:48	8.24	SU
APCO GS-AP-MW-35HO	SULFIDE	Sulfide	8/31/2023 10:48	0	mg/L
APCO GS-AP-MW-35HO	TEMP	Temperature	8/31/2023 10:48	21.56	C
APCO GS-AP-MW-35HO	TURB	Turbidity	8/31/2023 10:48	5.86	NTU
APCO GS-AP-MW-36H	COND	Conductivity	9/6/2023 13:24	839.55	uS/cm
APCO GS-AP-MW-36H	DO	DO	9/6/2023 13:24	5.81	mg/L
APCO GS-AP-MW-36H	DTW	Depth to Water Detail	9/6/2023 13:24	241.52	ft
APCO GS-AP-MW-36H	ORP	Oxidation Reduction Potential	9/6/2023 13:24	-31.8	mv
APCO GS-AP-MW-36H	PH	pH	9/6/2023 13:24	7.35	SU
APCO GS-AP-MW-36H	TEMP	Temperature	9/6/2023 13:24	34.5	C
APCO GS-AP-MW-36H	TURB	Turbidity	9/6/2023 13:24	10.21	NTU
APCO GS-AP-MW-36H	COND	Conductivity	9/6/2023 13:29	759.72	uS/cm
APCO GS-AP-MW-36H	DO	DO	9/6/2023 13:29	5.68	mg/L
APCO GS-AP-MW-36H	DTW	Depth to Water Detail	9/6/2023 13:29	242.42	ft
APCO GS-AP-MW-36H	ORP	Oxidation Reduction Potential	9/6/2023 13:29	-21.36	mv
APCO GS-AP-MW-36H	PH	pH	9/6/2023 13:29	7.28	SU
APCO GS-AP-MW-36H	TEMP	Temperature	9/6/2023 13:29	34.82	C
APCO GS-AP-MW-36H	TURB	Turbidity	9/6/2023 13:29	6.84	NTU
APCO GS-AP-MW-36H	COND	Conductivity	9/6/2023 13:34	723.44	uS/cm
APCO GS-AP-MW-36H	DO	DO	9/6/2023 13:34	5.55	mg/L
APCO GS-AP-MW-36H	DTW	Depth to Water Detail	9/6/2023 13:34	243.08	ft
APCO GS-AP-MW-36H	ORP	Oxidation Reduction Potential	9/6/2023 13:34	-16.68	mv
APCO GS-AP-MW-36H	PH	pH	9/6/2023 13:34	7.25	SU
APCO GS-AP-MW-36H	TEMP	Temperature	9/6/2023 13:34	35.36	C
APCO GS-AP-MW-36H	TURB	Turbidity	9/6/2023 13:34	7.12	NTU
APCO GS-AP-MW-36H	COND	Conductivity	9/6/2023 13:39	733.66	uS/cm
APCO GS-AP-MW-36H	DO	DO	9/6/2023 13:39	5.32	mg/L
APCO GS-AP-MW-36H	DTW	Depth to Water Detail	9/6/2023 13:39	243.42	ft
APCO GS-AP-MW-36H	ORP	Oxidation Reduction Potential	9/6/2023 13:39	-15.27	mv
APCO GS-AP-MW-36H	PH	pH	9/6/2023 13:39	7.27	SU
APCO GS-AP-MW-36H	TEMP	Temperature	9/6/2023 13:39	36.27	C
APCO GS-AP-MW-36H	TURB	Turbidity	9/6/2023 13:39	6.62	NTU
APCO GS-AP-MW-36H	COND	Conductivity	9/6/2023 13:44	721.78	uS/cm
APCO GS-AP-MW-36H	DO	DO	9/6/2023 13:44	5.23	mg/L
APCO GS-AP-MW-36H	DTW	Depth to Water Detail	9/6/2023 13:44	243.79	ft
APCO GS-AP-MW-36H	ORP	Oxidation Reduction Potential	9/6/2023 13:44	-12.59	mv

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO GS-AP-MW-36H	PH	pH	9/6/2023 13:44	7.28	SU
APCO GS-AP-MW-36H	TEMP	Temperature	9/6/2023 13:44	36.72	C
APCO GS-AP-MW-36H	TURB	Turbidity	9/6/2023 13:44	6.9	NTU
APCO GS-AP-MW-36H	COND	Conductivity	9/6/2023 13:49	678.26	uS/cm
APCO GS-AP-MW-36H	DO	DO	9/6/2023 13:49	4.97	mg/L
APCO GS-AP-MW-36H	DTW	Depth to Water Detail	9/6/2023 13:49	244.02	ft
APCO GS-AP-MW-36H	ORP	Oxidation Reduction Potential	9/6/2023 13:49	-2.89	mv
APCO GS-AP-MW-36H	PH	pH	9/6/2023 13:49	7.17	SU
APCO GS-AP-MW-36H	TEMP	Temperature	9/6/2023 13:49	35.33	C
APCO GS-AP-MW-36H	TURB	Turbidity	9/6/2023 13:49	6.11	NTU
APCO GS-AP-MW-36H	COND	Conductivity	9/6/2023 13:54	656.01	uS/cm
APCO GS-AP-MW-36H	DO	DO	9/6/2023 13:54	4.59	mg/L
APCO GS-AP-MW-36H	DTW	Depth to Water Detail	9/6/2023 13:54	244.2	ft
APCO GS-AP-MW-36H	ORP	Oxidation Reduction Potential	9/6/2023 13:54	2.43	mv
APCO GS-AP-MW-36H	PH	pH	9/6/2023 13:54	7.13	SU
APCO GS-AP-MW-36H	TEMP	Temperature	9/6/2023 13:54	33.85	C
APCO GS-AP-MW-36H	TURB	Turbidity	9/6/2023 13:54	6.24	NTU
APCO GS-AP-MW-36H	COND	Conductivity	9/6/2023 13:59	656.3	uS/cm
APCO GS-AP-MW-36H	DO	DO	9/6/2023 13:59	4.48	mg/L
APCO GS-AP-MW-36H	DTW	Depth to Water Detail	9/6/2023 13:59	244.52	ft
APCO GS-AP-MW-36H	ORP	Oxidation Reduction Potential	9/6/2023 13:59	-2.52	mv
APCO GS-AP-MW-36H	PH	pH	9/6/2023 13:59	7.15	SU
APCO GS-AP-MW-36H	TEMP	Temperature	9/6/2023 13:59	34.36	C
APCO GS-AP-MW-36H	TURB	Turbidity	9/6/2023 13:59	7.07	NTU
APCO GS-AP-MW-36H	COND	Conductivity	9/6/2023 14:04	651.25	uS/cm
APCO GS-AP-MW-36H	DO	DO	9/6/2023 14:04	4.36	mg/L
APCO GS-AP-MW-36H	DTW	Depth to Water Detail	9/6/2023 14:04	244.78	ft
APCO GS-AP-MW-36H	ORP	Oxidation Reduction Potential	9/6/2023 14:04	-9.76	mv
APCO GS-AP-MW-36H	PH	pH	9/6/2023 14:04	7.17	SU
APCO GS-AP-MW-36H	TEMP	Temperature	9/6/2023 14:04	34.68	C
APCO GS-AP-MW-36H	TURB	Turbidity	9/6/2023 14:04	6.89	NTU
APCO GS-AP-MW-36H	COND	Conductivity	9/6/2023 14:09	650.52	uS/cm
APCO GS-AP-MW-36H	DO	DO	9/6/2023 14:09	4.1	mg/L
APCO GS-AP-MW-36H	DTW	Depth to Water Detail	9/6/2023 14:09	245	ft
APCO GS-AP-MW-36H	ORP	Oxidation Reduction Potential	9/6/2023 14:09	-23.31	mv
APCO GS-AP-MW-36H	PH	pH	9/6/2023 14:09	7.2	SU
APCO GS-AP-MW-36H	TEMP	Temperature	9/6/2023 14:09	35.27	C
APCO GS-AP-MW-36H	TURB	Turbidity	9/6/2023 14:09	6.54	NTU
APCO GS-AP-MW-36H	COND	Conductivity	9/6/2023 14:14	653.69	uS/cm
APCO GS-AP-MW-36H	DO	DO	9/6/2023 14:14	3.91	mg/L
APCO GS-AP-MW-36H	DTW	Depth to Water Detail	9/6/2023 14:14	245.16	ft
APCO GS-AP-MW-36H	ORP	Oxidation Reduction Potential	9/6/2023 14:14	-28.37	mv
APCO GS-AP-MW-36H	PH	pH	9/6/2023 14:14	7.22	SU
APCO GS-AP-MW-36H	TEMP	Temperature	9/6/2023 14:14	35.67	C
APCO GS-AP-MW-36H	TURB	Turbidity	9/6/2023 14:14	6.56	NTU
APCO GS-AP-MW-36H	COND	Conductivity	9/6/2023 14:19	663.7	uS/cm
APCO GS-AP-MW-36H	DO	DO	9/6/2023 14:19	3.81	mg/L
APCO GS-AP-MW-36H	DTW	Depth to Water Detail	9/6/2023 14:19	245.29	ft
APCO GS-AP-MW-36H	ORP	Oxidation Reduction Potential	9/6/2023 14:19	-32.58	mv
APCO GS-AP-MW-36H	PH	pH	9/6/2023 14:19	7.23	SU
APCO GS-AP-MW-36H	TEMP	Temperature	9/6/2023 14:19	35.87	C
APCO GS-AP-MW-36H	TURB	Turbidity	9/6/2023 14:19	6.33	NTU
APCO GS-AP-MW-36H	COND	Conductivity	9/6/2023 14:24	666.65	uS/cm
APCO GS-AP-MW-36H	DO	DO	9/6/2023 14:24	3.67	mg/L
APCO GS-AP-MW-36H	DTW	Depth to Water Detail	9/6/2023 14:24	245.29	ft
APCO GS-AP-MW-36H	ORP	Oxidation Reduction Potential	9/6/2023 14:24	-32.96	mv
APCO GS-AP-MW-36H	PH	pH	9/6/2023 14:24	7.26	SU
APCO GS-AP-MW-36H	TEMP	Temperature	9/6/2023 14:24	34.31	C
APCO GS-AP-MW-36H	TURB	Turbidity	9/6/2023 14:24	6.32	NTU
APCO GS-AP-MW-36H	COND	Conductivity	9/6/2023 14:29	672.84	uS/cm
APCO GS-AP-MW-36H	DO	DO	9/6/2023 14:29	3.63	mg/L
APCO GS-AP-MW-36H	DTW	Depth to Water Detail	9/6/2023 14:29	245.67	ft
APCO GS-AP-MW-36H	ORP	Oxidation Reduction Potential	9/6/2023 14:29	-34.61	mv
APCO GS-AP-MW-36H	PH	pH	9/6/2023 14:29	7.26	SU

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO GS-AP-MW-36H	TEMP	Temperature	9/6/2023 14:29	34.59	C
APCO GS-AP-MW-36H	TURB	Turbidity	9/6/2023 14:29	6.2	NTU
APCO GS-AP-MW-36H	COND	Conductivity	9/6/2023 14:34	674.31	uS/cm
APCO GS-AP-MW-36H	DO	DO	9/6/2023 14:34	3.54	mg/L
APCO GS-AP-MW-36H	DTW	Depth to Water Detail	9/6/2023 14:34	245.89	ft
APCO GS-AP-MW-36H	ORP	Oxidation Reduction Potential	9/6/2023 14:34	-35.35	mv
APCO GS-AP-MW-36H	PH	pH	9/6/2023 14:34	7.29	SU
APCO GS-AP-MW-36H	TEMP	Temperature	9/6/2023 14:34	34.81	C
APCO GS-AP-MW-36H	TURB	Turbidity	9/6/2023 14:34	5.91	NTU
APCO GS-AP-MW-36H	COND	Conductivity	9/6/2023 14:39	675.49	uS/cm
APCO GS-AP-MW-36H	DO	DO	9/6/2023 14:39	3.5	mg/L
APCO GS-AP-MW-36H	DTW	Depth to Water Detail	9/6/2023 14:39	246.05	ft
APCO GS-AP-MW-36H	ORP	Oxidation Reduction Potential	9/6/2023 14:39	-40.86	mv
APCO GS-AP-MW-36H	PH	pH	9/6/2023 14:39	7.33	SU
APCO GS-AP-MW-36H	TEMP	Temperature	9/6/2023 14:39	34.1	C
APCO GS-AP-MW-36H	TURB	Turbidity	9/6/2023 14:39	7.22	NTU
APCO GS-AP-MW-36H	COND	Conductivity	9/6/2023 14:44	706.78	uS/cm
APCO GS-AP-MW-36H	DO	DO	9/6/2023 14:44	4.13	mg/L
APCO GS-AP-MW-36H	DTW	Depth to Water Detail	9/6/2023 14:44	246.21	ft
APCO GS-AP-MW-36H	ORP	Oxidation Reduction Potential	9/6/2023 14:44	-69.13	mv
APCO GS-AP-MW-36H	PH	pH	9/6/2023 14:44	7.56	SU
APCO GS-AP-MW-36H	TEMP	Temperature	9/6/2023 14:44	34.15	C
APCO GS-AP-MW-36H	TURB	Turbidity	9/6/2023 14:44	6.98	NTU
APCO GS-AP-MW-36H	COND	Conductivity	9/6/2023 14:49	869.96	uS/cm
APCO GS-AP-MW-36H	DO	DO	9/6/2023 14:49	3.38	mg/L
APCO GS-AP-MW-36H	DTW	Depth to Water Detail	9/6/2023 14:49	246.39	ft
APCO GS-AP-MW-36H	ORP	Oxidation Reduction Potential	9/6/2023 14:49	-76.95	mv
APCO GS-AP-MW-36H	PH	pH	9/6/2023 14:49	7.69	SU
APCO GS-AP-MW-36H	TEMP	Temperature	9/6/2023 14:49	33.3	C
APCO GS-AP-MW-36H	TURB	Turbidity	9/6/2023 14:49	6.9	NTU
APCO GS-AP-MW-36H	COND	Conductivity	9/6/2023 14:54	997.73	uS/cm
APCO GS-AP-MW-36H	DO	DO	9/6/2023 14:54	3.83	mg/L
APCO GS-AP-MW-36H	DTW	Depth to Water Detail	9/6/2023 14:54	246.53	ft
APCO GS-AP-MW-36H	ORP	Oxidation Reduction Potential	9/6/2023 14:54	-81.3	mv
APCO GS-AP-MW-36H	PH	pH	9/6/2023 14:54	7.82	SU
APCO GS-AP-MW-36H	TEMP	Temperature	9/6/2023 14:54	32.71	C
APCO GS-AP-MW-36H	TURB	Turbidity	9/6/2023 14:54	6.53	NTU
APCO GS-AP-MW-36H	COND	Conductivity	9/6/2023 14:59	1013.9	uS/cm
APCO GS-AP-MW-36H	DO	DO	9/6/2023 14:59	2.73	mg/L
APCO GS-AP-MW-36H	DTW	Depth to Water Detail	9/6/2023 14:59	246.67	ft
APCO GS-AP-MW-36H	ORP	Oxidation Reduction Potential	9/6/2023 14:59	-79.22	mv
APCO GS-AP-MW-36H	PH	pH	9/6/2023 14:59	7.87	SU
APCO GS-AP-MW-36H	TEMP	Temperature	9/6/2023 14:59	32.69	C
APCO GS-AP-MW-36H	TURB	Turbidity	9/6/2023 14:59	6.44	NTU
APCO GS-AP-MW-36H	COND	Conductivity	9/6/2023 15:04	1032.03	uS/cm
APCO GS-AP-MW-36H	DO	DO	9/6/2023 15:04	2.4	mg/L
APCO GS-AP-MW-36H	DTW	Depth to Water Detail	9/6/2023 15:04	246.76	ft
APCO GS-AP-MW-36H	ORP	Oxidation Reduction Potential	9/6/2023 15:04	-77.64	mv
APCO GS-AP-MW-36H	PH	pH	9/6/2023 15:04	7.89	SU
APCO GS-AP-MW-36H	TEMP	Temperature	9/6/2023 15:04	33.07	C
APCO GS-AP-MW-36H	TURB	Turbidity	9/6/2023 15:04	6.19	NTU
APCO GS-AP-MW-36H	COND	Conductivity	9/6/2023 15:09	1027.36	uS/cm
APCO GS-AP-MW-36H	DO	DO	9/6/2023 15:09	1.54	mg/L
APCO GS-AP-MW-36H	DTW	Depth to Water Detail	9/6/2023 15:09	246.84	ft
APCO GS-AP-MW-36H	ORP	Oxidation Reduction Potential	9/6/2023 15:09	-77.75	mv
APCO GS-AP-MW-36H	PH	pH	9/6/2023 15:09	7.93	SU
APCO GS-AP-MW-36H	TEMP	Temperature	9/6/2023 15:09	33.11	C
APCO GS-AP-MW-36H	TURB	Turbidity	9/6/2023 15:09	6.22	NTU
APCO GS-AP-MW-36H	COND	Conductivity	9/6/2023 15:14	1032.17	uS/cm
APCO GS-AP-MW-36H	DO	DO	9/6/2023 15:14	1.6	mg/L
APCO GS-AP-MW-36H	DTW	Depth to Water Detail	9/6/2023 15:14	246.96	ft
APCO GS-AP-MW-36H	ORP	Oxidation Reduction Potential	9/6/2023 15:14	-75.74	mv
APCO GS-AP-MW-36H	PH	pH	9/6/2023 15:14	7.91	SU
APCO GS-AP-MW-36H	TEMP	Temperature	9/6/2023 15:14	33.19	C

Plant Gorgas Ash Pond
Field Parameter Summary

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO GS-AP-MW-36H	TURB	Turbidity	9/6/2023 15:14	6.09	NTU
APCO GS-AP-MW-36H	COND	Conductivity	9/6/2023 15:19	1032.88	uS/cm
APCO GS-AP-MW-36H	DO	DO	9/6/2023 15:19	1.52	mg/L
APCO GS-AP-MW-36H	DTW	Depth to Water Detail	9/6/2023 15:19	247.02	ft
APCO GS-AP-MW-36H	ORP	Oxidation Reduction Potential	9/6/2023 15:19	-76.62	mv
APCO GS-AP-MW-36H	PH	pH	9/6/2023 15:19	7.95	SU
APCO GS-AP-MW-36H	SULFIDE	Sulfide	9/6/2023 15:19	0	mg/L
APCO GS-AP-MW-36H	TEMP	Temperature	9/6/2023 15:19	33.18	C
APCO GS-AP-MW-36H	TURB	Turbidity	9/6/2023 15:19	6.17	NTU
APCO GS-AP-MW-36V	COND	Conductivity	9/6/2023 10:51	2569.55	uS/cm
APCO GS-AP-MW-36V	DO	DO	9/6/2023 10:51	0.35	mg/L
APCO GS-AP-MW-36V	DTW	Depth to Water Detail	9/6/2023 10:51	263.12	ft
APCO GS-AP-MW-36V	ORP	Oxidation Reduction Potential	9/6/2023 10:51	-2.32	mv
APCO GS-AP-MW-36V	PH	pH	9/6/2023 10:51	7.12	SU
APCO GS-AP-MW-36V	TEMP	Temperature	9/6/2023 10:51	19.44	C
APCO GS-AP-MW-36V	TURB	Turbidity	9/6/2023 10:51	5.75	NTU
APCO GS-AP-MW-36V	COND	Conductivity	9/6/2023 10:56	2564.59	uS/cm
APCO GS-AP-MW-36V	DO	DO	9/6/2023 10:56	0.29	mg/L
APCO GS-AP-MW-36V	DTW	Depth to Water Detail	9/6/2023 10:56	265.15	ft
APCO GS-AP-MW-36V	ORP	Oxidation Reduction Potential	9/6/2023 10:56	-4.1	mv
APCO GS-AP-MW-36V	PH	pH	9/6/2023 10:56	7.13	SU
APCO GS-AP-MW-36V	TEMP	Temperature	9/6/2023 10:56	19.16	C
APCO GS-AP-MW-36V	TURB	Turbidity	9/6/2023 10:56	5.28	NTU
APCO GS-AP-MW-36V	COND	Conductivity	9/6/2023 11:01	2554.43	uS/cm
APCO GS-AP-MW-36V	DO	DO	9/6/2023 11:01	0.29	mg/L
APCO GS-AP-MW-36V	DTW	Depth to Water Detail	9/6/2023 11:01	267.25	ft
APCO GS-AP-MW-36V	ORP	Oxidation Reduction Potential	9/6/2023 11:01	-7	mv
APCO GS-AP-MW-36V	PH	pH	9/6/2023 11:01	7.13	SU
APCO GS-AP-MW-36V	TEMP	Temperature	9/6/2023 11:01	19.23	C
APCO GS-AP-MW-36V	TURB	Turbidity	9/6/2023 11:01	5.34	NTU
APCO GS-AP-MW-36V	COND	Conductivity	9/6/2023 11:06	2545.94	uS/cm
APCO GS-AP-MW-36V	DO	DO	9/6/2023 11:06	0.28	mg/L
APCO GS-AP-MW-36V	DTW	Depth to Water Detail	9/6/2023 11:06	269.02	ft
APCO GS-AP-MW-36V	ORP	Oxidation Reduction Potential	9/6/2023 11:06	-10.13	mv
APCO GS-AP-MW-36V	PH	pH	9/6/2023 11:06	7.13	SU
APCO GS-AP-MW-36V	TEMP	Temperature	9/6/2023 11:06	19.37	C
APCO GS-AP-MW-36V	TURB	Turbidity	9/6/2023 11:06	5.11	NTU
APCO GS-AP-MW-36V	COND	Conductivity	9/6/2023 11:11	2532.6	uS/cm
APCO GS-AP-MW-36V	DO	DO	9/6/2023 11:11	0.24	mg/L
APCO GS-AP-MW-36V	DTW	Depth to Water Detail	9/6/2023 11:11	270.87	ft
APCO GS-AP-MW-36V	ORP	Oxidation Reduction Potential	9/6/2023 11:11	-14.76	mv
APCO GS-AP-MW-36V	PH	pH	9/6/2023 11:11	7.13	SU
APCO GS-AP-MW-36V	TEMP	Temperature	9/6/2023 11:11	19.31	C
APCO GS-AP-MW-36V	TURB	Turbidity	9/6/2023 11:11	4.82	NTU
APCO GS-AP-MW-36V	COND	Conductivity	9/6/2023 11:16	2583.15	uS/cm
APCO GS-AP-MW-36V	DO	DO	9/6/2023 11:16	0.31	mg/L
APCO GS-AP-MW-36V	DTW	Depth to Water Detail	9/6/2023 11:16	271.64	ft
APCO GS-AP-MW-36V	ORP	Oxidation Reduction Potential	9/6/2023 11:16	-20.68	mv
APCO GS-AP-MW-36V	PH	pH	9/6/2023 11:16	7.12	SU
APCO GS-AP-MW-36V	TEMP	Temperature	9/6/2023 11:16	20.91	C
APCO GS-AP-MW-36V	TURB	Turbidity	9/6/2023 11:16	4.63	NTU
APCO GS-AP-MW-36V	COND	Conductivity	9/6/2023 11:21	2603.81	uS/cm
APCO GS-AP-MW-36V	DO	DO	9/6/2023 11:21	0.33	mg/L
APCO GS-AP-MW-36V	DTW	Depth to Water Detail	9/6/2023 11:21	272	ft
APCO GS-AP-MW-36V	ORP	Oxidation Reduction Potential	9/6/2023 11:21	-25.52	mv
APCO GS-AP-MW-36V	PH	pH	9/6/2023 11:21	7.13	SU
APCO GS-AP-MW-36V	TEMP	Temperature	9/6/2023 11:21	21.41	C
APCO GS-AP-MW-36V	TURB	Turbidity	9/6/2023 11:21	4.7	NTU
APCO GS-AP-MW-36V	COND	Conductivity	9/6/2023 11:26	2605.76	uS/cm
APCO GS-AP-MW-36V	DO	DO	9/6/2023 11:26	0.39	mg/L
APCO GS-AP-MW-36V	DTW	Depth to Water Detail	9/6/2023 11:26	272.46	ft
APCO GS-AP-MW-36V	ORP	Oxidation Reduction Potential	9/6/2023 11:26	-16.78	mv
APCO GS-AP-MW-36V	PH	pH	9/6/2023 11:26	7.1	SU
APCO GS-AP-MW-36V	TEMP	Temperature	9/6/2023 11:26	21.59	C

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO GS-AP-MW-36V	TURB	Turbidity	9/6/2023 11:26	4.95	NTU
APCO GS-AP-MW-36V	COND	Conductivity	9/6/2023 11:31	2627.15	uS/cm
APCO GS-AP-MW-36V	DO	DO	9/6/2023 11:31	0.41	mg/L
APCO GS-AP-MW-36V	DTW	Depth to Water Detail	9/6/2023 11:31	272.71	ft
APCO GS-AP-MW-36V	ORP	Oxidation Reduction Potential	9/6/2023 11:31	-8	mv
APCO GS-AP-MW-36V	PH	pH	9/6/2023 11:31	7.12	SU
APCO GS-AP-MW-36V	TEMP	Temperature	9/6/2023 11:31	22.34	C
APCO GS-AP-MW-36V	TURB	Turbidity	9/6/2023 11:31	4.48	NTU
APCO GS-AP-MW-36V	COND	Conductivity	9/6/2023 11:36	2674.88	uS/cm
APCO GS-AP-MW-36V	DO	DO	9/6/2023 11:36	0.41	mg/L
APCO GS-AP-MW-36V	DTW	Depth to Water Detail	9/6/2023 11:36	272.62	ft
APCO GS-AP-MW-36V	ORP	Oxidation Reduction Potential	9/6/2023 11:36	-20.17	mv
APCO GS-AP-MW-36V	PH	pH	9/6/2023 11:36	7.11	SU
APCO GS-AP-MW-36V	TEMP	Temperature	9/6/2023 11:36	23.95	C
APCO GS-AP-MW-36V	TURB	Turbidity	9/6/2023 11:36	4.56	NTU
APCO GS-AP-MW-36V	COND	Conductivity	9/6/2023 11:41	2664.44	uS/cm
APCO GS-AP-MW-36V	DO	DO	9/6/2023 11:41	0.43	mg/L
APCO GS-AP-MW-36V	DTW	Depth to Water Detail	9/6/2023 11:41	272.48	ft
APCO GS-AP-MW-36V	ORP	Oxidation Reduction Potential	9/6/2023 11:41	-32.25	mv
APCO GS-AP-MW-36V	PH	pH	9/6/2023 11:41	7.11	SU
APCO GS-AP-MW-36V	SULFIDE	Sulfide	9/6/2023 11:41	3	mg/L
APCO GS-AP-MW-36V	TEMP	Temperature	9/6/2023 11:41	24.32	C
APCO GS-AP-MW-36V	TURB	Turbidity	9/6/2023 11:41	4.95	NTU
APCO GS-AP-MW-37HR	COND	Conductivity	9/11/2023 14:06	787.04	uS/cm
APCO GS-AP-MW-37HR	DO	DO	9/11/2023 14:06	7.2	mg/L
APCO GS-AP-MW-37HR	DTW	Depth to Water Detail	9/11/2023 14:06	147.02	ft
APCO GS-AP-MW-37HR	ORP	Oxidation Reduction Potential	9/11/2023 14:06	13.24	mv
APCO GS-AP-MW-37HR	PH	pH	9/11/2023 14:06	7.34	SU
APCO GS-AP-MW-37HR	TEMP	Temperature	9/11/2023 14:06	28.88	C
APCO GS-AP-MW-37HR	TURB	Turbidity	9/11/2023 14:06	8.91	NTU
APCO GS-AP-MW-37HR	COND	Conductivity	9/11/2023 14:11	798.23	uS/cm
APCO GS-AP-MW-37HR	DO	DO	9/11/2023 14:11	6.94	mg/L
APCO GS-AP-MW-37HR	DTW	Depth to Water Detail	9/11/2023 14:11	148.7	ft
APCO GS-AP-MW-37HR	ORP	Oxidation Reduction Potential	9/11/2023 14:11	9.02	mv
APCO GS-AP-MW-37HR	PH	pH	9/11/2023 14:11	7.34	SU
APCO GS-AP-MW-37HR	TEMP	Temperature	9/11/2023 14:11	21.18	C
APCO GS-AP-MW-37HR	TURB	Turbidity	9/11/2023 14:11	7.12	NTU
APCO GS-AP-MW-37HR	COND	Conductivity	9/11/2023 14:16	1234.59	uS/cm
APCO GS-AP-MW-37HR	DO	DO	9/11/2023 14:16	0.41	mg/L
APCO GS-AP-MW-37HR	DTW	Depth to Water Detail	9/11/2023 14:16	150.56	ft
APCO GS-AP-MW-37HR	ORP	Oxidation Reduction Potential	9/11/2023 14:16	-45.04	mv
APCO GS-AP-MW-37HR	PH	pH	9/11/2023 14:16	7.4	SU
APCO GS-AP-MW-37HR	TEMP	Temperature	9/11/2023 14:16	19.65	C
APCO GS-AP-MW-37HR	TURB	Turbidity	9/11/2023 14:16	4.56	NTU
APCO GS-AP-MW-37HR	COND	Conductivity	9/11/2023 14:21	1261.86	uS/cm
APCO GS-AP-MW-37HR	DO	DO	9/11/2023 14:21	0.22	mg/L
APCO GS-AP-MW-37HR	DTW	Depth to Water Detail	9/11/2023 14:21	153.82	ft
APCO GS-AP-MW-37HR	ORP	Oxidation Reduction Potential	9/11/2023 14:21	-29.42	mv
APCO GS-AP-MW-37HR	PH	pH	9/11/2023 14:21	7.45	SU
APCO GS-AP-MW-37HR	TEMP	Temperature	9/11/2023 14:21	18.95	C
APCO GS-AP-MW-37HR	TURB	Turbidity	9/11/2023 14:21	4.12	NTU
APCO GS-AP-MW-37HR	COND	Conductivity	9/11/2023 14:26	1266.78	uS/cm
APCO GS-AP-MW-37HR	DO	DO	9/11/2023 14:26	0.18	mg/L
APCO GS-AP-MW-37HR	DTW	Depth to Water Detail	9/11/2023 14:26	157.15	ft
APCO GS-AP-MW-37HR	ORP	Oxidation Reduction Potential	9/11/2023 14:26	-26.3	mv
APCO GS-AP-MW-37HR	PH	pH	9/11/2023 14:26	7.47	SU
APCO GS-AP-MW-37HR	TEMP	Temperature	9/11/2023 14:26	19.25	C
APCO GS-AP-MW-37HR	TURB	Turbidity	9/11/2023 14:26	3.89	NTU
APCO GS-AP-MW-37HR	COND	Conductivity	9/11/2023 14:31	1253.72	uS/cm
APCO GS-AP-MW-37HR	DO	DO	9/11/2023 14:31	0.15	mg/L
APCO GS-AP-MW-37HR	DTW	Depth to Water Detail	9/11/2023 14:31	160.82	ft
APCO GS-AP-MW-37HR	ORP	Oxidation Reduction Potential	9/11/2023 14:31	-28.03	mv
APCO GS-AP-MW-37HR	PH	pH	9/11/2023 14:31	7.49	SU
APCO GS-AP-MW-37HR	TEMP	Temperature	9/11/2023 14:31	18.95	C

Plant Gorgas Ash Pond
Field Parameter Summary

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO GS-AP-MW-37HR	TURB	Turbidity	9/11/2023 14:31	3.22	NTU
APCO GS-AP-MW-37HR	COND	Conductivity	9/11/2023 14:36	1242.36	uS/cm
APCO GS-AP-MW-37HR	DO	DO	9/11/2023 14:36	0.13	mg/L
APCO GS-AP-MW-37HR	DTW	Depth to Water Detail	9/11/2023 14:36	163.44	ft
APCO GS-AP-MW-37HR	ORP	Oxidation Reduction Potential	9/11/2023 14:36	-37.93	mv
APCO GS-AP-MW-37HR	PH	pH	9/11/2023 14:36	7.48	SU
APCO GS-AP-MW-37HR	TEMP	Temperature	9/11/2023 14:36	19.33	C
APCO GS-AP-MW-37HR	TURB	Turbidity	9/11/2023 14:36	3.1	NTU
APCO GS-AP-MW-37HR	COND	Conductivity	9/11/2023 14:41	1264.32	uS/cm
APCO GS-AP-MW-37HR	DO	DO	9/11/2023 14:41	0.31	mg/L
APCO GS-AP-MW-37HR	DTW	Depth to Water Detail	9/11/2023 14:41	164.05	ft
APCO GS-AP-MW-37HR	ORP	Oxidation Reduction Potential	9/11/2023 14:41	-48.21	mv
APCO GS-AP-MW-37HR	PH	pH	9/11/2023 14:41	7.47	SU
APCO GS-AP-MW-37HR	TEMP	Temperature	9/11/2023 14:41	22.28	C
APCO GS-AP-MW-37HR	TURB	Turbidity	9/11/2023 14:41	3.16	NTU
APCO GS-AP-MW-37HR	COND	Conductivity	9/11/2023 14:46	1274.17	uS/cm
APCO GS-AP-MW-37HR	DO	DO	9/11/2023 14:46	0.36	mg/L
APCO GS-AP-MW-37HR	DTW	Depth to Water Detail	9/11/2023 14:46	163.92	ft
APCO GS-AP-MW-37HR	ORP	Oxidation Reduction Potential	9/11/2023 14:46	-56.31	mv
APCO GS-AP-MW-37HR	PH	pH	9/11/2023 14:46	7.49	SU
APCO GS-AP-MW-37HR	TEMP	Temperature	9/11/2023 14:46	23.7	C
APCO GS-AP-MW-37HR	TURB	Turbidity	9/11/2023 14:46	3.78	NTU
APCO GS-AP-MW-37HR	COND	Conductivity	9/11/2023 14:51	1278.82	uS/cm
APCO GS-AP-MW-37HR	DO	DO	9/11/2023 14:51	0.39	mg/L
APCO GS-AP-MW-37HR	DTW	Depth to Water Detail	9/11/2023 14:51	163.84	ft
APCO GS-AP-MW-37HR	ORP	Oxidation Reduction Potential	9/11/2023 14:51	-63.46	mv
APCO GS-AP-MW-37HR	PH	pH	9/11/2023 14:51	7.51	SU
APCO GS-AP-MW-37HR	SULFIDE	Sulfide	9/11/2023 14:51	0	mg/L
APCO GS-AP-MW-37HR	TEMP	Temperature	9/11/2023 14:51	24.75	C
APCO GS-AP-MW-37HR	TURB	Turbidity	9/11/2023 14:51	3.65	NTU
APCO GS-AP-MW-38H	COND	Conductivity	9/19/2023 12:38	1166.58	uS/cm
APCO GS-AP-MW-38H	DO	DO	9/19/2023 12:38	0.12	mg/L
APCO GS-AP-MW-38H	DTW	Depth to Water Detail	9/19/2023 12:38	49.52	ft
APCO GS-AP-MW-38H	ORP	Oxidation Reduction Potential	9/19/2023 12:38	-183.56	mv
APCO GS-AP-MW-38H	PH	pH	9/19/2023 12:38	7.37	SU
APCO GS-AP-MW-38H	TEMP	Temperature	9/19/2023 12:38	20.05	C
APCO GS-AP-MW-38H	TURB	Turbidity	9/19/2023 12:38	3.19	NTU
APCO GS-AP-MW-38H	COND	Conductivity	9/19/2023 12:43	1148.19	uS/cm
APCO GS-AP-MW-38H	DO	DO	9/19/2023 12:43	0.09	mg/L
APCO GS-AP-MW-38H	DTW	Depth to Water Detail	9/19/2023 12:43	49.69	ft
APCO GS-AP-MW-38H	ORP	Oxidation Reduction Potential	9/19/2023 12:43	-193.71	mv
APCO GS-AP-MW-38H	PH	pH	9/19/2023 12:43	7.45	SU
APCO GS-AP-MW-38H	TEMP	Temperature	9/19/2023 12:43	19.77	C
APCO GS-AP-MW-38H	TURB	Turbidity	9/19/2023 12:43	2	NTU
APCO GS-AP-MW-38H	COND	Conductivity	9/19/2023 12:48	995.41	uS/cm
APCO GS-AP-MW-38H	DO	DO	9/19/2023 12:48	0.08	mg/L
APCO GS-AP-MW-38H	DTW	Depth to Water Detail	9/19/2023 12:48	49.73	ft
APCO GS-AP-MW-38H	ORP	Oxidation Reduction Potential	9/19/2023 12:48	-198.9	mv
APCO GS-AP-MW-38H	PH	pH	9/19/2023 12:48	7.49	SU
APCO GS-AP-MW-38H	TEMP	Temperature	9/19/2023 12:48	19.72	C
APCO GS-AP-MW-38H	TURB	Turbidity	9/19/2023 12:48	1.76	NTU
APCO GS-AP-MW-38H	COND	Conductivity	9/19/2023 12:53	897.5	uS/cm
APCO GS-AP-MW-38H	DO	DO	9/19/2023 12:53	0.08	mg/L
APCO GS-AP-MW-38H	DTW	Depth to Water Detail	9/19/2023 12:53	49.75	ft
APCO GS-AP-MW-38H	ORP	Oxidation Reduction Potential	9/19/2023 12:53	-201.34	mv
APCO GS-AP-MW-38H	PH	pH	9/19/2023 12:53	7.54	SU
APCO GS-AP-MW-38H	TEMP	Temperature	9/19/2023 12:53	19.65	C
APCO GS-AP-MW-38H	TURB	Turbidity	9/19/2023 12:53	1.57	NTU
APCO GS-AP-MW-38H	COND	Conductivity	9/19/2023 12:58	818.95	uS/cm
APCO GS-AP-MW-38H	DO	DO	9/19/2023 12:58	0.08	mg/L
APCO GS-AP-MW-38H	DTW	Depth to Water Detail	9/19/2023 12:58	49.77	ft
APCO GS-AP-MW-38H	ORP	Oxidation Reduction Potential	9/19/2023 12:58	-200.01	mv
APCO GS-AP-MW-38H	PH	pH	9/19/2023 12:58	7.57	SU
APCO GS-AP-MW-38H	TEMP	Temperature	9/19/2023 12:58	19.7	C

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO GS-AP-MW-38H	TURB	Turbidity	9/19/2023 12:58	1.58	NTU
APCO GS-AP-MW-38H	COND	Conductivity	9/19/2023 13:03	774.36	uS/cm
APCO GS-AP-MW-38H	DO	DO	9/19/2023 13:03	0.08	mg/L
APCO GS-AP-MW-38H	DTW	Depth to Water Detail	9/19/2023 13:03	49.77	ft
APCO GS-AP-MW-38H	ORP	Oxidation Reduction Potential	9/19/2023 13:03	-196.68	mv
APCO GS-AP-MW-38H	PH	pH	9/19/2023 13:03	7.58	SU
APCO GS-AP-MW-38H	TEMP	Temperature	9/19/2023 13:03	19.57	C
APCO GS-AP-MW-38H	TURB	Turbidity	9/19/2023 13:03	1.5	NTU
APCO GS-AP-MW-38H	COND	Conductivity	9/19/2023 13:08	737.1	uS/cm
APCO GS-AP-MW-38H	DO	DO	9/19/2023 13:08	0.08	mg/L
APCO GS-AP-MW-38H	DTW	Depth to Water Detail	9/19/2023 13:08	49.77	ft
APCO GS-AP-MW-38H	ORP	Oxidation Reduction Potential	9/19/2023 13:08	-193.43	mv
APCO GS-AP-MW-38H	PH	pH	9/19/2023 13:08	7.58	SU
APCO GS-AP-MW-38H	TEMP	Temperature	9/19/2023 13:08	19.51	C
APCO GS-AP-MW-38H	TURB	Turbidity	9/19/2023 13:08	1.09	NTU
APCO GS-AP-MW-38H	COND	Conductivity	9/19/2023 13:13	730.1	uS/cm
APCO GS-AP-MW-38H	DO	DO	9/19/2023 13:13	0.08	mg/L
APCO GS-AP-MW-38H	DTW	Depth to Water Detail	9/19/2023 13:13	49.77	ft
APCO GS-AP-MW-38H	ORP	Oxidation Reduction Potential	9/19/2023 13:13	-190.8	mv
APCO GS-AP-MW-38H	PH	pH	9/19/2023 13:13	7.58	SU
APCO GS-AP-MW-38H	TEMP	Temperature	9/19/2023 13:13	19.59	C
APCO GS-AP-MW-38H	TURB	Turbidity	9/19/2023 13:13	0.97	NTU
APCO GS-AP-MW-38H	COND	Conductivity	9/19/2023 13:18	698.98	uS/cm
APCO GS-AP-MW-38H	DO	DO	9/19/2023 13:18	0.08	mg/L
APCO GS-AP-MW-38H	DTW	Depth to Water Detail	9/19/2023 13:18	49.77	ft
APCO GS-AP-MW-38H	ORP	Oxidation Reduction Potential	9/19/2023 13:18	-188.25	mv
APCO GS-AP-MW-38H	PH	pH	9/19/2023 13:18	7.58	SU
APCO GS-AP-MW-38H	TEMP	Temperature	9/19/2023 13:18	19.61	C
APCO GS-AP-MW-38H	TURB	Turbidity	9/19/2023 13:18	0.92	NTU
APCO GS-AP-MW-38H	COND	Conductivity	9/19/2023 13:23	669.89	uS/cm
APCO GS-AP-MW-38H	DO	DO	9/19/2023 13:23	0.08	mg/L
APCO GS-AP-MW-38H	DTW	Depth to Water Detail	9/19/2023 13:23	49.77	ft
APCO GS-AP-MW-38H	ORP	Oxidation Reduction Potential	9/19/2023 13:23	-186.36	mv
APCO GS-AP-MW-38H	PH	pH	9/19/2023 13:23	7.59	SU
APCO GS-AP-MW-38H	TEMP	Temperature	9/19/2023 13:23	19.63	C
APCO GS-AP-MW-38H	TURB	Turbidity	9/19/2023 13:23	0.88	NTU
APCO GS-AP-MW-38H	COND	Conductivity	9/19/2023 13:28	631.02	uS/cm
APCO GS-AP-MW-38H	DO	DO	9/19/2023 13:28	0.08	mg/L
APCO GS-AP-MW-38H	DTW	Depth to Water Detail	9/19/2023 13:28	49.77	ft
APCO GS-AP-MW-38H	ORP	Oxidation Reduction Potential	9/19/2023 13:28	-183.93	mv
APCO GS-AP-MW-38H	PH	pH	9/19/2023 13:28	7.59	SU
APCO GS-AP-MW-38H	TEMP	Temperature	9/19/2023 13:28	19.63	C
APCO GS-AP-MW-38H	TURB	Turbidity	9/19/2023 13:28	1.29	NTU
APCO GS-AP-MW-38H	COND	Conductivity	9/19/2023 13:33	602.24	uS/cm
APCO GS-AP-MW-38H	DO	DO	9/19/2023 13:33	0.08	mg/L
APCO GS-AP-MW-38H	DTW	Depth to Water Detail	9/19/2023 13:33	49.77	ft
APCO GS-AP-MW-38H	ORP	Oxidation Reduction Potential	9/19/2023 13:33	-182.24	mv
APCO GS-AP-MW-38H	PH	pH	9/19/2023 13:33	7.59	SU
APCO GS-AP-MW-38H	TEMP	Temperature	9/19/2023 13:33	19.62	C
APCO GS-AP-MW-38H	TURB	Turbidity	9/19/2023 13:33	0.9	NTU
APCO GS-AP-MW-38H	COND	Conductivity	9/19/2023 13:38	595.5	uS/cm
APCO GS-AP-MW-38H	DO	DO	9/19/2023 13:38	0.08	mg/L
APCO GS-AP-MW-38H	DTW	Depth to Water Detail	9/19/2023 13:38	49.77	ft
APCO GS-AP-MW-38H	ORP	Oxidation Reduction Potential	9/19/2023 13:38	-180.52	mv
APCO GS-AP-MW-38H	PH	pH	9/19/2023 13:38	7.59	SU
APCO GS-AP-MW-38H	TEMP	Temperature	9/19/2023 13:38	19.6	C
APCO GS-AP-MW-38H	TURB	Turbidity	9/19/2023 13:38	1.23	NTU
APCO GS-AP-MW-38H	COND	Conductivity	9/19/2023 13:43	564.29	uS/cm
APCO GS-AP-MW-38H	DO	DO	9/19/2023 13:43	0.08	mg/L
APCO GS-AP-MW-38H	DTW	Depth to Water Detail	9/19/2023 13:43	49.77	ft
APCO GS-AP-MW-38H	ORP	Oxidation Reduction Potential	9/19/2023 13:43	-178.73	mv
APCO GS-AP-MW-38H	PH	pH	9/19/2023 13:43	7.59	SU
APCO GS-AP-MW-38H	TEMP	Temperature	9/19/2023 13:43	19.58	C
APCO GS-AP-MW-38H	TURB	Turbidity	9/19/2023 13:43	0.89	NTU

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO GS-AP-MW-38H	COND	Conductivity	9/19/2023 13:48	544.6	uS/cm
APCO GS-AP-MW-38H	DO	DO	9/19/2023 13:48	0.07	mg/L
APCO GS-AP-MW-38H	DTW	Depth to Water Detail	9/19/2023 13:48	49.77	ft
APCO GS-AP-MW-38H	ORP	Oxidation Reduction Potential	9/19/2023 13:48	-177	mv
APCO GS-AP-MW-38H	PH	pH	9/19/2023 13:48	7.59	SU
APCO GS-AP-MW-38H	TEMP	Temperature	9/19/2023 13:48	19.62	C
APCO GS-AP-MW-38H	TURB	Turbidity	9/19/2023 13:48	0.9	NTU
APCO GS-AP-MW-38H	COND	Conductivity	9/19/2023 13:53	525.44	uS/cm
APCO GS-AP-MW-38H	DO	DO	9/19/2023 13:53	0.07	mg/L
APCO GS-AP-MW-38H	DTW	Depth to Water Detail	9/19/2023 13:53	49.77	ft
APCO GS-AP-MW-38H	ORP	Oxidation Reduction Potential	9/19/2023 13:53	-175.75	mv
APCO GS-AP-MW-38H	PH	pH	9/19/2023 13:53	7.59	SU
APCO GS-AP-MW-38H	TEMP	Temperature	9/19/2023 13:53	19.76	C
APCO GS-AP-MW-38H	TURB	Turbidity	9/19/2023 13:53	0.77	NTU
APCO GS-AP-MW-38H	COND	Conductivity	9/19/2023 13:58	535.31	uS/cm
APCO GS-AP-MW-38H	DO	DO	9/19/2023 13:58	0.07	mg/L
APCO GS-AP-MW-38H	DTW	Depth to Water Detail	9/19/2023 13:58	49.77	ft
APCO GS-AP-MW-38H	ORP	Oxidation Reduction Potential	9/19/2023 13:58	-173.8	mv
APCO GS-AP-MW-38H	PH	pH	9/19/2023 13:58	7.59	SU
APCO GS-AP-MW-38H	SULFIDE	Sulfide	9/19/2023 13:58	0	mg/L
APCO GS-AP-MW-38H	TEMP	Temperature	9/19/2023 13:58	19.81	C
APCO GS-AP-MW-38H	TURB	Turbidity	9/19/2023 13:58	2.44	NTU
APCO GS-AP-MW-40H	COND	Conductivity	9/18/2023 11:45	1762.2	uS/cm
APCO GS-AP-MW-40H	DO	DO	9/18/2023 11:45	1.79	mg/L
APCO GS-AP-MW-40H	DTW	Depth to Water Detail	9/18/2023 11:45	81.43	ft
APCO GS-AP-MW-40H	ORP	Oxidation Reduction Potential	9/18/2023 11:45	94.6	mv
APCO GS-AP-MW-40H	PH	pH	9/18/2023 11:45	6.72	SU
APCO GS-AP-MW-40H	TEMP	Temperature	9/18/2023 11:45	20.81	C
APCO GS-AP-MW-40H	TURB	Turbidity	9/18/2023 11:45	14.6	NTU
APCO GS-AP-MW-40H	COND	Conductivity	9/18/2023 11:50	1746.21	uS/cm
APCO GS-AP-MW-40H	DO	DO	9/18/2023 11:50	1.74	mg/L
APCO GS-AP-MW-40H	DTW	Depth to Water Detail	9/18/2023 11:50	81.82	ft
APCO GS-AP-MW-40H	ORP	Oxidation Reduction Potential	9/18/2023 11:50	18.57	mv
APCO GS-AP-MW-40H	PH	pH	9/18/2023 11:50	6.73	SU
APCO GS-AP-MW-40H	TEMP	Temperature	9/18/2023 11:50	20.62	C
APCO GS-AP-MW-40H	TURB	Turbidity	9/18/2023 11:50	4.92	NTU
APCO GS-AP-MW-40H	COND	Conductivity	9/18/2023 11:55	1722.39	uS/cm
APCO GS-AP-MW-40H	DO	DO	9/18/2023 11:55	1.68	mg/L
APCO GS-AP-MW-40H	DTW	Depth to Water Detail	9/18/2023 11:55	81.93	ft
APCO GS-AP-MW-40H	ORP	Oxidation Reduction Potential	9/18/2023 11:55	-25.15	mv
APCO GS-AP-MW-40H	PH	pH	9/18/2023 11:55	6.72	SU
APCO GS-AP-MW-40H	TEMP	Temperature	9/18/2023 11:55	21.08	C
APCO GS-AP-MW-40H	TURB	Turbidity	9/18/2023 11:55	5.41	NTU
APCO GS-AP-MW-40H	COND	Conductivity	9/18/2023 12:00	1698.82	uS/cm
APCO GS-AP-MW-40H	DO	DO	9/18/2023 12:00	1.65	mg/L
APCO GS-AP-MW-40H	DTW	Depth to Water Detail	9/18/2023 12:00	82.02	ft
APCO GS-AP-MW-40H	ORP	Oxidation Reduction Potential	9/18/2023 12:00	-40.56	mv
APCO GS-AP-MW-40H	PH	pH	9/18/2023 12:00	6.7	SU
APCO GS-AP-MW-40H	SULFIDE	Sulfide	9/18/2023 12:00	0	mg/L
APCO GS-AP-MW-40H	TEMP	Temperature	9/18/2023 12:00	21.06	C
APCO GS-AP-MW-40H	TURB	Turbidity	9/18/2023 12:00	3.77	NTU
APCO GS-AP-MW-41HD	COND	Conductivity	8/30/2023 10:35	439.88	uS/cm
APCO GS-AP-MW-41HD	DO	DO	8/30/2023 10:35	0.25	mg/L
APCO GS-AP-MW-41HD	DTW	Depth to Water Detail	8/30/2023 10:35	6.91	ft
APCO GS-AP-MW-41HD	ORP	Oxidation Reduction Potential	8/30/2023 10:35	59.19	mv
APCO GS-AP-MW-41HD	PH	pH	8/30/2023 10:35	7.28	SU
APCO GS-AP-MW-41HD	TEMP	Temperature	8/30/2023 10:35	19.18	C
APCO GS-AP-MW-41HD	TURB	Turbidity	8/30/2023 10:35	1.6	NTU
APCO GS-AP-MW-41HD	COND	Conductivity	8/30/2023 10:40	436.69	uS/cm
APCO GS-AP-MW-41HD	DO	DO	8/30/2023 10:40	0.22	mg/L
APCO GS-AP-MW-41HD	DTW	Depth to Water Detail	8/30/2023 10:40	7.08	ft
APCO GS-AP-MW-41HD	ORP	Oxidation Reduction Potential	8/30/2023 10:40	21.68	mv
APCO GS-AP-MW-41HD	PH	pH	8/30/2023 10:40	7.29	SU
APCO GS-AP-MW-41HD	TEMP	Temperature	8/30/2023 10:40	18.99	C

Plant Gorgas Ash Pond
Field Parameter Summary

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO GS-AP-MW-41HD	TURB	Turbidity	8/30/2023 10:40	1.48	NTU
APCO GS-AP-MW-41HD	COND	Conductivity	8/30/2023 10:45	436.64	uS/cm
APCO GS-AP-MW-41HD	DO	DO	8/30/2023 10:45	0.21	mg/L
APCO GS-AP-MW-41HD	DTW	Depth to Water Detail	8/30/2023 10:45	7.16	ft
APCO GS-AP-MW-41HD	ORP	Oxidation Reduction Potential	8/30/2023 10:45	9	mv
APCO GS-AP-MW-41HD	PH	pH	8/30/2023 10:45	7.27	SU
APCO GS-AP-MW-41HD	TEMP	Temperature	8/30/2023 10:45	18.84	C
APCO GS-AP-MW-41HD	TURB	Turbidity	8/30/2023 10:45	1.47	NTU
APCO GS-AP-MW-41HD	COND	Conductivity	8/30/2023 10:50	435.96	uS/cm
APCO GS-AP-MW-41HD	DO	DO	8/30/2023 10:50	0.2	mg/L
APCO GS-AP-MW-41HD	DTW	Depth to Water Detail	8/30/2023 10:50	7.21	ft
APCO GS-AP-MW-41HD	ORP	Oxidation Reduction Potential	8/30/2023 10:50	4.06	mv
APCO GS-AP-MW-41HD	PH	pH	8/30/2023 10:50	7.27	SU
APCO GS-AP-MW-41HD	SULFIDE	Sulfide	8/30/2023 10:50	0	mg/L
APCO GS-AP-MW-41HD	TEMP	Temperature	8/30/2023 10:50	18.85	C
APCO GS-AP-MW-41HD	TURB	Turbidity	8/30/2023 10:50	1.86	NTU
APCO GS-AP-MW-41HS	COND	Conductivity	8/30/2023 12:04	339.66	uS/cm
APCO GS-AP-MW-41HS	DO	DO	8/30/2023 12:04	1.63	mg/L
APCO GS-AP-MW-41HS	DTW	Depth to Water Detail	8/30/2023 12:04	27.16	ft
APCO GS-AP-MW-41HS	ORP	Oxidation Reduction Potential	8/30/2023 12:04	52.52	mv
APCO GS-AP-MW-41HS	PH	pH	8/30/2023 12:04	6.21	SU
APCO GS-AP-MW-41HS	TEMP	Temperature	8/30/2023 12:04	19.92	C
APCO GS-AP-MW-41HS	TURB	Turbidity	8/30/2023 12:04	3.33	NTU
APCO GS-AP-MW-41HS	COND	Conductivity	8/30/2023 12:09	338.74	uS/cm
APCO GS-AP-MW-41HS	DO	DO	8/30/2023 12:09	1.65	mg/L
APCO GS-AP-MW-41HS	DTW	Depth to Water Detail	8/30/2023 12:09	27.39	ft
APCO GS-AP-MW-41HS	ORP	Oxidation Reduction Potential	8/30/2023 12:09	58.27	mv
APCO GS-AP-MW-41HS	PH	pH	8/30/2023 12:09	6.18	SU
APCO GS-AP-MW-41HS	TEMP	Temperature	8/30/2023 12:09	19.71	C
APCO GS-AP-MW-41HS	TURB	Turbidity	8/30/2023 12:09	2.95	NTU
APCO GS-AP-MW-41HS	COND	Conductivity	8/30/2023 12:14	339.64	uS/cm
APCO GS-AP-MW-41HS	DO	DO	8/30/2023 12:14	1.62	mg/L
APCO GS-AP-MW-41HS	DTW	Depth to Water Detail	8/30/2023 12:14	27.48	ft
APCO GS-AP-MW-41HS	ORP	Oxidation Reduction Potential	8/30/2023 12:14	63.15	mv
APCO GS-AP-MW-41HS	PH	pH	8/30/2023 12:14	6.15	SU
APCO GS-AP-MW-41HS	TEMP	Temperature	8/30/2023 12:14	19.66	C
APCO GS-AP-MW-41HS	TURB	Turbidity	8/30/2023 12:14	2.58	NTU
APCO GS-AP-MW-41HS	COND	Conductivity	8/30/2023 12:19	337.68	uS/cm
APCO GS-AP-MW-41HS	DO	DO	8/30/2023 12:19	1.59	mg/L
APCO GS-AP-MW-41HS	DTW	Depth to Water Detail	8/30/2023 12:19	27.59	ft
APCO GS-AP-MW-41HS	ORP	Oxidation Reduction Potential	8/30/2023 12:19	67.24	mv
APCO GS-AP-MW-41HS	PH	pH	8/30/2023 12:19	6.13	SU
APCO GS-AP-MW-41HS	SULFIDE	Sulfide	8/30/2023 12:19	0	mg/L
APCO GS-AP-MW-41HS	TEMP	Temperature	8/30/2023 12:19	19.54	C
APCO GS-AP-MW-41HS	TURB	Turbidity	8/30/2023 12:19	2.16	NTU
APCO GS-AP-MW-42H	COND	Conductivity	9/19/2023 15:02	1045.62	uS/cm
APCO GS-AP-MW-42H	DO	DO	9/19/2023 15:02	0.1	mg/L
APCO GS-AP-MW-42H	DTW	Depth to Water Detail	9/19/2023 15:02	54.44	ft
APCO GS-AP-MW-42H	ORP	Oxidation Reduction Potential	9/19/2023 15:02	-48.67	mv
APCO GS-AP-MW-42H	PH	pH	9/19/2023 15:02	6.61	SU
APCO GS-AP-MW-42H	TEMP	Temperature	9/19/2023 15:02	18.73	C
APCO GS-AP-MW-42H	TURB	Turbidity	9/19/2023 15:02	67.7	NTU
APCO GS-AP-MW-42H	COND	Conductivity	9/19/2023 15:07	1050.44	uS/cm
APCO GS-AP-MW-42H	DO	DO	9/19/2023 15:07	2.53	mg/L
APCO GS-AP-MW-42H	DTW	Depth to Water Detail	9/19/2023 15:07	54.44	ft
APCO GS-AP-MW-42H	ORP	Oxidation Reduction Potential	9/19/2023 15:07	-27.48	mv
APCO GS-AP-MW-42H	PH	pH	9/19/2023 15:07	6.72	SU
APCO GS-AP-MW-42H	TEMP	Temperature	9/19/2023 15:07	18.62	C
APCO GS-AP-MW-42H	TURB	Turbidity	9/19/2023 15:07	59.3	NTU
APCO GS-AP-MW-42H	COND	Conductivity	9/19/2023 15:12	1056.82	uS/cm
APCO GS-AP-MW-42H	DO	DO	9/19/2023 15:12	0.19	mg/L
APCO GS-AP-MW-42H	DTW	Depth to Water Detail	9/19/2023 15:12	54.44	ft
APCO GS-AP-MW-42H	ORP	Oxidation Reduction Potential	9/19/2023 15:12	-37.78	mv
APCO GS-AP-MW-42H	PH	pH	9/19/2023 15:12	6.6	SU

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO GS-AP-MW-42H	TEMP	Temperature	9/19/2023 15:12	18.6	C
APCO GS-AP-MW-42H	TURB	Turbidity	9/19/2023 15:12	22.1	NTU
APCO GS-AP-MW-42H	COND	Conductivity	9/19/2023 15:17	1060.9	uS/cm
APCO GS-AP-MW-42H	DO	DO	9/19/2023 15:17	0.13	mg/L
APCO GS-AP-MW-42H	DTW	Depth to Water Detail	9/19/2023 15:17	54.44	ft
APCO GS-AP-MW-42H	ORP	Oxidation Reduction Potential	9/19/2023 15:17	-37.77	mv
APCO GS-AP-MW-42H	PH	pH	9/19/2023 15:17	6.59	SU
APCO GS-AP-MW-42H	TEMP	Temperature	9/19/2023 15:17	18.54	C
APCO GS-AP-MW-42H	TURB	Turbidity	9/19/2023 15:17	14.4	NTU
APCO GS-AP-MW-42H	COND	Conductivity	9/19/2023 15:22	1062.43	uS/cm
APCO GS-AP-MW-42H	DO	DO	9/19/2023 15:22	0.13	mg/L
APCO GS-AP-MW-42H	DTW	Depth to Water Detail	9/19/2023 15:22	54.44	ft
APCO GS-AP-MW-42H	ORP	Oxidation Reduction Potential	9/19/2023 15:22	-36.92	mv
APCO GS-AP-MW-42H	PH	pH	9/19/2023 15:22	6.58	SU
APCO GS-AP-MW-42H	TEMP	Temperature	9/19/2023 15:22	18.51	C
APCO GS-AP-MW-42H	TURB	Turbidity	9/19/2023 15:22	11.3	NTU
APCO GS-AP-MW-42H	COND	Conductivity	9/19/2023 15:27	1063.73	uS/cm
APCO GS-AP-MW-42H	DO	DO	9/19/2023 15:27	0.12	mg/L
APCO GS-AP-MW-42H	DTW	Depth to Water Detail	9/19/2023 15:27	54.44	ft
APCO GS-AP-MW-42H	ORP	Oxidation Reduction Potential	9/19/2023 15:27	-36.16	mv
APCO GS-AP-MW-42H	PH	pH	9/19/2023 15:27	6.58	SU
APCO GS-AP-MW-42H	SULFIDE	Sulfide	9/19/2023 15:27	0	mg/L
APCO GS-AP-MW-42H	TEMP	Temperature	9/19/2023 15:27	18.56	C
APCO GS-AP-MW-42H	TURB	Turbidity	9/19/2023 15:27	9.61	NTU
APCO GS-AP-MW-43H	COND	Conductivity	9/19/2023 10:17	1566.27	uS/cm
APCO GS-AP-MW-43H	DO	DO	9/19/2023 10:17	0.13	mg/L
APCO GS-AP-MW-43H	DTW	Depth to Water Detail	9/19/2023 10:17	159.45	ft
APCO GS-AP-MW-43H	ORP	Oxidation Reduction Potential	9/19/2023 10:17	-291.86	mv
APCO GS-AP-MW-43H	PH	pH	9/19/2023 10:17	8.28	SU
APCO GS-AP-MW-43H	TEMP	Temperature	9/19/2023 10:17	18.67	C
APCO GS-AP-MW-43H	TURB	Turbidity	9/19/2023 10:17	3.36	NTU
APCO GS-AP-MW-43H	COND	Conductivity	9/19/2023 10:22	1489.4	uS/cm
APCO GS-AP-MW-43H	DO	DO	9/19/2023 10:22	0.05	mg/L
APCO GS-AP-MW-43H	DTW	Depth to Water Detail	9/19/2023 10:22	161.31	ft
APCO GS-AP-MW-43H	ORP	Oxidation Reduction Potential	9/19/2023 10:22	-298.85	mv
APCO GS-AP-MW-43H	PH	pH	9/19/2023 10:22	8.26	SU
APCO GS-AP-MW-43H	TEMP	Temperature	9/19/2023 10:22	18.67	C
APCO GS-AP-MW-43H	TURB	Turbidity	9/19/2023 10:22	3.19	NTU
APCO GS-AP-MW-43H	COND	Conductivity	9/19/2023 10:27	1478.39	uS/cm
APCO GS-AP-MW-43H	DO	DO	9/19/2023 10:27	0.05	mg/L
APCO GS-AP-MW-43H	DTW	Depth to Water Detail	9/19/2023 10:27	161.31	ft
APCO GS-AP-MW-43H	ORP	Oxidation Reduction Potential	9/19/2023 10:27	-299.66	mv
APCO GS-AP-MW-43H	PH	pH	9/19/2023 10:27	8.26	SU
APCO GS-AP-MW-43H	TEMP	Temperature	9/19/2023 10:27	18.86	C
APCO GS-AP-MW-43H	TURB	Turbidity	9/19/2023 10:27	3.24	NTU
APCO GS-AP-MW-43H	COND	Conductivity	9/19/2023 10:32	1480.38	uS/cm
APCO GS-AP-MW-43H	DO	DO	9/19/2023 10:32	0.07	mg/L
APCO GS-AP-MW-43H	DTW	Depth to Water Detail	9/19/2023 10:32	161.31	ft
APCO GS-AP-MW-43H	ORP	Oxidation Reduction Potential	9/19/2023 10:32	-300.84	mv
APCO GS-AP-MW-43H	PH	pH	9/19/2023 10:32	8.25	SU
APCO GS-AP-MW-43H	TEMP	Temperature	9/19/2023 10:32	19.37	C
APCO GS-AP-MW-43H	TURB	Turbidity	9/19/2023 10:32	3.19	NTU
APCO GS-AP-MW-43H	COND	Conductivity	9/19/2023 10:37	1478.94	uS/cm
APCO GS-AP-MW-43H	DO	DO	9/19/2023 10:37	0.06	mg/L
APCO GS-AP-MW-43H	DTW	Depth to Water Detail	9/19/2023 10:37	161.31	ft
APCO GS-AP-MW-43H	ORP	Oxidation Reduction Potential	9/19/2023 10:37	-303.23	mv
APCO GS-AP-MW-43H	PH	pH	9/19/2023 10:37	8.25	SU
APCO GS-AP-MW-43H	SULFIDE	Sulfide	9/19/2023 10:37	7	mg/L
APCO GS-AP-MW-43H	TEMP	Temperature	9/19/2023 10:37	19.27	C
APCO GS-AP-MW-43H	TURB	Turbidity	9/19/2023 10:37	3.92	NTU
APCO GS-AP-MW-44HO	COND	Conductivity	9/5/2023 9:36	929.53	uS/cm
APCO GS-AP-MW-44HO	DO	DO	9/5/2023 9:36	0.17	mg/L
APCO GS-AP-MW-44HO	DTW	Depth to Water Detail	9/5/2023 9:36	152.8	ft
APCO GS-AP-MW-44HO	ORP	Oxidation Reduction Potential	9/5/2023 9:36	-264.47	mv

Plant Gorgas Ash Pond
Field Parameter Summary

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO GS-AP-MW-44HO	PH	pH	9/5/2023 9:36	7.79	SU
APCO GS-AP-MW-44HO	TEMP	Temperature	9/5/2023 9:36	19.18	C
APCO GS-AP-MW-44HO	TURB	Turbidity	9/5/2023 9:36	2.13	NTU
APCO GS-AP-MW-44HO	COND	Conductivity	9/5/2023 9:41	890.27	uS/cm
APCO GS-AP-MW-44HO	DO	DO	9/5/2023 9:41	0.12	mg/L
APCO GS-AP-MW-44HO	DTW	Depth to Water Detail	9/5/2023 9:41	154.6	ft
APCO GS-AP-MW-44HO	ORP	Oxidation Reduction Potential	9/5/2023 9:41	-268.66	mv
APCO GS-AP-MW-44HO	PH	pH	9/5/2023 9:41	7.66	SU
APCO GS-AP-MW-44HO	TEMP	Temperature	9/5/2023 9:41	19.01	C
APCO GS-AP-MW-44HO	TURB	Turbidity	9/5/2023 9:41	3.2	NTU
APCO GS-AP-MW-44HO	COND	Conductivity	9/5/2023 9:46	870.44	uS/cm
APCO GS-AP-MW-44HO	DO	DO	9/5/2023 9:46	0.09	mg/L
APCO GS-AP-MW-44HO	DTW	Depth to Water Detail	9/5/2023 9:46	158.83	ft
APCO GS-AP-MW-44HO	ORP	Oxidation Reduction Potential	9/5/2023 9:46	-274.24	mv
APCO GS-AP-MW-44HO	PH	pH	9/5/2023 9:46	7.71	SU
APCO GS-AP-MW-44HO	TEMP	Temperature	9/5/2023 9:46	18.21	C
APCO GS-AP-MW-44HO	TURB	Turbidity	9/5/2023 9:46	2.36	NTU
APCO GS-AP-MW-44HO	COND	Conductivity	9/5/2023 9:51	834.93	uS/cm
APCO GS-AP-MW-44HO	DO	DO	9/5/2023 9:51	0.04	mg/L
APCO GS-AP-MW-44HO	DTW	Depth to Water Detail	9/5/2023 9:51	162.45	ft
APCO GS-AP-MW-44HO	ORP	Oxidation Reduction Potential	9/5/2023 9:51	-275.29	mv
APCO GS-AP-MW-44HO	PH	pH	9/5/2023 9:51	7.62	SU
APCO GS-AP-MW-44HO	TEMP	Temperature	9/5/2023 9:51	18.01	C
APCO GS-AP-MW-44HO	TURB	Turbidity	9/5/2023 9:51	1.56	NTU
APCO GS-AP-MW-44HO	COND	Conductivity	9/5/2023 9:56	823.59	uS/cm
APCO GS-AP-MW-44HO	DO	DO	9/5/2023 9:56	0.02	mg/L
APCO GS-AP-MW-44HO	DTW	Depth to Water Detail	9/5/2023 9:56	165.55	ft
APCO GS-AP-MW-44HO	ORP	Oxidation Reduction Potential	9/5/2023 9:56	-283.38	mv
APCO GS-AP-MW-44HO	PH	pH	9/5/2023 9:56	7.73	SU
APCO GS-AP-MW-44HO	TEMP	Temperature	9/5/2023 9:56	17.99	C
APCO GS-AP-MW-44HO	TURB	Turbidity	9/5/2023 9:56	1.7	NTU
APCO GS-AP-MW-44HO	COND	Conductivity	9/5/2023 10:01	817.64	uS/cm
APCO GS-AP-MW-44HO	DO	DO	9/5/2023 10:01	0.03	mg/L
APCO GS-AP-MW-44HO	DTW	Depth to Water Detail	9/5/2023 10:01	166.5	ft
APCO GS-AP-MW-44HO	ORP	Oxidation Reduction Potential	9/5/2023 10:01	-282.15	mv
APCO GS-AP-MW-44HO	PH	pH	9/5/2023 10:01	7.81	SU
APCO GS-AP-MW-44HO	TEMP	Temperature	9/5/2023 10:01	19.08	C
APCO GS-AP-MW-44HO	TURB	Turbidity	9/5/2023 10:01	1.53	NTU
APCO GS-AP-MW-44HO	COND	Conductivity	9/5/2023 10:06	817.61	uS/cm
APCO GS-AP-MW-44HO	DO	DO	9/5/2023 10:06	0.02	mg/L
APCO GS-AP-MW-44HO	DTW	Depth to Water Detail	9/5/2023 10:06	166.7	ft
APCO GS-AP-MW-44HO	ORP	Oxidation Reduction Potential	9/5/2023 10:06	-306.05	mv
APCO GS-AP-MW-44HO	PH	pH	9/5/2023 10:06	8.63	SU
APCO GS-AP-MW-44HO	TEMP	Temperature	9/5/2023 10:06	18.85	C
APCO GS-AP-MW-44HO	TURB	Turbidity	9/5/2023 10:06	1.46	NTU
APCO GS-AP-MW-44HO	COND	Conductivity	9/5/2023 10:11	819.52	uS/cm
APCO GS-AP-MW-44HO	DO	DO	9/5/2023 10:11	0	mg/L
APCO GS-AP-MW-44HO	DTW	Depth to Water Detail	9/5/2023 10:11	166.9	ft
APCO GS-AP-MW-44HO	ORP	Oxidation Reduction Potential	9/5/2023 10:11	-309.18	mv
APCO GS-AP-MW-44HO	PH	pH	9/5/2023 10:11	8.81	SU
APCO GS-AP-MW-44HO	TEMP	Temperature	9/5/2023 10:11	19.32	C
APCO GS-AP-MW-44HO	TURB	Turbidity	9/5/2023 10:11	1.43	NTU
APCO GS-AP-MW-44HO	COND	Conductivity	9/5/2023 10:16	812.71	uS/cm
APCO GS-AP-MW-44HO	DO	DO	9/5/2023 10:16	0.01	mg/L
APCO GS-AP-MW-44HO	DTW	Depth to Water Detail	9/5/2023 10:16	167.18	ft
APCO GS-AP-MW-44HO	ORP	Oxidation Reduction Potential	9/5/2023 10:16	-306.99	mv
APCO GS-AP-MW-44HO	PH	pH	9/5/2023 10:16	8.85	SU
APCO GS-AP-MW-44HO	TEMP	Temperature	9/5/2023 10:16	19.21	C
APCO GS-AP-MW-44HO	TURB	Turbidity	9/5/2023 10:16	1.32	NTU
APCO GS-AP-MW-44HO	COND	Conductivity	9/5/2023 10:21	803.8	uS/cm
APCO GS-AP-MW-44HO	DO	DO	9/5/2023 10:21	0	mg/L
APCO GS-AP-MW-44HO	DTW	Depth to Water Detail	9/5/2023 10:21	167.19	ft
APCO GS-AP-MW-44HO	ORP	Oxidation Reduction Potential	9/5/2023 10:21	-308.7	mv
APCO GS-AP-MW-44HO	PH	pH	9/5/2023 10:21	8.88	SU

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO GS-AP-MW-44HO	SULFIDE	Sulfide	9/5/2023 10:21	5	mg/L
APCO GS-AP-MW-44HO	TEMP	Temperature	9/5/2023 10:21	19.15	C
APCO GS-AP-MW-44HO	TURB	Turbidity	9/5/2023 10:21	1.54	NTU
APCO GS-AP-MW-45V	COND	Conductivity	9/18/2023 15:02	2406.52	uS/cm
APCO GS-AP-MW-45V	DO	DO	9/18/2023 15:02	0.59	mg/L
APCO GS-AP-MW-45V	DTW	Depth to Water Detail	9/18/2023 15:02	213.46	ft
APCO GS-AP-MW-45V	ORP	Oxidation Reduction Potential	9/18/2023 15:02	-45.19	mv
APCO GS-AP-MW-45V	PH	pH	9/18/2023 15:02	7.31	SU
APCO GS-AP-MW-45V	TEMP	Temperature	9/18/2023 15:02	18.74	C
APCO GS-AP-MW-45V	TURB	Turbidity	9/18/2023 15:02	2.3	NTU
APCO GS-AP-MW-45V	COND	Conductivity	9/18/2023 15:07	2545.03	uS/cm
APCO GS-AP-MW-45V	DO	DO	9/18/2023 15:07	0.21	mg/L
APCO GS-AP-MW-45V	DTW	Depth to Water Detail	9/18/2023 15:07	215.94	ft
APCO GS-AP-MW-45V	ORP	Oxidation Reduction Potential	9/18/2023 15:07	-61.06	mv
APCO GS-AP-MW-45V	PH	pH	9/18/2023 15:07	7.38	SU
APCO GS-AP-MW-45V	TEMP	Temperature	9/18/2023 15:07	18.52	C
APCO GS-AP-MW-45V	TURB	Turbidity	9/18/2023 15:07	1.97	NTU
APCO GS-AP-MW-45V	COND	Conductivity	9/18/2023 15:12	2506.97	uS/cm
APCO GS-AP-MW-45V	DO	DO	9/18/2023 15:12	0.16	mg/L
APCO GS-AP-MW-45V	DTW	Depth to Water Detail	9/18/2023 15:12	218.01	ft
APCO GS-AP-MW-45V	ORP	Oxidation Reduction Potential	9/18/2023 15:12	-70.79	mv
APCO GS-AP-MW-45V	PH	pH	9/18/2023 15:12	7.39	SU
APCO GS-AP-MW-45V	TEMP	Temperature	9/18/2023 15:12	18.47	C
APCO GS-AP-MW-45V	TURB	Turbidity	9/18/2023 15:12	1.92	NTU
APCO GS-AP-MW-45V	COND	Conductivity	9/18/2023 15:17	2450.66	uS/cm
APCO GS-AP-MW-45V	DO	DO	9/18/2023 15:17	0.14	mg/L
APCO GS-AP-MW-45V	DTW	Depth to Water Detail	9/18/2023 15:17	220.25	ft
APCO GS-AP-MW-45V	ORP	Oxidation Reduction Potential	9/18/2023 15:17	-76.44	mv
APCO GS-AP-MW-45V	PH	pH	9/18/2023 15:17	7.39	SU
APCO GS-AP-MW-45V	TEMP	Temperature	9/18/2023 15:17	18.33	C
APCO GS-AP-MW-45V	TURB	Turbidity	9/18/2023 15:17	2.02	NTU
APCO GS-AP-MW-45V	COND	Conductivity	9/18/2023 15:22	2426.98	uS/cm
APCO GS-AP-MW-45V	DO	DO	9/18/2023 15:22	0.11	mg/L
APCO GS-AP-MW-45V	DTW	Depth to Water Detail	9/18/2023 15:22	222.31	ft
APCO GS-AP-MW-45V	ORP	Oxidation Reduction Potential	9/18/2023 15:22	-80.81	mv
APCO GS-AP-MW-45V	PH	pH	9/18/2023 15:22	7.4	SU
APCO GS-AP-MW-45V	TEMP	Temperature	9/18/2023 15:22	18.28	C
APCO GS-AP-MW-45V	TURB	Turbidity	9/18/2023 15:22	2.11	NTU
APCO GS-AP-MW-45V	COND	Conductivity	9/18/2023 15:27	2390.27	uS/cm
APCO GS-AP-MW-45V	DO	DO	9/18/2023 15:27	0.1	mg/L
APCO GS-AP-MW-45V	DTW	Depth to Water Detail	9/18/2023 15:27	224.82	ft
APCO GS-AP-MW-45V	ORP	Oxidation Reduction Potential	9/18/2023 15:27	-85.09	mv
APCO GS-AP-MW-45V	PH	pH	9/18/2023 15:27	7.4	SU
APCO GS-AP-MW-45V	TEMP	Temperature	9/18/2023 15:27	18.34	C
APCO GS-AP-MW-45V	TURB	Turbidity	9/18/2023 15:27	1.95	NTU
APCO GS-AP-MW-45V	COND	Conductivity	9/18/2023 15:32	2364.41	uS/cm
APCO GS-AP-MW-45V	DO	DO	9/18/2023 15:32	0.08	mg/L
APCO GS-AP-MW-45V	DTW	Depth to Water Detail	9/18/2023 15:32	227.24	ft
APCO GS-AP-MW-45V	ORP	Oxidation Reduction Potential	9/18/2023 15:32	-88.97	mv
APCO GS-AP-MW-45V	PH	pH	9/18/2023 15:32	7.41	SU
APCO GS-AP-MW-45V	TEMP	Temperature	9/18/2023 15:32	18.21	C
APCO GS-AP-MW-45V	TURB	Turbidity	9/18/2023 15:32	1.92	NTU
APCO GS-AP-MW-45V	COND	Conductivity	9/18/2023 15:37	2442.45	uS/cm
APCO GS-AP-MW-45V	DO	DO	9/18/2023 15:37	0.22	mg/L
APCO GS-AP-MW-45V	DTW	Depth to Water Detail	9/18/2023 15:37	226.76	ft
APCO GS-AP-MW-45V	ORP	Oxidation Reduction Potential	9/18/2023 15:37	-92.2	mv
APCO GS-AP-MW-45V	PH	pH	9/18/2023 15:37	7.4	SU
APCO GS-AP-MW-45V	TEMP	Temperature	9/18/2023 15:37	20.4	C
APCO GS-AP-MW-45V	TURB	Turbidity	9/18/2023 15:37	1.88	NTU
APCO GS-AP-MW-45V	COND	Conductivity	9/18/2023 15:42	2482.35	uS/cm
APCO GS-AP-MW-45V	DO	DO	9/18/2023 15:42	0.26	mg/L
APCO GS-AP-MW-45V	DTW	Depth to Water Detail	9/18/2023 15:42	226.64	ft
APCO GS-AP-MW-45V	ORP	Oxidation Reduction Potential	9/18/2023 15:42	-94.08	mv
APCO GS-AP-MW-45V	PH	pH	9/18/2023 15:42	7.42	SU

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO GS-AP-MW-45V	TEMP	Temperature	9/18/2023 15:42	21.05	C
APCO GS-AP-MW-45V	TURB	Turbidity	9/18/2023 15:42	1.71	NTU
APCO GS-AP-MW-45V	COND	Conductivity	9/18/2023 15:47	2406.4	uS/cm
APCO GS-AP-MW-45V	DO	DO	9/18/2023 15:47	0.24	mg/L
APCO GS-AP-MW-45V	DTW	Depth to Water Detail	9/18/2023 15:47	226.62	ft
APCO GS-AP-MW-45V	ORP	Oxidation Reduction Potential	9/18/2023 15:47	-94.22	mv
APCO GS-AP-MW-45V	PH	pH	9/18/2023 15:47	7.44	SU
APCO GS-AP-MW-45V	SULFIDE	Sulfide	9/18/2023 15:47	4	mg/L
APCO GS-AP-MW-45V	TEMP	Temperature	9/18/2023 15:47	19.78	C
APCO GS-AP-MW-45V	TURB	Turbidity	9/18/2023 15:47	1.65	NTU
APCO GS-AP-MW-46	COND	Conductivity	9/18/2023 15:34	791.23	uS/cm
APCO GS-AP-MW-46	DO	DO	9/18/2023 15:34	0.15	mg/L
APCO GS-AP-MW-46	DTW	Depth to Water Detail	9/18/2023 15:34	138.28	ft
APCO GS-AP-MW-46	ORP	Oxidation Reduction Potential	9/18/2023 15:34	-245.35	mv
APCO GS-AP-MW-46	PH	pH	9/18/2023 15:34	8.77	SU
APCO GS-AP-MW-46	TEMP	Temperature	9/18/2023 15:34	19.07	C
APCO GS-AP-MW-46	TURB	Turbidity	9/18/2023 15:34	0.85	NTU
APCO GS-AP-MW-46	COND	Conductivity	9/18/2023 15:39	786.04	uS/cm
APCO GS-AP-MW-46	DO	DO	9/18/2023 15:39	0.06	mg/L
APCO GS-AP-MW-46	DTW	Depth to Water Detail	9/18/2023 15:39	138.47	ft
APCO GS-AP-MW-46	ORP	Oxidation Reduction Potential	9/18/2023 15:39	-282.43	mv
APCO GS-AP-MW-46	PH	pH	9/18/2023 15:39	8.71	SU
APCO GS-AP-MW-46	TEMP	Temperature	9/18/2023 15:39	19.01	C
APCO GS-AP-MW-46	TURB	Turbidity	9/18/2023 15:39	0.93	NTU
APCO GS-AP-MW-46	COND	Conductivity	9/18/2023 15:44	784.72	uS/cm
APCO GS-AP-MW-46	DO	DO	9/18/2023 15:44	0.03	mg/L
APCO GS-AP-MW-46	DTW	Depth to Water Detail	9/18/2023 15:44	138.75	ft
APCO GS-AP-MW-46	ORP	Oxidation Reduction Potential	9/18/2023 15:44	-294.33	mv
APCO GS-AP-MW-46	PH	pH	9/18/2023 15:44	8.67	SU
APCO GS-AP-MW-46	TEMP	Temperature	9/18/2023 15:44	18.81	C
APCO GS-AP-MW-46	TURB	Turbidity	9/18/2023 15:44	0.95	NTU
APCO GS-AP-MW-46	COND	Conductivity	9/18/2023 15:49	782.82	uS/cm
APCO GS-AP-MW-46	DO	DO	9/18/2023 15:49	0.02	mg/L
APCO GS-AP-MW-46	DTW	Depth to Water Detail	9/18/2023 15:49	138.79	ft
APCO GS-AP-MW-46	ORP	Oxidation Reduction Potential	9/18/2023 15:49	-298.42	mv
APCO GS-AP-MW-46	PH	pH	9/18/2023 15:49	8.65	SU
APCO GS-AP-MW-46	TEMP	Temperature	9/18/2023 15:49	18.86	C
APCO GS-AP-MW-46	TURB	Turbidity	9/18/2023 15:49	1.23	NTU
APCO GS-AP-MW-46	COND	Conductivity	9/18/2023 15:54	780.84	uS/cm
APCO GS-AP-MW-46	DO	DO	9/18/2023 15:54	0.01	mg/L
APCO GS-AP-MW-46	DTW	Depth to Water Detail	9/18/2023 15:54	138.85	ft
APCO GS-AP-MW-46	ORP	Oxidation Reduction Potential	9/18/2023 15:54	-299.83	mv
APCO GS-AP-MW-46	PH	pH	9/18/2023 15:54	8.63	SU
APCO GS-AP-MW-46	SULFIDE	Sulfide	9/18/2023 15:54	6	mg/L
APCO GS-AP-MW-46	TEMP	Temperature	9/18/2023 15:54	18.77	C
APCO GS-AP-MW-46	TURB	Turbidity	9/18/2023 15:54	1.01	NTU
APCO GS-AP-MW-47	COND	Conductivity	9/12/2023 14:08	787.23	uS/cm
APCO GS-AP-MW-47	DO	DO	9/12/2023 14:08	0.31	mg/L
APCO GS-AP-MW-47	DTW	Depth to Water Detail	9/12/2023 14:08	129.92	ft
APCO GS-AP-MW-47	ORP	Oxidation Reduction Potential	9/12/2023 14:08	-44.48	mv
APCO GS-AP-MW-47	PH	pH	9/12/2023 14:08	6.96	SU
APCO GS-AP-MW-47	TEMP	Temperature	9/12/2023 14:08	18.99	C
APCO GS-AP-MW-47	TURB	Turbidity	9/12/2023 14:08	1.48	NTU
APCO GS-AP-MW-47	COND	Conductivity	9/12/2023 14:13	784.69	uS/cm
APCO GS-AP-MW-47	DO	DO	9/12/2023 14:13	0.49	mg/L
APCO GS-AP-MW-47	DTW	Depth to Water Detail	9/12/2023 14:13	132.08	ft
APCO GS-AP-MW-47	ORP	Oxidation Reduction Potential	9/12/2023 14:13	-42.36	mv
APCO GS-AP-MW-47	PH	pH	9/12/2023 14:13	6.99	SU
APCO GS-AP-MW-47	TEMP	Temperature	9/12/2023 14:13	18.81	C
APCO GS-AP-MW-47	TURB	Turbidity	9/12/2023 14:13	1.32	NTU
APCO GS-AP-MW-47	COND	Conductivity	9/12/2023 14:18	803.37	uS/cm
APCO GS-AP-MW-47	DO	DO	9/12/2023 14:18	0.54	mg/L
APCO GS-AP-MW-47	DTW	Depth to Water Detail	9/12/2023 14:18	132.28	ft
APCO GS-AP-MW-47	ORP	Oxidation Reduction Potential	9/12/2023 14:18	-43.3	mv

Plant Gorgas Ash Pond
Field Parameter Summary

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO GS-AP-MW-47	PH	pH	9/12/2023 14:18	6.99	SU
APCO GS-AP-MW-47	TEMP	Temperature	9/12/2023 14:18	21.59	C
APCO GS-AP-MW-47	TURB	Turbidity	9/12/2023 14:18	1.28	NTU
APCO GS-AP-MW-47	COND	Conductivity	9/12/2023 14:23	797.98	uS/cm
APCO GS-AP-MW-47	DO	DO	9/12/2023 14:23	0.55	mg/L
APCO GS-AP-MW-47	DTW	Depth to Water Detail	9/12/2023 14:23	132.3	ft
APCO GS-AP-MW-47	ORP	Oxidation Reduction Potential	9/12/2023 14:23	-44.98	mv
APCO GS-AP-MW-47	PH	pH	9/12/2023 14:23	7.03	SU
APCO GS-AP-MW-47	TEMP	Temperature	9/12/2023 14:23	21.66	C
APCO GS-AP-MW-47	TURB	Turbidity	9/12/2023 14:23	1.39	NTU
APCO GS-AP-MW-47	COND	Conductivity	9/12/2023 14:28	774.9	uS/cm
APCO GS-AP-MW-47	DO	DO	9/12/2023 14:28	0.54	mg/L
APCO GS-AP-MW-47	DTW	Depth to Water Detail	9/12/2023 14:28	132.34	ft
APCO GS-AP-MW-47	ORP	Oxidation Reduction Potential	9/12/2023 14:28	-47.38	mv
APCO GS-AP-MW-47	PH	pH	9/12/2023 14:28	7.07	SU
APCO GS-AP-MW-47	SULFIDE	Sulfide	9/12/2023 14:28	0	mg/L
APCO GS-AP-MW-47	TEMP	Temperature	9/12/2023 14:28	21.5	C
APCO GS-AP-MW-47	TURB	Turbidity	9/12/2023 14:28	1.33	NTU
APCO GS-AP-MW-6D	COND	Conductivity	9/5/2023 14:09	465.73	uS/cm
APCO GS-AP-MW-6D	DO	DO	9/5/2023 14:09	0.16	mg/L
APCO GS-AP-MW-6D	DTW	Depth to Water Detail	9/5/2023 14:09	12.71	ft
APCO GS-AP-MW-6D	ORP	Oxidation Reduction Potential	9/5/2023 14:09	-147.19	mv
APCO GS-AP-MW-6D	PH	pH	9/5/2023 14:09	7.22	SU
APCO GS-AP-MW-6D	TEMP	Temperature	9/5/2023 14:09	19.98	C
APCO GS-AP-MW-6D	TURB	Turbidity	9/5/2023 14:09	2.92	NTU
APCO GS-AP-MW-6D	COND	Conductivity	9/5/2023 14:14	465.72	uS/cm
APCO GS-AP-MW-6D	DO	DO	9/5/2023 14:14	0.13	mg/L
APCO GS-AP-MW-6D	DTW	Depth to Water Detail	9/5/2023 14:14	12.71	ft
APCO GS-AP-MW-6D	ORP	Oxidation Reduction Potential	9/5/2023 14:14	-161.04	mv
APCO GS-AP-MW-6D	PH	pH	9/5/2023 14:14	7.23	SU
APCO GS-AP-MW-6D	TEMP	Temperature	9/5/2023 14:14	19.84	C
APCO GS-AP-MW-6D	TURB	Turbidity	9/5/2023 14:14	2.43	NTU
APCO GS-AP-MW-6D	COND	Conductivity	9/5/2023 14:19	465.03	uS/cm
APCO GS-AP-MW-6D	DO	DO	9/5/2023 14:19	0.13	mg/L
APCO GS-AP-MW-6D	DTW	Depth to Water Detail	9/5/2023 14:19	12.71	ft
APCO GS-AP-MW-6D	ORP	Oxidation Reduction Potential	9/5/2023 14:19	-176.13	mv
APCO GS-AP-MW-6D	PH	pH	9/5/2023 14:19	7.22	SU
APCO GS-AP-MW-6D	TEMP	Temperature	9/5/2023 14:19	19.67	C
APCO GS-AP-MW-6D	TURB	Turbidity	9/5/2023 14:19	2.4	NTU
APCO GS-AP-MW-6D	COND	Conductivity	9/5/2023 14:24	465.44	uS/cm
APCO GS-AP-MW-6D	DO	DO	9/5/2023 14:24	0.12	mg/L
APCO GS-AP-MW-6D	DTW	Depth to Water Detail	9/5/2023 14:24	12.71	ft
APCO GS-AP-MW-6D	ORP	Oxidation Reduction Potential	9/5/2023 14:24	-191.85	mv
APCO GS-AP-MW-6D	PH	pH	9/5/2023 14:24	7.23	SU
APCO GS-AP-MW-6D	SULFIDE	Sulfide	9/5/2023 14:24	7	mg/L
APCO GS-AP-MW-6D	TEMP	Temperature	9/5/2023 14:24	19.68	C
APCO GS-AP-MW-6D	TURB	Turbidity	9/5/2023 14:24	2.45	NTU
APCO GS-AP-MW-6S	COND	Conductivity	9/5/2023 12:59	472.28	uS/cm
APCO GS-AP-MW-6S	DO	DO	9/5/2023 12:59	0.15	mg/L
APCO GS-AP-MW-6S	DTW	Depth to Water Detail	9/5/2023 12:59	17.33	ft
APCO GS-AP-MW-6S	ORP	Oxidation Reduction Potential	9/5/2023 12:59	-74.33	mv
APCO GS-AP-MW-6S	PH	pH	9/5/2023 12:59	6.61	SU
APCO GS-AP-MW-6S	TEMP	Temperature	9/5/2023 12:59	19.91	C
APCO GS-AP-MW-6S	TURB	Turbidity	9/5/2023 12:59	11.25	NTU
APCO GS-AP-MW-6S	COND	Conductivity	9/5/2023 13:04	470.55	uS/cm
APCO GS-AP-MW-6S	DO	DO	9/5/2023 13:04	0.13	mg/L
APCO GS-AP-MW-6S	DTW	Depth to Water Detail	9/5/2023 13:04	17.33	ft
APCO GS-AP-MW-6S	ORP	Oxidation Reduction Potential	9/5/2023 13:04	-82.01	mv
APCO GS-AP-MW-6S	PH	pH	9/5/2023 13:04	6.63	SU
APCO GS-AP-MW-6S	TEMP	Temperature	9/5/2023 13:04	19.97	C
APCO GS-AP-MW-6S	TURB	Turbidity	9/5/2023 13:04	12.05	NTU
APCO GS-AP-MW-6S	COND	Conductivity	9/5/2023 13:09	471.66	uS/cm
APCO GS-AP-MW-6S	DO	DO	9/5/2023 13:09	0.13	mg/L
APCO GS-AP-MW-6S	DTW	Depth to Water Detail	9/5/2023 13:09	17.33	ft

Plant Gorgas Ash Pond
Field Parameter Summary

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO GS-AP-MW-6S	ORP	Oxidation Reduction Potential	9/5/2023 13:09	-87.04	mv
APCO GS-AP-MW-6S	PH	pH	9/5/2023 13:09	6.67	SU
APCO GS-AP-MW-6S	TEMP	Temperature	9/5/2023 13:09	19.99	C
APCO GS-AP-MW-6S	TURB	Turbidity	9/5/2023 13:09	11.6	NTU
APCO GS-AP-MW-6S	COND	Conductivity	9/5/2023 13:14	474.95	uS/cm
APCO GS-AP-MW-6S	DO	DO	9/5/2023 13:14	0.13	mg/L
APCO GS-AP-MW-6S	DTW	Depth to Water Detail	9/5/2023 13:14	17.33	ft
APCO GS-AP-MW-6S	ORP	Oxidation Reduction Potential	9/5/2023 13:14	-89.15	mv
APCO GS-AP-MW-6S	PH	pH	9/5/2023 13:14	6.69	SU
APCO GS-AP-MW-6S	SULFIDE	Sulfide	9/5/2023 13:14	0	mg/L
APCO GS-AP-MW-6S	TEMP	Temperature	9/5/2023 13:14	19.96	C
APCO GS-AP-MW-6S	TURB	Turbidity	9/5/2023 13:14	9.12	NTU
APCO GS-AP-MW-6V	COND	Conductivity	9/11/2023 14:12	1375.68	uS/cm
APCO GS-AP-MW-6V	DO	DO	9/11/2023 14:12	0.57	mg/L
APCO GS-AP-MW-6V	DTW	Depth to Water Detail	9/11/2023 14:12	91.09	ft
APCO GS-AP-MW-6V	ORP	Oxidation Reduction Potential	9/11/2023 14:12	-63.28	mv
APCO GS-AP-MW-6V	PH	pH	9/11/2023 14:12	8.26	SU
APCO GS-AP-MW-6V	TEMP	Temperature	9/11/2023 14:12	21.11	C
APCO GS-AP-MW-6V	TURB	Turbidity	9/11/2023 14:12	12.79	NTU
APCO GS-AP-MW-6V	COND	Conductivity	9/11/2023 14:17	1364.29	uS/cm
APCO GS-AP-MW-6V	DO	DO	9/11/2023 14:17	0.61	mg/L
APCO GS-AP-MW-6V	DTW	Depth to Water Detail	9/11/2023 14:17	91.09	ft
APCO GS-AP-MW-6V	ORP	Oxidation Reduction Potential	9/11/2023 14:17	-76.87	mv
APCO GS-AP-MW-6V	PH	pH	9/11/2023 14:17	8.35	SU
APCO GS-AP-MW-6V	TEMP	Temperature	9/11/2023 14:17	21.38	C
APCO GS-AP-MW-6V	TURB	Turbidity	9/11/2023 14:17	12.3	NTU
APCO GS-AP-MW-6V	COND	Conductivity	9/11/2023 14:22	1346.24	uS/cm
APCO GS-AP-MW-6V	DO	DO	9/11/2023 14:22	0.49	mg/L
APCO GS-AP-MW-6V	DTW	Depth to Water Detail	9/11/2023 14:22	91.16	ft
APCO GS-AP-MW-6V	ORP	Oxidation Reduction Potential	9/11/2023 14:22	-84.66	mv
APCO GS-AP-MW-6V	PH	pH	9/11/2023 14:22	8.4	SU
APCO GS-AP-MW-6V	TEMP	Temperature	9/11/2023 14:22	20.56	C
APCO GS-AP-MW-6V	TURB	Turbidity	9/11/2023 14:22	12.5	NTU
APCO GS-AP-MW-6V	COND	Conductivity	9/11/2023 14:27	1337.31	uS/cm
APCO GS-AP-MW-6V	DO	DO	9/11/2023 14:27	0.42	mg/L
APCO GS-AP-MW-6V	DTW	Depth to Water Detail	9/11/2023 14:27	91.42	ft
APCO GS-AP-MW-6V	ORP	Oxidation Reduction Potential	9/11/2023 14:27	-88.82	mv
APCO GS-AP-MW-6V	PH	pH	9/11/2023 14:27	8.33	SU
APCO GS-AP-MW-6V	TEMP	Temperature	9/11/2023 14:27	19.81	C
APCO GS-AP-MW-6V	TURB	Turbidity	9/11/2023 14:27	12.6	NTU
APCO GS-AP-MW-6V	COND	Conductivity	9/11/2023 14:32	1394.18	uS/cm
APCO GS-AP-MW-6V	DO	DO	9/11/2023 14:32	0.37	mg/L
APCO GS-AP-MW-6V	DTW	Depth to Water Detail	9/11/2023 14:32	91.59	ft
APCO GS-AP-MW-6V	ORP	Oxidation Reduction Potential	9/11/2023 14:32	-93.29	mv
APCO GS-AP-MW-6V	PH	pH	9/11/2023 14:32	8.3	SU
APCO GS-AP-MW-6V	TEMP	Temperature	9/11/2023 14:32	19.82	C
APCO GS-AP-MW-6V	TURB	Turbidity	9/11/2023 14:32	12.2	NTU
APCO GS-AP-MW-6V	COND	Conductivity	9/11/2023 14:37	1387.05	uS/cm
APCO GS-AP-MW-6V	DO	DO	9/11/2023 14:37	0.37	mg/L
APCO GS-AP-MW-6V	DTW	Depth to Water Detail	9/11/2023 14:37	91.94	ft
APCO GS-AP-MW-6V	ORP	Oxidation Reduction Potential	9/11/2023 14:37	-99.76	mv
APCO GS-AP-MW-6V	PH	pH	9/11/2023 14:37	8.29	SU
APCO GS-AP-MW-6V	TEMP	Temperature	9/11/2023 14:37	19.83	C
APCO GS-AP-MW-6V	TURB	Turbidity	9/11/2023 14:37	12.1	NTU
APCO GS-AP-MW-6V	COND	Conductivity	9/11/2023 14:42	1347.02	uS/cm
APCO GS-AP-MW-6V	DO	DO	9/11/2023 14:42	0.35	mg/L
APCO GS-AP-MW-6V	DTW	Depth to Water Detail	9/11/2023 14:42	92.2	ft
APCO GS-AP-MW-6V	ORP	Oxidation Reduction Potential	9/11/2023 14:42	-105.38	mv
APCO GS-AP-MW-6V	PH	pH	9/11/2023 14:42	8.29	SU
APCO GS-AP-MW-6V	TEMP	Temperature	9/11/2023 14:42	19.87	C
APCO GS-AP-MW-6V	TURB	Turbidity	9/11/2023 14:42	13.2	NTU
APCO GS-AP-MW-6V	COND	Conductivity	9/11/2023 14:47	1411.78	uS/cm
APCO GS-AP-MW-6V	DO	DO	9/11/2023 14:47	0.45	mg/L
APCO GS-AP-MW-6V	DTW	Depth to Water Detail	9/11/2023 14:47	92.24	ft

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO GS-AP-MW-6V	ORP	Oxidation Reduction Potential	9/11/2023 14:47	-107.45	mv
APCO GS-AP-MW-6V	PH	pH	9/11/2023 14:47	8.27	SU
APCO GS-AP-MW-6V	TEMP	Temperature	9/11/2023 14:47	21.16	C
APCO GS-AP-MW-6V	TURB	Turbidity	9/11/2023 14:47	11.9	NTU
APCO GS-AP-MW-6V	COND	Conductivity	9/11/2023 14:52	1364.06	uS/cm
APCO GS-AP-MW-6V	DO	DO	9/11/2023 14:52	0.48	mg/L
APCO GS-AP-MW-6V	DTW	Depth to Water Detail	9/11/2023 14:52	92.31	ft
APCO GS-AP-MW-6V	ORP	Oxidation Reduction Potential	9/11/2023 14:52	-108.61	mv
APCO GS-AP-MW-6V	PH	pH	9/11/2023 14:52	8.33	SU
APCO GS-AP-MW-6V	TEMP	Temperature	9/11/2023 14:52	21.72	C
APCO GS-AP-MW-6V	TURB	Turbidity	9/11/2023 14:52	16	NTU
APCO GS-AP-MW-6V	COND	Conductivity	9/11/2023 14:57	1374.18	uS/cm
APCO GS-AP-MW-6V	DO	DO	9/11/2023 14:57	0.48	mg/L
APCO GS-AP-MW-6V	DTW	Depth to Water Detail	9/11/2023 14:57	92.34	ft
APCO GS-AP-MW-6V	ORP	Oxidation Reduction Potential	9/11/2023 14:57	-109.24	mv
APCO GS-AP-MW-6V	PH	pH	9/11/2023 14:57	8.39	SU
APCO GS-AP-MW-6V	TEMP	Temperature	9/11/2023 14:57	21.57	C
APCO GS-AP-MW-6V	TURB	Turbidity	9/11/2023 14:57	16.4	NTU
APCO GS-AP-MW-6V	COND	Conductivity	9/11/2023 15:02	1362.5	uS/cm
APCO GS-AP-MW-6V	DO	DO	9/11/2023 15:02	0.4	mg/L
APCO GS-AP-MW-6V	DTW	Depth to Water Detail	9/11/2023 15:02	92.55	ft
APCO GS-AP-MW-6V	ORP	Oxidation Reduction Potential	9/11/2023 15:02	-111.24	mv
APCO GS-AP-MW-6V	PH	pH	9/11/2023 15:02	8.38	SU
APCO GS-AP-MW-6V	TEMP	Temperature	9/11/2023 15:02	20.97	C
APCO GS-AP-MW-6V	TURB	Turbidity	9/11/2023 15:02	15.6	NTU
APCO GS-AP-MW-6V	COND	Conductivity	9/11/2023 15:07	1382.62	uS/cm
APCO GS-AP-MW-6V	DO	DO	9/11/2023 15:07	0.4	mg/L
APCO GS-AP-MW-6V	DTW	Depth to Water Detail	9/11/2023 15:07	92.65	ft
APCO GS-AP-MW-6V	ORP	Oxidation Reduction Potential	9/11/2023 15:07	-113.43	mv
APCO GS-AP-MW-6V	PH	pH	9/11/2023 15:07	8.34	SU
APCO GS-AP-MW-6V	TEMP	Temperature	9/11/2023 15:07	21.08	C
APCO GS-AP-MW-6V	TURB	Turbidity	9/11/2023 15:07	13.4	NTU
APCO GS-AP-MW-6V	COND	Conductivity	9/11/2023 15:12	1409.01	uS/cm
APCO GS-AP-MW-6V	DO	DO	9/11/2023 15:12	0.39	mg/L
APCO GS-AP-MW-6V	DTW	Depth to Water Detail	9/11/2023 15:12	92.75	ft
APCO GS-AP-MW-6V	ORP	Oxidation Reduction Potential	9/11/2023 15:12	-116.84	mv
APCO GS-AP-MW-6V	PH	pH	9/11/2023 15:12	8.36	SU
APCO GS-AP-MW-6V	TEMP	Temperature	9/11/2023 15:12	20.72	C
APCO GS-AP-MW-6V	TURB	Turbidity	9/11/2023 15:12	14.6	NTU
APCO GS-AP-MW-6V	COND	Conductivity	9/11/2023 15:17	1393.27	uS/cm
APCO GS-AP-MW-6V	DO	DO	9/11/2023 15:17	0.37	mg/L
APCO GS-AP-MW-6V	DTW	Depth to Water Detail	9/11/2023 15:17	92.85	ft
APCO GS-AP-MW-6V	ORP	Oxidation Reduction Potential	9/11/2023 15:17	-120.4	mv
APCO GS-AP-MW-6V	PH	pH	9/11/2023 15:17	8.36	SU
APCO GS-AP-MW-6V	TEMP	Temperature	9/11/2023 15:17	20.39	C
APCO GS-AP-MW-6V	TURB	Turbidity	9/11/2023 15:17	13.6	NTU
APCO GS-AP-MW-6V	COND	Conductivity	9/11/2023 15:22	1354.8	uS/cm
APCO GS-AP-MW-6V	DO	DO	9/11/2023 15:22	0.37	mg/L
APCO GS-AP-MW-6V	DTW	Depth to Water Detail	9/11/2023 15:22	92.96	ft
APCO GS-AP-MW-6V	ORP	Oxidation Reduction Potential	9/11/2023 15:22	-124.01	mv
APCO GS-AP-MW-6V	PH	pH	9/11/2023 15:22	8.38	SU
APCO GS-AP-MW-6V	TEMP	Temperature	9/11/2023 15:22	20.3	C
APCO GS-AP-MW-6V	TURB	Turbidity	9/11/2023 15:22	14.6	NTU
APCO GS-AP-MW-6V	COND	Conductivity	9/11/2023 15:27	1393.28	uS/cm
APCO GS-AP-MW-6V	DO	DO	9/11/2023 15:27	0.38	mg/L
APCO GS-AP-MW-6V	DTW	Depth to Water Detail	9/11/2023 15:27	93.18	ft
APCO GS-AP-MW-6V	ORP	Oxidation Reduction Potential	9/11/2023 15:27	-126.49	mv
APCO GS-AP-MW-6V	PH	pH	9/11/2023 15:27	8.37	SU
APCO GS-AP-MW-6V	TEMP	Temperature	9/11/2023 15:27	20.1	C
APCO GS-AP-MW-6V	TURB	Turbidity	9/11/2023 15:27	13.5	NTU
APCO GS-AP-MW-6V	COND	Conductivity	9/11/2023 15:32	1375.94	uS/cm
APCO GS-AP-MW-6V	DO	DO	9/11/2023 15:32	0.46	mg/L
APCO GS-AP-MW-6V	DTW	Depth to Water Detail	9/11/2023 15:32	93.31	ft
APCO GS-AP-MW-6V	ORP	Oxidation Reduction Potential	9/11/2023 15:32	-126.49	mv

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO GS-AP-MW-6V	PH	pH	9/11/2023 15:32	8.36	SU
APCO GS-AP-MW-6V	TEMP	Temperature	9/11/2023 15:32	20.56	C
APCO GS-AP-MW-6V	TURB	Turbidity	9/11/2023 15:32	15.1	NTU
APCO GS-AP-MW-6V	COND	Conductivity	9/11/2023 15:37	1399.27	uS/cm
APCO GS-AP-MW-6V	DO	DO	9/11/2023 15:37	0.51	mg/L
APCO GS-AP-MW-6V	DTW	Depth to Water Detail	9/11/2023 15:37	93.41	ft
APCO GS-AP-MW-6V	ORP	Oxidation Reduction Potential	9/11/2023 15:37	-127.1	mv
APCO GS-AP-MW-6V	PH	pH	9/11/2023 15:37	8.4	SU
APCO GS-AP-MW-6V	TEMP	Temperature	9/11/2023 15:37	20.63	C
APCO GS-AP-MW-6V	TURB	Turbidity	9/11/2023 15:37	14.1	NTU
APCO GS-AP-MW-6V	COND	Conductivity	9/11/2023 15:42	1384.58	uS/cm
APCO GS-AP-MW-6V	DO	DO	9/11/2023 15:42	0.51	mg/L
APCO GS-AP-MW-6V	DTW	Depth to Water Detail	9/11/2023 15:42	93.46	ft
APCO GS-AP-MW-6V	ORP	Oxidation Reduction Potential	9/11/2023 15:42	-125.59	mv
APCO GS-AP-MW-6V	PH	pH	9/11/2023 15:42	8.42	SU
APCO GS-AP-MW-6V	TEMP	Temperature	9/11/2023 15:42	20.61	C
APCO GS-AP-MW-6V	TURB	Turbidity	9/11/2023 15:42	15.2	NTU
APCO GS-AP-MW-6V	COND	Conductivity	9/11/2023 15:47	1372.88	uS/cm
APCO GS-AP-MW-6V	DO	DO	9/11/2023 15:47	0.52	mg/L
APCO GS-AP-MW-6V	DTW	Depth to Water Detail	9/11/2023 15:47	93.56	ft
APCO GS-AP-MW-6V	ORP	Oxidation Reduction Potential	9/11/2023 15:47	-124.2	mv
APCO GS-AP-MW-6V	PH	pH	9/11/2023 15:47	8.43	SU
APCO GS-AP-MW-6V	TEMP	Temperature	9/11/2023 15:47	20.7	C
APCO GS-AP-MW-6V	TURB	Turbidity	9/11/2023 15:47	19.9	NTU
APCO GS-AP-MW-6V	COND	Conductivity	9/11/2023 15:52	1400.52	uS/cm
APCO GS-AP-MW-6V	DO	DO	9/11/2023 15:52	0.58	mg/L
APCO GS-AP-MW-6V	DTW	Depth to Water Detail	9/11/2023 15:52	93.61	ft
APCO GS-AP-MW-6V	ORP	Oxidation Reduction Potential	9/11/2023 15:52	-121.09	mv
APCO GS-AP-MW-6V	PH	pH	9/11/2023 15:52	8.41	SU
APCO GS-AP-MW-6V	TEMP	Temperature	9/11/2023 15:52	20.85	C
APCO GS-AP-MW-6V	TURB	Turbidity	9/11/2023 15:52	19.6	NTU
APCO GS-AP-MW-6V	COND	Conductivity	9/11/2023 15:57	1384.29	uS/cm
APCO GS-AP-MW-6V	DO	DO	9/11/2023 15:57	0.6	mg/L
APCO GS-AP-MW-6V	DTW	Depth to Water Detail	9/11/2023 15:57	93.64	ft
APCO GS-AP-MW-6V	ORP	Oxidation Reduction Potential	9/11/2023 15:57	-119.36	mv
APCO GS-AP-MW-6V	PH	pH	9/11/2023 15:57	8.43	SU
APCO GS-AP-MW-6V	TEMP	Temperature	9/11/2023 15:57	20.95	C
APCO GS-AP-MW-6V	TURB	Turbidity	9/11/2023 15:57	20.6	NTU
APCO GS-AP-MW-6V	COND	Conductivity	9/11/2023 16:02	1378.4	uS/cm
APCO GS-AP-MW-6V	DO	DO	9/11/2023 16:02	0.61	mg/L
APCO GS-AP-MW-6V	DTW	Depth to Water Detail	9/11/2023 16:02	93.71	ft
APCO GS-AP-MW-6V	ORP	Oxidation Reduction Potential	9/11/2023 16:02	-118.12	mv
APCO GS-AP-MW-6V	PH	pH	9/11/2023 16:02	8.43	SU
APCO GS-AP-MW-6V	TEMP	Temperature	9/11/2023 16:02	20.89	C
APCO GS-AP-MW-6V	TURB	Turbidity	9/11/2023 16:02	18.9	NTU
APCO GS-AP-MW-6V	COND	Conductivity	9/11/2023 16:07	1378.25	uS/cm
APCO GS-AP-MW-6V	DO	DO	9/11/2023 16:07	0.73	mg/L
APCO GS-AP-MW-6V	DTW	Depth to Water Detail	9/11/2023 16:07	93.76	ft
APCO GS-AP-MW-6V	ORP	Oxidation Reduction Potential	9/11/2023 16:07	-116.02	mv
APCO GS-AP-MW-6V	PH	pH	9/11/2023 16:07	8.42	SU
APCO GS-AP-MW-6V	TEMP	Temperature	9/11/2023 16:07	21.27	C
APCO GS-AP-MW-6V	TURB	Turbidity	9/11/2023 16:07	18.7	NTU
APCO GS-AP-MW-6V	COND	Conductivity	9/11/2023 16:12	1365.54	uS/cm
APCO GS-AP-MW-6V	DO	DO	9/11/2023 16:12	0.83	mg/L
APCO GS-AP-MW-6V	DTW	Depth to Water Detail	9/11/2023 16:12	93.8	ft
APCO GS-AP-MW-6V	ORP	Oxidation Reduction Potential	9/11/2023 16:12	-112.81	mv
APCO GS-AP-MW-6V	PH	pH	9/11/2023 16:12	8.41	SU
APCO GS-AP-MW-6V	TEMP	Temperature	9/11/2023 16:12	21.8	C
APCO GS-AP-MW-6V	TURB	Turbidity	9/11/2023 16:12	19.2	NTU
APCO GS-AP-MW-6V	COND	Conductivity	9/11/2023 16:17	1343.48	uS/cm
APCO GS-AP-MW-6V	DO	DO	9/11/2023 16:17	0.85	mg/L
APCO GS-AP-MW-6V	DTW	Depth to Water Detail	9/11/2023 16:17	93.82	ft
APCO GS-AP-MW-6V	ORP	Oxidation Reduction Potential	9/11/2023 16:17	-111.04	mv
APCO GS-AP-MW-6V	PH	pH	9/11/2023 16:17	8.44	SU

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO GS-AP-MW-6V	SULFIDE	Sulfide	9/11/2023 16:17	0	mg/L
APCO GS-AP-MW-6V	TEMP	Temperature	9/11/2023 16:17	21.86	C
APCO GS-AP-MW-6V	TURB	Turbidity	9/11/2023 16:17	19.9	NTU
APCO GS-AP-MW-7	COND	Conductivity	9/11/2023 10:47	521.55	uS/cm
APCO GS-AP-MW-7	DO	DO	9/11/2023 10:47	0.47	mg/L
APCO GS-AP-MW-7	DTW	Depth to Water Detail	9/11/2023 10:47	13.46	ft
APCO GS-AP-MW-7	ORP	Oxidation Reduction Potential	9/11/2023 10:47	-138.85	mv
APCO GS-AP-MW-7	PH	pH	9/11/2023 10:47	7.21	SU
APCO GS-AP-MW-7	TEMP	Temperature	9/11/2023 10:47	19.19	C
APCO GS-AP-MW-7	TURB	Turbidity	9/11/2023 10:47	3.12	NTU
APCO GS-AP-MW-7	COND	Conductivity	9/11/2023 10:52	521.58	uS/cm
APCO GS-AP-MW-7	DO	DO	9/11/2023 10:52	0.37	mg/L
APCO GS-AP-MW-7	DTW	Depth to Water Detail	9/11/2023 10:52	13.56	ft
APCO GS-AP-MW-7	ORP	Oxidation Reduction Potential	9/11/2023 10:52	-140.68	mv
APCO GS-AP-MW-7	PH	pH	9/11/2023 10:52	7.25	SU
APCO GS-AP-MW-7	TEMP	Temperature	9/11/2023 10:52	19.14	C
APCO GS-AP-MW-7	TURB	Turbidity	9/11/2023 10:52	5.1	NTU
APCO GS-AP-MW-7	COND	Conductivity	9/11/2023 10:57	521.41	uS/cm
APCO GS-AP-MW-7	DO	DO	9/11/2023 10:57	0.33	mg/L
APCO GS-AP-MW-7	DTW	Depth to Water Detail	9/11/2023 10:57	13.56	ft
APCO GS-AP-MW-7	ORP	Oxidation Reduction Potential	9/11/2023 10:57	-141.54	mv
APCO GS-AP-MW-7	PH	pH	9/11/2023 10:57	7.26	SU
APCO GS-AP-MW-7	TEMP	Temperature	9/11/2023 10:57	19.2	C
APCO GS-AP-MW-7	TURB	Turbidity	9/11/2023 10:57	5.61	NTU
APCO GS-AP-MW-7	COND	Conductivity	9/11/2023 10:58	522.78	uS/cm
APCO GS-AP-MW-7	DO	DO	9/11/2023 10:58	0.32	mg/L
APCO GS-AP-MW-7	DTW	Depth to Water Detail	9/11/2023 10:58	13.58	ft
APCO GS-AP-MW-7	ORP	Oxidation Reduction Potential	9/11/2023 10:58	-138.92	mv
APCO GS-AP-MW-7	PH	pH	9/11/2023 10:58	7.22	SU
APCO GS-AP-MW-7	TEMP	Temperature	9/11/2023 10:58	19.16	C
APCO GS-AP-MW-7	TURB	Turbidity	9/11/2023 10:58	5.66	NTU
APCO GS-AP-MW-7	COND	Conductivity	9/11/2023 11:03	521.45	uS/cm
APCO GS-AP-MW-7	DO	DO	9/11/2023 11:03	0.29	mg/L
APCO GS-AP-MW-7	DTW	Depth to Water Detail	9/11/2023 11:03	13.58	ft
APCO GS-AP-MW-7	ORP	Oxidation Reduction Potential	9/11/2023 11:03	-139.89	mv
APCO GS-AP-MW-7	PH	pH	9/11/2023 11:03	7.22	SU
APCO GS-AP-MW-7	TEMP	Temperature	9/11/2023 11:03	19.26	C
APCO GS-AP-MW-7	TURB	Turbidity	9/11/2023 11:03	5.14	NTU
APCO GS-AP-MW-7	SULFIDE	Sulfide	9/11/2023 11:07	0	mg/L
APCO GS-AP-MW-7	COND	Conductivity	9/11/2023 11:08	522.02	uS/cm
APCO GS-AP-MW-7	DO	DO	9/11/2023 11:08	0.29	mg/L
APCO GS-AP-MW-7	DTW	Depth to Water Detail	9/11/2023 11:08	13.58	ft
APCO GS-AP-MW-7	ORP	Oxidation Reduction Potential	9/11/2023 11:08	-140.28	mv
APCO GS-AP-MW-7	PH	pH	9/11/2023 11:08	7.23	SU
APCO GS-AP-MW-7	TEMP	Temperature	9/11/2023 11:08	19.26	C
APCO GS-AP-MW-7	TURB	Turbidity	9/11/2023 11:08	8.03	NTU
APCO GS-AP-MW-8	COND	Conductivity	9/18/2023 16:04	112.92	uS/cm
APCO GS-AP-MW-8	DO	DO	9/18/2023 16:04	0.82	mg/L
APCO GS-AP-MW-8	DTW	Depth to Water Detail	9/18/2023 16:04	47.31	ft
APCO GS-AP-MW-8	ORP	Oxidation Reduction Potential	9/18/2023 16:04	167.24	mv
APCO GS-AP-MW-8	PH	pH	9/18/2023 16:04	5.46	SU
APCO GS-AP-MW-8	TEMP	Temperature	9/18/2023 16:04	20.68	C
APCO GS-AP-MW-8	TURB	Turbidity	9/18/2023 16:04	3.4	NTU
APCO GS-AP-MW-8	COND	Conductivity	9/18/2023 16:09	106.53	uS/cm
APCO GS-AP-MW-8	DO	DO	9/18/2023 16:09	0.8	mg/L
APCO GS-AP-MW-8	DTW	Depth to Water Detail	9/18/2023 16:09	47.48	ft
APCO GS-AP-MW-8	ORP	Oxidation Reduction Potential	9/18/2023 16:09	173.64	mv
APCO GS-AP-MW-8	PH	pH	9/18/2023 16:09	5.42	SU
APCO GS-AP-MW-8	TEMP	Temperature	9/18/2023 16:09	20.58	C
APCO GS-AP-MW-8	TURB	Turbidity	9/18/2023 16:09	2.64	NTU
APCO GS-AP-MW-8	COND	Conductivity	9/18/2023 16:14	105.53	uS/cm
APCO GS-AP-MW-8	DO	DO	9/18/2023 16:14	0.76	mg/L
APCO GS-AP-MW-8	DTW	Depth to Water Detail	9/18/2023 16:14	47.57	ft
APCO GS-AP-MW-8	ORP	Oxidation Reduction Potential	9/18/2023 16:14	171.77	mv

Plant Gorgas Ash Pond
Field Parameter Summary

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO GS-AP-MW-8	PH	pH	9/18/2023 16:14	5.41	SU
APCO GS-AP-MW-8	TEMP	Temperature	9/18/2023 16:14	20.69	C
APCO GS-AP-MW-8	TURB	Turbidity	9/18/2023 16:14	3.69	NTU
APCO GS-AP-MW-8	COND	Conductivity	9/18/2023 16:19	107.72	uS/cm
APCO GS-AP-MW-8	DO	DO	9/18/2023 16:19	0.72	mg/L
APCO GS-AP-MW-8	DTW	Depth to Water Detail	9/18/2023 16:19	47.69	ft
APCO GS-AP-MW-8	ORP	Oxidation Reduction Potential	9/18/2023 16:19	155.18	mv
APCO GS-AP-MW-8	PH	pH	9/18/2023 16:19	5.42	SU
APCO GS-AP-MW-8	SULFIDE	Sulfide	9/18/2023 16:19	0	mg/L
APCO GS-AP-MW-8	TEMP	Temperature	9/18/2023 16:19	20.6	C
APCO GS-AP-MW-8	TURB	Turbidity	9/18/2023 16:19	3.3	NTU
APCO GS-AP-MW-9V	COND	Conductivity	9/13/2023 16:17	3027.65	uS/cm
APCO GS-AP-MW-9V	DO	DO	9/13/2023 16:17	0.34	mg/L
APCO GS-AP-MW-9V	DTW	Depth to Water Detail	9/13/2023 16:17	67.46	ft
APCO GS-AP-MW-9V	ORP	Oxidation Reduction Potential	9/13/2023 16:17	-104.16	mv
APCO GS-AP-MW-9V	PH	pH	9/13/2023 16:17	7.27	SU
APCO GS-AP-MW-9V	TEMP	Temperature	9/13/2023 16:17	19.33	C
APCO GS-AP-MW-9V	TURB	Turbidity	9/13/2023 16:17	1.58	NTU
APCO GS-AP-MW-9V	COND	Conductivity	9/13/2023 16:22	2866.69	uS/cm
APCO GS-AP-MW-9V	DO	DO	9/13/2023 16:22	0.28	mg/L
APCO GS-AP-MW-9V	DTW	Depth to Water Detail	9/13/2023 16:22	68.79	ft
APCO GS-AP-MW-9V	ORP	Oxidation Reduction Potential	9/13/2023 16:22	-114.33	mv
APCO GS-AP-MW-9V	PH	pH	9/13/2023 16:22	7.28	SU
APCO GS-AP-MW-9V	TEMP	Temperature	9/13/2023 16:22	19.26	C
APCO GS-AP-MW-9V	TURB	Turbidity	9/13/2023 16:22	1.46	NTU
APCO GS-AP-MW-9V	COND	Conductivity	9/13/2023 16:27	1871.94	uS/cm
APCO GS-AP-MW-9V	DO	DO	9/13/2023 16:27	0.27	mg/L
APCO GS-AP-MW-9V	DTW	Depth to Water Detail	9/13/2023 16:27	69.81	ft
APCO GS-AP-MW-9V	ORP	Oxidation Reduction Potential	9/13/2023 16:27	-121.56	mv
APCO GS-AP-MW-9V	PH	pH	9/13/2023 16:27	7.19	SU
APCO GS-AP-MW-9V	TEMP	Temperature	9/13/2023 16:27	19.22	C
APCO GS-AP-MW-9V	TURB	Turbidity	9/13/2023 16:27	0.99	NTU
APCO GS-AP-MW-9V	COND	Conductivity	9/13/2023 16:32	1648.32	uS/cm
APCO GS-AP-MW-9V	DO	DO	9/13/2023 16:32	0.35	mg/L
APCO GS-AP-MW-9V	DTW	Depth to Water Detail	9/13/2023 16:32	70.12	ft
APCO GS-AP-MW-9V	ORP	Oxidation Reduction Potential	9/13/2023 16:32	-124.72	mv
APCO GS-AP-MW-9V	PH	pH	9/13/2023 16:32	7.16	SU
APCO GS-AP-MW-9V	TEMP	Temperature	9/13/2023 16:32	19.64	C
APCO GS-AP-MW-9V	TURB	Turbidity	9/13/2023 16:32	1.12	NTU
APCO GS-AP-MW-9V	COND	Conductivity	9/13/2023 16:37	1627.89	uS/cm
APCO GS-AP-MW-9V	DO	DO	9/13/2023 16:37	0.35	mg/L
APCO GS-AP-MW-9V	DTW	Depth to Water Detail	9/13/2023 16:37	70.6	ft
APCO GS-AP-MW-9V	ORP	Oxidation Reduction Potential	9/13/2023 16:37	-128	mv
APCO GS-AP-MW-9V	PH	pH	9/13/2023 16:37	7.16	SU
APCO GS-AP-MW-9V	TEMP	Temperature	9/13/2023 16:37	19.67	C
APCO GS-AP-MW-9V	TURB	Turbidity	9/13/2023 16:37	0.88	NTU
APCO GS-AP-MW-9V	COND	Conductivity	9/13/2023 16:42	1475.98	uS/cm
APCO GS-AP-MW-9V	DO	DO	9/13/2023 16:42	0.35	mg/L
APCO GS-AP-MW-9V	DTW	Depth to Water Detail	9/13/2023 16:42	70.71	ft
APCO GS-AP-MW-9V	ORP	Oxidation Reduction Potential	9/13/2023 16:42	-127.72	mv
APCO GS-AP-MW-9V	PH	pH	9/13/2023 16:42	7.14	SU
APCO GS-AP-MW-9V	TEMP	Temperature	9/13/2023 16:42	19.67	C
APCO GS-AP-MW-9V	TURB	Turbidity	9/13/2023 16:42	0.93	NTU
APCO GS-AP-MW-9V	COND	Conductivity	9/13/2023 16:47	1306.67	uS/cm
APCO GS-AP-MW-9V	DO	DO	9/13/2023 16:47	0.36	mg/L
APCO GS-AP-MW-9V	DTW	Depth to Water Detail	9/13/2023 16:47	70.83	ft
APCO GS-AP-MW-9V	ORP	Oxidation Reduction Potential	9/13/2023 16:47	-125.22	mv
APCO GS-AP-MW-9V	PH	pH	9/13/2023 16:47	7.11	SU
APCO GS-AP-MW-9V	TEMP	Temperature	9/13/2023 16:47	19.69	C
APCO GS-AP-MW-9V	TURB	Turbidity	9/13/2023 16:47	0.91	NTU
APCO GS-AP-MW-9V	COND	Conductivity	9/13/2023 16:52	1169.21	uS/cm
APCO GS-AP-MW-9V	DO	DO	9/13/2023 16:52	0.36	mg/L
APCO GS-AP-MW-9V	DTW	Depth to Water Detail	9/13/2023 16:52	70.87	ft
APCO GS-AP-MW-9V	ORP	Oxidation Reduction Potential	9/13/2023 16:52	-121.67	mv

Plant Gorgas Ash Pond
Field Parameter Summary

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO GS-AP-MW-9V	PH	pH	9/13/2023 16:52	7.09	SU
APCO GS-AP-MW-9V	TEMP	Temperature	9/13/2023 16:52	19.71	C
APCO GS-AP-MW-9V	TURB	Turbidity	9/13/2023 16:52	1	NTU
APCO GS-AP-MW-9V	COND	Conductivity	9/13/2023 16:57	1061.22	uS/cm
APCO GS-AP-MW-9V	DO	DO	9/13/2023 16:57	0.36	mg/L
APCO GS-AP-MW-9V	DTW	Depth to Water Detail	9/13/2023 16:57	70.99	ft
APCO GS-AP-MW-9V	ORP	Oxidation Reduction Potential	9/13/2023 16:57	-118.61	mv
APCO GS-AP-MW-9V	PH	pH	9/13/2023 16:57	7.06	SU
APCO GS-AP-MW-9V	TEMP	Temperature	9/13/2023 16:57	19.71	C
APCO GS-AP-MW-9V	TURB	Turbidity	9/13/2023 16:57	0.52	NTU
APCO GS-AP-MW-9V	COND	Conductivity	9/13/2023 17:02	970.91	uS/cm
APCO GS-AP-MW-9V	DO	DO	9/13/2023 17:02	0.36	mg/L
APCO GS-AP-MW-9V	DTW	Depth to Water Detail	9/13/2023 17:02	80.12	ft
APCO GS-AP-MW-9V	ORP	Oxidation Reduction Potential	9/13/2023 17:02	-116.14	mv
APCO GS-AP-MW-9V	PH	pH	9/13/2023 17:02	7.04	SU
APCO GS-AP-MW-9V	TEMP	Temperature	9/13/2023 17:02	19.61	C
APCO GS-AP-MW-9V	TURB	Turbidity	9/13/2023 17:02	0.47	NTU
APCO GS-AP-MW-9V	COND	Conductivity	9/13/2023 17:07	902.6	uS/cm
APCO GS-AP-MW-9V	DO	DO	9/13/2023 17:07	0.36	mg/L
APCO GS-AP-MW-9V	DTW	Depth to Water Detail	9/13/2023 17:07	80.26	ft
APCO GS-AP-MW-9V	ORP	Oxidation Reduction Potential	9/13/2023 17:07	-113.43	mv
APCO GS-AP-MW-9V	PH	pH	9/13/2023 17:07	7.02	SU
APCO GS-AP-MW-9V	TEMP	Temperature	9/13/2023 17:07	19.73	C
APCO GS-AP-MW-9V	TURB	Turbidity	9/13/2023 17:07	0.54	NTU
APCO GS-AP-MW-9V	COND	Conductivity	9/13/2023 17:12	847.91	uS/cm
APCO GS-AP-MW-9V	DO	DO	9/13/2023 17:12	0.36	mg/L
APCO GS-AP-MW-9V	DTW	Depth to Water Detail	9/13/2023 17:12	80.38	ft
APCO GS-AP-MW-9V	ORP	Oxidation Reduction Potential	9/13/2023 17:12	-111.18	mv
APCO GS-AP-MW-9V	PH	pH	9/13/2023 17:12	7	SU
APCO GS-AP-MW-9V	TEMP	Temperature	9/13/2023 17:12	19.74	C
APCO GS-AP-MW-9V	TURB	Turbidity	9/13/2023 17:12	0.47	NTU
APCO GS-AP-MW-9V	COND	Conductivity	9/13/2023 17:17	807.62	uS/cm
APCO GS-AP-MW-9V	DO	DO	9/13/2023 17:17	0.37	mg/L
APCO GS-AP-MW-9V	DTW	Depth to Water Detail	9/13/2023 17:17	80.54	ft
APCO GS-AP-MW-9V	ORP	Oxidation Reduction Potential	9/13/2023 17:17	-109.53	mv
APCO GS-AP-MW-9V	PH	pH	9/13/2023 17:17	6.99	SU
APCO GS-AP-MW-9V	TEMP	Temperature	9/13/2023 17:17	19.57	C
APCO GS-AP-MW-9V	TURB	Turbidity	9/13/2023 17:17	0.51	NTU
APCO GS-AP-MW-9V	COND	Conductivity	9/13/2023 17:22	768.28	uS/cm
APCO GS-AP-MW-9V	DO	DO	9/13/2023 17:22	0.37	mg/L
APCO GS-AP-MW-9V	DTW	Depth to Water Detail	9/13/2023 17:22	80.66	ft
APCO GS-AP-MW-9V	ORP	Oxidation Reduction Potential	9/13/2023 17:22	-107.7	mv
APCO GS-AP-MW-9V	PH	pH	9/13/2023 17:22	6.97	SU
APCO GS-AP-MW-9V	TEMP	Temperature	9/13/2023 17:22	19.56	C
APCO GS-AP-MW-9V	TURB	Turbidity	9/13/2023 17:22	0.49	NTU
APCO GS-AP-MW-9V	COND	Conductivity	9/13/2023 17:27	740.17	uS/cm
APCO GS-AP-MW-9V	DO	DO	9/13/2023 17:27	0.36	mg/L
APCO GS-AP-MW-9V	DTW	Depth to Water Detail	9/13/2023 17:27	80.83	ft
APCO GS-AP-MW-9V	ORP	Oxidation Reduction Potential	9/13/2023 17:27	-106.53	mv
APCO GS-AP-MW-9V	PH	pH	9/13/2023 17:27	6.96	SU
APCO GS-AP-MW-9V	TEMP	Temperature	9/13/2023 17:27	19.48	C
APCO GS-AP-MW-9V	TURB	Turbidity	9/13/2023 17:27	0.7	NTU
APCO GS-AP-MW-9V	COND	Conductivity	9/13/2023 17:32	717.4	uS/cm
APCO GS-AP-MW-9V	DO	DO	9/13/2023 17:32	0.37	mg/L
APCO GS-AP-MW-9V	DTW	Depth to Water Detail	9/13/2023 17:32	80.94	ft
APCO GS-AP-MW-9V	ORP	Oxidation Reduction Potential	9/13/2023 17:32	-105.74	mv
APCO GS-AP-MW-9V	PH	pH	9/13/2023 17:32	6.95	SU
APCO GS-AP-MW-9V	TEMP	Temperature	9/13/2023 17:32	19.56	C
APCO GS-AP-MW-9V	TURB	Turbidity	9/13/2023 17:32	0.64	NTU
APCO GS-AP-MW-9V	COND	Conductivity	9/13/2023 17:37	696.02	uS/cm
APCO GS-AP-MW-9V	DO	DO	9/13/2023 17:37	0.37	mg/L
APCO GS-AP-MW-9V	DTW	Depth to Water Detail	9/13/2023 17:37	81.07	ft
APCO GS-AP-MW-9V	ORP	Oxidation Reduction Potential	9/13/2023 17:37	-105.77	mv
APCO GS-AP-MW-9V	PH	pH	9/13/2023 17:37	6.96	SU

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO GS-AP-MW-9V	TEMP	Temperature	9/13/2023 17:37	19.51	C
APCO GS-AP-MW-9V	TURB	Turbidity	9/13/2023 17:37	0.63	NTU
APCO GS-AP-MW-9V	COND	Conductivity	9/13/2023 17:42	682.51	uS/cm
APCO GS-AP-MW-9V	DO	DO	9/13/2023 17:42	0.59	mg/L
APCO GS-AP-MW-9V	DTW	Depth to Water Detail	9/13/2023 17:42	81.15	ft
APCO GS-AP-MW-9V	ORP	Oxidation Reduction Potential	9/13/2023 17:42	-102.96	mv
APCO GS-AP-MW-9V	PH	pH	9/13/2023 17:42	6.97	SU
APCO GS-AP-MW-9V	TEMP	Temperature	9/13/2023 17:42	19.48	C
APCO GS-AP-MW-9V	TURB	Turbidity	9/13/2023 17:42	0.65	NTU
APCO GS-AP-MW-9V	COND	Conductivity	9/13/2023 17:47	668.86	uS/cm
APCO GS-AP-MW-9V	DO	DO	9/13/2023 17:47	0.44	mg/L
APCO GS-AP-MW-9V	DTW	Depth to Water Detail	9/13/2023 17:47	81.21	ft
APCO GS-AP-MW-9V	ORP	Oxidation Reduction Potential	9/13/2023 17:47	-103.7	mv
APCO GS-AP-MW-9V	PH	pH	9/13/2023 17:47	6.97	SU
APCO GS-AP-MW-9V	TEMP	Temperature	9/13/2023 17:47	19.45	C
APCO GS-AP-MW-9V	TURB	Turbidity	9/13/2023 17:47	0.63	NTU
APCO GS-AP-MW-9V	COND	Conductivity	9/13/2023 17:52	650.5	uS/cm
APCO GS-AP-MW-9V	DO	DO	9/13/2023 17:52	0.41	mg/L
APCO GS-AP-MW-9V	DTW	Depth to Water Detail	9/13/2023 17:52	81.28	ft
APCO GS-AP-MW-9V	ORP	Oxidation Reduction Potential	9/13/2023 17:52	-103.47	mv
APCO GS-AP-MW-9V	PH	pH	9/13/2023 17:52	6.97	SU
APCO GS-AP-MW-9V	SULFIDE	Sulfide	9/13/2023 17:52	2	mg/L
APCO GS-AP-MW-9V	TEMP	Temperature	9/13/2023 17:52	19.45	C
APCO GS-AP-MW-9V	TURB	Turbidity	9/13/2023 17:52	0.54	NTU
APCO GS-AP-PZ-16	COND	Conductivity	9/12/2023 11:38	701.26	uS/cm
APCO GS-AP-PZ-16	DO	DO	9/12/2023 11:38	0.31	mg/L
APCO GS-AP-PZ-16	DTW	Depth to Water Detail	9/12/2023 11:38	190.54	ft
APCO GS-AP-PZ-16	ORP	Oxidation Reduction Potential	9/12/2023 11:38	-91.93	mv
APCO GS-AP-PZ-16	PH	pH	9/12/2023 11:38	7.95	SU
APCO GS-AP-PZ-16	TEMP	Temperature	9/12/2023 11:38	19.72	C
APCO GS-AP-PZ-16	TURB	Turbidity	9/12/2023 11:38	3.43	NTU
APCO GS-AP-PZ-16	COND	Conductivity	9/12/2023 11:43	698.42	uS/cm
APCO GS-AP-PZ-16	DO	DO	9/12/2023 11:43	0.2	mg/L
APCO GS-AP-PZ-16	DTW	Depth to Water Detail	9/12/2023 11:43	190.54	ft
APCO GS-AP-PZ-16	ORP	Oxidation Reduction Potential	9/12/2023 11:43	-97.34	mv
APCO GS-AP-PZ-16	PH	pH	9/12/2023 11:43	7.9	SU
APCO GS-AP-PZ-16	TEMP	Temperature	9/12/2023 11:43	19.98	C
APCO GS-AP-PZ-16	TURB	Turbidity	9/12/2023 11:43	3.35	NTU
APCO GS-AP-PZ-16	COND	Conductivity	9/12/2023 11:48	693.06	uS/cm
APCO GS-AP-PZ-16	DO	DO	9/12/2023 11:48	0.17	mg/L
APCO GS-AP-PZ-16	DTW	Depth to Water Detail	9/12/2023 11:48	190.54	ft
APCO GS-AP-PZ-16	ORP	Oxidation Reduction Potential	9/12/2023 11:48	-104.63	mv
APCO GS-AP-PZ-16	PH	pH	9/12/2023 11:48	7.91	SU
APCO GS-AP-PZ-16	TEMP	Temperature	9/12/2023 11:48	19.37	C
APCO GS-AP-PZ-16	TURB	Turbidity	9/12/2023 11:48	2.95	NTU
APCO GS-AP-PZ-16	COND	Conductivity	9/12/2023 11:53	695.54	uS/cm
APCO GS-AP-PZ-16	DO	DO	9/12/2023 11:53	0.15	mg/L
APCO GS-AP-PZ-16	DTW	Depth to Water Detail	9/12/2023 11:53	190.54	ft
APCO GS-AP-PZ-16	ORP	Oxidation Reduction Potential	9/12/2023 11:53	-112.96	mv
APCO GS-AP-PZ-16	PH	pH	9/12/2023 11:53	7.95	SU
APCO GS-AP-PZ-16	SULFIDE	Sulfide	9/12/2023 11:53	0	mg/L
APCO GS-AP-PZ-16	TEMP	Temperature	9/12/2023 11:53	19.53	C
APCO GS-AP-PZ-16	TURB	Turbidity	9/12/2023 11:53	2.98	NTU
APCO GS-AP-PZ-18R	COND	Conductivity	9/19/2023 17:14	505.79	uS/cm
APCO GS-AP-PZ-18R	DO	DO	9/19/2023 17:14	0.1	mg/L
APCO GS-AP-PZ-18R	DTW	Depth to Water Detail	9/19/2023 17:14	96.06	ft
APCO GS-AP-PZ-18R	ORP	Oxidation Reduction Potential	9/19/2023 17:14	-67.68	mv
APCO GS-AP-PZ-18R	PH	pH	9/19/2023 17:14	7.09	SU
APCO GS-AP-PZ-18R	TEMP	Temperature	9/19/2023 17:14	17.37	C
APCO GS-AP-PZ-18R	TURB	Turbidity	9/19/2023 17:14	2.02	NTU
APCO GS-AP-PZ-18R	COND	Conductivity	9/19/2023 17:19	505.06	uS/cm
APCO GS-AP-PZ-18R	DO	DO	9/19/2023 17:19	0.08	mg/L
APCO GS-AP-PZ-18R	DTW	Depth to Water Detail	9/19/2023 17:19	96.06	ft
APCO GS-AP-PZ-18R	ORP	Oxidation Reduction Potential	9/19/2023 17:19	-72.37	mv

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO GS-AP-PZ-18R	PH	pH	9/19/2023 17:19	7.1	SU
APCO GS-AP-PZ-18R	TEMP	Temperature	9/19/2023 17:19	17.34	C
APCO GS-AP-PZ-18R	TURB	Turbidity	9/19/2023 17:19	1.85	NTU
APCO GS-AP-PZ-18R	COND	Conductivity	9/19/2023 17:24	504.38	uS/cm
APCO GS-AP-PZ-18R	DO	DO	9/19/2023 17:24	0.12	mg/L
APCO GS-AP-PZ-18R	DTW	Depth to Water Detail	9/19/2023 17:24	96.06	ft
APCO GS-AP-PZ-18R	ORP	Oxidation Reduction Potential	9/19/2023 17:24	-74.28	mv
APCO GS-AP-PZ-18R	PH	pH	9/19/2023 17:24	7.1	SU
APCO GS-AP-PZ-18R	TEMP	Temperature	9/19/2023 17:24	17.31	C
APCO GS-AP-PZ-18R	TURB	Turbidity	9/19/2023 17:24	1.37	NTU
APCO GS-AP-PZ-18R	COND	Conductivity	9/19/2023 17:29	503.98	uS/cm
APCO GS-AP-PZ-18R	DO	DO	9/19/2023 17:29	0.99	mg/L
APCO GS-AP-PZ-18R	DTW	Depth to Water Detail	9/19/2023 17:29	96.06	ft
APCO GS-AP-PZ-18R	ORP	Oxidation Reduction Potential	9/19/2023 17:29	-65.24	mv
APCO GS-AP-PZ-18R	PH	pH	9/19/2023 17:29	7.08	SU
APCO GS-AP-PZ-18R	TEMP	Temperature	9/19/2023 17:29	17.46	C
APCO GS-AP-PZ-18R	TURB	Turbidity	9/19/2023 17:29	1.4	NTU
APCO GS-AP-PZ-18R	COND	Conductivity	9/19/2023 17:34	503.2	uS/cm
APCO GS-AP-PZ-18R	DO	DO	9/19/2023 17:34	0.23	mg/L
APCO GS-AP-PZ-18R	DTW	Depth to Water Detail	9/19/2023 17:34	96.06	ft
APCO GS-AP-PZ-18R	ORP	Oxidation Reduction Potential	9/19/2023 17:34	-70.58	mv
APCO GS-AP-PZ-18R	PH	pH	9/19/2023 17:34	7.08	SU
APCO GS-AP-PZ-18R	TEMP	Temperature	9/19/2023 17:34	17.42	C
APCO GS-AP-PZ-18R	TURB	Turbidity	9/19/2023 17:34	1.29	NTU
APCO GS-AP-PZ-18R	COND	Conductivity	9/19/2023 17:39	502.72	uS/cm
APCO GS-AP-PZ-18R	DO	DO	9/19/2023 17:39	0.22	mg/L
APCO GS-AP-PZ-18R	DTW	Depth to Water Detail	9/19/2023 17:39	96.06	ft
APCO GS-AP-PZ-18R	ORP	Oxidation Reduction Potential	9/19/2023 17:39	-71.61	mv
APCO GS-AP-PZ-18R	PH	pH	9/19/2023 17:39	7.08	SU
APCO GS-AP-PZ-18R	TEMP	Temperature	9/19/2023 17:39	17.37	C
APCO GS-AP-PZ-18R	TURB	Turbidity	9/19/2023 17:39	1.35	NTU
APCO GS-AP-PZ-18R	COND	Conductivity	9/19/2023 17:44	502.2	uS/cm
APCO GS-AP-PZ-18R	DO	DO	9/19/2023 17:44	0.22	mg/L
APCO GS-AP-PZ-18R	DTW	Depth to Water Detail	9/19/2023 17:44	96.06	ft
APCO GS-AP-PZ-18R	ORP	Oxidation Reduction Potential	9/19/2023 17:44	-71.98	mv
APCO GS-AP-PZ-18R	PH	pH	9/19/2023 17:44	7.08	SU
APCO GS-AP-PZ-18R	SULFIDE	Sulfide	9/19/2023 17:44	0	mg/L
APCO GS-AP-PZ-18R	TEMP	Temperature	9/19/2023 17:44	17.37	C
APCO GS-AP-PZ-18R	TURB	Turbidity	9/19/2023 17:44	1.25	NTU
APCO GS-AP-PZ-22	COND	Conductivity	9/11/2023 14:48	619.1	uS/cm
APCO GS-AP-PZ-22	DO	DO	9/11/2023 14:48	0.56	mg/L
APCO GS-AP-PZ-22	DTW	Depth to Water Detail	9/11/2023 14:48	260.72	ft
APCO GS-AP-PZ-22	ORP	Oxidation Reduction Potential	9/11/2023 14:48	-216.65	mv
APCO GS-AP-PZ-22	PH	pH	9/11/2023 14:48	8.72	SU
APCO GS-AP-PZ-22	TEMP	Temperature	9/11/2023 14:48	20.6	C
APCO GS-AP-PZ-22	TURB	Turbidity	9/11/2023 14:48	2.8	NTU
APCO GS-AP-PZ-22	COND	Conductivity	9/11/2023 14:53	665.58	uS/cm
APCO GS-AP-PZ-22	DO	DO	9/11/2023 14:53	0.16	mg/L
APCO GS-AP-PZ-22	DTW	Depth to Water Detail	9/11/2023 14:53	260.72	ft
APCO GS-AP-PZ-22	ORP	Oxidation Reduction Potential	9/11/2023 14:53	-219.8	mv
APCO GS-AP-PZ-22	PH	pH	9/11/2023 14:53	9.37	SU
APCO GS-AP-PZ-22	TEMP	Temperature	9/11/2023 14:53	20.37	C
APCO GS-AP-PZ-22	TURB	Turbidity	9/11/2023 14:53	3.26	NTU
APCO GS-AP-PZ-22	COND	Conductivity	9/11/2023 14:58	662.61	uS/cm
APCO GS-AP-PZ-22	DO	DO	9/11/2023 14:58	0.11	mg/L
APCO GS-AP-PZ-22	DTW	Depth to Water Detail	9/11/2023 14:58	260.72	ft
APCO GS-AP-PZ-22	ORP	Oxidation Reduction Potential	9/11/2023 14:58	-214.38	mv
APCO GS-AP-PZ-22	PH	pH	9/11/2023 14:58	9.31	SU
APCO GS-AP-PZ-22	TEMP	Temperature	9/11/2023 14:58	20.51	C
APCO GS-AP-PZ-22	TURB	Turbidity	9/11/2023 14:58	3.11	NTU
APCO GS-AP-PZ-22	COND	Conductivity	9/11/2023 15:03	661.26	uS/cm
APCO GS-AP-PZ-22	DO	DO	9/11/2023 15:03	0.09	mg/L
APCO GS-AP-PZ-22	DTW	Depth to Water Detail	9/11/2023 15:03	260.72	ft
APCO GS-AP-PZ-22	ORP	Oxidation Reduction Potential	9/11/2023 15:03	-215.98	mv

Plant Gorgas Ash Pond
Field Parameter Summary

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO GS-AP-PZ-22	PH	pH	9/11/2023 15:03	9.29	SU
APCO GS-AP-PZ-22	TEMP	Temperature	9/11/2023 15:03	20.3	C
APCO GS-AP-PZ-22	TURB	Turbidity	9/11/2023 15:03	2.81	NTU
APCO GS-AP-PZ-22	COND	Conductivity	9/11/2023 15:08	660.67	uS/cm
APCO GS-AP-PZ-22	DO	DO	9/11/2023 15:08	0.08	mg/L
APCO GS-AP-PZ-22	DTW	Depth to Water Detail	9/11/2023 15:08	260.72	ft
APCO GS-AP-PZ-22	ORP	Oxidation Reduction Potential	9/11/2023 15:08	-218.99	mv
APCO GS-AP-PZ-22	PH	pH	9/11/2023 15:08	9.27	SU
APCO GS-AP-PZ-22	SULFIDE	Sulfide	9/11/2023 15:08	0	mg/L
APCO GS-AP-PZ-22	TEMP	Temperature	9/11/2023 15:08	20.45	C
APCO GS-AP-PZ-22	TURB	Turbidity	9/11/2023 15:08	2.89	NTU

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040
205-664-6001

Analytical Report

Sample Group : WMWGORAP_1423

Project/Site : Gorgas Ash Pond
Parrish, AL 35580

For : Southern Company Services
3535 Colonnade Parkway
Birmingham, AL 35243

Attention : Dustin Brooks & Greg Budd

Released By : Brooke Caton
tbwill@southernco.com
(205) 664-6101

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040
(205) 664-6001

Alabama Power

October 25, 2023

Dear Dustin Brooks,

Enclosed are the analytical results for sample(s) received by the laboratory between August 31, 2023 and September 20, 2023. All results reported herein conform to the laboratory’s most current Quality Assurance Manual. Results marked with an asterisk conform to the most current applicable TNI/NELAC requirements. Exceptions will be noted in the body of the report.

Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2024

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Quality Control: Brooke Caton

Digitally signed by Brooke Caton
Date: 2023.10.25
12:37:26 -05'00'

Supervision: T Durant Maske

Digitally signed by T Durant Maske
DN: cn=T Durant Maske gn=T Durant Maske c=US
United States l=US United States
e=tdmaske@southernco.com
Reason: I am the author of this document
Location:
Date: 2023-10-25 15:33-05:00

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Case Narrative

Total Metals ICP

Gorgas Ash Pond

WMWGORAP_1423

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
BD16842	765391	WMWGORAP_1423
BD16843	765391	WMWGORAP_1423
BD16844	765391	WMWGORAP_1423
BD16845	765391	WMWGORAP_1423
BD17104	765873	WMWGORAP_1423
BD17105	765873	WMWGORAP_1423
BD17106	765873	WMWGORAP_1423
BD17107	765873	WMWGORAP_1423
BD17108	765873	WMWGORAP_1423
BD17109	765873	WMWGORAP_1423
BD17110	765873	WMWGORAP_1423
BD17111	765873	WMWGORAP_1423
BD17112	765873	WMWGORAP_1423
BD17113	765873	WMWGORAP_1423
BD17114	765874	WMWGORAP_1423
BD17115	765874	WMWGORAP_1423
BD17116	765874	WMWGORAP_1423
BD17492	766544	WMWGORAP_1423
BD17493	766544	WMWGORAP_1423
BD17494	766544	WMWGORAP_1423
BD17495	766544	WMWGORAP_1423
BD17496	766544	WMWGORAP_1423
BD17497	766544	WMWGORAP_1423
BD17498	766544	WMWGORAP_1423
BD17499	766544	WMWGORAP_1423
BD17500	766544	WMWGORAP_1423
BD17501	766544	WMWGORAP_1423
BD17502	766545	WMWGORAP_1423
BD17503	766545	WMWGORAP_1423
BD17504	766545	WMWGORAP_1423
BD17505	766545	WMWGORAP_1423
BD17506	766545	WMWGORAP_1423
BD17507	766545	WMWGORAP_1423

BD17508	766545	WMWGORAP_1423
BD17509	766545	WMWGORAP_1423
BD17510	766545	WMWGORAP_1423
BD17511	766545	WMWGORAP_1423
BD17512	766546	WMWGORAP_1423
BD17513	766546	WMWGORAP_1423
BD17514	766546	WMWGORAP_1423
BD17516	766546	WMWGORAP_1423
BD17517	766546	WMWGORAP_1423
BD17518	766546	WMWGORAP_1423
BD17519	766546	WMWGORAP_1423
BD17520	766546	WMWGORAP_1423
BD17521	766546	WMWGORAP_1423
BD17522	766546	WMWGORAP_1423
BD17523	766547	WMWGORAP_1423
BD17524	766547	WMWGORAP_1423
BD17817	766863	WMWGORAP_1423
BD17818	766863	WMWGORAP_1423
BD17819	766863	WMWGORAP_1423
BD17820	766863	WMWGORAP_1423
BD17821	766863	WMWGORAP_1423
BD17822	766863	WMWGORAP_1423
BD17823	766863	WMWGORAP_1423
BD17824	766863	WMWGORAP_1423
BD17825	766863	WMWGORAP_1423
BD17826	766863	WMWGORAP_1423
BD17827	766864	WMWGORAP_1423
BD17828	766864	WMWGORAP_1423
BD17829	766864	WMWGORAP_1423
BD17830	766864	WMWGORAP_1423
BD17831	766864	WMWGORAP_1423
BD17832	766864	WMWGORAP_1423
BD17833	766864	WMWGORAP_1423
BD17834	766864	WMWGORAP_1423
BD17835	766864	WMWGORAP_1423
BD17836	766864	WMWGORAP_1423

4. All of the above samples were analyzed by EPA 200.7 and prepared by EPA 1638.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- Prior to sample analysis, an initial calibration verification (ICV) was analyzed, and all criteria were met.
- Following the ICV, an initial calibration blank (ICB) was analyzed, and all criteria were met.
- All continued calibration verification (CCV) were within the acceptance criteria for the requested analytes.
- All continued calibration blanks (CCB) were analyzed, and all criteria were met.
- A preparation method blank and laboratory control sample were digested and analyzed with the samples in each digestion batch.
- All laboratory control sample criteria were met.
- The method blank associated with each digestion batch passed all acceptance criteria for all requested analytes.
- All calibration curve requirements were within acceptance criteria.
- All sample internal standard criteria were met.
- The spectral interference check associated with EPA 200.7 was analyzed, and all acceptance criteria were met.
- It is noted that the QC summary page typically provides the QC results from the original batch analytical sequence. If dilutions were subsequently performed to bring sample concentrations within the calibration range, any additional QC data from the dilution analyses may need to be obtained from the laboratory. Any qualifications applied to original analyses or dilution re-analyses are based upon QC data available at the time of review.

Matrix Specific Quality Control Procedures:

Similarity of matrix and therefore relevance of matrix specific QC results should not be automatically inferred for any sample other than the sample selected for QC.

- A matrix spike and matrix spike duplicate were digested and analyzed with each ICP batch. All acceptance criteria for accuracy were met, except for the following:
    - BD17113 Calcium MS/MSD spike levels were less than 30% of the sample concentrations.
    - BD17501 Sodium & Silicon MS/MSD spike levels were less than 30% of the sample concentrations.
    - BD17511 Sodium MS/MSD spike levels were less than 30% of the sample concentrations.
    - BD17836 Calcium MS/MSD spike levels were less than 30% of the sample concentrations.
- A matrix spike and matrix spike duplicate were digested and analyzed with each ICP batch. All acceptance criteria for precision were met.

7. The following samples were diluted due to the analyzed sample concentration being greater than the high standard of the calibration curve:

Sample ID	Analyte	Dilution Factor
BD16842	Calcium	10.15
BD16843	Calcium	10.15
BD17104	Sodium	10.15
BD17105	Sodium	101.5
BD17106	Calcium, Sodium	10.15
BD17108	Calcium	10.15
BD17108	Sodium	101.5
BD17109	Calcium	10.15

BD17109	Sodium	101.5
BD17110	Sodium	10.15
BD17111	Calcium, Iron	10.15
BD17112	Calcium, Iron	10.15
BD17113	Calcium	10.15
BD17114	Calcium	10.15
BD17114	Iron	101.5
BD17115	Calcium, Sodium	10.15
BD17116	Calcium	10.15
BD17492	Sodium	10.15
BD17493	Sodium	10.15
BD17494	Sodium	10.15
BD17495	Sodium	10.15
BD17497	Sodium	10.15
BD17498	Sodium	10.15
BD17499	Sodium	10.15
BD17500	Sodium	10.15
BD17501	Sodium, Silicon	10.15
BD17502	Sodium	10.15
BD17503	Sodium	10.15
BD17505	Calcium, Sodium	10.15
BD17507	Sodium	10.15
BD17509	Sodium	10.15
BD17510	Sodium	10.15
BD17511	Sodium	101.5
BD17512	Sodium	10.15
BD17513	Sodium	10.15
BD17514	Sodium	10.15
BD17516	Sodium	10.15
BD17517	Sodium	101.5
BD17518	Calcium, Sodium	10.15
BD17520	Calcium	10.15
BD17523	Calcium, Sodium	10.15
BD17817	Sodium	10.15
BD17818	Sodium	10.15
BD17819	Sodium	10.15
BD17820	Calcium, Sodium	10.15
BD17821	Sodium	10.15
BD17822	Sodium	10.15
BD17823	Sodium	10.15
BD17824	Calcium	10.15
BD17824	Sodium	101.5
BD17828	Calcium, Mg, Sodium	10.15

BD17829	Sodium	10.15
BD17831	Calcium, Iron	10.15
BD17832	Sodium	10.15
BD17833	Calcium, Iron, Magnesium	10.15
BD17836	Calcium	10.15

8. The raw data results are shown with dilution factors included.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Case Narrative

Alabama Power

Dissolved Metals ICP

Gorgas Ash Pond

WMWGORAP_1423

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	**Batch ID**	**Project ID**
BD16842	765398	WMWGORAP_1423
BD16843	765398	WMWGORAP_1423
BD16844	765398	WMWGORAP_1423
BD17104	765834	WMWGORAP_1423
BD17105	765834	WMWGORAP_1423
BD17106	765834	WMWGORAP_1423
BD17108	765834	WMWGORAP_1423
BD17109	765834	WMWGORAP_1423
BD17110	765834	WMWGORAP_1423
BD17111	765834	WMWGORAP_1423
BD17112	765834	WMWGORAP_1423
BD17113	765834	WMWGORAP_1423
BD17114	765834	WMWGORAP_1423
BD17115	765835	WMWGORAP_1423
BD17116	765835	WMWGORAP_1423
BD17492	766478	WMWGORAP_1423
BD17493	766478	WMWGORAP_1423
BD17494	766478	WMWGORAP_1423
BD17495	766478	WMWGORAP_1423
BD17497	766478	WMWGORAP_1423
BD17498	766478	WMWGORAP_1423
BD17499	766478	WMWGORAP_1423
BD17500	766478	WMWGORAP_1423
BD17501	766478	WMWGORAP_1423
BD17502	766478	WMWGORAP_1423
BD17503	766479	WMWGORAP_1423
BD17505	766479	WMWGORAP_1423
BD17506	766479	WMWGORAP_1423
BD17507	766479	WMWGORAP_1423
BD17508	766479	WMWGORAP_1423
BD17509	766479	WMWGORAP_1423
BD17510	766479	WMWGORAP_1423
BD17511	766479	WMWGORAP_1423

BD17512	766479	WMWGORAP_1423
BD17513	766479	WMWGORAP_1423
BD17514	766480	WMWGORAP_1423
BD17516	766480	WMWGORAP_1423
BD17517	766480	WMWGORAP_1423
BD17518	766480	WMWGORAP_1423
BD17519	766480	WMWGORAP_1423
BD17520	766480	WMWGORAP_1423
BD17521	766480	WMWGORAP_1423
BD17522	766480	WMWGORAP_1423
BD17523	766480	WMWGORAP_1423
BD17817	766823	WMWGORAP_1423
BD17818	766823	WMWGORAP_1423
BD17819	766823	WMWGORAP_1423
BD17820	766823	WMWGORAP_1423
BD17821	766823	WMWGORAP_1423
BD17822	766823	WMWGORAP_1423
BD17823	766823	WMWGORAP_1423
BD17824	766823	WMWGORAP_1423
BD17825	766823	WMWGORAP_1423
BD17826	766823	WMWGORAP_1423
BD17828	766824	WMWGORAP_1423
BD17829	766824	WMWGORAP_1423
BD17830	766824	WMWGORAP_1423
BD17831	766824	WMWGORAP_1423
BD17832	766824	WMWGORAP_1423
BD17833	766824	WMWGORAP_1423
BD17834	766824	WMWGORAP_1423
BD17836	766824	WMWGORAP_1423

4. All of the above samples were analyzed and prepared by EPA 200.7 for dissolved analysis.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- Prior to sample analysis, an initial calibration verification (ICV) was analyzed, and all criteria were met.
- Following the ICV, an initial calibration blank (ICB) was analyzed, and all criteria were met.
- All continued calibration verification (CCV) were within the acceptance criteria for the requested analytes.
- All continued calibration blanks (CCB) were analyzed, and all criteria were met.
- Due to no filtered method blank (MB) or laboratory control sample (LCS) submitted with the sample set, an unfiltered MB and LCS were analyzed with the samples in each batch.
- All laboratory control sample criteria were met.

- The method blank associated with each batch passed all acceptance criteria for all requested analytes.
- All calibration curve requirements were within acceptance criteria.
- All sample internal standard criteria were met.
- The spectral interference check associated with EPA 200.7 was analyzed and all acceptance criteria were met.
- It is noted that the QC summary page typically provides the QC results from the original batch analytical sequence. If dilutions were subsequently performed to bring sample concentrations within the calibration range, any additional QC data from the dilution analyses may need to be obtained from the laboratory. Any qualifications applied to original analyses or dilution re-analyses are based upon QC data available at the time of review.

Matrix Specific Quality Control Procedures:

Similarity of matrix and therefore relevance of matrix specific QC results should not be automatically inferred for any sample other than the sample selected for QC.

- A matrix spike and matrix spike duplicate were analyzed with each ICP batch. All acceptance criteria for accuracy were met, except for the following:
    - BD17114 Calcium & Iron MS/MSD spike levels were less than 30% of the sample concentrations.
    - BD17502 Sodium MS/MSD spike levels were less than 30% of the sample concentrations.
    - BD17513 Sodium MS/MSD spike levels were less than 30% of the sample concentrations.
    - BD17523 Calcium & Sodium MS/MSD spike levels were less than 30% of the sample concentrations.
    - BD17836 Calcium MS/MSD spike levels were less than 30% of the sample concentrations.
- A matrix spike and matrix spike duplicate were analyzed with each ICP batch. All acceptance criteria for precision were met.

7. The following samples were diluted due to the analyzed sample concentration being greater than the high standard of the calibration curve:

Sample ID	Analyte	Dilution Factor
BD16842	Calcium	10.15
BD16843	Calcium	10.15
BD17104	Sodium	10.15
BD17105	Sodium	101.5
BD17106	Calcium, Sodium	10.15
BD17108	Calcium	10.15
BD17108	Sodium	101.5
BD17109	Calcium	10.15
BD17109	Sodium	101.5
BD17110	Sodium	10.15
BD17111	Calcium, Iron	10.15
BD17112	Calcium, Iron	10.15
BD17113	Calcium	10.15

BD17114	Calcium	10.15
BD17114	Iron	101.5
BD17115	Calcium, Sodium	10.15
BD17116	Calcium	10.15
BD17492	Sodium	10.15
BD17493	Sodium	10.15
BD17494	Sodium	10.15
BD17495	Sodium	10.15
BD17497	Sodium	10.15
BD17498	Sodium	10.15
BD17499	Sodium	10.15
BD17500	Sodium	10.15
BD17501	Sodium, Silicon	10.15
BD17502	Sodium	10.15
BD17503	Sodium	10.15
BD17505	Calcium, Sodium	10.15
BD17507	Sodium	10.15
BD17509	Sodium	10.15
BD17510	Sodium	10.15
BD17511	Sodium	101.5
BD17512	Sodium	10.15
BD17513	Sodium	10.15
BD17514	Sodium	101.5
BD17516	Sodium	10.15
BD17517	Sodium	101.5
BD17518	Calcium, Sodium	10.15
BD17523	Calcium, Sodium	10.15
BD17817	Sodium	10.15
BD17818	Sodium	10.15
BD17819	Sodium	10.15
BD17820	Calcium, Sodium	10.15
BD17821	Sodium	10.15
BD17822	Sodium	10.15
BD17823	Sodium	10.15
BD17824	Sodium	101.5
BD17828	Calcium, Mg, Sodium	10.15
BD17829	Sodium	10.15
BD17831	Calcium	10.15
BD17832	Sodium	10.15
BD17833	Calcium, Magnesium	10.15
BD17836	Calcium	10.15

8. The raw data results are shown with dilution factors included.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Case Narrative

Total Metals ICPMS

Gorgas Ash Pond

WMWGORAP_1423

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	**Batch ID**	**Project ID**
BD16842	765799	WMWGORAP_1423
BD16843	765799	WMWGORAP_1423
BD16844	765799	WMWGORAP_1423
BD16845	765799	WMWGORAP_1423
BD17104	766345	WMWGORAP_1423
BD17105	766345	WMWGORAP_1423
BD17106	766345	WMWGORAP_1423
BD17107	766345	WMWGORAP_1423
BD17108	766345	WMWGORAP_1423
BD17109	766345	WMWGORAP_1423
BD17110	766345	WMWGORAP_1423
BD17111	766345	WMWGORAP_1423
BD17112	766345	WMWGORAP_1423
BD17113	766345	WMWGORAP_1423
BD17114	766346	WMWGORAP_1423
BD17115	766346	WMWGORAP_1423
BD17116	766346	WMWGORAP_1423
BD17492	767214	WMWGORAP_1423
BD17493	767214	WMWGORAP_1423
BD17494	767214	WMWGORAP_1423
BD17495	767214	WMWGORAP_1423
BD17496	767214	WMWGORAP_1423
BD17497	767214	WMWGORAP_1423
BD17498	767214	WMWGORAP_1423
BD17499	767214	WMWGORAP_1423
BD17500	767214	WMWGORAP_1423
BD17501	767214	WMWGORAP_1423
BD17502	767215	WMWGORAP_1423
BD17503	767215	WMWGORAP_1423
BD17504	767215	WMWGORAP_1423
BD17505	767215	WMWGORAP_1423
BD17506	767215	WMWGORAP_1423
BD17507	767215	WMWGORAP_1423

BD17508	767215	WMWGORAP_1423
BD17509	767215	WMWGORAP_1423
BD17510	767215	WMWGORAP_1423
BD17511	767215	WMWGORAP_1423
BD17512	767216	WMWGORAP_1423
BD17513	767216	WMWGORAP_1423
BD17514	767216	WMWGORAP_1423
BD17516	767216	WMWGORAP_1423
BD17517	767216	WMWGORAP_1423
BD17518	767216	WMWGORAP_1423
BD17519	767216	WMWGORAP_1423
BD17520	767216	WMWGORAP_1423
BD17521	767216	WMWGORAP_1423
BD17522	767216	WMWGORAP_1423
BD17523	767217, 768824	WMWGORAP_1423
BD17524	767217	WMWGORAP_1423
BD17817	767516	WMWGORAP_1423
BD17818	767516	WMWGORAP_1423
BD17819	767516	WMWGORAP_1423
BD17820	767516	WMWGORAP_1423
BD17821	767516	WMWGORAP_1423
BD17822	767516	WMWGORAP_1423
BD17823	767516	WMWGORAP_1423
BD17824	767516	WMWGORAP_1423
BD17825	767516	WMWGORAP_1423
BD17826	767516	WMWGORAP_1423
BD17827	767517	WMWGORAP_1423
BD17828	767517, 768824	WMWGORAP_1423
BD17829	767517	WMWGORAP_1423
BD17830	767517	WMWGORAP_1423
BD17831	767517	WMWGORAP_1423
BD17832	767517	WMWGORAP_1423
BD17833	767517	WMWGORAP_1423
BD17834	767517	WMWGORAP_1423
BD17835	767517	WMWGORAP_1423
BD17836	767517	WMWGORAP_1423

4. All of the above samples were analyzed by EPA 200.8 and prepared by EPA 1638.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- All tune and calibration met criteria for all requested analytes.
- Prior to sample analysis, an initial calibration verification (ICV) was analyzed, and all criteria were met.
- Following the ICV, an initial calibration blank (ICB) was analyzed and was below the limit of quantitation for all requested analytes.
- All continued calibration verification (CCV) were within the acceptance criteria for the requested analytes.
- All continued calibration blanks (CCB) were below the limit of quantitation for the requested analytes.
- A preparation method blank and laboratory control sample were digested and analyzed with the samples in each digestion batch.
- All laboratory control sample criteria were met.
- The method blank associated with each digestion batch passed all acceptance criteria for all requested analytes.
- The interference check samples associated with EPA 200.8 were analyzed and passed for all requested analytes.
- All sample internal standard criteria were met.
- It is noted that the QC summary page typically provides the QC results from the original batch analytical sequence. If dilutions were subsequently performed to bring sample concentrations within the calibration range, any additional QC data from the dilution analyses may need to be obtained from the laboratory. Any qualifications applied to original analyses or dilution re-analyses are based upon QC data available at the time of review.

Matrix Specific Quality Control Procedures:

Similarity of matrix and therefore relevance of matrix specific QC results should not be automatically inferred for any sample other than the sample selected for QC.

- A matrix spike and matrix spike duplicate were digested and analyzed with each ICPMS batch. All acceptance criteria for accuracy were met, except for the following:
  - BD17116 Barium MS/MSD spike levels were less than 30% of the sample concentrations.
- A matrix spike and matrix spike duplicate were digested and analyzed with each ICPMS batch. All acceptance criteria for precision were met, except for the following:
  - BD16845 Antimony Precision is out of specification limit.

7. The following samples were diluted due to the analyzed sample concentration being greater than the high standard of the calibration curve:

Sample ID	Analyte	Dilution Factor
BD17111	Manganese	5.075
BD17112	Manganese	5.075
BD17114	Manganese	5.075

8. The raw data results are shown with dilution factors included.

Case Narrative

Dissolved Metals ICPMS

Gorgas Ash Pond

WMWGORAP_1423

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
BD16842	766263	WMWGORAP_1423
BD16843	766263	WMWGORAP_1423
BD16844	766263	WMWGORAP_1423
BD17104	766291, 768828	WMWGORAP_1423
BD17105	766291	WMWGORAP_1423
BD17106	766291	WMWGORAP_1423
BD17108	766291, 768828	WMWGORAP_1423
BD17109	766291	WMWGORAP_1423
BD17110	766291	WMWGORAP_1423
BD17111	766291	WMWGORAP_1423
BD17112	766291	WMWGORAP_1423
BD17113	766291	WMWGORAP_1423
BD17114	766291	WMWGORAP_1423
BD17115	766292	WMWGORAP_1423
BD17116	766292	WMWGORAP_1423
BD17492	767105	WMWGORAP_1423
BD17493	767105	WMWGORAP_1423
BD17494	767105	WMWGORAP_1423
BD17495	767105	WMWGORAP_1423
BD17497	767105	WMWGORAP_1423
BD17498	767105	WMWGORAP_1423
BD17499	767105	WMWGORAP_1423
BD17500	767105	WMWGORAP_1423
BD17501	767105, 768828	WMWGORAP_1423
BD17502	767105	WMWGORAP_1423
BD17503	767106	WMWGORAP_1423
BD17505	767106	WMWGORAP_1423
BD17506	767106	WMWGORAP_1423
BD17507	767106	WMWGORAP_1423
BD17508	767106	WMWGORAP_1423
BD17509	767106	WMWGORAP_1423
BD17510	767106, 768828	WMWGORAP_1423
BD17511	767106	WMWGORAP_1423

BD17512	767106	WMWGORAP_1423
BD17513	767106	WMWGORAP_1423
BD17514	767107	WMWGORAP_1423
BD17516	767107	WMWGORAP_1423
BD17517	767107	WMWGORAP_1423
BD17518	767107	WMWGORAP_1423
BD17519	767107	WMWGORAP_1423
BD17520	767107	WMWGORAP_1423
BD17521	767107	WMWGORAP_1423
BD17522	767107	WMWGORAP_1423
BD17523	767107	WMWGORAP_1423
BD17817	767282	WMWGORAP_1423
BD17818	767282	WMWGORAP_1423
BD17819	767282	WMWGORAP_1423
BD17820	767282	WMWGORAP_1423
BD17821	767282	WMWGORAP_1423
BD17822	767282	WMWGORAP_1423
BD17823	767282	WMWGORAP_1423
BD17824	767282	WMWGORAP_1423
BD17825	767282	WMWGORAP_1423
BD17826	767282	WMWGORAP_1423
BD17828	767283, 768830	WMWGORAP_1423
BD17829	767283	WMWGORAP_1423
BD17830	767283	WMWGORAP_1423
BD17831	767283	WMWGORAP_1423
BD17832	767283	WMWGORAP_1423
BD17833	767283	WMWGORAP_1423
BD17834	767283	WMWGORAP_1423
BD17836	767283	WMWGORAP_1423

4. All of the above samples were analyzed and prepared by EPA 200.8 for dissolved analysis.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- All tune and calibration met criteria for all requested analytes.
- Prior to sample analysis, an initial calibration verification (ICV) was analyzed, and all criteria were met.
- Following the ICV, an initial calibration blank (ICB) was analyzed and was below the limit of quantitation for all requested analytes.
- All continued calibration verification (CCV) were within the acceptance criteria for the requested analytes.
- All continued calibration blanks (CCB) were below the limit of quantitation for the requested analytes.

- Due to no filtered method blank (MB) or laboratory control sample (LCS) submitted with the sample set, an unfiltered MB and LCS were analyzed with the samples in each batch.
- All laboratory control sample criteria were met.
- The method blank associated with each preparation batch passed all acceptance criteria for all requested analytes.
- The interference check samples associated with EPA 200.8 were analyzed and passed for all requested analytes.
- All sample internal standard criteria were met.
- It is noted that the QC summary page typically provides the QC results from the original batch analytical sequence. If dilutions were subsequently performed to bring sample concentrations within the calibration range, any additional QC data from the dilution analyses may need to be obtained from the laboratory. Any qualifications applied to original analyses or dilution re-analyses are based upon QC data available at the time of review.

Matrix Specific Quality Control Procedures:

Similarity of matrix and therefore relevance of matrix specific QC results should not be automatically inferred for any sample other than the sample selected for QC.

- A matrix spike and matrix spike duplicate were analyzed with each ICPMS batch. All acceptance criteria for accuracy were met.
- A matrix spike and matrix spike duplicate were analyzed with each ICPMS batch. All acceptance criteria for precision were met.

7. The following samples were diluted due to the analyzed sample concentration being greater than the high standard of the calibration curve:

Sample ID	Analyte	Dilution Factor
BD17111	Manganese	5.075
BD17112	Manganese	5.075
BD17114	Manganese	5.075

8. The raw data results are shown with dilution factors included.

Case Narrative

Mercury

Gorgas Ash Pond

WMWGORAP_1423

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	**Batch ID**	**Project ID**
BD16842	765315	WMWGORAP_1423
BD16843	765315	WMWGORAP_1423
BD16844	765315	WMWGORAP_1423
BD16845	765315	WMWGORAP_1423
BD17104	765878	WMWGORAP_1423
BD17105	765878	WMWGORAP_1423
BD17106	765878	WMWGORAP_1423
BD17107	765878	WMWGORAP_1423
BD17108	765878	WMWGORAP_1423
BD17109	765878	WMWGORAP_1423
BD17110	765878	WMWGORAP_1423
BD17111	765878	WMWGORAP_1423
BD17112	765878	WMWGORAP_1423
BD17113	765878	WMWGORAP_1423
BD17114	765879	WMWGORAP_1423
BD17115	765879	WMWGORAP_1423
BD17116	765879	WMWGORAP_1423
BD17492	766554	WMWGORAP_1423
BD17493	766554	WMWGORAP_1423
BD17494	766554	WMWGORAP_1423
BD17495	766554	WMWGORAP_1423
BD17496	766554	WMWGORAP_1423
BD17497	766554	WMWGORAP_1423
BD17498	766554	WMWGORAP_1423
BD17499	766554	WMWGORAP_1423
BD17500	766554	WMWGORAP_1423
BD17501	766554	WMWGORAP_1423
BD17502	766555	WMWGORAP_1423
BD17503	766555	WMWGORAP_1423
BD17504	766555	WMWGORAP_1423
BD17505	766555	WMWGORAP_1423
BD17506	766555	WMWGORAP_1423
BD17507	766555	WMWGORAP_1423

BD17508	766555	WMWGORAP_1423
BD17509	766555	WMWGORAP_1423
BD17510	766555	WMWGORAP_1423
BD17511	766555	WMWGORAP_1423
BD17512	766556	WMWGORAP_1423
BD17513	766556	WMWGORAP_1423
BD17514	766556	WMWGORAP_1423
BD17516	766556	WMWGORAP_1423
BD17517	766556	WMWGORAP_1423
BD17518	766556	WMWGORAP_1423
BD17519	766556	WMWGORAP_1423
BD17520	766556	WMWGORAP_1423
BD17521	766556	WMWGORAP_1423
BD17522	766556	WMWGORAP_1423
BD17523	766557	WMWGORAP_1423
BD17524	766557	WMWGORAP_1423
BD17817	766905	WMWGORAP_1423
BD17818	766905	WMWGORAP_1423
BD17819	766905	WMWGORAP_1423
BD17820	766905	WMWGORAP_1423
BD17821	766905	WMWGORAP_1423
BD17822	766905	WMWGORAP_1423
BD17823	766905	WMWGORAP_1423
BD17824	766905	WMWGORAP_1423
BD17825	766905	WMWGORAP_1423
BD17826	766905	WMWGORAP_1423
BD17827	766906	WMWGORAP_1423
BD17828	766906	WMWGORAP_1423
BD17829	766906	WMWGORAP_1423
BD17830	766906	WMWGORAP_1423
BD17831	766906	WMWGORAP_1423
BD17832	766906	WMWGORAP_1423
BD17833	766906	WMWGORAP_1423
BD17834	766906	WMWGORAP_1423
BD17835	766906	WMWGORAP_1423
BD17836	766906	WMWGORAP_1423

4. All of the above samples were analyzed and prepared by EPA 245.1.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- Prior to sample analysis, an initial calibration verification (ICV) was analyzed and all criteria were met.
- Following the ICV, an initial calibration blank (ICB) was analyzed and was below the method detection limit for the requested analyte.
- All continued calibration verification (CCV) were within the acceptance criteria for the requested analyte.
- All continued calibration blanks (CCB) were below the limit of quantitation for the requested analyte.
- A preparation method blank and laboratory control sample were digested and analyzed with the samples in each digestion batch.
- All laboratory control sample criteria were met.
- The method blank associated with each digestion batch was below the limit of quantitation for the requested analyte.
- All calibration met criteria for the requested analyte.
- All response signals were satisfactory.

Matrix Specific Quality Control Procedures:

Similarity of matrix and therefore relevance of matrix specific QC results should not be automatically inferred for any sample other than the sample selected for QC.

- A matrix spike and matrix spike duplicate were digested and analyzed with each analytical batch. All acceptance criteria for accuracy were met.
- A matrix spike and matrix spike duplicate were digested and analyzed with each analytical batch. All acceptance criteria for precision were met.

7. All samples were analyzed without a dilution.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Case Narrative

Dissolved Mercury

Gorgas Ash Pond

WMWGORAP_1423

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
BD17515	766558	WMWGORAP_1423

4. All of the above samples were analyzed and prepared by EPA 245.1 for dissolved analysis.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- Prior to sample analysis, an initial calibration verification (ICV) was analyzed, and all criteria were met.
- Following the ICV, an initial calibration blank (ICB) was analyzed and was below the method detection limit for the requested analyte.
- All continued calibration verification (CCV) were within the acceptance criteria for the requested analyte.
- All continued calibration blanks (CCB) were below the limit of quantitation for the requested analyte.
- Due to no filtered method blank (MB) or laboratory control sample (LCS) submitted with the sample set, an unfiltered MB and LCS were digested and analyzed with the samples in each batch.
- All laboratory control sample criteria were met.
- The method blank associated with each digestion batch was below the limit of quantitation for the requested analyte.
- All calibration met criteria for the requested analyte.
- All response signals were satisfactory.

Matrix Specific Quality Control Procedures:

Similarity of matrix and therefore relevance of matrix specific QC results should not be automatically inferred for any sample other than the sample selected for QC.

- A matrix spike and matrix spike duplicate were digested and analyzed with each analytical batch. All acceptance criteria for accuracy were met.
- A matrix spike and matrix spike duplicate were digested and analyzed with each analytical batch. All acceptance criteria for precision were met.

7. All samples were analyzed without a dilution.

Case Narrative

Total Dissolved Solids

Gorgas Ash Pond

WMWGORAP_1423

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
BD16842	765266	WMWGORAP_1423
BD16843	765266	WMWGORAP_1423
BD16844	765266	WMWGORAP_1423
BD16845	765266	WMWGORAP_1423
BD17104	765907	WMWGORAP_1423
BD17105	765907	WMWGORAP_1423
BD17106	765907	WMWGORAP_1423
BD17107	765907	WMWGORAP_1423
BD17108	765907	WMWGORAP_1423
BD17109	765907	WMWGORAP_1423
BD17110	765907	WMWGORAP_1423
BD17111	765907	WMWGORAP_1423
BD17112	765908	WMWGORAP_1423
BD17113	765908	WMWGORAP_1423
BD17114	765908	WMWGORAP_1423
BD17115	765908	WMWGORAP_1423
BD17116	765908	WMWGORAP_1423
BD17492	766570	WMWGORAP_1423
BD17493	766570	WMWGORAP_1423
BD17494	766570	WMWGORAP_1423
BD17495	766570	WMWGORAP_1423
BD17496	766570	WMWGORAP_1423
BD17497	766570	WMWGORAP_1423
BD17498	766570	WMWGORAP_1423
BD17499	766570	WMWGORAP_1423
BD17500	766570	WMWGORAP_1423
BD17501	766570	WMWGORAP_1423
BD17502	766571	WMWGORAP_1423
BD17503	766571	WMWGORAP_1423
BD17504	766571	WMWGORAP_1423
BD17505	766571	WMWGORAP_1423
BD17506	766571	WMWGORAP_1423
BD17507	766571	WMWGORAP_1423

BD17508	766571	WMWGORAP_1423
BD17509	766571	WMWGORAP_1423
BD17510	766571	WMWGORAP_1423
BD17511	766571	WMWGORAP_1423
BD17512	766621	WMWGORAP_1423
BD17513	766621	WMWGORAP_1423
BD17514	766621	WMWGORAP_1423
BD17515	766621	WMWGORAP_1423
BD17516	766621	WMWGORAP_1423
BD17517	766621	WMWGORAP_1423
BD17518	766622	WMWGORAP_1423
BD17519	766622	WMWGORAP_1423
BD17520	766622	WMWGORAP_1423
BD17521	766622	WMWGORAP_1423
BD17522	766622	WMWGORAP_1423
BD17523	766622	WMWGORAP_1423
BD17524	766622	WMWGORAP_1423
BD17817	766877	WMWGORAP_1423
BD17818	766877	WMWGORAP_1423
BD17819	766877	WMWGORAP_1423
BD17820	766877	WMWGORAP_1423
BD17821	766877	WMWGORAP_1423
BD17822	766877	WMWGORAP_1423
BD17823	766877	WMWGORAP_1423
BD17824	766877	WMWGORAP_1423
BD17825	766878	WMWGORAP_1423
BD17826	766878	WMWGORAP_1423
BD17827	766878	WMWGORAP_1423
BD17828	766878	WMWGORAP_1423
BD17829	766878	WMWGORAP_1423
BD17830	766878	WMWGORAP_1423
BD17831	766878	WMWGORAP_1423
BD17832	766878	WMWGORAP_1423
BD17833	766878	WMWGORAP_1423
BD17834	766878	WMWGORAP_1423
BD17835	767526	WMWGORAP_1423
BD17836	767526	WMWGORAP_1423

4. All of the above samples were prepared and analyzed by Standard Method 2540C.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- A Method Blank was analyzed with each batch. All criteria were met.
- All final weights of samples, standards, and blanks agreed within 0.5mg of the previous weight.
- A sample duplicate was analyzed with each batch, and RPD was ≤10%.
- A laboratory control sample was analyzed with each batch. All criteria were met.
- Samples were between 2.5mg and 200mg residue.
- All samples with residue <2.5mg had the maximum volume of 150mL filtered. Affected samples are as follows:
  - BD16845
  - BD17107
  - BD17496
  - BD17504
  - BD17524
  - BD17827
  - BD17835

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Case Narrative

Alkalinity

Gorgas Ash Pond

WMWGORAP_1423

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
BD16842	766194, 766195, 766196, 766197	WMWGORAP_1423
BD16843	766194, 766195, 766196, 766197	WMWGORAP_1423
BD16844	766194, 766195, 766196, 766197	WMWGORAP_1423
BD17104	766194, 766195, 766196, 766197	WMWGORAP_1423
BD17105	766194, 766195, 766196, 766197	WMWGORAP_1423
BD17106	766194, 766195, 766196, 766197	WMWGORAP_1423
BD17108	766194, 766195, 766196, 766197	WMWGORAP_1423
BD17109	766194, 766195, 766196, 766197	WMWGORAP_1423
BD17110	766194, 766195, 766196, 766197	WMWGORAP_1423
BD17111	766194, 766195, 766196, 766197	WMWGORAP_1423
BD17112	766194, 766195, 766196, 766197	WMWGORAP_1423
BD17113	766194, 766195, 766196, 766197	WMWGORAP_1423
BD17114	766194, 766195, 766196, 766197	WMWGORAP_1423
BD17115	766194, 766195, 766196, 766197	WMWGORAP_1423
BD17116	766194, 766195, 766196, 766197	WMWGORAP_1423
BD17492	767088, 767089, 767090, 767091	WMWGORAP_1423
BD17493	767088, 767089, 767090, 767091	WMWGORAP_1423
BD17494	767088, 767089, 767090, 767091	WMWGORAP_1423
BD17495	767088, 767089, 767090, 767091	WMWGORAP_1423
BD17497	767088, 767089, 767090, 767091	WMWGORAP_1423
BD17498	767572, 767573, 767574, 767575	WMWGORAP_1423
BD17499	767572, 767573, 767574, 767575	WMWGORAP_1423
BD17500	767572, 767573, 767574, 767575	WMWGORAP_1423
BD17501	767088, 767089, 767090, 767091	WMWGORAP_1423
BD17502	767088, 767089, 767090, 767091	WMWGORAP_1423
BD17503	767088, 767089, 767090, 767091	WMWGORAP_1423
BD17505	767246, 767247, 767248, 767249	WMWGORAP_1423
BD17506	767088, 767089, 767090, 767091	WMWGORAP_1423
BD17507	767088, 767089, 767090, 767091	WMWGORAP_1423
BD17508	767246, 767247, 767248, 767249	WMWGORAP_1423
BD17509	767246, 767247, 767248, 767249	WMWGORAP_1423
BD17510	767572, 767573, 767574, 767575	WMWGORAP_1423
BD17511	767572, 767573, 767574, 767575	WMWGORAP_1423

BD17512	767572, 767573, 767574, 767575	WMWGORAP_1423
BD17513	767088, 767089, 767090, 767091	WMWGORAP_1423
BD17514	767088, 767089, 767090, 767091	WMWGORAP_1423
BD17515	767088, 767089, 767090, 767091	WMWGORAP_1423
BD17516	767088, 767089, 767090, 767091	WMWGORAP_1423
BD17517	767246, 767247, 767248, 767249	WMWGORAP_1423
BD17518	767246, 767247, 767248, 767249	WMWGORAP_1423
BD17519	767572, 767573, 767574, 767575	WMWGORAP_1423
BD17520	767572, 767573, 767574, 767575	WMWGORAP_1423
BD17521	767572, 767573, 767574, 767575	WMWGORAP_1423
BD17522	767572, 767573, 767574, 767575	WMWGORAP_1423
BD17523	767572, 767573, 767574, 767575	WMWGORAP_1423
BD17817	767701, 767702, 767703, 767704	WMWGORAP_1423
BD17818	767701, 767702, 767703, 767704	WMWGORAP_1423
BD17819	767701, 767702, 767703, 767704	WMWGORAP_1423
BD17820	767701, 767702, 767703, 767704	WMWGORAP_1423
BD17821	767701, 767702, 767703, 767704	WMWGORAP_1423
BD17822	767701, 767702, 767703, 767704	WMWGORAP_1423
BD17823	767701, 767702, 767703, 767704	WMWGORAP_1423
BD17824	767701, 767702, 767703, 767704	WMWGORAP_1423
BD17825	767701, 767702, 767703, 767704	WMWGORAP_1423
BD17826	767701, 767702, 767703, 767704	WMWGORAP_1423
BD17828	767701, 767702, 767703, 767704	WMWGORAP_1423
BD17829	767701, 767702, 767703, 767704	WMWGORAP_1423
BD17830	767701, 767702, 767703, 767704	WMWGORAP_1423
BD17831	767701, 767702, 767703, 767704	WMWGORAP_1423
BD17832	767701, 767702, 767703, 767704	WMWGORAP_1423
BD17833	767701, 767702, 767703, 767704	WMWGORAP_1423
BD17834	767701, 767702, 767703, 767704	WMWGORAP_1423
BD17836	767701, 767702, 767703, 767704	WMWGORAP_1423

4. All of the above samples were prepared and analyzed by Standard Method 2320B.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- An initial pH check was analyzed with each batch. The acceptance criteria were met.
- A final pH check was analyzed with each batch. The acceptance criteria were met.
- An alkalinity laboratory control sample was analyzed with each batch. Range criteria of within 10% of true value was met.
- An alkalinity sample duplicate was analyzed with each batch. Precision criteria less than 10 RPD was met.

7. The following samples had pH>12 SU. Therefore, the calculations for carbonate and bicarbonate are invalid and not reported:
   - BD17505
8. The following samples had pH>10 and/or TDS>500mg/L. Therefore, the calculations for carbonate and bicarbonate are estimates:
   - BD17104
   - BD17105
   - BD17106
   - BD17108
   - BD17109
   - BD17110
   - BD17114
   - BD17501
   - BD17502
   - BD17503
   - BD17511
   - BD17514
   - BD17515
   - BD17517
   - BD17518
   - BD17817
   - BD17818
   - BD17822
   - BD17823
   - BD17824
   - BD17828
   - BD17833

Case Narrative

Anions

Gorgas Ash Pond

WMWGORAP_1423

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
BD16842	766044, 766046, 765947	WMWGORAP_1423
BD16843	766044, 766046, 765947	WMWGORAP_1423
BD16844	766044, 766046, 765947	WMWGORAP_1423
BD16845	766044, 766046, 765947	WMWGORAP_1423
BD17104	766044, 766046, 765947	WMWGORAP_1423
BD17105	766044, 766046, 765947	WMWGORAP_1423
BD17106	766044, 766046, 765947	WMWGORAP_1423
BD17107	766044, 766046, 765947	WMWGORAP_1423
BD17108	766044, 766046, 765947	WMWGORAP_1423
BD17109	766044, 766046, 765947	WMWGORAP_1423
BD17110	766045, 766047, 765948	WMWGORAP_1423
BD17111	766045, 766047, 765948	WMWGORAP_1423
BD17112	766045, 766047, 765948	WMWGORAP_1423
BD17113	766045, 766047, 765948	WMWGORAP_1423
BD17114	766045, 766047, 765948	WMWGORAP_1423
BD17115	766045, 766047, 765948	WMWGORAP_1423
BD17116	766045, 766047, 765948	WMWGORAP_1423
BD17492	766712, 766716, 767550	WMWGORAP_1423
BD17493	766712, 766716, 767550	WMWGORAP_1423
BD17494	766712, 766716, 767550	WMWGORAP_1423
BD17495	766712, 766716, 767550	WMWGORAP_1423
BD17496	766712, 766716, 767550	WMWGORAP_1423
BD17497	766712, 766716, 767550	WMWGORAP_1423
BD17498	766712, 766716, 767550	WMWGORAP_1423
BD17499	766712, 766716, 767550	WMWGORAP_1423
BD17500	766712, 766716, 767550	WMWGORAP_1423
BD17501	766712, 766716, 767550	WMWGORAP_1423
BD17502	766713, 766717, 767551	WMWGORAP_1423
BD17503	766713, 766717, 767551	WMWGORAP_1423
BD17504	766713, 766717, 767551	WMWGORAP_1423
BD17505	766713, 766717, 767551	WMWGORAP_1423

BD17506	766713, 766717, 767551	WMWGORAP_1423
BD17507	766713, 766717, 767551	WMWGORAP_1423
BD17508	766713, 766717, 767551	WMWGORAP_1423
BD17509	766713, 766717, 767551	WMWGORAP_1423
BD17510	766713, 766717, 767551	WMWGORAP_1423
BD17511	766713, 766717, 767551	WMWGORAP_1423
BD17512	766714, 766718, 767552	WMWGORAP_1423
BD17513	766714, 766718, 767552	WMWGORAP_1423
BD17514	766714, 766718, 767552	WMWGORAP_1423
BD17515	766714, 766718, 767552	WMWGORAP_1423
BD17516	766714, 766718, 767552	WMWGORAP_1423
BD17517	766714, 766718, 767552	WMWGORAP_1423
BD17518	766714, 766718, 767552	WMWGORAP_1423
BD17519	766714, 766718, 767552	WMWGORAP_1423
BD17520	766714, 766718, 767552	WMWGORAP_1423
BD17521	766714, 766718, 767552	WMWGORAP_1423
BD17522	766715, 766719, 767553	WMWGORAP_1423
BD17523	766715, 766719, 767553	WMWGORAP_1423
BD17524	766715, 766719, 767553	WMWGORAP_1423
BD17817	767362, 767364, 767553	WMWGORAP_1423
BD17818	767362, 767364, 767553	WMWGORAP_1423
BD17819	767362, 767364, 767553	WMWGORAP_1423
BD17820	767362, 767364, 767553	WMWGORAP_1423
BD17821	767362, 767364, 767553	WMWGORAP_1423
BD17822	767362, 767364, 767553	WMWGORAP_1423
BD17823	767362, 767364, 767553	WMWGORAP_1423
BD17824	767362, 767364, 767569	WMWGORAP_1423
BD17825	767362, 767364, 767569	WMWGORAP_1423
BD17826	767362, 767364, 767569	WMWGORAP_1423
BD17827	767363, 767365, 767569	WMWGORAP_1423
BD17828	767363, 767365, 767569	WMWGORAP_1423
BD17829	767363, 767365, 767569	WMWGORAP_1423
BD17830	767363, 767365, 767569	WMWGORAP_1423
BD17831	767363, 767365, 767569	WMWGORAP_1423
BD17832	767363, 767365, 767569	WMWGORAP_1423
BD17833	767363, 767365, 767569	WMWGORAP_1423
BD17834	767363, 767365, 767570	WMWGORAP_1423
BD17835	767363, 767365, 767570	WMWGORAP_1423
BD17836	767363, 767365, 767570	WMWGORAP_1423

4. All of the above samples were analyzed and prepared by SM4500 Cl E, SM4500 F G, and SM4500 SO4 E.

5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- All calibration met criteria for the requested analyte.
- Prior to sample analysis, an initial calibration verification (ICV), and all criteria were met.
- Prior to sample analysis, an initial calibration blank (ICB) was analyzed and was below half the limit of quantitation for the requested analyte.
- All continued calibration verification (CCV) were within the acceptance criteria for the requested analyte.
- All continued calibration blanks (CCB) were below the limit of quantitation for the requested analyte.
- It is noted that the QC summary page typically provides the QC results from the original batch analytical sequence. If dilutions were subsequently performed to bring sample concentrations within the calibration range, any additional QC data from the dilution analyses may need to be obtained from the laboratory. Any qualifications applied to original analyses or dilution re-analyses are based upon QC data available at the time of review.

Matrix Specific Quality Control Procedures:

Similarity of matrix and therefore relevance of matrix specific QC results should not be automatically inferred for any sample other than the sample selected for QC.

- A matrix spike and matrix spike duplicate were analyzed with each batch. All acceptance criteria for accuracy were met.
- A matrix spike and matrix spike duplicate were analyzed with each batch. All acceptance criteria for precision were met.

7. The following samples were diluted due to the analyzed sample concentration being greater than the high standard of the calibration curve:

Sample ID	Analyte	Dilution Factor
BD16842	Sulfate	5
BD16843	Sulfate	5
BD16844	Sulfate	4
BD17104	Chloride, Sulfate	4, 16
BD17105	Chloride, Sulfate	32, 25
BD17106	Sulfate	16
BD17108	Chloride, Sulfate	40, 50
BD17109	Chloride, Sulfate	80, 32
BD17110	Chloride, Sulfate	10, 8
BD17111	Sulfate	4
BD17112	Sulfate	4
BD17113	Sulfate	2

BD17114	Sulfate	20
BD17115	Sulfate	2
BD17494	Sulfate	5
BD17495	Sulfate	5
BD17500	Chloride	4
BD17502	Chloride, Sulfate	5, 8
BD17503	Chloride, Sulfate	5, 4
BD17509	Chloride, Sulfate	4, 3
BD17510	Chloride	4
BD17511	Chloride, Sulfate	25, 32
BD17513	Sulfate	8
BD17514	Chloride	4
BD17515	Chloride	4
BD17516	Sulfate	2
BD17517	Chloride, Sulfate	25, 25
BD17518	Chloride, Sulfate	4, 16
BD17521	Sulfate	4
BD17522	Sulfate	3
BD17523	Chloride, Sulfate	4, 4
BD17817	Chloride, Sulfate	2, 8
BD17818	Chloride, Sulfate	2, 8
BD17822	Chloride, Sulfate	8, 16
BD17823	Chloride	2
BD17824	Chloride, Sulfate	25, 40
BD17828	Sulfate	40
BD17831	Sulfate	3
BD17832	Chloride	3
BD17833	Sulfate	32
BD17836	Sulfate	3

8. The raw data results are shown with dilution factors included.

Case Narrative

Nitrate-Nitrite

Gorgas Ash Pond

WMWGORAP_1423

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
BD16842	765469	WMWGORAP_1423
BD16843	765469	WMWGORAP_1423
BD16844	765469	WMWGORAP_1423
BD16845	765469	WMWGORAP_1423
BD17104	766080	WMWGORAP_1423
BD17105	766080	WMWGORAP_1423
BD17106	766080	WMWGORAP_1423
BD17107	766080	WMWGORAP_1423
BD17108	766080	WMWGORAP_1423
BD17109	766080	WMWGORAP_1423
BD17110	766081	WMWGORAP_1423
BD17111	766081	WMWGORAP_1423
BD17112	766081	WMWGORAP_1423
BD17113	766081	WMWGORAP_1423
BD17114	766081	WMWGORAP_1423
BD17115	766081	WMWGORAP_1423
BD17116	766081	WMWGORAP_1423
BD17492	766724	WMWGORAP_1423
BD17493	766724	WMWGORAP_1423
BD17494	766724	WMWGORAP_1423
BD17495	766724	WMWGORAP_1423
BD17496	766724	WMWGORAP_1423
BD17497	766724	WMWGORAP_1423
BD17498	766724	WMWGORAP_1423
BD17499	766724	WMWGORAP_1423
BD17500	766724	WMWGORAP_1423
BD17501	766724	WMWGORAP_1423
BD17502	766725	WMWGORAP_1423
BD17503	766725	WMWGORAP_1423
BD17504	766725	WMWGORAP_1423
BD17505	766725	WMWGORAP_1423

BD17506	766725	WMWGORAP_1423
BD17507	766725	WMWGORAP_1423
BD17508	766725	WMWGORAP_1423
BD17509	766725	WMWGORAP_1423
BD17510	766725	WMWGORAP_1423
BD17511	766725	WMWGORAP_1423
BD17512	766726	WMWGORAP_1423
BD17513	766726	WMWGORAP_1423
BD17514	766726	WMWGORAP_1423
BD17515	766726	WMWGORAP_1423
BD17516	766726	WMWGORAP_1423
BD17517	766726	WMWGORAP_1423
BD17518	766726	WMWGORAP_1423
BD17519	766726	WMWGORAP_1423
BD17520	766726	WMWGORAP_1423
BD17521	766726	WMWGORAP_1423
BD17522	766727	WMWGORAP_1423
BD17523	766727	WMWGORAP_1423
BD17524	766727	WMWGORAP_1423
BD17817	767252	WMWGORAP_1423
BD17818	767252	WMWGORAP_1423
BD17819	767252	WMWGORAP_1423
BD17820	767252	WMWGORAP_1423
BD17821	767252	WMWGORAP_1423
BD17822	767252	WMWGORAP_1423
BD17823	767252	WMWGORAP_1423
BD17824	767252	WMWGORAP_1423
BD17825	767252	WMWGORAP_1423
BD17826	767252	WMWGORAP_1423
BD17827	767253	WMWGORAP_1423
BD17828	767253	WMWGORAP_1423
BD17829	767253	WMWGORAP_1423
BD17830	767253	WMWGORAP_1423
BD17831	767253	WMWGORAP_1423
BD17832	767253	WMWGORAP_1423
BD17833	767253	WMWGORAP_1423
BD17834	767253	WMWGORAP_1423
BD17835	767253	WMWGORAP_1423
BD17836	767253	WMWGORAP_1423

4. All of the above samples were prepared and analyzed for NO_x by EPA 353.2.

5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- Water baseline report was run and met criteria.
- All calibration met criteria for the requested analytes.
- Prior to sample analysis, an initial calibration verification (ICV) was analyzed and met all criteria.
- All continued calibration verification (CCV) were within the acceptance criteria.
- Prior to sample analysis, an initial calibration blank (ICB) was analyzed and were below limit of detection.
- All continued calibration blanks (CCB) were below the limit of detection.

EPA 353.2 Specific QC:

- Prior to sample analysis, Cadmium coil reduction efficiency check met criteria.
- Matrix Specific QC:
  - A sample duplicate was run and criteria for precision was met, except for the following:
    - BD17109 Precision is invalid due to sample concentration.
  - A matrix spike was run and criteria for accuracy was met.

7. All samples were analyzed without a dilution factor.
8. The raw data results are shown with dilution factors included.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Case Narrative

Alabama Power

Total Organic Carbon

Gorgas Ash Pond

WMWGORAP_1423

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
BD16842	765589	WMWGORAP_1423
BD16843	765589	WMWGORAP_1423
BD16844	765589	WMWGORAP_1423
BD16845	765589	WMWGORAP_1423
BD17104	766456	WMWGORAP_1423
BD17105	766456	WMWGORAP_1423
BD17106	766456	WMWGORAP_1423
BD17107	766456	WMWGORAP_1423
BD17108	766456	WMWGORAP_1423
BD17109	766456	WMWGORAP_1423
BD17110	766456	WMWGORAP_1423
BD17111	766456	WMWGORAP_1423
BD17112	766456	WMWGORAP_1423
BD17113	766456	WMWGORAP_1423
BD17114	766457	WMWGORAP_1423
BD17115	766457	WMWGORAP_1423
BD17116	766457	WMWGORAP_1423
BD17492	766635	WMWGORAP_1423
BD17493	766635	WMWGORAP_1423
BD17494	766635	WMWGORAP_1423
BD17495	766635	WMWGORAP_1423
BD17496	766635	WMWGORAP_1423
BD17497	766635	WMWGORAP_1423
BD17498	766635	WMWGORAP_1423
BD17499	766635	WMWGORAP_1423
BD17500	766635	WMWGORAP_1423
BD17501	766635	WMWGORAP_1423
BD17502	766636	WMWGORAP_1423
BD17503	766636	WMWGORAP_1423
BD17504	766636	WMWGORAP_1423
BD17505	766636	WMWGORAP_1423
BD17506	766636	WMWGORAP_1423
BD17507	766636	WMWGORAP_1423

BD17508	766636	WMWGORAP_1423
BD17509	766636	WMWGORAP_1423
BD17510	766636	WMWGORAP_1423
BD17511	766636	WMWGORAP_1423
BD17512	766637	WMWGORAP_1423
BD17513	766637	WMWGORAP_1423
BD17514	766637	WMWGORAP_1423
BD17515	766637	WMWGORAP_1423
BD17516	766637	WMWGORAP_1423
BD17517	766637	WMWGORAP_1423
BD17518	766637	WMWGORAP_1423
BD17519	766637	WMWGORAP_1423
BD17520	766637	WMWGORAP_1423
BD17521	766637	WMWGORAP_1423
BD17522	766638	WMWGORAP_1423
BD17523	766638	WMWGORAP_1423
BD17524	766638	WMWGORAP_1423
BD17817	767326	WMWGORAP_1423
BD17818	767326	WMWGORAP_1423
BD17819	767326	WMWGORAP_1423
BD17820	767326	WMWGORAP_1423
BD17821	767326	WMWGORAP_1423
BD17822	767326	WMWGORAP_1423
BD17823	767326	WMWGORAP_1423
BD17824	767326	WMWGORAP_1423
BD17825	767326	WMWGORAP_1423
BD17826	767326	WMWGORAP_1423
BD17827	767327	WMWGORAP_1423
BD17828	767327	WMWGORAP_1423
BD17829	767327	WMWGORAP_1423
BD17830	767327	WMWGORAP_1423
BD17831	767327	WMWGORAP_1423
BD17832	767327	WMWGORAP_1423
BD17833	767327	WMWGORAP_1423
BD17834	767327	WMWGORAP_1423
BD17835	767327	WMWGORAP_1423
BD17836	767327	WMWGORAP_1423

4. All of the above samples were prepared and analyzed by Standard Method 5310B.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- All calibration criteria were met.
- Prior to sample analysis, an initial calibration verification (ICV) was analyzed and met all criteria.
- Prior to sample analysis, an initial calibration blank (ICB) was analyzed and was <1/2RL.
- All continued calibration verifications (CCVs) were within the acceptance range.
- All continued calibration blanks (CCBs) were <1/2RL.

Matrix Specific Quality Control Procedures:

- A matrix spike and matrix spike duplicate were analyzed with each batch. All acceptance criteria for accuracy were met., except for the following:
    - BD17501 MS and/or MSD recovery is outside of specification limit.
- A matrix spike and matrix spike duplicate were analyzed with each batch. All acceptance criteria for precision were met.

7. All samples were analyzed without a dilution factor.
8. The raw data results are shown with dilution factors included.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-41HD

Location Code: WMWGORAP
Collected: 8/30/23 10:53
Customer ID:
Submittal Date: 8/31/23 14:26

Laboratory ID Number: BD16842

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	9/5/23 13:08	9/6/23 12:34		1.015	1.60	mg/L	0.030000	0.1015	
* Calcium, Total	9/5/23 13:08	9/6/23 14:23		10.15	58.9	mg/L	0.70035	4.06	
* Iron, Total	9/5/23 13:08	9/6/23 12:34		1.015	0.0371	mg/L	0.008120	0.0406	J
* Lithium, Total	9/5/23 13:08	9/6/23 12:34		1.015	0.357	mg/L	0.007105	0.01999956	
* Magnesium, Total	9/5/23 13:08	9/6/23 12:34		1.015	17.9	mg/L	0.021315	0.406	
* Molybdenum, Total	9/5/23 13:08	9/6/23 12:34		1.015	0.0337	mg/L	0.005075	0.01015	
* Silica, Total (calc.)	9/5/23 13:08	9/6/23 12:34		1	16.2	mg/L			
* Silicon, Total	9/5/23 13:08	9/6/23 12:34		1.015	7.56	mg/L	0.02030	0.25375	
* Sodium, Total	9/5/23 13:08	9/6/23 12:34		1.015	20.5	mg/L	0.04060	0.406	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	9/5/23 09:14	9/6/23 12:12		1.015	1.59	mg/L	0.030000	0.1015	
* Calcium, Dissolved	9/5/23 09:14	9/6/23 14:17		10.15	55.4	mg/L	0.70035	4.06	
* Iron, Dissolved	9/5/23 09:14	9/6/23 12:12		1.015	0.0341	mg/L	0.008120	0.0406	J
* Lithium, Dissolved	9/5/23 09:14	9/6/23 12:12		1.015	0.349	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	9/5/23 09:14	9/6/23 12:12		1.015	17.8	mg/L	0.021315	0.406	
* Molybdenum, Dissolved	9/5/23 09:14	9/6/23 12:12		1.015	0.0343	mg/L	0.005075	0.01015	
* Silica, Dissolved (calc.)	9/5/23 09:14	9/6/23 12:12		1	16.2	mg/L			
* Silicon, Dissolved	9/5/23 09:14	9/6/23 12:12		1.015	7.55	mg/L	0.02030	0.25375	
* Sodium, Dissolved	9/5/23 09:14	9/6/23 12:12		1.015	20.2	mg/L	0.04060	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	9/5/23 13:08	9/5/23 15:26		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Arsenic, Total	9/5/23 13:08	9/5/23 15:26		1.015	0.00342	mg/L	0.000112	0.000203	
* Aluminum, Total	9/5/23 13:08	9/5/23 15:26		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Barium, Total	9/5/23 13:08	9/5/23 15:26		1.015	0.0519	mg/L	0.000508	0.001015	
* Beryllium, Total	9/5/23 13:08	9/5/23 15:26		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	9/5/23 13:08	9/5/23 15:26		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	9/5/23 13:08	9/5/23 15:26		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	9/5/23 13:08	9/5/23 15:26		1.015	0.000967	mg/L	0.000068	0.000203	
* Lead, Total	9/5/23 13:08	9/5/23 15:26		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	9/5/23 13:08	9/5/23 15:26		1.015	0.648	mg/L	0.000152	0.001015	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-41HD

Location Code: WMWGORAP
Collected: 8/30/23 10:53
Customer ID:
Submittal Date: 8/31/23 14:26

Laboratory ID Number: BD16842

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	9/5/23 13:08	9/5/23 15:26		1.015	1.73	mg/L	0.169505	0.5075	
* Selenium, Total	9/5/23 13:08	9/5/23 15:26		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	9/5/23 13:08	9/5/23 15:26		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	9/7/23 14:12	9/8/23 12:39		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	9/7/23 14:12	9/8/23 12:39		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Dissolved	9/7/23 14:12	9/8/23 12:39		1.015	0.00348	mg/L	0.000112	0.000203	
* Barium, Dissolved	9/7/23 14:12	9/8/23 12:39		1.015	0.0482	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	9/7/23 14:12	9/8/23 12:39		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	9/7/23 14:12	9/8/23 12:39		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	9/7/23 14:12	9/8/23 12:39		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	9/7/23 14:12	9/8/23 12:39		1.015	0.000959	mg/L	0.000068	0.000203	
* Lead, Dissolved	9/7/23 14:12	9/8/23 12:39		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	9/7/23 14:12	9/8/23 12:39		1.015	0.606	mg/L	0.000152	0.001015	
* Potassium, Dissolved	9/7/23 14:12	9/8/23 12:39		1.015	1.67	mg/L	0.169505	0.5075	
* Selenium, Dissolved	9/7/23 14:12	9/8/23 12:39		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	9/7/23 14:12	9/8/23 12:39		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	9/1/23 12:34	9/1/23 17:03		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	9/5/23 08:55	9/5/23 08:55		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: DHC***								
Alkalinity pH Endpoint	9/12/23 10:42	9/12/23 15:34		1	4.43	SU		2	
* Alkalinity	9/12/23 10:42	9/12/23 15:34		1	137	mg CaCO3/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	8/31/23 15:40	9/1/23 13:30		1	315	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: DHC***								
* Bicarbonate Alkalinity, (calc.)	9/12/23 10:42	9/12/23 15:34		1	136	mg CaCO3/L		1	
* Carbonate Alkalinity, (calc.)	9/12/23 10:42	9/12/23 15:34		1	0.885	mg CaCO3/L		0.5	
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	9/6/23 19:46	9/6/23 19:46		1	Not Detected	mg/L	1.00	2	U

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-41HD

Location Code: WMWGORAP
Collected: 8/30/23 10:53
Customer ID:
Submittal Date: 8/31/23 14:26

Laboratory ID Number: BD16842

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	9/11/23 11:44	9/11/23 11:44		1	7.91	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	9/11/23 15:28	9/11/23 15:28		1	0.161	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	9/7/23 14:50	9/7/23 14:50		5	113	mg/L	3.0	10	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	8/30/23 10:50	8/30/23 10:50			435.96	uS/cm			FA
pH	8/30/23 10:50	8/30/23 10:50			7.27	SU			FA
Temperature	8/30/23 10:50	8/30/23 10:50			18.85	C			FA
Turbidity	8/30/23 10:50	8/30/23 10:50			1.86	NTU			FA
Sulfide	8/30/23 10:50	8/30/23 10:50			0	mg/L			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 8/30/23 10:53
Customer ID:
Delivery Date: 8/31/23 14:26

Description: Gorgas Ash Pond - MW-41HD

Laboratory ID Number: BD16842

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD16842	Aluminum, Dissolved	mg/L	0.000916	0.0198	0.100	0.102	0.101	0.0979	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BD16845	Aluminum, Total	mg/L	0.00103	0.0198	0.100	0.102	0.100	0.103	0.0850 to 0.115	102	70.0 to 130	1.98	20.0
BD16842	Antimony, Dissolved	mg/L	0.000328	0.00100	0.100	0.0925	0.0900	0.0906	0.0850 to 0.115	92.5	70.0 to 130	2.74	20.0
BD16845	Antimony, Total	mg/L	0.000244	0.00100	0.100	0.0748	0.103	0.107	0.0850 to 0.115	74.8	70.0 to 130	31.7	20.0
BD16842	Arsenic, Dissolved	mg/L	0.0000374	0.000200	0.100	0.107	0.106	0.101	0.0850 to 0.115	104	70.0 to 130	0.939	20.0
BD16845	Arsenic, Total	mg/L	-0.0000419	0.000200	0.100	0.110	0.109	0.113	0.0850 to 0.115	110	70.0 to 130	0.913	20.0
BD16842	Barium, Dissolved	mg/L	0.0000352	0.00100	0.100	0.146	0.143	0.0954	0.0850 to 0.115	97.8	70.0 to 130	2.08	20.0
BD16845	Barium, Total	mg/L	0.0000021	0.00100	0.100	0.0990	0.0996	0.0990	0.0850 to 0.115	99.0	70.0 to 130	0.604	20.0
BD16842	Beryllium, Dissolved	mg/L	0.000105	0.000880	0.100	0.0969	0.0957	0.0954	0.0850 to 0.115	96.9	70.0 to 130	1.25	20.0
BD16845	Beryllium, Total	mg/L	0.0000782	0.000880	0.100	0.109	0.111	0.109	0.0850 to 0.115	109	70.0 to 130	1.82	20.0
BD16844	Boron, Dissolved	mg/L	-0.00196	0.0650	1.00	1.92	1.92	1.02	0.850 to 1.15	103	70.0 to 130	0.00	20.0
BD16845	Boron, Total	mg/L	-0.00157	0.0650	1.00	1.02	1.01	1.03	0.850 to 1.15	102	70.0 to 130	0.985	20.0
BD16842	Cadmium, Dissolved	mg/L	-0.0000004	0.000147	0.100	0.102	0.0982	0.100	0.0850 to 0.115	102	70.0 to 130	3.80	20.0
BD16845	Cadmium, Total	mg/L	0.0000048	0.000147	0.100	0.107	0.107	0.108	0.0850 to 0.115	107	70.0 to 130	0.00	20.0
BD16844	Calcium, Dissolved	mg/L	-0.0160	0.152	5.00	35.4	34.9	5.07	4.25 to 5.75	102	70.0 to 130	1.42	20.0
BD16845	Calcium, Total	mg/L	-0.0277	0.152	5.00	4.95	4.89	5.09	4.25 to 5.75	99.0	70.0 to 130	1.22	20.0
BD17109	Chloride	mg/L	0.0244	1.00	800	1250	1340	10.3	9.00 to 11.0	95.1	80.0 to 120	6.95	20.0
BD16842	Chromium, Dissolved	mg/L	-0.000115	0.000440	0.100	0.102	0.0999	0.0989	0.0850 to 0.115	102	70.0 to 130	2.08	20.0
BD16845	Chromium, Total	mg/L	-0.0000465	0.000440	0.100	0.102	0.102	0.106	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BD16842	Cobalt, Dissolved	mg/L	0.0000001	0.000147	0.100	0.104	0.101	0.100	0.0850 to 0.115	103	70.0 to 130	2.93	20.0
BD16845	Cobalt, Total	mg/L	-0.0000017	0.000147	0.100	0.105	0.105	0.107	0.0850 to 0.115	105	70.0 to 130	0.00	20.0
BD17109	Fluoride	mg/L	0.0252	0.125	2.50	2.96	2.93	2.67	2.25 to 2.75	107	80.0 to 120	1.02	20.0
BD16844	Iron, Dissolved	mg/L	-0.000830	0.0176	0.2	2.53	2.52	0.203	0.170 to 0.230	95.0	70.0 to 130	0.396	20.0
BD16845	Iron, Total	mg/L	-0.000550	0.0176	0.2	0.201	0.201	0.204	0.170 to 0.230	100	70.0 to 130	0.00	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 8/30/23 10:53
Customer ID:
Delivery Date: 8/31/23 14:26

Description: Gorgas Ash Pond - MW-41HD

Laboratory ID Number: BD16842

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD16842	Lead, Dissolved	mg/L	0.0000082	0.000147	0.100	0.0952	0.0945	0.0962	0.0850 to 0.115	95.2	70.0 to 130	0.738	20.0
BD16845	Lead, Total	mg/L	0.0000022	0.000147	0.100	0.0977	0.0982	0.0976	0.0850 to 0.115	97.7	70.0 to 130	0.510	20.0
BD16844	Lithium, Dissolved	mg/L	0.00106	0.0154	0.200	0.258	0.261	0.202	0.170 to 0.230	100	70.0 to 130	1.16	20.0
BD16845	Lithium, Total	mg/L	0.00102	0.0154	0.200	0.203	0.201	0.206	0.170 to 0.230	102	70.0 to 130	0.990	20.0
BD16844	Magnesium, Dissolved	mg/L	-0.00882	0.0462	5.00	23.8	23.7	5.10	4.25 to 5.75	98.0	70.0 to 130	0.421	20.0
BD16845	Magnesium, Total	mg/L	0.00333	0.0462	5.00	5.02	4.96	5.13	4.25 to 5.75	100	70.0 to 130	1.20	20.0
BD16842	Manganese, Dissolved	mg/L	-0.0000407	0.00033	0.100	0.718	0.699	0.0995	0.0850 to 0.115	112	70.0 to 130	2.68	20.0
BD16845	Manganese, Total	mg/L	0.0000068	0.00033	0.100	0.106	0.105	0.107	0.0850 to 0.115	106	70.0 to 130	0.948	20.0
BD16845	Mercury, Total by CVAA	mg/L	4.000E-05	0.000500	0.004	0.00406	0.00402	0.004	0.00340 to 0.00460	102	70.0 to 130	0.990	20.0
BD16844	Molybdenum, Dissolved	mg/L	0.00143	0.0100	0.2	0.200	0.202	0.201	0.170 to 0.230	100	70.0 to 130	0.995	20.0
BD16845	Molybdenum, Total	mg/L	0.001	0.0100	0.2	0.201	0.200	0.203	0.170 to 0.230	100	70.0 to 130	0.499	20.0
BD16842	Potassium, Dissolved	mg/L	-0.0189	0.367	10.0	11.8	11.4	9.98	8.50 to 11.5	101	70.0 to 130	3.45	20.0
BD16845	Potassium, Total	mg/L	0.0168	0.367	10.0	10.3	10.1	10.4	8.50 to 11.5	103	70.0 to 130	1.96	20.0
BD16842	Selenium, Dissolved	mg/L	0.0000265	0.00100	0.100	0.103	0.101	0.102	0.0850 to 0.115	103	70.0 to 130	1.96	20.0
BD16845	Selenium, Total	mg/L	-0.0000165	0.00100	0.100	0.103	0.104	0.105	0.0850 to 0.115	103	70.0 to 130	0.966	20.0
BD16844	Silicon, Dissolved	mg/L	0.000278	0.0440	1.00	9.99	10.0	1.03	0.850 to 1.15	98.0	70.0 to 130	0.100	20.0
BD16845	Silicon, Total	mg/L	0.00175	0.0440	1.00	1.03	1.02	1.04	0.850 to 1.15	103	70.0 to 130	0.976	20.0
BD16844	Sodium, Dissolved	mg/L	0.00766	0.0880	5.00	25.2	25.2	5.24	4.25 to 5.75	100	70.0 to 130	0.00	20.0
BD16845	Sodium, Total	mg/L	0.00617	0.0880	5.00	5.20	5.15	5.30	4.25 to 5.75	104	70.0 to 130	0.966	20.0
BD17109	Sulfate	mg/L	-0.0331	2.0	640	1160	1180	20.9	18.0 to 22.0	100	80.0 to 120	1.71	20.0
BD16842	Thallium, Dissolved	mg/L	-0.0000025	0.000147	0.100	0.0949	0.0961	0.0986	0.0850 to 0.115	94.9	70.0 to 130	1.26	20.0
BD16845	Thallium, Total	mg/L	0.0000118	0.000147	0.100	0.104	0.103	0.103	0.0850 to 0.115	104	70.0 to 130	0.966	20.0
BD16845	Total Organic Carbon	mg/L	0.227	1.00	10.0	9.92	10.4	9.44		99.2	80.0 to 120	4.72	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 8/30/23 10:53
Customer ID:
Delivery Date: 8/31/23 14:26

Description: Gorgas Ash Pond - MW-41HD

Laboratory ID Number: BD16842

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17116	Alkalinity	mg CaCO3/L					222	51.9	45.0 to 55.0			0.00	10.0
BD16845	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.02	0.200	2.00	2.01	-0.027	1.88	1.80 to 2.20	100	90.0 to 110	0.00	15.0
BD16844	Solids, Dissolved	mg/L	0.0000	25.0			240	54.0	40.0 to 60.0			2.53	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-41HD Dup

Location Code: WMWGORAP
Collected: 8/30/23 10:53
Customer ID:
Submittal Date: 8/31/23 14:26

Laboratory ID Number: BD16843

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	9/5/23 13:08	9/6/23 12:37		1.015	1.59	mg/L	0.030000	0.1015	
* Calcium, Total	9/5/23 13:08	9/6/23 14:26		10.15	56.0	mg/L	0.70035	4.06	
* Iron, Total	9/5/23 13:08	9/6/23 12:37		1.015	0.0431	mg/L	0.008120	0.0406	
* Lithium, Total	9/5/23 13:08	9/6/23 12:37		1.015	0.348	mg/L	0.007105	0.01999956	
* Magnesium, Total	9/5/23 13:08	9/6/23 12:37		1.015	17.7	mg/L	0.021315	0.406	
* Molybdenum, Total	9/5/23 13:08	9/6/23 12:37		1.015	0.0339	mg/L	0.005075	0.01015	
* Silica, Total (calc.)	9/5/23 13:08	9/6/23 12:37		1	16.2	mg/L			
* Silicon, Total	9/5/23 13:08	9/6/23 12:37		1.015	7.55	mg/L	0.02030	0.25375	
* Sodium, Total	9/5/23 13:08	9/6/23 12:37		1.015	20.2	mg/L	0.04060	0.406	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	9/5/23 09:14	9/6/23 12:15		1.015	1.59	mg/L	0.030000	0.1015	
* Calcium, Dissolved	9/5/23 09:14	9/6/23 14:20		10.15	57.4	mg/L	0.70035	4.06	
* Iron, Dissolved	9/5/23 09:14	9/6/23 12:15		1.015	0.0344	mg/L	0.008120	0.0406	J
* Lithium, Dissolved	9/5/23 09:14	9/6/23 12:15		1.015	0.352	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	9/5/23 09:14	9/6/23 12:15		1.015	17.7	mg/L	0.021315	0.406	
* Molybdenum, Dissolved	9/5/23 09:14	9/6/23 12:15		1.015	0.0335	mg/L	0.005075	0.01015	
* Silica, Dissolved (calc.)	9/5/23 09:14	9/6/23 12:15		1	16.1	mg/L			
* Silicon, Dissolved	9/5/23 09:14	9/6/23 12:15		1.015	7.52	mg/L	0.02030	0.25375	
* Sodium, Dissolved	9/5/23 09:14	9/6/23 12:15		1.015	20.3	mg/L	0.04060	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	9/5/23 13:08	9/5/23 15:30		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Total	9/5/23 13:08	9/5/23 15:30		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Total	9/5/23 13:08	9/5/23 15:30		1.015	0.00344	mg/L	0.000112	0.000203	
* Barium, Total	9/5/23 13:08	9/5/23 15:30		1.015	0.0504	mg/L	0.000508	0.001015	
* Beryllium, Total	9/5/23 13:08	9/5/23 15:30		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	9/5/23 13:08	9/5/23 15:30		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	9/5/23 13:08	9/5/23 15:30		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	9/5/23 13:08	9/5/23 15:30		1.015	0.000962	mg/L	0.000068	0.000203	
* Lead, Total	9/5/23 13:08	9/5/23 15:30		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	9/5/23 13:08	9/5/23 15:30		1.015	0.656	mg/L	0.000152	0.001015	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-41HD Dup

Location Code: WMWGORAP
Collected: 8/30/23 10:53
Customer ID:
Submittal Date: 8/31/23 14:26

Laboratory ID Number: BD16843

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	9/5/23 13:08	9/5/23 15:30		1.015	1.83	mg/L	0.169505	0.5075	
* Selenium, Total	9/5/23 13:08	9/5/23 15:30		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	9/5/23 13:08	9/5/23 15:30		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	9/7/23 14:12	9/8/23 12:51		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	9/7/23 14:12	9/8/23 12:51		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Dissolved	9/7/23 14:12	9/8/23 12:51		1.015	0.00333	mg/L	0.000112	0.000203	
* Barium, Dissolved	9/7/23 14:12	9/8/23 12:51		1.015	0.0464	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	9/7/23 14:12	9/8/23 12:51		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	9/7/23 14:12	9/8/23 12:51		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	9/7/23 14:12	9/8/23 12:51		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	9/7/23 14:12	9/8/23 12:51		1.015	0.000899	mg/L	0.000068	0.000203	
* Lead, Dissolved	9/7/23 14:12	9/8/23 12:51		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	9/7/23 14:12	9/8/23 12:51		1.015	0.557	mg/L	0.000152	0.001015	
* Potassium, Dissolved	9/7/23 14:12	9/8/23 12:51		1.015	1.61	mg/L	0.169505	0.5075	
* Selenium, Dissolved	9/7/23 14:12	9/8/23 12:51		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	9/7/23 14:12	9/8/23 12:51		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	9/1/23 12:34	9/1/23 17:07		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	9/5/23 08:57	9/5/23 08:57		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: DHC***								
Alkalinity pH Endpoint	9/12/23 10:42	9/12/23 15:34		1	4.51	SU		2	
* Alkalinity	9/12/23 10:42	9/12/23 15:34		1	133	mg CaCO3/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	8/31/23 15:40	9/1/23 13:30		1	318	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: DHC***								
* Bicarbonate Alkalinity, (calc.)	9/12/23 10:42	9/12/23 15:34		1	132	mg CaCO3/L		1	
* Carbonate Alkalinity, (calc.)	9/12/23 10:42	9/12/23 15:34		1	0.699	mg CaCO3/L		0.5	
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	9/6/23 20:00	9/6/23 20:00		1	Not Detected	mg/L	1.00	2	U

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-41HD Dup

Location Code: WMWGORAP
Collected: 8/30/23 10:53
Customer ID:
Submittal Date: 8/31/23 14:26

Laboratory ID Number: BD16843

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	9/11/23 11:45	9/11/23 11:45		1	7.96	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	9/11/23 15:29	9/11/23 15:29		1	0.137	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	9/7/23 14:51	9/7/23 14:51		5	110	mg/L	3.0	10	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	8/30/23 10:50	8/30/23 10:50			435.96	uS/cm			FA
pH	8/30/23 10:50	8/30/23 10:50			7.27	SU			FA
Temperature	8/30/23 10:50	8/30/23 10:50			18.85	C			FA
Turbidity	8/30/23 10:50	8/30/23 10:50			1.86	NTU			FA
Sulfide	8/30/23 10:50	8/30/23 10:50			0	mg/L			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 8/30/23 10:53
Customer ID:
Delivery Date: 8/31/23 14:26

Description: Gorgas Ash Pond - MW-41HD Dup

Laboratory ID Number: BD16843

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD16842	Aluminum, Dissolved	mg/L	0.000916	0.0198	0.100	0.102	0.101	0.0979	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BD16845	Aluminum, Total	mg/L	0.00103	0.0198	0.100	0.102	0.100	0.103	0.0850 to 0.115	102	70.0 to 130	1.98	20.0
BD16842	Antimony, Dissolved	mg/L	0.000328	0.00100	0.100	0.0925	0.0900	0.0906	0.0850 to 0.115	92.5	70.0 to 130	2.74	20.0
BD16845	Antimony, Total	mg/L	0.000244	0.00100	0.100	0.0748	0.103	0.107	0.0850 to 0.115	74.8	70.0 to 130	31.7	20.0
BD16842	Arsenic, Dissolved	mg/L	0.0000374	0.000200	0.100	0.107	0.106	0.101	0.0850 to 0.115	104	70.0 to 130	0.939	20.0
BD16845	Arsenic, Total	mg/L	-0.0000419	0.000200	0.100	0.110	0.109	0.113	0.0850 to 0.115	110	70.0 to 130	0.913	20.0
BD16842	Barium, Dissolved	mg/L	0.0000352	0.00100	0.100	0.146	0.143	0.0954	0.0850 to 0.115	97.8	70.0 to 130	2.08	20.0
BD16845	Barium, Total	mg/L	0.0000021	0.00100	0.100	0.0990	0.0996	0.0990	0.0850 to 0.115	99.0	70.0 to 130	0.604	20.0
BD16842	Beryllium, Dissolved	mg/L	0.000105	0.000880	0.100	0.0969	0.0957	0.0954	0.0850 to 0.115	96.9	70.0 to 130	1.25	20.0
BD16845	Beryllium, Total	mg/L	0.0000782	0.000880	0.100	0.109	0.111	0.109	0.0850 to 0.115	109	70.0 to 130	1.82	20.0
BD16844	Boron, Dissolved	mg/L	-0.00196	0.0650	1.00	1.92	1.92	1.02	0.850 to 1.15	103	70.0 to 130	0.00	20.0
BD16845	Boron, Total	mg/L	-0.00157	0.0650	1.00	1.02	1.01	1.03	0.850 to 1.15	102	70.0 to 130	0.985	20.0
BD16842	Cadmium, Dissolved	mg/L	-0.0000004	0.000147	0.100	0.102	0.0982	0.100	0.0850 to 0.115	102	70.0 to 130	3.80	20.0
BD16845	Cadmium, Total	mg/L	0.0000048	0.000147	0.100	0.107	0.107	0.108	0.0850 to 0.115	107	70.0 to 130	0.00	20.0
BD16844	Calcium, Dissolved	mg/L	-0.0160	0.152	5.00	35.4	34.9	5.07	4.25 to 5.75	102	70.0 to 130	1.42	20.0
BD16845	Calcium, Total	mg/L	-0.0277	0.152	5.00	4.95	4.89	5.09	4.25 to 5.75	99.0	70.0 to 130	1.22	20.0
BD17109	Chloride	mg/L	0.0244	1.00	800	1250	1340	10.3	9.00 to 11.0	95.1	80.0 to 120	6.95	20.0
BD16842	Chromium, Dissolved	mg/L	-0.000115	0.000440	0.100	0.102	0.0999	0.0989	0.0850 to 0.115	102	70.0 to 130	2.08	20.0
BD16845	Chromium, Total	mg/L	-0.0000465	0.000440	0.100	0.102	0.102	0.106	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BD16842	Cobalt, Dissolved	mg/L	0.0000001	0.000147	0.100	0.104	0.101	0.100	0.0850 to 0.115	103	70.0 to 130	2.93	20.0
BD16845	Cobalt, Total	mg/L	-0.0000017	0.000147	0.100	0.105	0.105	0.107	0.0850 to 0.115	105	70.0 to 130	0.00	20.0
BD17109	Fluoride	mg/L	0.0252	0.125	2.50	2.96	2.93	2.67	2.25 to 2.75	107	80.0 to 120	1.02	20.0
BD16844	Iron, Dissolved	mg/L	-0.000830	0.0176	0.2	2.53	2.52	0.203	0.170 to 0.230	95.0	70.0 to 130	0.396	20.0
BD16845	Iron, Total	mg/L	-0.000550	0.0176	0.2	0.201	0.201	0.204	0.170 to 0.230	100	70.0 to 130	0.00	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 8/30/23 10:53
Customer ID:
Delivery Date: 8/31/23 14:26

Description: Gorgas Ash Pond - MW-41HD Dup

Laboratory ID Number: BD16843

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD16842	Lead, Dissolved	mg/L	0.0000082	0.000147	0.100	0.0952	0.0945	0.0962	0.0850 to 0.115	95.2	70.0 to 130	0.738	20.0
BD16845	Lead, Total	mg/L	0.0000022	0.000147	0.100	0.0977	0.0982	0.0976	0.0850 to 0.115	97.7	70.0 to 130	0.510	20.0
BD16844	Lithium, Dissolved	mg/L	0.00106	0.0154	0.200	0.258	0.261	0.202	0.170 to 0.230	100	70.0 to 130	1.16	20.0
BD16845	Lithium, Total	mg/L	0.00102	0.0154	0.200	0.203	0.201	0.206	0.170 to 0.230	102	70.0 to 130	0.990	20.0
BD16844	Magnesium, Dissolved	mg/L	-0.00882	0.0462	5.00	23.8	23.7	5.10	4.25 to 5.75	98.0	70.0 to 130	0.421	20.0
BD16845	Magnesium, Total	mg/L	0.00333	0.0462	5.00	5.02	4.96	5.13	4.25 to 5.75	100	70.0 to 130	1.20	20.0
BD16842	Manganese, Dissolved	mg/L	-0.0000407	0.00033	0.100	0.718	0.699	0.0995	0.0850 to 0.115	112	70.0 to 130	2.68	20.0
BD16845	Manganese, Total	mg/L	0.0000068	0.00033	0.100	0.106	0.105	0.107	0.0850 to 0.115	106	70.0 to 130	0.948	20.0
BD16845	Mercury, Total by CVAA	mg/L	4.000E-05	0.000500	0.004	0.00406	0.00402	0.004	0.00340 to 0.00460	102	70.0 to 130	0.990	20.0
BD16844	Molybdenum, Dissolved	mg/L	0.00143	0.0100	0.2	0.200	0.202	0.201	0.170 to 0.230	100	70.0 to 130	0.995	20.0
BD16845	Molybdenum, Total	mg/L	0.001	0.0100	0.2	0.201	0.200	0.203	0.170 to 0.230	100	70.0 to 130	0.499	20.0
BD16842	Potassium, Dissolved	mg/L	-0.0189	0.367	10.0	11.8	11.4	9.98	8.50 to 11.5	101	70.0 to 130	3.45	20.0
BD16845	Potassium, Total	mg/L	0.0168	0.367	10.0	10.3	10.1	10.4	8.50 to 11.5	103	70.0 to 130	1.96	20.0
BD16842	Selenium, Dissolved	mg/L	0.0000265	0.00100	0.100	0.103	0.101	0.102	0.0850 to 0.115	103	70.0 to 130	1.96	20.0
BD16845	Selenium, Total	mg/L	-0.0000165	0.00100	0.100	0.103	0.104	0.105	0.0850 to 0.115	103	70.0 to 130	0.966	20.0
BD16844	Silicon, Dissolved	mg/L	0.000278	0.0440	1.00	9.99	10.0	1.03	0.850 to 1.15	98.0	70.0 to 130	0.100	20.0
BD16845	Silicon, Total	mg/L	0.00175	0.0440	1.00	1.03	1.02	1.04	0.850 to 1.15	103	70.0 to 130	0.976	20.0
BD16844	Sodium, Dissolved	mg/L	0.00766	0.0880	5.00	25.2	25.2	5.24	4.25 to 5.75	100	70.0 to 130	0.00	20.0
BD16845	Sodium, Total	mg/L	0.00617	0.0880	5.00	5.20	5.15	5.30	4.25 to 5.75	104	70.0 to 130	0.966	20.0
BD17109	Sulfate	mg/L	-0.0331	2.0	640	1160	1180	20.9	18.0 to 22.0	100	80.0 to 120	1.71	20.0
BD16842	Thallium, Dissolved	mg/L	-0.0000025	0.000147	0.100	0.0949	0.0961	0.0986	0.0850 to 0.115	94.9	70.0 to 130	1.26	20.0
BD16845	Thallium, Total	mg/L	0.0000118	0.000147	0.100	0.104	0.103	0.103	0.0850 to 0.115	104	70.0 to 130	0.966	20.0
BD16845	Total Organic Carbon	mg/L	0.227	1.00	10.0	9.92	10.4	9.44		99.2	80.0 to 120	4.72	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 8/30/23 10:53
Customer ID:
Delivery Date: 8/31/23 14:26

Description: Gorgas Ash Pond - MW-41HD Dup

Laboratory ID Number: BD16843

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17116	Alkalinity	mg CaCO3/L					222	51.9	45.0 to 55.0			0.00	10.0
BD16845	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.02	0.200	2.00	2.01	-0.027	1.88	1.80 to 2.20	100	90.0 to 110	0.00	15.0
BD16844	Solids, Dissolved	mg/L	0.0000	25.0			240	54.0	40.0 to 60.0			2.53	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-41HS

Location Code: WMWGORAP
Collected: 8/30/23 12:22
Customer ID:
Submittal Date: 8/31/23 14:26

Laboratory ID Number: BD16844

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	9/5/23 13:08	9/6/23 12:40		1.015	0.867	mg/L	0.030000	0.1015	
* Calcium, Total	9/5/23 13:08	9/6/23 12:40		1.015	28.0	mg/L	0.070035	0.406	
* Iron, Total	9/5/23 13:08	9/6/23 12:40		1.015	2.02	mg/L	0.008120	0.0406	
* Lithium, Total	9/5/23 13:08	9/6/23 12:40		1.015	0.0532	mg/L	0.007105	0.01999956	
* Magnesium, Total	9/5/23 13:08	9/6/23 12:40		1.015	18.1	mg/L	0.021315	0.406	
* Molybdenum, Total	9/5/23 13:08	9/6/23 12:40		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Total (calc.)	9/5/23 13:08	9/6/23 12:40		1	19.0	mg/L			
* Silicon, Total	9/5/23 13:08	9/6/23 12:40		1.015	8.88	mg/L	0.02030	0.25375	
* Sodium, Total	9/5/23 13:08	9/6/23 12:40		1.015	19.8	mg/L	0.04060	0.406	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	9/5/23 09:14	9/6/23 12:18		1.015	0.887	mg/L	0.030000	0.1015	
* Calcium, Dissolved	9/5/23 09:14	9/6/23 12:18		1.015	30.3	mg/L	0.070035	0.406	
* Iron, Dissolved	9/5/23 09:14	9/6/23 12:18		1.015	2.34	mg/L	0.008120	0.0406	
* Lithium, Dissolved	9/5/23 09:14	9/6/23 12:18		1.015	0.0572	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	9/5/23 09:14	9/6/23 12:18		1.015	18.9	mg/L	0.021315	0.406	
* Molybdenum, Dissolved	9/5/23 09:14	9/6/23 12:18		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Dissolved (calc.)	9/5/23 09:14	9/6/23 12:18		1	19.3	mg/L			
* Silicon, Dissolved	9/5/23 09:14	9/6/23 12:18		1.015	9.01	mg/L	0.02030	0.25375	
* Sodium, Dissolved	9/5/23 09:14	9/6/23 12:18		1.015	20.2	mg/L	0.04060	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	9/5/23 13:08	9/5/23 15:34		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Total	9/5/23 13:08	9/5/23 15:34		1.015	0.0332	mg/L	0.009135	0.05075	J
* Arsenic, Total	9/5/23 13:08	9/5/23 15:34		1.015	0.000556	mg/L	0.000112	0.000203	
* Barium, Total	9/5/23 13:08	9/5/23 15:34		1.015	0.0518	mg/L	0.000508	0.001015	
* Beryllium, Total	9/5/23 13:08	9/5/23 15:34		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	9/5/23 13:08	9/5/23 15:34		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	9/5/23 13:08	9/5/23 15:34		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	9/5/23 13:08	9/5/23 15:34		1.015	0.00374	mg/L	0.000068	0.000203	
* Lead, Total	9/5/23 13:08	9/5/23 15:34		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	9/5/23 13:08	9/5/23 15:34		1.015	0.448	mg/L	0.000152	0.001015	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 10/25/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-41HS

Location Code: WMWGORAP
Collected: 8/30/23 12:22
Customer ID:
Submittal Date: 8/31/23 14:26

Laboratory ID Number: BD16844

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	9/5/23 13:08	9/5/23 15:34		1.015	1.93	mg/L	0.169505	0.5075	
* Selenium, Total	9/5/23 13:08	9/5/23 15:34		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	9/5/23 13:08	9/5/23 15:34		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	9/7/23 14:12	9/8/23 12:55		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	9/7/23 14:12	9/8/23 12:55		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Dissolved	9/7/23 14:12	9/8/23 12:55		1.015	0.000530	mg/L	0.000112	0.000203	
* Barium, Dissolved	9/7/23 14:12	9/8/23 12:55		1.015	0.0471	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	9/7/23 14:12	9/8/23 12:55		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	9/7/23 14:12	9/8/23 12:55		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	9/7/23 14:12	9/8/23 12:55		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	9/7/23 14:12	9/8/23 12:55		1.015	0.00267	mg/L	0.000068	0.000203	
* Lead, Dissolved	9/7/23 14:12	9/8/23 12:55		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	9/7/23 14:12	9/8/23 12:55		1.015	0.357	mg/L	0.000152	0.001015	
* Potassium, Dissolved	9/7/23 14:12	9/8/23 12:55		1.015	1.84	mg/L	0.169505	0.5075	
* Selenium, Dissolved	9/7/23 14:12	9/8/23 12:55		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	9/7/23 14:12	9/8/23 12:55		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	9/1/23 12:34	9/1/23 17:11		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	9/5/23 08:59	9/5/23 08:59		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: DHC***								
Alkalinity pH Endpoint	9/12/23 10:42	9/12/23 15:34		1	4.56	SU		2	
* Alkalinity	9/12/23 10:42	9/12/23 15:34		1	87.7	mg CaCO3/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	8/31/23 15:40	9/1/23 13:30		1	234	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: DHC***								
* Bicarbonate Alkalinity, (calc.)	9/12/23 10:42	9/12/23 15:34		1	87.6	mg CaCO3/L		1	
* Carbonate Alkalinity, (calc.)	9/12/23 10:42	9/12/23 15:34		1	Not Detected	mg CaCO3/L		0.5	
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	9/6/23 20:15	9/6/23 20:15		1	Not Detected	mg/L	1.00	2	U

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-41HS

Location Code: WMWGORAP
Collected: 8/30/23 12:22
Customer ID:
Submittal Date: 8/31/23 14:26

Laboratory ID Number: BD16844

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	9/11/23 11:47	9/11/23 11:47		1	7.77	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	9/11/23 15:30	9/11/23 15:30		1	0.102	mg/L	0.06	0.125	J
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	9/7/23 14:52	9/7/23 14:52		4	89.0	mg/L	2.4	8	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	8/30/23 12:19	8/30/23 12:19			337.68	uS/cm			FA
pH	8/30/23 12:19	8/30/23 12:19			6.13	SU			FA
Temperature	8/30/23 12:19	8/30/23 12:19			19.54	C			FA
Turbidity	8/30/23 12:19	8/30/23 12:19			2.16	NTU			FA
Sulfide	8/30/23 12:19	8/30/23 12:19			0	mg/L			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 10/25/2023
Version: 3.5
COA_CCR

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 8/30/23 12:22
Customer ID:
Delivery Date: 8/31/23 14:26

Description: Gorgas Ash Pond - MW-41HS

Laboratory ID Number: BD16844

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD16842	Aluminum, Dissolved	mg/L	0.000916	0.0198	0.100	0.102	0.101	0.0979	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BD16845	Aluminum, Total	mg/L	0.00103	0.0198	0.100	0.102	0.100	0.103	0.0850 to 0.115	102	70.0 to 130	1.98	20.0
BD16842	Antimony, Dissolved	mg/L	0.000328	0.00100	0.100	0.0925	0.0900	0.0906	0.0850 to 0.115	92.5	70.0 to 130	2.74	20.0
BD16845	Antimony, Total	mg/L	0.000244	0.00100	0.100	0.0748	0.103	0.107	0.0850 to 0.115	74.8	70.0 to 130	31.7	20.0
BD16842	Arsenic, Dissolved	mg/L	0.0000374	0.000200	0.100	0.107	0.106	0.101	0.0850 to 0.115	104	70.0 to 130	0.939	20.0
BD16845	Arsenic, Total	mg/L	-0.0000419	0.000200	0.100	0.110	0.109	0.113	0.0850 to 0.115	110	70.0 to 130	0.913	20.0
BD16842	Barium, Dissolved	mg/L	0.0000352	0.00100	0.100	0.146	0.143	0.0954	0.0850 to 0.115	97.8	70.0 to 130	2.08	20.0
BD16845	Barium, Total	mg/L	0.0000021	0.00100	0.100	0.0990	0.0996	0.0990	0.0850 to 0.115	99.0	70.0 to 130	0.604	20.0
BD16842	Beryllium, Dissolved	mg/L	0.000105	0.000880	0.100	0.0969	0.0957	0.0954	0.0850 to 0.115	96.9	70.0 to 130	1.25	20.0
BD16845	Beryllium, Total	mg/L	0.0000782	0.000880	0.100	0.109	0.111	0.109	0.0850 to 0.115	109	70.0 to 130	1.82	20.0
BD16844	Boron, Dissolved	mg/L	-0.00196	0.0650	1.00	1.92	1.92	1.02	0.850 to 1.15	103	70.0 to 130	0.00	20.0
BD16845	Boron, Total	mg/L	-0.00157	0.0650	1.00	1.02	1.01	1.03	0.850 to 1.15	102	70.0 to 130	0.985	20.0
BD16842	Cadmium, Dissolved	mg/L	-0.0000004	0.000147	0.100	0.102	0.0982	0.100	0.0850 to 0.115	102	70.0 to 130	3.80	20.0
BD16845	Cadmium, Total	mg/L	0.0000048	0.000147	0.100	0.107	0.107	0.108	0.0850 to 0.115	107	70.0 to 130	0.00	20.0
BD16844	Calcium, Dissolved	mg/L	-0.0160	0.152	5.00	35.4	34.9	5.07	4.25 to 5.75	102	70.0 to 130	1.42	20.0
BD16845	Calcium, Total	mg/L	-0.0277	0.152	5.00	4.95	4.89	5.09	4.25 to 5.75	99.0	70.0 to 130	1.22	20.0
BD17109	Chloride	mg/L	0.0244	1.00	800	1250	1340	10.3	9.00 to 11.0	95.1	80.0 to 120	6.95	20.0
BD16842	Chromium, Dissolved	mg/L	-0.000115	0.000440	0.100	0.102	0.0999	0.0989	0.0850 to 0.115	102	70.0 to 130	2.08	20.0
BD16845	Chromium, Total	mg/L	-0.0000465	0.000440	0.100	0.102	0.102	0.106	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BD16842	Cobalt, Dissolved	mg/L	0.0000001	0.000147	0.100	0.104	0.101	0.100	0.0850 to 0.115	103	70.0 to 130	2.93	20.0
BD16845	Cobalt, Total	mg/L	-0.0000017	0.000147	0.100	0.105	0.105	0.107	0.0850 to 0.115	105	70.0 to 130	0.00	20.0
BD17109	Fluoride	mg/L	0.0252	0.125	2.50	2.96	2.93	2.67	2.25 to 2.75	107	80.0 to 120	1.02	20.0
BD16844	Iron, Dissolved	mg/L	-0.000830	0.0176	0.2	2.53	2.52	0.203	0.170 to 0.230	95.0	70.0 to 130	0.396	20.0
BD16845	Iron, Total	mg/L	-0.000550	0.0176	0.2	0.201	0.201	0.204	0.170 to 0.230	100	70.0 to 130	0.00	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGORAP
Sample Date: 8/30/23 12:22
Customer ID:
Delivery Date: 8/31/23 14:26

Description: Gorgas Ash Pond - MW-41HS

Laboratory ID Number: BD16844

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD16842	Lead, Dissolved	mg/L	0.0000082	0.000147	0.100	0.0952	0.0945	0.0962	0.0850 to 0.115	95.2	70.0 to 130	0.738	20.0
BD16845	Lead, Total	mg/L	0.0000022	0.000147	0.100	0.0977	0.0982	0.0976	0.0850 to 0.115	97.7	70.0 to 130	0.510	20.0
BD16844	Lithium, Dissolved	mg/L	0.00106	0.0154	0.200	0.258	0.261	0.202	0.170 to 0.230	100	70.0 to 130	1.16	20.0
BD16845	Lithium, Total	mg/L	0.00102	0.0154	0.200	0.203	0.201	0.206	0.170 to 0.230	102	70.0 to 130	0.990	20.0
BD16844	Magnesium, Dissolved	mg/L	-0.00882	0.0462	5.00	23.8	23.7	5.10	4.25 to 5.75	98.0	70.0 to 130	0.421	20.0
BD16845	Magnesium, Total	mg/L	0.00333	0.0462	5.00	5.02	4.96	5.13	4.25 to 5.75	100	70.0 to 130	1.20	20.0
BD16842	Manganese, Dissolved	mg/L	-0.0000407	0.00033	0.100	0.718	0.699	0.0995	0.0850 to 0.115	112	70.0 to 130	2.68	20.0
BD16845	Manganese, Total	mg/L	0.0000068	0.00033	0.100	0.106	0.105	0.107	0.0850 to 0.115	106	70.0 to 130	0.948	20.0
BD16845	Mercury, Total by CVAA	mg/L	4.000E-05	0.000500	0.004	0.00406	0.00402	0.004	0.00340 to 0.00460	102	70.0 to 130	0.990	20.0
BD16844	Molybdenum, Dissolved	mg/L	0.00143	0.0100	0.2	0.200	0.202	0.201	0.170 to 0.230	100	70.0 to 130	0.995	20.0
BD16845	Molybdenum, Total	mg/L	0.001	0.0100	0.2	0.201	0.200	0.203	0.170 to 0.230	100	70.0 to 130	0.499	20.0
BD16842	Potassium, Dissolved	mg/L	-0.0189	0.367	10.0	11.8	11.4	9.98	8.50 to 11.5	101	70.0 to 130	3.45	20.0
BD16845	Potassium, Total	mg/L	0.0168	0.367	10.0	10.3	10.1	10.4	8.50 to 11.5	103	70.0 to 130	1.96	20.0
BD16842	Selenium, Dissolved	mg/L	0.0000265	0.00100	0.100	0.103	0.101	0.102	0.0850 to 0.115	103	70.0 to 130	1.96	20.0
BD16845	Selenium, Total	mg/L	-0.0000165	0.00100	0.100	0.103	0.104	0.105	0.0850 to 0.115	103	70.0 to 130	0.966	20.0
BD16844	Silicon, Dissolved	mg/L	0.000278	0.0440	1.00	9.99	10.0	1.03	0.850 to 1.15	98.0	70.0 to 130	0.100	20.0
BD16845	Silicon, Total	mg/L	0.00175	0.0440	1.00	1.03	1.02	1.04	0.850 to 1.15	103	70.0 to 130	0.976	20.0
BD16844	Sodium, Dissolved	mg/L	0.00766	0.0880	5.00	25.2	25.2	5.24	4.25 to 5.75	100	70.0 to 130	0.00	20.0
BD16845	Sodium, Total	mg/L	0.00617	0.0880	5.00	5.20	5.15	5.30	4.25 to 5.75	104	70.0 to 130	0.966	20.0
BD17109	Sulfate	mg/L	-0.0331	2.0	640	1160	1180	20.9	18.0 to 22.0	100	80.0 to 120	1.71	20.0
BD16842	Thallium, Dissolved	mg/L	-0.0000025	0.000147	0.100	0.0949	0.0961	0.0986	0.0850 to 0.115	94.9	70.0 to 130	1.26	20.0
BD16845	Thallium, Total	mg/L	0.0000118	0.000147	0.100	0.104	0.103	0.103	0.0850 to 0.115	104	70.0 to 130	0.966	20.0
BD16845	Total Organic Carbon	mg/L	0.227	1.00	10.0	9.92	10.4	9.44		99.2	80.0 to 120	4.72	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 8/30/23 12:22
Customer ID:
Delivery Date: 8/31/23 14:26

Description: Gorgas Ash Pond - MW-41HS

Laboratory ID Number: BD16844

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17116	Alkalinity	mg CaCO3/L					222	51.9	45.0 to 55.0			0.00	10.0
BD16845	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.02	0.200	2.00	2.01	-0.027	1.88	1.80 to 2.20	100	90.0 to 110	0.00	15.0
BD16844	Solids, Dissolved	mg/L	0.0000	25.0			240	54.0	40.0 to 60.0			2.53	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond Field Blank-1

Location Code: WMWGORAPFB
Collected: 8/30/23 13:20
Customer ID:
Submittal Date: 8/31/23 14:26

Laboratory ID Number: BD16845

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	9/5/23 13:08	9/6/23 12:43		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	9/5/23 13:08	9/6/23 12:43		1.015	Not Detected	mg/L	0.070035	0.406	U
* Iron, Total	9/5/23 13:08	9/6/23 12:43		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Total	9/5/23 13:08	9/6/23 12:43		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	9/5/23 13:08	9/6/23 12:43		1.015	Not Detected	mg/L	0.021315	0.406	U
* Molybdenum, Total	9/5/23 13:08	9/6/23 12:43		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Total (calc.)	9/5/23 13:08	9/6/23 12:43		1	Not Detected	mg/L			
* Silicon, Total	9/5/23 13:08	9/6/23 12:43		1.015	Not Detected	mg/L	0.02030	0.25375	U
* Sodium, Total	9/5/23 13:08	9/6/23 12:43		1.015	Not Detected	mg/L	0.04060	0.406	U
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	9/5/23 13:08	9/5/23 15:37		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Total	9/5/23 13:08	9/5/23 15:37		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Total	9/5/23 13:08	9/5/23 15:37		1.015	Not Detected	mg/L	0.000112	0.000203	U
* Barium, Total	9/5/23 13:08	9/5/23 15:37		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Beryllium, Total	9/5/23 13:08	9/5/23 15:37		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	9/5/23 13:08	9/5/23 15:37		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	9/5/23 13:08	9/5/23 15:37		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	9/5/23 13:08	9/5/23 15:37		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	9/5/23 13:08	9/5/23 15:37		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	9/5/23 13:08	9/5/23 15:37		1.015	Not Detected	mg/L	0.000152	0.001015	U
* Potassium, Total	9/5/23 13:08	9/5/23 15:37		1.015	Not Detected	mg/L	0.169505	0.5075	U
* Selenium, Total	9/5/23 13:08	9/5/23 15:37		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	9/5/23 13:08	9/5/23 15:37		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	9/1/23 12:34	9/1/23 17:15		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	9/5/23 09:01	9/5/23 09:01		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	8/31/23 15:40	9/1/23 13:30		1	Not Detected	mg/L		25	U

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Precision is out of specification limit for Total Antimony.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond Field Blank-1

Location Code: WMWGORAPFB
Collected: 8/30/23 13:20
Customer ID:
Submittal Date: 8/31/23 14:26

Laboratory ID Number: BD16845

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	9/6/23 20:29	9/6/23 20:29		1	Not Detected	mg/L	1.00	2	U
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	9/11/23 11:48	9/11/23 11:48		1	Not Detected	mg/L	0.50	1	U
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	9/11/23 15:31	9/11/23 15:31		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	9/7/23 14:39	9/7/23 14:39		1	Not Detected	mg/L	0.6	2	U

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Precision is out of specification limit for Total Antimony.

Reported: 10/25/2023
Version: 3.5
COA_CCR

Batch QC Summary

Customer Account: WMWGORAPFB
Sample Date: 8/30/23 13:20
Customer ID:
Delivery Date: 8/31/23 14:26

Description: Gorgas Ash Pond Field Blank-1

Laboratory ID Number: BD16845

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD16845	Aluminum, Total	mg/L	0.00103	0.0198	0.100	0.102	0.100	0.103	0.0850 to 0.115	102	70.0 to 130	1.98	20.0
BD16845	Antimony, Total	mg/L	0.000244	0.00100	0.100	0.0748	0.103	0.107	0.0850 to 0.115	74.8	70.0 to 130	31.7	20.0
BD16845	Arsenic, Total	mg/L	-0.0000419	0.000200	0.100	0.110	0.109	0.113	0.0850 to 0.115	110	70.0 to 130	0.913	20.0
BD16845	Barium, Total	mg/L	0.0000021	0.00100	0.100	0.0990	0.0996	0.0990	0.0850 to 0.115	99.0	70.0 to 130	0.604	20.0
BD16845	Beryllium, Total	mg/L	0.0000782	0.000880	0.100	0.109	0.111	0.109	0.0850 to 0.115	109	70.0 to 130	1.82	20.0
BD16845	Boron, Total	mg/L	-0.00157	0.0650	1.00	1.02	1.01	1.03	0.850 to 1.15	102	70.0 to 130	0.985	20.0
BD16845	Cadmium, Total	mg/L	0.0000048	0.000147	0.100	0.107	0.107	0.108	0.0850 to 0.115	107	70.0 to 130	0.00	20.0
BD16845	Calcium, Total	mg/L	-0.0277	0.152	5.00	4.95	4.89	5.09	4.25 to 5.75	99.0	70.0 to 130	1.22	20.0
BD17109	Chloride	mg/L	0.0244	1.00	800	1250	1340	10.3	9.00 to 11.0	95.1	80.0 to 120	6.95	20.0
BD16845	Chromium, Total	mg/L	-0.0000465	0.000440	0.100	0.102	0.102	0.106	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BD16845	Cobalt, Total	mg/L	-0.0000017	0.000147	0.100	0.105	0.105	0.107	0.0850 to 0.115	105	70.0 to 130	0.00	20.0
BD17109	Fluoride	mg/L	0.0252	0.125	2.50	2.96	2.93	2.67	2.25 to 2.75	107	80.0 to 120	1.02	20.0
BD16845	Iron, Total	mg/L	-0.000550	0.0176	0.2	0.201	0.201	0.204	0.170 to 0.230	100	70.0 to 130	0.00	20.0
BD16845	Lead, Total	mg/L	0.0000022	0.000147	0.100	0.0977	0.0982	0.0976	0.0850 to 0.115	97.7	70.0 to 130	0.510	20.0
BD16845	Lithium, Total	mg/L	0.00102	0.0154	0.200	0.203	0.201	0.206	0.170 to 0.230	102	70.0 to 130	0.990	20.0
BD16845	Magnesium, Total	mg/L	0.00333	0.0462	5.00	5.02	4.96	5.13	4.25 to 5.75	100	70.0 to 130	1.20	20.0
BD16845	Manganese, Total	mg/L	0.0000068	0.00033	0.100	0.106	0.105	0.107	0.0850 to 0.115	106	70.0 to 130	0.948	20.0
BD16845	Mercury, Total by CVAA	mg/L	4.000E-05	0.000500	0.004	0.00406	0.00402	0.004	0.00340 to 0.00460	102	70.0 to 130	0.990	20.0
BD16845	Molybdenum, Total	mg/L	0.001	0.0100	0.2	0.201	0.200	0.203	0.170 to 0.230	100	70.0 to 130	0.499	20.0
BD16845	Potassium, Total	mg/L	0.0168	0.367	10.0	10.3	10.1	10.4	8.50 to 11.5	103	70.0 to 130	1.96	20.0
BD16845	Selenium, Total	mg/L	-0.0000165	0.00100	0.100	0.103	0.104	0.105	0.0850 to 0.115	103	70.0 to 130	0.966	20.0
BD16845	Silicon, Total	mg/L	0.00175	0.0440	1.00	1.03	1.02	1.04	0.850 to 1.15	103	70.0 to 130	0.976	20.0
BD16845	Sodium, Total	mg/L	0.00617	0.0880	5.00	5.20	5.15	5.30	4.25 to 5.75	104	70.0 to 130	0.966	20.0
BD17109	Sulfate	mg/L	-0.0331	2.0	640	1160	1180	20.9	18.0 to 22.0	100	80.0 to 120	1.71	20.0

Comments: Precision is out of specification limit for Total Antimony.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAPFB
Sample Date: 8/30/23 13:20
Customer ID:
Delivery Date: 8/31/23 14:26

Description: Gorgas Ash Pond Field Blank-1

Laboratory ID Number: BD16845

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD16845	Thallium, Total	mg/L	0.0000118	0.000147	0.100	0.104	0.103	0.103	0.0850 to 0.115	104	70.0 to 130	0.966	20.0
BD16845	Total Organic Carbon	mg/L	0.227	1.00	10.0	9.92	10.4	9.44		99.2	80.0 to 120	4.72	20.0

Comments: Precision is out of specification limit for Total Antimony.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAPFB
Sample Date: 8/30/23 13:20
Customer ID:
Delivery Date: 8/31/23 14:26

Description: Gorgas Ash Pond Field Blank-1

Laboratory ID Number: BD16845

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD16845	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.02	0.200	2.00	2.01	-0.027	1.88	1.80 to 2.20	100	90.0 to 110	0.00	15.0
BD16844	Solids, Dissolved	mg/L	0.0000	25.0			240	54.0	40.0 to 60.0			2.53	10.0

Comments: Precision is out of specification limit for Total Antimony.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-21

Location Code: WMWGORAP
Collected: 9/5/23 10:24
Customer ID:
Submittal Date: 9/7/23 10:51

Laboratory ID Number: BD17104

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	9/8/23 07:51	9/14/23 15:17		1.015	0.140	mg/L	0.030000	0.1015	
* Calcium, Total	9/8/23 07:51	9/14/23 15:17		1.015	2.00	mg/L	0.070035	0.406	
* Iron, Total	9/8/23 07:51	9/14/23 15:17		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Total	9/8/23 07:51	9/14/23 15:17		1.015	0.102	mg/L	0.007105	0.01999956	
* Magnesium, Total	9/8/23 07:51	9/14/23 15:17		1.015	0.391	mg/L	0.021315	0.406	J
* Molybdenum, Total	9/8/23 07:51	9/14/23 15:17		1.015	0.0139	mg/L	0.005075	0.01015	
* Silica, Total (calc.)	9/8/23 07:51	9/14/23 15:17		1	9.20	mg/L			
* Silicon, Total	9/8/23 07:51	9/14/23 15:17		1.015	4.30	mg/L	0.02030	0.25375	
* Sodium, Total	9/8/23 07:51	9/14/23 18:57		10.15	216	mg/L	0.4060	4.06	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	9/17/23 14:38	9/14/23 14:07		1.015	0.141	mg/L	0.030000	0.1015	
* Calcium, Dissolved	9/17/23 14:38	9/14/23 14:07		1.015	1.59	mg/L	0.070035	0.406	
* Iron, Dissolved	9/17/23 14:38	9/14/23 14:07		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Dissolved	9/17/23 14:38	9/14/23 14:07		1.015	0.0840	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	9/17/23 14:38	9/14/23 14:07		1.015	0.388	mg/L	0.021315	0.406	J
* Molybdenum, Dissolved	9/17/23 14:38	9/14/23 14:07		1.015	0.0107	mg/L	0.005075	0.01015	
* Silica, Dissolved (calc.)	9/17/23 14:38	9/14/23 14:07		1	9.24	mg/L			
* Silicon, Dissolved	9/17/23 14:38	9/14/23 14:07		1.015	4.32	mg/L	0.02030	0.25375	
* Sodium, Dissolved	9/17/23 14:38	9/14/23 17:37		10.15	217	mg/L	0.4060	4.06	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	9/8/23 07:51	9/8/23 11:13		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Total	9/8/23 07:51	9/8/23 11:13		1.015	0.0424	mg/L	0.009135	0.05075	J
* Arsenic, Total	9/8/23 07:51	9/8/23 11:13		1.015	0.000578	mg/L	0.000112	0.000203	
* Barium, Total	9/8/23 07:51	9/8/23 11:13		1.015	0.122	mg/L	0.000508	0.001015	
* Beryllium, Total	9/8/23 07:51	9/8/23 11:13		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	9/8/23 07:51	9/8/23 11:13		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	9/8/23 07:51	9/8/23 11:13		1.015	0.000303	mg/L	0.000203	0.001015	J
* Cobalt, Total	9/8/23 07:51	9/8/23 11:13		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	9/8/23 07:51	9/8/23 11:13		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	9/8/23 07:51	9/8/23 11:13		1.015	0.000508	mg/L	0.000152	0.001015	J

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-21

Location Code: WMWGORAP
Collected: 9/5/23 10:24
Customer ID:
Submittal Date: 9/7/23 10:51

Laboratory ID Number: BD17104

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	9/8/23 07:51	9/8/23 11:13		1.015	2.01	mg/L	0.169505	0.5075	
* Selenium, Total	9/8/23 07:51	9/8/23 11:13		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	9/8/23 07:51	9/8/23 11:13		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	9/7/23 14:38	9/8/23 13:17		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	9/7/23 14:38	9/8/23 13:17		1.015	0.0252	mg/L	0.009135	0.05075	J
* Arsenic, Dissolved	9/7/23 14:38	9/8/23 13:17		1.015	0.000569	mg/L	0.000112	0.000203	
* Barium, Dissolved	9/7/23 14:38	9/8/23 13:17		1.015	0.110	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	9/7/23 14:38	9/8/23 13:17		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	9/7/23 14:38	9/8/23 13:17		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	9/7/23 14:38	9/8/23 13:17		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	9/7/23 14:38	9/8/23 13:17		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Dissolved	9/7/23 14:38	9/8/23 13:17		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	9/7/23 14:38	9/8/23 13:17		1.015	0.000465	mg/L	0.000152	0.001015	J
* Potassium, Dissolved	9/7/23 14:38	9/8/23 13:17		1.015	1.49	mg/L	0.169505	0.5075	
* Selenium, Dissolved	10/12/23 23:23	10/12/23 12:54		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	9/7/23 14:38	9/8/23 13:17		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	9/7/23 16:09	9/7/23 20:37		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	9/11/23 08:45	9/11/23 08:45		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: DHC***								
Alkalinity pH Endpoint	9/12/23 10:42	9/12/23 15:34		1	4.50	SU		2	
* Alkalinity	9/12/23 10:42	9/12/23 15:34		1	195	mg CaCO3/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	9/7/23 13:50	9/11/23 13:15		1	572	mg/L		50	
Analytical Method: SM 4500CO2 D	***Analyst: DHC***								
* Bicarbonate Alkalinity, (calc.)	9/12/23 10:42	9/12/23 15:34		1	118	mg CaCO3/L		1	A
* Carbonate Alkalinity, (calc.)	9/12/23 10:42	9/12/23 15:34		1	73.4	mg CaCO3/L		0.5	A
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	9/14/23 10:48	9/14/23 10:48		1	1.37	mg/L	1.00	2	J

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-21

Location Code: WMWGORAP
Collected: 9/5/23 10:24
Customer ID:
Submittal Date: 9/7/23 10:51

Laboratory ID Number: BD17104

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	9/11/23 11:59	9/11/23 11:59		4	36.6	mg/L	2.00	4	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	9/11/23 15:33	9/11/23 15:33		1	0.188	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	9/7/23 14:53	9/7/23 14:53		16	214	mg/L	9.6	32	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	9/5/23 10:21	9/5/23 10:21			990.18	uS/cm			FA
pH	9/5/23 10:21	9/5/23 10:21			9.81	SU			FA
Temperature	9/5/23 10:21	9/5/23 10:21			21.81	C			FA
Turbidity	9/5/23 10:21	9/5/23 10:21			5.22	NTU			FA
Sulfide	9/5/23 10:21	9/5/23 10:21			2.0	mg/L			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 10/25/2023
Version: 3.5
COA_CCR

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/5/23 10:24
Customer ID:
Delivery Date: 9/7/23 10:51

Description: Gorgas Ash Pond - MW-21

Laboratory ID Number: BD17104

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17114	Aluminum, Dissolved	mg/L	0.000425	0.0198	0.100	0.0980	0.0999	0.0938	0.0850 to 0.115	98.0	70.0 to 130	1.92	20.0
BD17113	Aluminum, Total	mg/L	0.000780	0.0198	0.100	0.0995	0.100	0.0986	0.0850 to 0.115	99.5	70.0 to 130	0.501	20.0
BD17114	Antimony, Dissolved	mg/L	0.000270	0.00100	0.100	0.107	0.105	0.0935	0.0850 to 0.115	107	70.0 to 130	1.89	20.0
BD17113	Antimony, Total	mg/L	0.000278	0.00100	0.100	0.101	0.101	0.0972	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BD17114	Arsenic, Dissolved	mg/L	0.0000525	0.000200	0.100	0.174	0.174	0.104	0.0850 to 0.115	109	70.0 to 130	0.00	20.0
BD17113	Arsenic, Total	mg/L	0.0000220	0.000200	0.100	0.204	0.203	0.0991	0.0850 to 0.115	104	70.0 to 130	0.491	20.0
BD17114	Barium, Dissolved	mg/L	0.0000082	0.00100	0.100	0.112	0.111	0.0954	0.0850 to 0.115	98.2	70.0 to 130	0.897	20.0
BD17113	Barium, Total	mg/L	-0.0000007	0.00100	0.100	0.674	0.653	0.0932	0.0850 to 0.115	103	70.0 to 130	3.17	20.0
BD17114	Beryllium, Dissolved	mg/L	0.0000831	0.000880	0.100	0.0974	0.0977	0.0980	0.0850 to 0.115	97.4	70.0 to 130	0.308	20.0
BD17113	Beryllium, Total	mg/L	0.000110	0.000880	0.100	0.0948	0.0961	0.0900	0.0850 to 0.115	94.8	70.0 to 130	1.36	20.0
BD17114	Boron, Dissolved	mg/L	-0.000333	0.0650	1.00	1.08	1.07	1.02	0.850 to 1.15	104	70.0 to 130	0.930	20.0
BD17113	Boron, Total	mg/L	0.000355	0.0650	1.00	2.38	2.39	1.01	0.850 to 1.15	102	70.0 to 130	0.419	20.0
BD17114	Cadmium, Dissolved	mg/L	-0.0000081	0.000147	0.100	0.103	0.102	0.102	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BD17113	Cadmium, Total	mg/L	-0.0000002	0.000147	0.100	0.0987	0.101	0.0998	0.0850 to 0.115	98.7	70.0 to 130	2.30	20.0
BD17114	Calcium, Dissolved	mg/L	-0.0117	0.152	5.00	85.6	84.3	5.08	4.25 to 5.75	204	70.0 to 130	1.53	20.0
BD17113	Calcium, Total	mg/L	-0.0276	0.152	5.00	58.8	60.7	5.12	4.25 to 5.75	98.0	70.0 to 130	3.18	20.0
BD17109	Chloride	mg/L	0.0244	1.00	800	1250	1340	10.3	9.00 to 11.0	95.1	80.0 to 120	6.95	20.0
BD17114	Chromium, Dissolved	mg/L	-0.000104	0.000440	0.100	0.0983	0.101	0.0972	0.0850 to 0.115	98.3	70.0 to 130	2.71	20.0
BD17113	Chromium, Total	mg/L	-0.0000753	0.000440	0.100	0.0985	0.0995	0.0980	0.0850 to 0.115	98.5	70.0 to 130	1.01	20.0
BD17114	Cobalt, Dissolved	mg/L	0.0000006	0.000147	0.100	0.101	0.103	0.100	0.0850 to 0.115	100	70.0 to 130	1.96	20.0
BD17113	Cobalt, Total	mg/L	0.0000106	0.000147	0.100	0.0992	0.0998	0.101	0.0850 to 0.115	99.2	70.0 to 130	0.603	20.0
BD17109	Fluoride	mg/L	0.0252	0.125	2.50	2.96	2.93	2.67	2.25 to 2.75	107	80.0 to 120	1.02	20.0
BD17114	Iron, Dissolved	mg/L	0.00162	0.0176	0.2	47.4	46.1	0.202	0.170 to 0.230	350	70.0 to 130	2.78	20.0
BD17113	Iron, Total	mg/L	-0.00332	0.0176	0.2	0.227	0.225	0.200	0.170 to 0.230	102	70.0 to 130	0.885	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/5/23 10:24
Customer ID:
Delivery Date: 9/7/23 10:51

Description: Gorgas Ash Pond - MW-21

Laboratory ID Number: BD17104

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17114	Lead, Dissolved	mg/L	0.0000049	0.000147	0.100	0.0927	0.0940	0.0969	0.0850 to 0.115	92.7	70.0 to 130	1.39	20.0
BD17113	Lead, Total	mg/L	0.0000076	0.000147	0.100	0.0955	0.0971	0.0976	0.0850 to 0.115	95.5	70.0 to 130	1.66	20.0
BD17114	Lithium, Dissolved	mg/L	0.000425	0.0154	0.200	0.238	0.234	0.200	0.170 to 0.230	104	70.0 to 130	1.69	20.0
BD17113	Lithium, Total	mg/L	0.000205	0.0154	0.200	0.515	0.523	0.203	0.170 to 0.230	103	70.0 to 130	1.54	20.0
BD17114	Magnesium, Dissolved	mg/L	0.00215	0.0462	5.00	39.9	39.9	5.23	4.25 to 5.75	106	70.0 to 130	0.00	20.0
BD17113	Magnesium, Total	mg/L	-0.0156	0.0462	5.00	21.3	21.5	5.25	4.25 to 5.75	104	70.0 to 130	0.935	20.0
BD17114	Manganese, Dissolved	mg/L	-0.0000103	0.00033	0.100	1.48	1.49	0.0977	0.0850 to 0.115	70.0	70.0 to 130	0.673	20.0
BD17113	Manganese, Total	mg/L	-0.0000601	0.00033	0.100	0.268	0.273	0.0972	0.0850 to 0.115	98.0	70.0 to 130	1.85	20.0
BD17113	Mercury, Total by CVAA	mg/L	4.000E-05	0.000500	0.004	0.00403	0.00403	0.00404	0.00340 to 0.00460	101	70.0 to 130	0.00	20.0
BD17114	Molybdenum, Dissolved	mg/L	0.00120	0.0100	0.2	0.202	0.203	0.202	0.170 to 0.230	101	70.0 to 130	0.494	20.0
BD17113	Molybdenum, Total	mg/L	0.001	0.0100	0.2	0.215	0.216	0.204	0.170 to 0.230	102	70.0 to 130	0.464	20.0
BD17114	Potassium, Dissolved	mg/L	-0.0436	0.367	10.0	11.7	12.1	9.65	8.50 to 11.5	97.6	70.0 to 130	3.36	20.0
BD17113	Potassium, Total	mg/L	-0.00994	0.367	10.0	12.0	12.0	10.3	8.50 to 11.5	97.4	70.0 to 130	0.00	20.0
BD17510	Selenium, Dissolved	mg/L	0.0000623	0.00100	0.100	0.108	0.111	0.0999	0.0850 to 0.115	107	70.0 to 130	2.74	20.0
BD17113	Selenium, Total	mg/L	-0.0000097	0.00100	0.100	0.103	0.102	0.101	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BD17114	Silicon, Dissolved	mg/L	0.000595	0.0440	1.00	14.6	14.6	1.04	0.850 to 1.15	100	70.0 to 130	0.00	20.0
BD17113	Silicon, Total	mg/L	0.00200	0.0440	1.00	7.96	8.01	1.04	0.850 to 1.15	104	70.0 to 130	0.626	20.0
BD17114	Sodium, Dissolved	mg/L	0.00544	0.0880	5.00	24.6	24.3	5.13	4.25 to 5.75	106	70.0 to 130	1.23	20.0
BD17113	Sodium, Total	mg/L	0.00259	0.0880	5.00	32.3	32.8	5.11	4.25 to 5.75	104	70.0 to 130	1.54	20.0
BD17109	Sulfate	mg/L	-0.0331	2.0	640	1160	1180	20.9	18.0 to 22.0	100	80.0 to 120	1.71	20.0
BD17114	Thallium, Dissolved	mg/L	-0.0000048	0.000147	0.100	0.0923	0.0938	0.0997	0.0850 to 0.115	92.3	70.0 to 130	1.61	20.0
BD17113	Thallium, Total	mg/L	0.0000085	0.000147	0.100	0.0950	0.0970	0.0982	0.0850 to 0.115	95.0	70.0 to 130	2.08	20.0
BD17113	Total Organic Carbon	mg/L	0.140	1.00	10.0	10.1	9.98	10.2		89.8	80.0 to 120	1.20	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/5/23 10:24
Customer ID:
Delivery Date: 9/7/23 10:51

Description: Gorgas Ash Pond - MW-21

Laboratory ID Number: BD17104

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17116	Alkalinity	mg CaCO3/L					222	51.9	45.0 to 55.0			0.00	10.0
BD17109	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.05	0.200	2.00	2.24	0.199	1.94	1.80 to 2.20	99.8	90.0 to 110	20.7	15.0
BD17111	Solids, Dissolved	mg/L	2.00	25.0			308	55.0	40.0 to 60.0			0.325	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-21V

Location Code: WMWGORAP
Collected: 9/5/23 12:54
Customer ID:
Submittal Date: 9/7/23 10:51

Laboratory ID Number: BD17105

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	9/8/23 07:51	9/14/23 15:20		1.015	0.103	mg/L	0.030000	0.1015	
* Calcium, Total	9/8/23 07:51	9/14/23 15:20		1.015	39.8	mg/L	0.070035	0.406	
* Iron, Total	9/8/23 07:51	9/14/23 15:20		1.015	0.0767	mg/L	0.008120	0.0406	
* Lithium, Total	9/8/23 07:51	9/14/23 15:20		1.015	0.0928	mg/L	0.007105	0.01999956	
* Magnesium, Total	9/8/23 07:51	9/14/23 15:20		1.015	10.5	mg/L	0.021315	0.406	
* Molybdenum, Total	9/8/23 07:51	9/14/23 15:20		1.015	0.0307	mg/L	0.005075	0.01015	
* Silica, Total (calc.)	9/8/23 07:51	9/14/23 15:20		1	12.0	mg/L			
* Silicon, Total	9/8/23 07:51	9/14/23 15:20		1.015	5.60	mg/L	0.02030	0.25375	
* Sodium, Total	9/8/23 07:51	9/14/23 19:00		101.5	430	mg/L	4.060	40.6	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	9/17/23 14:38	9/14/23 14:10		1.015	0.101	mg/L	0.030000	0.1015	J
* Calcium, Dissolved	9/17/23 14:38	9/14/23 14:10		1.015	40.0	mg/L	0.070035	0.406	
* Iron, Dissolved	9/17/23 14:38	9/14/23 14:10		1.015	0.0613	mg/L	0.008120	0.0406	
* Lithium, Dissolved	9/17/23 14:38	9/14/23 14:10		1.015	0.0912	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	9/17/23 14:38	9/14/23 14:10		1.015	10.4	mg/L	0.021315	0.406	
* Molybdenum, Dissolved	9/17/23 14:38	9/14/23 14:10		1.015	0.0258	mg/L	0.005075	0.01015	
* Silica, Dissolved (calc.)	9/17/23 14:38	9/14/23 14:10		1	11.8	mg/L			
* Silicon, Dissolved	9/17/23 14:38	9/14/23 14:10		1.015	5.52	mg/L	0.02030	0.25375	
* Sodium, Dissolved	9/17/23 14:38	9/14/23 17:40		101.5	430	mg/L	4.060	40.6	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	9/8/23 07:51	9/8/23 11:16		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Total	9/8/23 07:51	9/8/23 11:16		1.015	0.0167	mg/L	0.009135	0.05075	J
* Arsenic, Total	9/8/23 07:51	9/8/23 11:16		1.015	0.00411	mg/L	0.000112	0.000203	
* Barium, Total	9/8/23 07:51	9/8/23 11:16		1.015	0.0484	mg/L	0.000508	0.001015	
* Beryllium, Total	9/8/23 07:51	9/8/23 11:16		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	9/8/23 07:51	9/8/23 11:16		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	9/8/23 07:51	9/8/23 11:16		1.015	0.000227	mg/L	0.000203	0.001015	J
* Cobalt, Total	9/8/23 07:51	9/8/23 11:16		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	9/8/23 07:51	9/8/23 11:16		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	9/8/23 07:51	9/8/23 11:16		1.015	0.0276	mg/L	0.000152	0.001015	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 10/25/2023
Version: 3.5
COA_CCR

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-21V

Location Code: WMWGORAP
Collected: 9/5/23 12:54
Customer ID:
Submittal Date: 9/7/23 10:51

Laboratory ID Number: BD17105

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	9/8/23 07:51	9/8/23 11:16		1.015	60.1	mg/L	0.169505	0.5075	
* Selenium, Total	9/8/23 07:51	9/8/23 11:16		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	9/8/23 07:51	9/8/23 11:16		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	9/7/23 14:38	9/8/23 13:21		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	9/7/23 14:38	9/8/23 13:21		1.015	0.0141	mg/L	0.009135	0.05075	J
* Arsenic, Dissolved	9/7/23 14:38	9/8/23 13:21		1.015	0.00419	mg/L	0.000112	0.000203	
* Barium, Dissolved	9/7/23 14:38	9/8/23 13:21		1.015	0.0491	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	9/7/23 14:38	9/8/23 13:21		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	9/7/23 14:38	9/8/23 13:21		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	9/7/23 14:38	9/8/23 13:21		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	9/7/23 14:38	9/8/23 13:21		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Dissolved	9/7/23 14:38	9/8/23 13:21		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	9/7/23 14:38	9/8/23 13:21		1.015	0.0271	mg/L	0.000152	0.001015	
* Potassium, Dissolved	9/7/23 14:38	9/8/23 13:21		1.015	58.4	mg/L	0.169505	0.5075	
* Selenium, Dissolved	9/7/23 14:38	9/8/23 13:21		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	9/7/23 14:38	9/8/23 13:21		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	9/7/23 16:09	9/7/23 20:41		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	9/11/23 08:47	9/11/23 08:47		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: DHC***								
Alkalinity pH Endpoint	9/12/23 10:42	9/12/23 15:34		1	4.53	SU		2	
* Alkalinity	9/12/23 10:42	9/12/23 15:34		1	229	mg CaCO3/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	9/7/23 13:50	9/11/23 13:15		1	1550	mg/L		125	
Analytical Method: SM 4500CO2 D	***Analyst: DHC***								
* Bicarbonate Alkalinity, (calc.)	9/12/23 10:42	9/12/23 15:34		1	227	mg CaCO3/L		1	A
* Carbonate Alkalinity, (calc.)	9/12/23 10:42	9/12/23 15:34		1	1.90	mg CaCO3/L		0.5	A
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	9/14/23 11:04	9/14/23 11:04		1	3.46	mg/L	1.00	2	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-21V

Location Code: WMWGORAP
Collected: 9/5/23 12:54
Customer ID:
Submittal Date: 9/7/23 10:51

Laboratory ID Number: BD17105

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	9/11/23 12:00	9/11/23 12:00		32	380	mg/L	16.00	32	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	9/11/23 15:34	9/11/23 15:34		1	0.391	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	9/7/23 14:54	9/7/23 14:54		25	430	mg/L	15.0	50	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	9/5/23 12:51	9/5/23 12:51			2326.14	uS/cm			FA
pH	9/5/23 12:51	9/5/23 12:51			7.68	SU			FA
Temperature	9/5/23 12:51	9/5/23 12:51			24.72	C			FA
Turbidity	9/5/23 12:51	9/5/23 12:51			4.05	NTU			FA
Sulfide	9/5/23 12:51	9/5/23 12:51			0	mg/L			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/5/23 12:54
Customer ID:
Delivery Date: 9/7/23 10:51

Description: Gorgas Ash Pond - MW-21V

Laboratory ID Number: BD17105

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17114	Aluminum, Dissolved	mg/L	0.000425	0.0198	0.100	0.0980	0.0999	0.0938	0.0850 to 0.115	98.0	70.0 to 130	1.92	20.0
BD17113	Aluminum, Total	mg/L	0.000780	0.0198	0.100	0.0995	0.100	0.0986	0.0850 to 0.115	99.5	70.0 to 130	0.501	20.0
BD17114	Antimony, Dissolved	mg/L	0.000270	0.00100	0.100	0.107	0.105	0.0935	0.0850 to 0.115	107	70.0 to 130	1.89	20.0
BD17113	Antimony, Total	mg/L	0.000278	0.00100	0.100	0.101	0.101	0.0972	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BD17114	Arsenic, Dissolved	mg/L	0.0000525	0.000200	0.100	0.174	0.174	0.104	0.0850 to 0.115	109	70.0 to 130	0.00	20.0
BD17113	Arsenic, Total	mg/L	0.0000220	0.000200	0.100	0.204	0.203	0.0991	0.0850 to 0.115	104	70.0 to 130	0.491	20.0
BD17114	Barium, Dissolved	mg/L	0.0000082	0.00100	0.100	0.112	0.111	0.0954	0.0850 to 0.115	98.2	70.0 to 130	0.897	20.0
BD17113	Barium, Total	mg/L	-0.0000007	0.00100	0.100	0.674	0.653	0.0932	0.0850 to 0.115	103	70.0 to 130	3.17	20.0
BD17114	Beryllium, Dissolved	mg/L	0.0000831	0.000880	0.100	0.0974	0.0977	0.0980	0.0850 to 0.115	97.4	70.0 to 130	0.308	20.0
BD17113	Beryllium, Total	mg/L	0.000110	0.000880	0.100	0.0948	0.0961	0.0900	0.0850 to 0.115	94.8	70.0 to 130	1.36	20.0
BD17114	Boron, Dissolved	mg/L	-0.000333	0.0650	1.00	1.08	1.07	1.02	0.850 to 1.15	104	70.0 to 130	0.930	20.0
BD17113	Boron, Total	mg/L	0.000355	0.0650	1.00	2.38	2.39	1.01	0.850 to 1.15	102	70.0 to 130	0.419	20.0
BD17114	Cadmium, Dissolved	mg/L	-0.0000081	0.000147	0.100	0.103	0.102	0.102	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BD17113	Cadmium, Total	mg/L	-0.0000002	0.000147	0.100	0.0987	0.101	0.0998	0.0850 to 0.115	98.7	70.0 to 130	2.30	20.0
BD17114	Calcium, Dissolved	mg/L	-0.0117	0.152	5.00	85.6	84.3	5.08	4.25 to 5.75	204	70.0 to 130	1.53	20.0
BD17113	Calcium, Total	mg/L	-0.0276	0.152	5.00	58.8	60.7	5.12	4.25 to 5.75	98.0	70.0 to 130	3.18	20.0
BD17109	Chloride	mg/L	0.0244	1.00	800	1250	1340	10.3	9.00 to 11.0	95.1	80.0 to 120	6.95	20.0
BD17114	Chromium, Dissolved	mg/L	-0.000104	0.000440	0.100	0.0983	0.101	0.0972	0.0850 to 0.115	98.3	70.0 to 130	2.71	20.0
BD17113	Chromium, Total	mg/L	-0.0000753	0.000440	0.100	0.0985	0.0995	0.0980	0.0850 to 0.115	98.5	70.0 to 130	1.01	20.0
BD17114	Cobalt, Dissolved	mg/L	0.0000006	0.000147	0.100	0.101	0.103	0.100	0.0850 to 0.115	100	70.0 to 130	1.96	20.0
BD17113	Cobalt, Total	mg/L	0.0000106	0.000147	0.100	0.0992	0.0998	0.101	0.0850 to 0.115	99.2	70.0 to 130	0.603	20.0
BD17109	Fluoride	mg/L	0.0252	0.125	2.50	2.96	2.93	2.67	2.25 to 2.75	107	80.0 to 120	1.02	20.0
BD17114	Iron, Dissolved	mg/L	0.00162	0.0176	0.2	47.4	46.1	0.202	0.170 to 0.230	350	70.0 to 130	2.78	20.0
BD17113	Iron, Total	mg/L	-0.00332	0.0176	0.2	0.227	0.225	0.200	0.170 to 0.230	102	70.0 to 130	0.885	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/5/23 12:54
Customer ID:
Delivery Date: 9/7/23 10:51

Description: Gorgas Ash Pond - MW-21V

Laboratory ID Number: BD17105

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17114	Lead, Dissolved	mg/L	0.0000049	0.000147	0.100	0.0927	0.0940	0.0969	0.0850 to 0.115	92.7	70.0 to 130	1.39	20.0
BD17113	Lead, Total	mg/L	0.0000076	0.000147	0.100	0.0955	0.0971	0.0976	0.0850 to 0.115	95.5	70.0 to 130	1.66	20.0
BD17114	Lithium, Dissolved	mg/L	0.000425	0.0154	0.200	0.238	0.234	0.200	0.170 to 0.230	104	70.0 to 130	1.69	20.0
BD17113	Lithium, Total	mg/L	0.000205	0.0154	0.200	0.515	0.523	0.203	0.170 to 0.230	103	70.0 to 130	1.54	20.0
BD17114	Magnesium, Dissolved	mg/L	0.00215	0.0462	5.00	39.9	39.9	5.23	4.25 to 5.75	106	70.0 to 130	0.00	20.0
BD17113	Magnesium, Total	mg/L	-0.0156	0.0462	5.00	21.3	21.5	5.25	4.25 to 5.75	104	70.0 to 130	0.935	20.0
BD17114	Manganese, Dissolved	mg/L	-0.0000103	0.00033	0.100	1.48	1.49	0.0977	0.0850 to 0.115	70.0	70.0 to 130	0.673	20.0
BD17113	Manganese, Total	mg/L	-0.0000601	0.00033	0.100	0.268	0.273	0.0972	0.0850 to 0.115	98.0	70.0 to 130	1.85	20.0
BD17113	Mercury, Total by CVAA	mg/L	4.000E-05	0.000500	0.004	0.00403	0.00403	0.00404	0.00340 to 0.00460	101	70.0 to 130	0.00	20.0
BD17114	Molybdenum, Dissolved	mg/L	0.00120	0.0100	0.2	0.202	0.203	0.202	0.170 to 0.230	101	70.0 to 130	0.494	20.0
BD17113	Molybdenum, Total	mg/L	0.001	0.0100	0.2	0.215	0.216	0.204	0.170 to 0.230	102	70.0 to 130	0.464	20.0
BD17114	Potassium, Dissolved	mg/L	-0.0436	0.367	10.0	11.7	12.1	9.65	8.50 to 11.5	97.6	70.0 to 130	3.36	20.0
BD17113	Potassium, Total	mg/L	-0.00994	0.367	10.0	12.0	12.0	10.3	8.50 to 11.5	97.4	70.0 to 130	0.00	20.0
BD17114	Selenium, Dissolved	mg/L	-0.0000491	0.00100	0.100	0.104	0.107	0.103	0.0850 to 0.115	104	70.0 to 130	2.84	20.0
BD17113	Selenium, Total	mg/L	-0.0000097	0.00100	0.100	0.103	0.102	0.101	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BD17114	Silicon, Dissolved	mg/L	0.000595	0.0440	1.00	14.6	14.6	1.04	0.850 to 1.15	100	70.0 to 130	0.00	20.0
BD17113	Silicon, Total	mg/L	0.00200	0.0440	1.00	7.96	8.01	1.04	0.850 to 1.15	104	70.0 to 130	0.626	20.0
BD17114	Sodium, Dissolved	mg/L	0.00544	0.0880	5.00	24.6	24.3	5.13	4.25 to 5.75	106	70.0 to 130	1.23	20.0
BD17113	Sodium, Total	mg/L	0.00259	0.0880	5.00	32.3	32.8	5.11	4.25 to 5.75	104	70.0 to 130	1.54	20.0
BD17109	Sulfate	mg/L	-0.0331	2.0	640	1160	1180	20.9	18.0 to 22.0	100	80.0 to 120	1.71	20.0
BD17114	Thallium, Dissolved	mg/L	-0.0000048	0.000147	0.100	0.0923	0.0938	0.0997	0.0850 to 0.115	92.3	70.0 to 130	1.61	20.0
BD17113	Thallium, Total	mg/L	0.0000085	0.000147	0.100	0.0950	0.0970	0.0982	0.0850 to 0.115	95.0	70.0 to 130	2.08	20.0
BD17113	Total Organic Carbon	mg/L	0.140	1.00	10.0	10.1	9.98	10.2		89.8	80.0 to 120	1.20	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/5/23 12:54
Customer ID:
Delivery Date: 9/7/23 10:51

Description: Gorgas Ash Pond - MW-21V

Laboratory ID Number: BD17105

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17116	Alkalinity	mg CaCO3/L					222	51.9	45.0 to 55.0			0.00	10.0
BD17109	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.05	0.200	2.00	2.24	0.199	1.94	1.80 to 2.20	99.8	90.0 to 110	20.7	15.0
BD17111	Solids, Dissolved	mg/L	2.00	25.0			308	55.0	40.0 to 60.0			0.325	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 10/25/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-30HA

Location Code: WMWGORAP
Collected: 9/5/23 15:34
Customer ID:
Submittal Date: 9/7/23 10:51

Laboratory ID Number: BD17106

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	9/8/23 07:51	9/14/23 15:23		1.015	0.0607	mg/L	0.030000	0.1015	J
* Calcium, Total	9/8/23 07:51	9/14/23 19:03		10.15	45.1	mg/L	0.70035	4.06	
* Iron, Total	9/8/23 07:51	9/14/23 15:23		1.015	2.78	mg/L	0.008120	0.0406	
* Lithium, Total	9/8/23 07:51	9/14/23 15:23		1.015	0.0558	mg/L	0.007105	0.01999956	
* Magnesium, Total	9/8/23 07:51	9/14/23 15:23		1.015	7.91	mg/L	0.021315	0.406	
* Molybdenum, Total	9/8/23 07:51	9/14/23 15:23		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Total (calc.)	9/8/23 07:51	9/14/23 15:23		1	23.3	mg/L			
* Silicon, Total	9/8/23 07:51	9/14/23 15:23		1.015	10.9	mg/L	0.02030	0.25375	
* Sodium, Total	9/8/23 07:51	9/14/23 19:03		10.15	192	mg/L	0.4060	4.06	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	9/17/23 14:38	9/14/23 14:14		1.015	0.0601	mg/L	0.030000	0.1015	J
* Calcium, Dissolved	9/17/23 14:38	9/14/23 17:43		10.15	48.1	mg/L	0.70035	4.06	
* Iron, Dissolved	9/17/23 14:38	9/14/23 14:14		1.015	2.67	mg/L	0.008120	0.0406	
* Lithium, Dissolved	9/17/23 14:38	9/14/23 14:14		1.015	0.0566	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	9/17/23 14:38	9/14/23 14:14		1.015	8.13	mg/L	0.021315	0.406	
* Molybdenum, Dissolved	9/17/23 14:38	9/14/23 14:14		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Dissolved (calc.)	9/17/23 14:38	9/14/23 14:14		1	22.9	mg/L			
* Silicon, Dissolved	9/17/23 14:38	9/14/23 14:14		1.015	10.7	mg/L	0.02030	0.25375	
* Sodium, Dissolved	9/17/23 14:38	9/14/23 17:43		10.15	202	mg/L	0.4060	4.06	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	9/8/23 07:51	9/8/23 11:20		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Arsenic, Total	9/8/23 07:51	9/8/23 11:20		1.015	0.00325	mg/L	0.000112	0.000203	
* Aluminum, Total	9/8/23 07:51	9/8/23 11:20		1.015	0.168	mg/L	0.009135	0.05075	
* Barium, Total	9/8/23 07:51	9/8/23 11:20		1.015	0.116	mg/L	0.000508	0.001015	
* Beryllium, Total	9/8/23 07:51	9/8/23 11:20		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	9/8/23 07:51	9/8/23 11:20		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	9/8/23 07:51	9/8/23 11:20		1.015	0.000322	mg/L	0.000203	0.001015	J
* Cobalt, Total	9/8/23 07:51	9/8/23 11:20		1.015	0.000144	mg/L	0.000068	0.000203	J
* Lead, Total	9/8/23 07:51	9/8/23 11:20		1.015	0.000294	mg/L	0.000068	0.000203	
* Manganese, Total	9/8/23 07:51	9/8/23 11:20		1.015	0.139	mg/L	0.000152	0.001015	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-30HA

Location Code: WMWGORAP
Collected: 9/5/23 15:34
Customer ID:
Submittal Date: 9/7/23 10:51

Laboratory ID Number: BD17106

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	9/8/23 07:51	9/8/23 11:20		1.015	3.80	mg/L	0.169505	0.5075	
* Selenium, Total	9/8/23 07:51	9/8/23 11:20		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	9/8/23 07:51	9/8/23 11:20		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	9/7/23 14:38	9/8/23 13:25		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	9/7/23 14:38	9/8/23 13:25		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Dissolved	9/7/23 14:38	9/8/23 13:25		1.015	0.00355	mg/L	0.000112	0.000203	
* Barium, Dissolved	9/7/23 14:38	9/8/23 13:25		1.015	0.113	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	9/7/23 14:38	9/8/23 13:25		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	9/7/23 14:38	9/8/23 13:25		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	9/7/23 14:38	9/8/23 13:25		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	9/7/23 14:38	9/8/23 13:25		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Dissolved	9/7/23 14:38	9/8/23 13:25		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	9/7/23 14:38	9/8/23 13:25		1.015	0.130	mg/L	0.000152	0.001015	
* Potassium, Dissolved	9/7/23 14:38	9/8/23 13:25		1.015	3.62	mg/L	0.169505	0.5075	
* Selenium, Dissolved	9/7/23 14:38	9/8/23 13:25		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	9/7/23 14:38	9/8/23 13:25		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	9/7/23 16:09	9/7/23 20:45		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	9/11/23 08:48	9/11/23 08:48		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: DHC***								
Alkalinity pH Endpoint	9/12/23 10:42	9/12/23 15:34		1	4.51	SU		2	
* Alkalinity	9/12/23 10:42	9/12/23 15:34		1	303	mg CaCO3/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	9/7/23 13:50	9/11/23 13:15		1	696	mg/L		50	
Analytical Method: SM 4500CO2 D	***Analyst: DHC***								
* Bicarbonate Alkalinity, (calc.)	9/12/23 10:42	9/12/23 15:34		1	301	mg CaCO3/L		1	A
* Carbonate Alkalinity, (calc.)	9/12/23 10:42	9/12/23 15:34		1	1.56	mg CaCO3/L		0.5	A
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	9/14/23 11:19	9/14/23 11:19		1	1.48	mg/L	1.00	2	J

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-30HA

Location Code: WMWGORAP
Collected: 9/5/23 15:34
Customer ID:
Submittal Date: 9/7/23 10:51

Laboratory ID Number: BD17106

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	9/11/23 11:51	9/11/23 11:51		1	6.67	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	9/11/23 15:35	9/11/23 15:35		1	1.86	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	9/7/23 14:56	9/7/23 14:56		16	244	mg/L	9.6	32	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	9/5/23 15:31	9/5/23 15:31			883.30	uS/cm			FA
pH	9/5/23 15:31	9/5/23 15:31			7.32	SU			FA
Temperature	9/5/23 15:31	9/5/23 15:31			23.62	C			FA
Turbidity	9/5/23 15:31	9/5/23 15:31			8.96	NTU			FA
Sulfide	9/5/23 15:31	9/5/23 15:31			0	mg/L			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 10/25/2023
Version: 3.5
COA_CCR

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/5/23 15:34
Customer ID:
Delivery Date: 9/7/23 10:51

Description: Gorgas Ash Pond - MW-30HA

Laboratory ID Number: BD17106

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17114	Aluminum, Dissolved	mg/L	0.000425	0.0198	0.100	0.0980	0.0999	0.0938	0.0850 to 0.115	98.0	70.0 to 130	1.92	20.0
BD17113	Aluminum, Total	mg/L	0.000780	0.0198	0.100	0.0995	0.100	0.0986	0.0850 to 0.115	99.5	70.0 to 130	0.501	20.0
BD17114	Antimony, Dissolved	mg/L	0.000270	0.00100	0.100	0.107	0.105	0.0935	0.0850 to 0.115	107	70.0 to 130	1.89	20.0
BD17113	Antimony, Total	mg/L	0.000278	0.00100	0.100	0.101	0.101	0.0972	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BD17114	Arsenic, Dissolved	mg/L	0.0000525	0.000200	0.100	0.174	0.174	0.104	0.0850 to 0.115	109	70.0 to 130	0.00	20.0
BD17113	Arsenic, Total	mg/L	0.0000220	0.000200	0.100	0.204	0.203	0.0991	0.0850 to 0.115	104	70.0 to 130	0.491	20.0
BD17114	Barium, Dissolved	mg/L	0.0000082	0.00100	0.100	0.112	0.111	0.0954	0.0850 to 0.115	98.2	70.0 to 130	0.897	20.0
BD17113	Barium, Total	mg/L	-0.0000007	0.00100	0.100	0.674	0.653	0.0932	0.0850 to 0.115	103	70.0 to 130	3.17	20.0
BD17114	Beryllium, Dissolved	mg/L	0.0000831	0.000880	0.100	0.0974	0.0977	0.0980	0.0850 to 0.115	97.4	70.0 to 130	0.308	20.0
BD17113	Beryllium, Total	mg/L	0.000110	0.000880	0.100	0.0948	0.0961	0.0900	0.0850 to 0.115	94.8	70.0 to 130	1.36	20.0
BD17114	Boron, Dissolved	mg/L	-0.000333	0.0650	1.00	1.08	1.07	1.02	0.850 to 1.15	104	70.0 to 130	0.930	20.0
BD17113	Boron, Total	mg/L	0.000355	0.0650	1.00	2.38	2.39	1.01	0.850 to 1.15	102	70.0 to 130	0.419	20.0
BD17114	Cadmium, Dissolved	mg/L	-0.0000081	0.000147	0.100	0.103	0.102	0.102	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BD17113	Cadmium, Total	mg/L	-0.0000002	0.000147	0.100	0.0987	0.101	0.0998	0.0850 to 0.115	98.7	70.0 to 130	2.30	20.0
BD17114	Calcium, Dissolved	mg/L	-0.0117	0.152	5.00	85.6	84.3	5.08	4.25 to 5.75	204	70.0 to 130	1.53	20.0
BD17113	Calcium, Total	mg/L	-0.0276	0.152	5.00	58.8	60.7	5.12	4.25 to 5.75	98.0	70.0 to 130	3.18	20.0
BD17109	Chloride	mg/L	0.0244	1.00	800	1250	1340	10.3	9.00 to 11.0	95.1	80.0 to 120	6.95	20.0
BD17114	Chromium, Dissolved	mg/L	-0.000104	0.000440	0.100	0.0983	0.101	0.0972	0.0850 to 0.115	98.3	70.0 to 130	2.71	20.0
BD17113	Chromium, Total	mg/L	-0.0000753	0.000440	0.100	0.0985	0.0995	0.0980	0.0850 to 0.115	98.5	70.0 to 130	1.01	20.0
BD17114	Cobalt, Dissolved	mg/L	0.0000006	0.000147	0.100	0.101	0.103	0.100	0.0850 to 0.115	100	70.0 to 130	1.96	20.0
BD17113	Cobalt, Total	mg/L	0.0000106	0.000147	0.100	0.0992	0.0998	0.101	0.0850 to 0.115	99.2	70.0 to 130	0.603	20.0
BD17109	Fluoride	mg/L	0.0252	0.125	2.50	2.96	2.93	2.67	2.25 to 2.75	107	80.0 to 120	1.02	20.0
BD17114	Iron, Dissolved	mg/L	0.00162	0.0176	0.2	47.4	46.1	0.202	0.170 to 0.230	350	70.0 to 130	2.78	20.0
BD17113	Iron, Total	mg/L	-0.00332	0.0176	0.2	0.227	0.225	0.200	0.170 to 0.230	102	70.0 to 130	0.885	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/5/23 15:34
Customer ID:
Delivery Date: 9/7/23 10:51

Description: Gorgas Ash Pond - MW-30HA

Laboratory ID Number: BD17106

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17114	Lead, Dissolved	mg/L	0.0000049	0.000147	0.100	0.0927	0.0940	0.0969	0.0850 to 0.115	92.7	70.0 to 130	1.39	20.0
BD17113	Lead, Total	mg/L	0.0000076	0.000147	0.100	0.0955	0.0971	0.0976	0.0850 to 0.115	95.5	70.0 to 130	1.66	20.0
BD17114	Lithium, Dissolved	mg/L	0.000425	0.0154	0.200	0.238	0.234	0.200	0.170 to 0.230	104	70.0 to 130	1.69	20.0
BD17113	Lithium, Total	mg/L	0.000205	0.0154	0.200	0.515	0.523	0.203	0.170 to 0.230	103	70.0 to 130	1.54	20.0
BD17114	Magnesium, Dissolved	mg/L	0.00215	0.0462	5.00	39.9	39.9	5.23	4.25 to 5.75	106	70.0 to 130	0.00	20.0
BD17113	Magnesium, Total	mg/L	-0.0156	0.0462	5.00	21.3	21.5	5.25	4.25 to 5.75	104	70.0 to 130	0.935	20.0
BD17114	Manganese, Dissolved	mg/L	-0.0000103	0.00033	0.100	1.48	1.49	0.0977	0.0850 to 0.115	70.0	70.0 to 130	0.673	20.0
BD17113	Manganese, Total	mg/L	-0.0000601	0.00033	0.100	0.268	0.273	0.0972	0.0850 to 0.115	98.0	70.0 to 130	1.85	20.0
BD17113	Mercury, Total by CVAA	mg/L	4.000E-05	0.000500	0.004	0.00403	0.00403	0.00404	0.00340 to 0.00460	101	70.0 to 130	0.00	20.0
BD17114	Molybdenum, Dissolved	mg/L	0.00120	0.0100	0.2	0.202	0.203	0.202	0.170 to 0.230	101	70.0 to 130	0.494	20.0
BD17113	Molybdenum, Total	mg/L	0.001	0.0100	0.2	0.215	0.216	0.204	0.170 to 0.230	102	70.0 to 130	0.464	20.0
BD17114	Potassium, Dissolved	mg/L	-0.0436	0.367	10.0	11.7	12.1	9.65	8.50 to 11.5	97.6	70.0 to 130	3.36	20.0
BD17113	Potassium, Total	mg/L	-0.00994	0.367	10.0	12.0	12.0	10.3	8.50 to 11.5	97.4	70.0 to 130	0.00	20.0
BD17114	Selenium, Dissolved	mg/L	-0.0000491	0.00100	0.100	0.104	0.107	0.103	0.0850 to 0.115	104	70.0 to 130	2.84	20.0
BD17113	Selenium, Total	mg/L	-0.0000097	0.00100	0.100	0.103	0.102	0.101	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BD17114	Silicon, Dissolved	mg/L	0.000595	0.0440	1.00	14.6	14.6	1.04	0.850 to 1.15	100	70.0 to 130	0.00	20.0
BD17113	Silicon, Total	mg/L	0.00200	0.0440	1.00	7.96	8.01	1.04	0.850 to 1.15	104	70.0 to 130	0.626	20.0
BD17114	Sodium, Dissolved	mg/L	0.00544	0.0880	5.00	24.6	24.3	5.13	4.25 to 5.75	106	70.0 to 130	1.23	20.0
BD17113	Sodium, Total	mg/L	0.00259	0.0880	5.00	32.3	32.8	5.11	4.25 to 5.75	104	70.0 to 130	1.54	20.0
BD17109	Sulfate	mg/L	-0.0331	2.0	640	1160	1180	20.9	18.0 to 22.0	100	80.0 to 120	1.71	20.0
BD17114	Thallium, Dissolved	mg/L	-0.0000048	0.000147	0.100	0.0923	0.0938	0.0997	0.0850 to 0.115	92.3	70.0 to 130	1.61	20.0
BD17113	Thallium, Total	mg/L	0.0000085	0.000147	0.100	0.0950	0.0970	0.0982	0.0850 to 0.115	95.0	70.0 to 130	2.08	20.0
BD17113	Total Organic Carbon	mg/L	0.140	1.00	10.0	10.1	9.98	10.2		89.8	80.0 to 120	1.20	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/5/23 15:34
Customer ID:
Delivery Date: 9/7/23 10:51

Description: Gorgas Ash Pond - MW-30HA

Laboratory ID Number: BD17106

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17116	Alkalinity	mg CaCO3/L					222	51.9	45.0 to 55.0			0.00	10.0
BD17109	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.05	0.200	2.00	2.24	0.199	1.94	1.80 to 2.20	99.8	90.0 to 110	20.7	15.0
BD17111	Solids, Dissolved	mg/L	2.00	25.0			308	55.0	40.0 to 60.0			0.325	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond Field Blank-2

Location Code: WMWGORAPFB
Collected: 9/5/23 16:30
Customer ID:
Submittal Date: 9/7/23 10:51

Laboratory ID Number: BD17107

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7		***Analyst: ABB***			***Preparation Method: EPA 1638***				
* Boron, Total	9/8/23 07:51	9/14/23 15:26		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	9/8/23 07:51	9/14/23 15:26		1.015	Not Detected	mg/L	0.070035	0.406	U
* Iron, Total	9/8/23 07:51	9/14/23 15:26		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Total	9/8/23 07:51	9/14/23 15:26		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	9/8/23 07:51	9/14/23 15:26		1.015	Not Detected	mg/L	0.021315	0.406	U
* Molybdenum, Total	9/8/23 07:51	9/14/23 15:26		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Total (calc.)	9/8/23 07:51	9/14/23 15:26		1	Not Detected	mg/L			
* Silicon, Total	9/8/23 07:51	9/14/23 15:26		1.015	Not Detected	mg/L	0.02030	0.25375	U
* Sodium, Total	9/8/23 07:51	9/14/23 15:26		1.015	0.0648	mg/L	0.04060	0.406	J
Analytical Method: EPA 200.8		***Analyst: DLJ***			***Preparation Method: EPA 1638***				
* Antimony, Total	9/8/23 07:51	9/8/23 11:24		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Total	9/8/23 07:51	9/8/23 11:24		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Total	9/8/23 07:51	9/8/23 11:24		1.015	Not Detected	mg/L	0.000112	0.000203	U
* Barium, Total	9/8/23 07:51	9/8/23 11:24		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Beryllium, Total	9/8/23 07:51	9/8/23 11:24		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	9/8/23 07:51	9/8/23 11:24		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	9/8/23 07:51	9/8/23 11:24		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	9/8/23 07:51	9/8/23 11:24		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	9/8/23 07:51	9/8/23 11:24		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	9/8/23 07:51	9/8/23 11:24		1.015	Not Detected	mg/L	0.000152	0.001015	U
* Potassium, Total	9/8/23 07:51	9/8/23 11:24		1.015	Not Detected	mg/L	0.169505	0.5075	U
* Selenium, Total	9/8/23 07:51	9/8/23 11:24		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	9/8/23 07:51	9/8/23 11:24		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1		***Analyst: ABB***							
* Mercury, Total by CVAA	9/7/23 16:09	9/7/23 20:49		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2		***Analyst: SC***							
* Nitrogen, Nitrate/Nitrite	9/11/23 08:50	9/11/23 08:50		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2540C		***Analyst: CNJ***							
* Solids, Dissolved	9/7/23 13:50	9/11/23 13:15		1	Not Detected	mg/L		25	U

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments:

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond Field Blank-2

Location Code: WMWGORAPFB
Collected: 9/5/23 16:30
Customer ID:
Submittal Date: 9/7/23 10:51

Laboratory ID Number: BD17107

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	9/14/23 11:36	9/14/23 11:36		1	Not Detected	mg/L	1.00	2	U
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	9/11/23 11:53	9/11/23 11:53		1	Not Detected	mg/L	0.50	1	U
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	9/11/23 15:36	9/11/23 15:36		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	9/7/23 14:44	9/7/23 14:44		1	Not Detected	mg/L	0.6	2	U

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments:

Batch QC Summary

Customer Account: WMWGORAPFB
Sample Date: 9/5/23 16:30
Customer ID:
Delivery Date: 9/7/23 10:51

Description: Gorgas Ash Pond Field Blank-2

Laboratory ID Number: BD17107

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17113	Aluminum, Total	mg/L	0.000780	0.0198	0.100	0.0995	0.100	0.0986	0.0850 to 0.115	99.5	70.0 to 130	0.501	20.0
BD17113	Antimony, Total	mg/L	0.000278	0.00100	0.100	0.101	0.101	0.0972	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BD17113	Arsenic, Total	mg/L	0.0000220	0.000200	0.100	0.204	0.203	0.0991	0.0850 to 0.115	104	70.0 to 130	0.491	20.0
BD17113	Barium, Total	mg/L	-0.0000007	0.00100	0.100	0.674	0.653	0.0932	0.0850 to 0.115	103	70.0 to 130	3.17	20.0
BD17113	Beryllium, Total	mg/L	0.000110	0.000880	0.100	0.0948	0.0961	0.0900	0.0850 to 0.115	94.8	70.0 to 130	1.36	20.0
BD17113	Boron, Total	mg/L	0.000355	0.0650	1.00	2.38	2.39	1.01	0.850 to 1.15	102	70.0 to 130	0.419	20.0
BD17113	Cadmium, Total	mg/L	-0.0000002	0.000147	0.100	0.0987	0.101	0.0998	0.0850 to 0.115	98.7	70.0 to 130	2.30	20.0
BD17113	Calcium, Total	mg/L	-0.0276	0.152	5.00	58.8	60.7	5.12	4.25 to 5.75	98.0	70.0 to 130	3.18	20.0
BD17109	Chloride	mg/L	0.0244	1.00	800	1250	1340	10.3	9.00 to 11.0	95.1	80.0 to 120	6.95	20.0
BD17113	Chromium, Total	mg/L	-0.0000753	0.000440	0.100	0.0985	0.0995	0.0980	0.0850 to 0.115	98.5	70.0 to 130	1.01	20.0
BD17113	Cobalt, Total	mg/L	0.0000106	0.000147	0.100	0.0992	0.0998	0.101	0.0850 to 0.115	99.2	70.0 to 130	0.603	20.0
BD17109	Fluoride	mg/L	0.0252	0.125	2.50	2.96	2.93	2.67	2.25 to 2.75	107	80.0 to 120	1.02	20.0
BD17113	Iron, Total	mg/L	-0.00332	0.0176	0.2	0.227	0.225	0.200	0.170 to 0.230	102	70.0 to 130	0.885	20.0
BD17113	Lead, Total	mg/L	0.0000076	0.000147	0.100	0.0955	0.0971	0.0976	0.0850 to 0.115	95.5	70.0 to 130	1.66	20.0
BD17113	Lithium, Total	mg/L	0.000205	0.0154	0.200	0.515	0.523	0.203	0.170 to 0.230	103	70.0 to 130	1.54	20.0
BD17113	Magnesium, Total	mg/L	-0.0156	0.0462	5.00	21.3	21.5	5.25	4.25 to 5.75	104	70.0 to 130	0.935	20.0
BD17113	Manganese, Total	mg/L	-0.0000601	0.00033	0.100	0.268	0.273	0.0972	0.0850 to 0.115	98.0	70.0 to 130	1.85	20.0
BD17113	Mercury, Total by CVAA	mg/L	4.000E-05	0.000500	0.004	0.00403	0.00403	0.00404	0.00340 to 0.00460	101	70.0 to 130	0.00	20.0
BD17113	Molybdenum, Total	mg/L	0.001	0.0100	0.2	0.215	0.216	0.204	0.170 to 0.230	102	70.0 to 130	0.464	20.0
BD17113	Potassium, Total	mg/L	-0.00994	0.367	10.0	12.0	12.0	10.3	8.50 to 11.5	97.4	70.0 to 130	0.00	20.0
BD17113	Selenium, Total	mg/L	-0.0000097	0.00100	0.100	0.103	0.102	0.101	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BD17113	Silicon, Total	mg/L	0.00200	0.0440	1.00	7.96	8.01	1.04	0.850 to 1.15	104	70.0 to 130	0.626	20.0
BD17113	Sodium, Total	mg/L	0.00259	0.0880	5.00	32.3	32.8	5.11	4.25 to 5.75	104	70.0 to 130	1.54	20.0
BD17109	Sulfate	mg/L	-0.0331	2.0	640	1160	1180	20.9	18.0 to 22.0	100	80.0 to 120	1.71	20.0

Comments:

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAPFB
Sample Date: 9/5/23 16:30
Customer ID:
Delivery Date: 9/7/23 10:51

Description: Gorgas Ash Pond Field Blank-2

Laboratory ID Number: BD17107

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17113	Thallium, Total	mg/L	0.0000085	0.000147	0.100	0.0950	0.0970	0.0982	0.0850 to 0.115	95.0	70.0 to 130	2.08	20.0
BD17113	Total Organic Carbon	mg/L	0.140	1.00	10.0	10.1	9.98	10.2		89.8	80.0 to 120	1.20	20.0

Comments:

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAPFB
Sample Date: 9/5/23 16:30
Customer ID:
Delivery Date: 9/7/23 10:51

Description: Gorgas Ash Pond Field Blank-2

Laboratory ID Number: BD17107

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17109	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.05	0.200	2.00	2.24	0.199	1.94	1.80 to 2.20	99.8	90.0 to 110	20.7	15.0
BD17111	Solids, Dissolved	mg/L	2.00	25.0			308	55.0	40.0 to 60.0			0.325	10.0

Comments:

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-27HR

Location Code: WMWGORAP
Collected: 9/6/23 08:52
Customer ID:
Submittal Date: 9/7/23 10:51

Laboratory ID Number: BD17108

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	9/8/23 07:51	9/14/23 15:29		1.015	0.109	mg/L	0.030000	0.1015	
* Calcium, Total	9/8/23 07:51	9/14/23 19:06		10.15	107	mg/L	0.70035	4.06	
* Iron, Total	9/8/23 07:51	9/14/23 15:29		1.015	0.108	mg/L	0.008120	0.0406	
* Lithium, Total	9/8/23 07:51	9/14/23 15:29		1.015	0.121	mg/L	0.007105	0.01999956	
* Magnesium, Total	9/8/23 07:51	9/14/23 15:29		1.015	22.6	mg/L	0.021315	0.406	
* Molybdenum, Total	9/8/23 07:51	9/14/23 15:29		1.015	0.0279	mg/L	0.005075	0.01015	
* Silica, Total (calc.)	9/8/23 07:51	9/14/23 15:29		1	16.0	mg/L			
* Silicon, Total	9/8/23 07:51	9/14/23 15:29		1.015	7.47	mg/L	0.02030	0.25375	
* Sodium, Total	9/8/23 07:51	9/14/23 19:09		101.5	769	mg/L	4.060	40.6	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	9/17/23 14:38	9/14/23 14:17		1.015	0.107	mg/L	0.030000	0.1015	
* Calcium, Dissolved	9/17/23 14:38	9/14/23 17:46		10.15	98.9	mg/L	0.70035	4.06	
* Iron, Dissolved	9/17/23 14:38	9/14/23 14:17		1.015	0.109	mg/L	0.008120	0.0406	
* Lithium, Dissolved	9/17/23 14:38	9/14/23 14:17		1.015	0.123	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	9/17/23 14:38	9/14/23 14:17		1.015	21.2	mg/L	0.021315	0.406	
* Molybdenum, Dissolved	9/17/23 14:38	9/14/23 14:17		1.015	0.0159	mg/L	0.005075	0.01015	
* Silica, Dissolved (calc.)	9/17/23 14:38	9/14/23 14:17		1	16.1	mg/L			
* Silicon, Dissolved	9/17/23 14:38	9/14/23 14:17		1.015	7.54	mg/L	0.02030	0.25375	
* Sodium, Dissolved	9/17/23 14:38	9/14/23 17:49		101.5	797	mg/L	4.060	40.6	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	9/8/23 07:51	9/8/23 11:28		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Arsenic, Total	9/8/23 07:51	9/8/23 11:28		1.015	0.00122	mg/L	0.000112	0.000203	
* Aluminum, Total	9/8/23 07:51	9/8/23 11:28		1.015	0.0132	mg/L	0.009135	0.05075	J
* Barium, Total	9/8/23 07:51	9/8/23 11:28		1.015	0.0401	mg/L	0.000508	0.001015	
* Beryllium, Total	9/8/23 07:51	9/8/23 11:28		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	9/8/23 07:51	9/8/23 11:28		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	9/8/23 07:51	9/8/23 11:28		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	9/8/23 07:51	9/8/23 11:28		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	9/8/23 07:51	9/8/23 11:28		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	9/8/23 07:51	9/8/23 11:28		1.015	0.517	mg/L	0.000152	0.001015	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-27HR

Location Code: WMWGORAP
Collected: 9/6/23 08:52
Customer ID:
Submittal Date: 9/7/23 10:51

Laboratory ID Number: BD17108

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	9/8/23 07:51	9/8/23 11:28		1.015	47.6	mg/L	0.169505	0.5075	
* Selenium, Total	9/8/23 07:51	9/8/23 11:28		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	9/8/23 07:51	9/8/23 11:28		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	9/7/23 14:38	9/8/23 13:29		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	9/7/23 14:38	9/8/23 13:29		1.015	0.0115	mg/L	0.009135	0.05075	J
* Arsenic, Dissolved	9/7/23 14:38	9/8/23 13:29		1.015	0.000862	mg/L	0.000112	0.000203	
* Barium, Dissolved	9/7/23 14:38	9/8/23 13:29		1.015	0.0369	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	9/7/23 14:38	9/8/23 13:29		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	9/7/23 14:38	9/8/23 13:29		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	9/7/23 14:38	9/8/23 13:29		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	9/7/23 14:38	9/8/23 13:29		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Dissolved	9/7/23 14:38	9/8/23 13:29		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	9/7/23 14:38	9/8/23 13:29		1.015	0.570	mg/L	0.000152	0.001015	
* Potassium, Dissolved	9/7/23 14:38	9/8/23 13:29		1.015	29.8	mg/L	0.169505	0.5075	
* Selenium, Dissolved	10/12/23 23:23	10/12/23 12:58		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	9/7/23 14:38	9/8/23 13:29		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	9/7/23 16:09	9/7/23 20:53		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	9/11/23 08:52	9/11/23 08:52		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: DHC***								
Alkalinity pH Endpoint	9/12/23 10:42	9/12/23 15:34		1	4.49	SU		2	
* Alkalinity	9/12/23 10:42	9/12/23 15:34		1	249	mg CaCO3/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	9/7/23 13:50	9/11/23 13:15		1	2750	mg/L		178.6	
Analytical Method: SM 4500CO2 D	***Analyst: DHC***								
* Bicarbonate Alkalinity, (calc.)	9/12/23 10:42	9/12/23 15:34		1	248	mg CaCO3/L		1	A
* Carbonate Alkalinity, (calc.)	9/12/23 10:42	9/12/23 15:34		1	1.43	mg CaCO3/L		0.5	A
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	9/14/23 11:50	9/14/23 11:50		1	10.3	mg/L	1.00	2	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-27HR

Location Code: WMWGORAP
Collected: 9/6/23 08:52
Customer ID:
Submittal Date: 9/7/23 10:51

Laboratory ID Number: BD17108

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	9/11/23 12:01	9/11/23 12:01		40	758	mg/L	20.00	40	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	9/11/23 15:37	9/11/23 15:37		1	0.285	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	9/7/23 14:57	9/7/23 14:57		50	858	mg/L	30.0	100	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	9/6/23 08:49	9/6/23 08:49			2983.56	uS/cm			FA
pH	9/6/23 08:49	9/6/23 08:49			7.35	SU			FA
Temperature	9/6/23 08:49	9/6/23 08:49			19.75	C			FA
Turbidity	9/6/23 08:49	9/6/23 08:49			5.92	NTU			FA
Sulfide	9/6/23 08:49	9/6/23 08:49			2.0	mg/L			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/6/23 08:52
Customer ID:
Delivery Date: 9/7/23 10:51

Description: Gorgas Ash Pond - MW-27HR

Laboratory ID Number: BD17108

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17114	Aluminum, Dissolved	mg/L	0.000425	0.0198	0.100	0.0980	0.0999	0.0938	0.0850 to 0.115	98.0	70.0 to 130	1.92	20.0
BD17113	Aluminum, Total	mg/L	0.000780	0.0198	0.100	0.0995	0.100	0.0986	0.0850 to 0.115	99.5	70.0 to 130	0.501	20.0
BD17114	Antimony, Dissolved	mg/L	0.000270	0.00100	0.100	0.107	0.105	0.0935	0.0850 to 0.115	107	70.0 to 130	1.89	20.0
BD17113	Antimony, Total	mg/L	0.000278	0.00100	0.100	0.101	0.101	0.0972	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BD17114	Arsenic, Dissolved	mg/L	0.0000525	0.000200	0.100	0.174	0.174	0.104	0.0850 to 0.115	109	70.0 to 130	0.00	20.0
BD17113	Arsenic, Total	mg/L	0.0000220	0.000200	0.100	0.204	0.203	0.0991	0.0850 to 0.115	104	70.0 to 130	0.491	20.0
BD17114	Barium, Dissolved	mg/L	0.0000082	0.00100	0.100	0.112	0.111	0.0954	0.0850 to 0.115	98.2	70.0 to 130	0.897	20.0
BD17113	Barium, Total	mg/L	-0.0000007	0.00100	0.100	0.674	0.653	0.0932	0.0850 to 0.115	103	70.0 to 130	3.17	20.0
BD17114	Beryllium, Dissolved	mg/L	0.0000831	0.000880	0.100	0.0974	0.0977	0.0980	0.0850 to 0.115	97.4	70.0 to 130	0.308	20.0
BD17113	Beryllium, Total	mg/L	0.000110	0.000880	0.100	0.0948	0.0961	0.0900	0.0850 to 0.115	94.8	70.0 to 130	1.36	20.0
BD17114	Boron, Dissolved	mg/L	-0.000333	0.0650	1.00	1.08	1.07	1.02	0.850 to 1.15	104	70.0 to 130	0.930	20.0
BD17113	Boron, Total	mg/L	0.000355	0.0650	1.00	2.38	2.39	1.01	0.850 to 1.15	102	70.0 to 130	0.419	20.0
BD17114	Cadmium, Dissolved	mg/L	-0.0000081	0.000147	0.100	0.103	0.102	0.102	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BD17113	Cadmium, Total	mg/L	-0.0000002	0.000147	0.100	0.0987	0.101	0.0998	0.0850 to 0.115	98.7	70.0 to 130	2.30	20.0
BD17114	Calcium, Dissolved	mg/L	-0.0117	0.152	5.00	85.6	84.3	5.08	4.25 to 5.75	204	70.0 to 130	1.53	20.0
BD17113	Calcium, Total	mg/L	-0.0276	0.152	5.00	58.8	60.7	5.12	4.25 to 5.75	98.0	70.0 to 130	3.18	20.0
BD17109	Chloride	mg/L	0.0244	1.00	800	1250	1340	10.3	9.00 to 11.0	95.1	80.0 to 120	6.95	20.0
BD17114	Chromium, Dissolved	mg/L	-0.000104	0.000440	0.100	0.0983	0.101	0.0972	0.0850 to 0.115	98.3	70.0 to 130	2.71	20.0
BD17113	Chromium, Total	mg/L	-0.0000753	0.000440	0.100	0.0985	0.0995	0.0980	0.0850 to 0.115	98.5	70.0 to 130	1.01	20.0
BD17114	Cobalt, Dissolved	mg/L	0.0000006	0.000147	0.100	0.101	0.103	0.100	0.0850 to 0.115	100	70.0 to 130	1.96	20.0
BD17113	Cobalt, Total	mg/L	0.0000106	0.000147	0.100	0.0992	0.0998	0.101	0.0850 to 0.115	99.2	70.0 to 130	0.603	20.0
BD17109	Fluoride	mg/L	0.0252	0.125	2.50	2.96	2.93	2.67	2.25 to 2.75	107	80.0 to 120	1.02	20.0
BD17114	Iron, Dissolved	mg/L	0.00162	0.0176	0.2	47.4	46.1	0.202	0.170 to 0.230	350	70.0 to 130	2.78	20.0
BD17113	Iron, Total	mg/L	-0.00332	0.0176	0.2	0.227	0.225	0.200	0.170 to 0.230	102	70.0 to 130	0.885	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/6/23 08:52
Customer ID:
Delivery Date: 9/7/23 10:51

Description: Gorgas Ash Pond - MW-27HR

Laboratory ID Number: BD17108

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17114	Lead, Dissolved	mg/L	0.0000049	0.000147	0.100	0.0927	0.0940	0.0969	0.0850 to 0.115	92.7	70.0 to 130	1.39	20.0
BD17113	Lead, Total	mg/L	0.0000076	0.000147	0.100	0.0955	0.0971	0.0976	0.0850 to 0.115	95.5	70.0 to 130	1.66	20.0
BD17114	Lithium, Dissolved	mg/L	0.000425	0.0154	0.200	0.238	0.234	0.200	0.170 to 0.230	104	70.0 to 130	1.69	20.0
BD17113	Lithium, Total	mg/L	0.000205	0.0154	0.200	0.515	0.523	0.203	0.170 to 0.230	103	70.0 to 130	1.54	20.0
BD17114	Magnesium, Dissolved	mg/L	0.00215	0.0462	5.00	39.9	39.9	5.23	4.25 to 5.75	106	70.0 to 130	0.00	20.0
BD17113	Magnesium, Total	mg/L	-0.0156	0.0462	5.00	21.3	21.5	5.25	4.25 to 5.75	104	70.0 to 130	0.935	20.0
BD17114	Manganese, Dissolved	mg/L	-0.0000103	0.00033	0.100	1.48	1.49	0.0977	0.0850 to 0.115	70.0	70.0 to 130	0.673	20.0
BD17113	Manganese, Total	mg/L	-0.0000601	0.00033	0.100	0.268	0.273	0.0972	0.0850 to 0.115	98.0	70.0 to 130	1.85	20.0
BD17113	Mercury, Total by CVAA	mg/L	4.000E-05	0.000500	0.004	0.00403	0.00403	0.00404	0.00340 to 0.00460	101	70.0 to 130	0.00	20.0
BD17114	Molybdenum, Dissolved	mg/L	0.00120	0.0100	0.2	0.202	0.203	0.202	0.170 to 0.230	101	70.0 to 130	0.494	20.0
BD17113	Molybdenum, Total	mg/L	0.001	0.0100	0.2	0.215	0.216	0.204	0.170 to 0.230	102	70.0 to 130	0.464	20.0
BD17114	Potassium, Dissolved	mg/L	-0.0436	0.367	10.0	11.7	12.1	9.65	8.50 to 11.5	97.6	70.0 to 130	3.36	20.0
BD17113	Potassium, Total	mg/L	-0.00994	0.367	10.0	12.0	12.0	10.3	8.50 to 11.5	97.4	70.0 to 130	0.00	20.0
BD17510	Selenium, Dissolved	mg/L	0.0000623	0.00100	0.100	0.108	0.111	0.0999	0.0850 to 0.115	107	70.0 to 130	2.74	20.0
BD17113	Selenium, Total	mg/L	-0.0000097	0.00100	0.100	0.103	0.102	0.101	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BD17114	Silicon, Dissolved	mg/L	0.000595	0.0440	1.00	14.6	14.6	1.04	0.850 to 1.15	100	70.0 to 130	0.00	20.0
BD17113	Silicon, Total	mg/L	0.00200	0.0440	1.00	7.96	8.01	1.04	0.850 to 1.15	104	70.0 to 130	0.626	20.0
BD17114	Sodium, Dissolved	mg/L	0.00544	0.0880	5.00	24.6	24.3	5.13	4.25 to 5.75	106	70.0 to 130	1.23	20.0
BD17113	Sodium, Total	mg/L	0.00259	0.0880	5.00	32.3	32.8	5.11	4.25 to 5.75	104	70.0 to 130	1.54	20.0
BD17109	Sulfate	mg/L	-0.0331	2.0	640	1160	1180	20.9	18.0 to 22.0	100	80.0 to 120	1.71	20.0
BD17114	Thallium, Dissolved	mg/L	-0.0000048	0.000147	0.100	0.0923	0.0938	0.0997	0.0850 to 0.115	92.3	70.0 to 130	1.61	20.0
BD17113	Thallium, Total	mg/L	0.0000085	0.000147	0.100	0.0950	0.0970	0.0982	0.0850 to 0.115	95.0	70.0 to 130	2.08	20.0
BD17113	Total Organic Carbon	mg/L	0.140	1.00	10.0	10.1	9.98	10.2		89.8	80.0 to 120	1.20	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/6/23 08:52
Customer ID:
Delivery Date: 9/7/23 10:51

Description: Gorgas Ash Pond - MW-27HR

Laboratory ID Number: BD17108

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17116	Alkalinity	mg CaCO3/L					222	51.9	45.0 to 55.0			0.00	10.0
BD17109	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.05	0.200	2.00	2.24	0.199	1.94	1.80 to 2.20	99.8	90.0 to 110	20.7	15.0
BD17111	Solids, Dissolved	mg/L	2.00	25.0			308	55.0	40.0 to 60.0			0.325	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 10/25/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-36V

Location Code: WMWGORAP
Collected: 9/6/23 11:45
Customer ID:
Submittal Date: 9/7/23 10:51

Laboratory ID Number: BD17109

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	9/8/23 07:51	9/14/23 15:33		1.015	0.0950	mg/L	0.030000	0.1015	J
* Calcium, Total	9/8/23 07:51	9/14/23 19:13		10.15	61.5	mg/L	0.70035	4.06	
* Iron, Total	9/8/23 07:51	9/14/23 15:33		1.015	0.609	mg/L	0.008120	0.0406	
* Lithium, Total	9/8/23 07:51	9/14/23 15:33		1.015	0.0545	mg/L	0.007105	0.01999956	
* Magnesium, Total	9/8/23 07:51	9/14/23 15:33		1.015	19.4	mg/L	0.021315	0.406	
* Molybdenum, Total	9/8/23 07:51	9/14/23 15:33		1.015	0.0381	mg/L	0.005075	0.01015	
* Silica, Total (calc.)	9/8/23 07:51	9/14/23 15:33		1	15.2	mg/L			
* Silicon, Total	9/8/23 07:51	9/14/23 15:33		1.015	7.08	mg/L	0.02030	0.25375	
* Sodium, Total	9/8/23 07:51	9/14/23 19:16		101.5	500	mg/L	4.060	40.6	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	9/17/23 14:38	9/14/23 14:20		1.015	0.0858	mg/L	0.030000	0.1015	J
* Calcium, Dissolved	9/17/23 14:38	9/14/23 17:53		10.15	51.0	mg/L	0.70035	4.06	
* Iron, Dissolved	9/17/23 14:38	9/14/23 14:20		1.015	0.564	mg/L	0.008120	0.0406	
* Lithium, Dissolved	9/17/23 14:38	9/14/23 14:20		1.015	0.0502	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	9/17/23 14:38	9/14/23 14:20		1.015	16.6	mg/L	0.021315	0.406	
* Molybdenum, Dissolved	9/17/23 14:38	9/14/23 14:20		1.015	0.0276	mg/L	0.005075	0.01015	
* Silica, Dissolved (calc.)	9/17/23 14:38	9/14/23 14:20		1	15.0	mg/L			
* Silicon, Dissolved	9/17/23 14:38	9/14/23 14:20		1.015	7.03	mg/L	0.02030	0.25375	
* Sodium, Dissolved	9/17/23 14:38	9/14/23 17:56		101.5	444	mg/L	4.060	40.6	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	9/8/23 07:51	9/8/23 11:32		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Arsenic, Total	9/8/23 07:51	9/8/23 11:32		1.015	0.00268	mg/L	0.000112	0.000203	
* Aluminum, Total	9/8/23 07:51	9/8/23 11:32		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Barium, Total	9/8/23 07:51	9/8/23 11:32		1.015	0.0803	mg/L	0.000508	0.001015	
* Beryllium, Total	9/8/23 07:51	9/8/23 11:32		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	9/8/23 07:51	9/8/23 11:32		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	9/8/23 07:51	9/8/23 11:32		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	9/8/23 07:51	9/8/23 11:32		1.015	0.000599	mg/L	0.000068	0.000203	
* Lead, Total	9/8/23 07:51	9/8/23 11:32		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	9/8/23 07:51	9/8/23 11:32		1.015	0.0823	mg/L	0.000152	0.001015	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
Precision is invalid due to sample concentration for Nitrate-Nitrite.

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-36V

Location Code: WMWGORAP
Collected: 9/6/23 11:45
Customer ID:
Submittal Date: 9/7/23 10:51

Laboratory ID Number: BD17109

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	9/8/23 07:51	9/8/23 11:32		1.015	66.6	mg/L	0.169505	0.5075	
* Selenium, Total	9/8/23 07:51	9/8/23 11:32		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	9/8/23 07:51	9/8/23 11:32		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	9/7/23 14:38	9/8/23 13:32		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	9/7/23 14:38	9/8/23 13:32		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Dissolved	9/7/23 14:38	9/8/23 13:32		1.015	0.00239	mg/L	0.000112	0.000203	
* Barium, Dissolved	9/7/23 14:38	9/8/23 13:32		1.015	0.0665	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	9/7/23 14:38	9/8/23 13:32		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	9/7/23 14:38	9/8/23 13:32		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	9/7/23 14:38	9/8/23 13:32		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	9/7/23 14:38	9/8/23 13:32		1.015	0.000427	mg/L	0.000068	0.000203	
* Lead, Dissolved	9/7/23 14:38	9/8/23 13:32		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	9/7/23 14:38	9/8/23 13:32		1.015	0.0739	mg/L	0.000152	0.001015	
* Potassium, Dissolved	9/7/23 14:38	9/8/23 13:32		1.015	57.6	mg/L	0.169505	0.5075	
* Selenium, Dissolved	9/7/23 14:38	9/8/23 13:32		1.015	0.000723	mg/L	0.000508	0.001015	J
* Thallium, Dissolved	9/7/23 14:38	9/8/23 13:32		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	9/7/23 16:09	9/7/23 20:57		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	9/11/23 08:54	9/11/23 08:54		1	0.245	mg/L as N	0.20	0.3	J
Analytical Method: SM 2320 B	***Analyst: DHC***								
Alkalinity pH Endpoint	9/12/23 10:42	9/12/23 15:34		1	4.52	SU		2	
* Alkalinity	9/12/23 10:42	9/12/23 15:34		1	305	mg CaCO3/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	9/7/23 13:50	9/11/23 13:15		1	1990	mg/L		147.1	
Analytical Method: SM 4500CO2 D	***Analyst: DHC***								
* Bicarbonate Alkalinity, (calc.)	9/12/23 10:42	9/12/23 15:34		1	303	mg CaCO3/L		1	A
* Carbonate Alkalinity, (calc.)	9/12/23 10:42	9/12/23 15:34		1	1.53	mg CaCO3/L		0.5	A
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	9/14/23 12:07	9/14/23 12:07		1	6.27	mg/L	1.00	2	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
Precision is invalid due to sample concentration for Nitrate-Nitrite.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-36V

Location Code: WMWGORAP
Collected: 9/6/23 11:45
Customer ID:
Submittal Date: 9/7/23 10:51

Laboratory ID Number: BD17109

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	9/11/23 12:13	9/11/23 12:13		80	489	mg/L	40.00	80	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	9/11/23 15:39	9/11/23 15:39		1	0.294	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	9/7/23 14:58	9/7/23 14:58		32	517	mg/L	19.2	64	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	9/6/23 11:41	9/6/23 11:41			2664.44	uS/cm			FA
pH	9/6/23 11:41	9/6/23 11:41			7.11	SU			FA
Temperature	9/6/23 11:41	9/6/23 11:41			24.32	C			FA
Turbidity	9/6/23 11:41	9/6/23 11:41			4.95	NTU			FA
Sulfide	9/6/23 11:41	9/6/23 11:41			3.0	mg/L			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
Precision is invalid due to sample concentration for Nitrate-Nitrite.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/6/23 11:45
Customer ID:
Delivery Date: 9/7/23 10:51

Description: Gorgas Ash Pond - MW-36V

Laboratory ID Number: BD17109

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17114	Aluminum, Dissolved	mg/L	0.000425	0.0198	0.100	0.0980	0.0999	0.0938	0.0850 to 0.115	98.0	70.0 to 130	1.92	20.0
BD17113	Aluminum, Total	mg/L	0.000780	0.0198	0.100	0.0995	0.100	0.0986	0.0850 to 0.115	99.5	70.0 to 130	0.501	20.0
BD17114	Antimony, Dissolved	mg/L	0.000270	0.00100	0.100	0.107	0.105	0.0935	0.0850 to 0.115	107	70.0 to 130	1.89	20.0
BD17113	Antimony, Total	mg/L	0.000278	0.00100	0.100	0.101	0.101	0.0972	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BD17114	Arsenic, Dissolved	mg/L	0.0000525	0.000200	0.100	0.174	0.174	0.104	0.0850 to 0.115	109	70.0 to 130	0.00	20.0
BD17113	Arsenic, Total	mg/L	0.0000220	0.000200	0.100	0.204	0.203	0.0991	0.0850 to 0.115	104	70.0 to 130	0.491	20.0
BD17114	Barium, Dissolved	mg/L	0.0000082	0.00100	0.100	0.112	0.111	0.0954	0.0850 to 0.115	98.2	70.0 to 130	0.897	20.0
BD17113	Barium, Total	mg/L	-0.0000007	0.00100	0.100	0.674	0.653	0.0932	0.0850 to 0.115	103	70.0 to 130	3.17	20.0
BD17114	Beryllium, Dissolved	mg/L	0.0000831	0.000880	0.100	0.0974	0.0977	0.0980	0.0850 to 0.115	97.4	70.0 to 130	0.308	20.0
BD17113	Beryllium, Total	mg/L	0.000110	0.000880	0.100	0.0948	0.0961	0.0900	0.0850 to 0.115	94.8	70.0 to 130	1.36	20.0
BD17114	Boron, Dissolved	mg/L	-0.000333	0.0650	1.00	1.08	1.07	1.02	0.850 to 1.15	104	70.0 to 130	0.930	20.0
BD17113	Boron, Total	mg/L	0.000355	0.0650	1.00	2.38	2.39	1.01	0.850 to 1.15	102	70.0 to 130	0.419	20.0
BD17114	Cadmium, Dissolved	mg/L	-0.0000081	0.000147	0.100	0.103	0.102	0.102	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BD17113	Cadmium, Total	mg/L	-0.0000002	0.000147	0.100	0.0987	0.101	0.0998	0.0850 to 0.115	98.7	70.0 to 130	2.30	20.0
BD17114	Calcium, Dissolved	mg/L	-0.0117	0.152	5.00	85.6	84.3	5.08	4.25 to 5.75	204	70.0 to 130	1.53	20.0
BD17113	Calcium, Total	mg/L	-0.0276	0.152	5.00	58.8	60.7	5.12	4.25 to 5.75	98.0	70.0 to 130	3.18	20.0
BD17109	Chloride	mg/L	0.0244	1.00	800	1250	1340	10.3	9.00 to 11.0	95.1	80.0 to 120	6.95	20.0
BD17114	Chromium, Dissolved	mg/L	-0.000104	0.000440	0.100	0.0983	0.101	0.0972	0.0850 to 0.115	98.3	70.0 to 130	2.71	20.0
BD17113	Chromium, Total	mg/L	-0.0000753	0.000440	0.100	0.0985	0.0995	0.0980	0.0850 to 0.115	98.5	70.0 to 130	1.01	20.0
BD17114	Cobalt, Dissolved	mg/L	0.0000006	0.000147	0.100	0.101	0.103	0.100	0.0850 to 0.115	100	70.0 to 130	1.96	20.0
BD17113	Cobalt, Total	mg/L	0.0000106	0.000147	0.100	0.0992	0.0998	0.101	0.0850 to 0.115	99.2	70.0 to 130	0.603	20.0
BD17109	Fluoride	mg/L	0.0252	0.125	2.50	2.96	2.93	2.67	2.25 to 2.75	107	80.0 to 120	1.02	20.0
BD17114	Iron, Dissolved	mg/L	0.00162	0.0176	0.2	47.4	46.1	0.202	0.170 to 0.230	350	70.0 to 130	2.78	20.0
BD17113	Iron, Total	mg/L	-0.00332	0.0176	0.2	0.227	0.225	0.200	0.170 to 0.230	102	70.0 to 130	0.885	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
Precision is invalid due to sample concentration for Nitrate-Nitrite.

Reported: 10/25/2023
Version: 3.5
COA_CCR

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/6/23 11:45
Customer ID:
Delivery Date: 9/7/23 10:51

Description: Gorgas Ash Pond - MW-36V

Laboratory ID Number: BD17109

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17114	Lead, Dissolved	mg/L	0.0000049	0.000147	0.100	0.0927	0.0940	0.0969	0.0850 to 0.115	92.7	70.0 to 130	1.39	20.0
BD17113	Lead, Total	mg/L	0.0000076	0.000147	0.100	0.0955	0.0971	0.0976	0.0850 to 0.115	95.5	70.0 to 130	1.66	20.0
BD17114	Lithium, Dissolved	mg/L	0.000425	0.0154	0.200	0.238	0.234	0.200	0.170 to 0.230	104	70.0 to 130	1.69	20.0
BD17113	Lithium, Total	mg/L	0.000205	0.0154	0.200	0.515	0.523	0.203	0.170 to 0.230	103	70.0 to 130	1.54	20.0
BD17114	Magnesium, Dissolved	mg/L	0.00215	0.0462	5.00	39.9	39.9	5.23	4.25 to 5.75	106	70.0 to 130	0.00	20.0
BD17113	Magnesium, Total	mg/L	-0.0156	0.0462	5.00	21.3	21.5	5.25	4.25 to 5.75	104	70.0 to 130	0.935	20.0
BD17114	Manganese, Dissolved	mg/L	-0.0000103	0.00033	0.100	1.48	1.49	0.0977	0.0850 to 0.115	70.0	70.0 to 130	0.673	20.0
BD17113	Manganese, Total	mg/L	-0.0000601	0.00033	0.100	0.268	0.273	0.0972	0.0850 to 0.115	98.0	70.0 to 130	1.85	20.0
BD17113	Mercury, Total by CVAA	mg/L	4.000E-05	0.000500	0.004	0.00403	0.00403	0.00404	0.00340 to 0.00460	101	70.0 to 130	0.00	20.0
BD17114	Molybdenum, Dissolved	mg/L	0.00120	0.0100	0.2	0.202	0.203	0.202	0.170 to 0.230	101	70.0 to 130	0.494	20.0
BD17113	Molybdenum, Total	mg/L	0.001	0.0100	0.2	0.215	0.216	0.204	0.170 to 0.230	102	70.0 to 130	0.464	20.0
BD17114	Potassium, Dissolved	mg/L	-0.0436	0.367	10.0	11.7	12.1	9.65	8.50 to 11.5	97.6	70.0 to 130	3.36	20.0
BD17113	Potassium, Total	mg/L	-0.00994	0.367	10.0	12.0	12.0	10.3	8.50 to 11.5	97.4	70.0 to 130	0.00	20.0
BD17114	Selenium, Dissolved	mg/L	-0.0000491	0.00100	0.100	0.104	0.107	0.103	0.0850 to 0.115	104	70.0 to 130	2.84	20.0
BD17113	Selenium, Total	mg/L	-0.0000097	0.00100	0.100	0.103	0.102	0.101	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BD17114	Silicon, Dissolved	mg/L	0.000595	0.0440	1.00	14.6	14.6	1.04	0.850 to 1.15	100	70.0 to 130	0.00	20.0
BD17113	Silicon, Total	mg/L	0.00200	0.0440	1.00	7.96	8.01	1.04	0.850 to 1.15	104	70.0 to 130	0.626	20.0
BD17114	Sodium, Dissolved	mg/L	0.00544	0.0880	5.00	24.6	24.3	5.13	4.25 to 5.75	106	70.0 to 130	1.23	20.0
BD17113	Sodium, Total	mg/L	0.00259	0.0880	5.00	32.3	32.8	5.11	4.25 to 5.75	104	70.0 to 130	1.54	20.0
BD17109	Sulfate	mg/L	-0.0331	2.0	640	1160	1180	20.9	18.0 to 22.0	100	80.0 to 120	1.71	20.0
BD17114	Thallium, Dissolved	mg/L	-0.0000048	0.000147	0.100	0.0923	0.0938	0.0997	0.0850 to 0.115	92.3	70.0 to 130	1.61	20.0
BD17113	Thallium, Total	mg/L	0.0000085	0.000147	0.100	0.0950	0.0970	0.0982	0.0850 to 0.115	95.0	70.0 to 130	2.08	20.0
BD17113	Total Organic Carbon	mg/L	0.140	1.00	10.0	10.1	9.98	10.2		89.8	80.0 to 120	1.20	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
Precision is invalid due to sample concentration for Nitrate-Nitrite.

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/6/23 11:45
Customer ID:
Delivery Date: 9/7/23 10:51

Description: Gorgas Ash Pond - MW-36V

Laboratory ID Number: BD17109

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17116	Alkalinity	mg CaCO3/L					222	51.9	45.0 to 55.0			0.00	10.0
BD17109	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.05	0.200	2.00	2.24	0.199	1.94	1.80 to 2.20	99.8	90.0 to 110	20.7	15.0
BD17111	Solids, Dissolved	mg/L	2.00	25.0			308	55.0	40.0 to 60.0			0.325	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
Precision is invalid due to sample concentration for Nitrate-Nitrite.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-36H

Location Code: WMWGORAP
Collected: 9/6/23 15:22
Customer ID:
Submittal Date: 9/7/23 10:51

Laboratory ID Number: BD17110

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7		***Analyst: ABB***			***Preparation Method: EPA 1638***				
* Boron, Total	9/8/23 07:51	9/14/23 15:36		1.015	0.0588	mg/L	0.030000	0.1015	J
* Calcium, Total	9/8/23 07:51	9/14/23 15:36		1.015	5.89	mg/L	0.070035	0.406	
* Iron, Total	9/8/23 07:51	9/14/23 15:36		1.015	0.358	mg/L	0.008120	0.0406	
* Lithium, Total	9/8/23 07:51	9/14/23 15:36		1.015	0.0489	mg/L	0.007105	0.01999956	
* Magnesium, Total	9/8/23 07:51	9/14/23 15:36		1.015	1.55	mg/L	0.021315	0.406	
* Molybdenum, Total	9/8/23 07:51	9/14/23 15:36		1.015	0.0195	mg/L	0.005075	0.01015	
* Silica, Total (calc.)	9/8/23 07:51	9/14/23 15:36		1	15.5	mg/L			
* Silicon, Total	9/8/23 07:51	9/14/23 15:36		1.015	7.26	mg/L	0.02030	0.25375	
* Sodium, Total	9/8/23 07:51	9/14/23 19:19		10.15	177	mg/L	0.4060	4.06	
Analytical Method: EPA 200.7		***Analyst: ABB***							
* Boron, Dissolved	9/17/23 14:38	9/14/23 14:23		1.015	0.0525	mg/L	0.030000	0.1015	J
* Calcium, Dissolved	9/17/23 14:38	9/14/23 14:23		1.015	5.98	mg/L	0.070035	0.406	
* Iron, Dissolved	9/17/23 14:38	9/14/23 14:23		1.015	0.00853	mg/L	0.008120	0.0406	J
* Lithium, Dissolved	9/17/23 14:38	9/14/23 14:23		1.015	0.0554	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	9/17/23 14:38	9/14/23 14:23		1.015	1.64	mg/L	0.021315	0.406	
* Molybdenum, Dissolved	9/17/23 14:38	9/14/23 14:23		1.015	0.0248	mg/L	0.005075	0.01015	
* Silica, Dissolved (calc.)	9/17/23 14:38	9/14/23 14:23		1	15.2	mg/L			
* Silicon, Dissolved	9/17/23 14:38	9/14/23 14:23		1.015	7.09	mg/L	0.02030	0.25375	
* Sodium, Dissolved	9/17/23 14:38	9/14/23 17:59		10.15	209	mg/L	0.4060	4.06	
Analytical Method: EPA 200.8		***Analyst: DLJ***			***Preparation Method: EPA 1638***				
* Antimony, Total	9/8/23 07:51	9/8/23 11:35		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Arsenic, Total	9/8/23 07:51	9/8/23 11:35		1.015	0.00225	mg/L	0.000112	0.000203	
* Aluminum, Total	9/8/23 07:51	9/8/23 11:35		1.015	0.112	mg/L	0.009135	0.05075	
* Barium, Total	9/8/23 07:51	9/8/23 11:35		1.015	0.137	mg/L	0.000508	0.001015	
* Beryllium, Total	9/8/23 07:51	9/8/23 11:35		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	9/8/23 07:51	9/8/23 11:35		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	9/8/23 07:51	9/8/23 11:35		1.015	0.000674	mg/L	0.000203	0.001015	J
* Cobalt, Total	9/8/23 07:51	9/8/23 11:35		1.015	0.000155	mg/L	0.000068	0.000203	J
* Lead, Total	9/8/23 07:51	9/8/23 11:35		1.015	0.000364	mg/L	0.000068	0.000203	
* Manganese, Total	9/8/23 07:51	9/8/23 11:35		1.015	0.0168	mg/L	0.000152	0.001015	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-36H

Location Code: WMWGORAP
Collected: 9/6/23 15:22
Customer ID:
Submittal Date: 9/7/23 10:51

Laboratory ID Number: BD17110

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	9/8/23 07:51	9/8/23 11:35		1.015	6.05	mg/L	0.169505	0.5075	
* Selenium, Total	9/8/23 07:51	9/8/23 11:35		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	9/8/23 07:51	9/8/23 11:35		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	9/7/23 14:38	9/8/23 13:36		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	9/7/23 14:38	9/8/23 13:36		1.015	0.0118	mg/L	0.009135	0.05075	J
* Arsenic, Dissolved	9/7/23 14:38	9/8/23 13:36		1.015	0.00295	mg/L	0.000112	0.000203	
* Barium, Dissolved	9/7/23 14:38	9/8/23 13:36		1.015	0.215	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	9/7/23 14:38	9/8/23 13:36		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	9/7/23 14:38	9/8/23 13:36		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	9/7/23 14:38	9/8/23 13:36		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	9/7/23 14:38	9/8/23 13:36		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Dissolved	9/7/23 14:38	9/8/23 13:36		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	9/7/23 14:38	9/8/23 13:36		1.015	0.0114	mg/L	0.000152	0.001015	
* Potassium, Dissolved	9/7/23 14:38	9/8/23 13:36		1.015	5.93	mg/L	0.169505	0.5075	
* Selenium, Dissolved	9/7/23 14:38	9/8/23 13:36		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	9/7/23 14:38	9/8/23 13:36		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	9/7/23 16:09	9/7/23 21:01		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	9/11/23 09:03	9/11/23 09:03		1	0.668	mg/L as N	0.20	0.3	
Analytical Method: SM 2320 B	***Analyst: DHC***								
Alkalinity pH Endpoint	9/12/23 10:42	9/12/23 15:34		1	4.51	SU		2	
* Alkalinity	9/12/23 10:42	9/12/23 15:34		1	209	mg CaCO3/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	9/7/23 13:50	9/11/23 13:15		1	622	mg/L		50	
Analytical Method: SM 4500CO2 D	***Analyst: DHC***								
* Bicarbonate Alkalinity, (calc.)	9/12/23 10:42	9/12/23 15:34		1	204	mg CaCO3/L		1	A
* Carbonate Alkalinity, (calc.)	9/12/23 10:42	9/12/23 15:34		1	4.50	mg CaCO3/L		0.5	A
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	9/14/23 12:20	9/14/23 12:20		1	2.96	mg/L	1.00	2	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-36H

Location Code: WMWGORAP
Collected: 9/6/23 15:22
Customer ID:
Submittal Date: 9/7/23 10:51

Laboratory ID Number: BD17110

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	9/11/23 12:37	9/11/23 12:37		10	99.3	mg/L	5.00	10	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	9/11/23 15:50	9/11/23 15:50		1	0.230	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	9/7/23 15:21	9/7/23 15:21		8	152	mg/L	4.8	16	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	9/6/23 15:19	9/6/23 15:19			1032.88	uS/cm			FA
pH	9/6/23 15:19	9/6/23 15:19			7.95	SU			FA
Temperature	9/6/23 15:19	9/6/23 15:19			33.18	C			FA
Turbidity	9/6/23 15:19	9/6/23 15:19			6.17	NTU			FA
Sulfide	9/6/23 15:19	9/6/23 15:19			0	mg/L			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 10/25/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/6/23 15:22
Customer ID:
Delivery Date: 9/7/23 10:51

Description: Gorgas Ash Pond - MW-36H

Laboratory ID Number: BD17110

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17114	Aluminum, Dissolved	mg/L	0.000425	0.0198	0.100	0.0980	0.0999	0.0938	0.0850 to 0.115	98.0	70.0 to 130	1.92	20.0
BD17113	Aluminum, Total	mg/L	0.000780	0.0198	0.100	0.0995	0.100	0.0986	0.0850 to 0.115	99.5	70.0 to 130	0.501	20.0
BD17114	Antimony, Dissolved	mg/L	0.000270	0.00100	0.100	0.107	0.105	0.0935	0.0850 to 0.115	107	70.0 to 130	1.89	20.0
BD17113	Antimony, Total	mg/L	0.000278	0.00100	0.100	0.101	0.101	0.0972	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BD17114	Arsenic, Dissolved	mg/L	0.0000525	0.000200	0.100	0.174	0.174	0.104	0.0850 to 0.115	109	70.0 to 130	0.00	20.0
BD17113	Arsenic, Total	mg/L	0.0000220	0.000200	0.100	0.204	0.203	0.0991	0.0850 to 0.115	104	70.0 to 130	0.491	20.0
BD17114	Barium, Dissolved	mg/L	0.0000082	0.00100	0.100	0.112	0.111	0.0954	0.0850 to 0.115	98.2	70.0 to 130	0.897	20.0
BD17113	Barium, Total	mg/L	-0.0000007	0.00100	0.100	0.674	0.653	0.0932	0.0850 to 0.115	103	70.0 to 130	3.17	20.0
BD17114	Beryllium, Dissolved	mg/L	0.0000831	0.000880	0.100	0.0974	0.0977	0.0980	0.0850 to 0.115	97.4	70.0 to 130	0.308	20.0
BD17113	Beryllium, Total	mg/L	0.000110	0.000880	0.100	0.0948	0.0961	0.0900	0.0850 to 0.115	94.8	70.0 to 130	1.36	20.0
BD17114	Boron, Dissolved	mg/L	-0.000333	0.0650	1.00	1.08	1.07	1.02	0.850 to 1.15	104	70.0 to 130	0.930	20.0
BD17113	Boron, Total	mg/L	0.000355	0.0650	1.00	2.38	2.39	1.01	0.850 to 1.15	102	70.0 to 130	0.419	20.0
BD17114	Cadmium, Dissolved	mg/L	-0.0000081	0.000147	0.100	0.103	0.102	0.102	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BD17113	Cadmium, Total	mg/L	-0.0000002	0.000147	0.100	0.0987	0.101	0.0998	0.0850 to 0.115	98.7	70.0 to 130	2.30	20.0
BD17114	Calcium, Dissolved	mg/L	-0.0117	0.152	5.00	85.6	84.3	5.08	4.25 to 5.75	204	70.0 to 130	1.53	20.0
BD17113	Calcium, Total	mg/L	-0.0276	0.152	5.00	58.8	60.7	5.12	4.25 to 5.75	98.0	70.0 to 130	3.18	20.0
BD17116	Chloride	mg/L	0.0345	1.00	10.0	13.2	12.9	10.2	9.00 to 11.0	101	80.0 to 120	2.30	20.0
BD17114	Chromium, Dissolved	mg/L	-0.000104	0.000440	0.100	0.0983	0.101	0.0972	0.0850 to 0.115	98.3	70.0 to 130	2.71	20.0
BD17113	Chromium, Total	mg/L	-0.0000753	0.000440	0.100	0.0985	0.0995	0.0980	0.0850 to 0.115	98.5	70.0 to 130	1.01	20.0
BD17114	Cobalt, Dissolved	mg/L	0.0000006	0.000147	0.100	0.101	0.103	0.100	0.0850 to 0.115	100	70.0 to 130	1.96	20.0
BD17113	Cobalt, Total	mg/L	0.0000106	0.000147	0.100	0.0992	0.0998	0.101	0.0850 to 0.115	99.2	70.0 to 130	0.603	20.0
BD17116	Fluoride	mg/L	0.0243	0.125	2.50	2.78	2.79	2.65	2.25 to 2.75	104	80.0 to 120	0.359	20.0
BD17114	Iron, Dissolved	mg/L	0.00162	0.0176	0.2	47.4	46.1	0.202	0.170 to 0.230	350	70.0 to 130	2.78	20.0
BD17113	Iron, Total	mg/L	-0.00332	0.0176	0.2	0.227	0.225	0.200	0.170 to 0.230	102	70.0 to 130	0.885	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/6/23 15:22
Customer ID:
Delivery Date: 9/7/23 10:51

Description: Gorgas Ash Pond - MW-36H

Laboratory ID Number: BD17110

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17114	Lead, Dissolved	mg/L	0.0000049	0.000147	0.100	0.0927	0.0940	0.0969	0.0850 to 0.115	92.7	70.0 to 130	1.39	20.0
BD17113	Lead, Total	mg/L	0.0000076	0.000147	0.100	0.0955	0.0971	0.0976	0.0850 to 0.115	95.5	70.0 to 130	1.66	20.0
BD17114	Lithium, Dissolved	mg/L	0.000425	0.0154	0.200	0.238	0.234	0.200	0.170 to 0.230	104	70.0 to 130	1.69	20.0
BD17113	Lithium, Total	mg/L	0.000205	0.0154	0.200	0.515	0.523	0.203	0.170 to 0.230	103	70.0 to 130	1.54	20.0
BD17114	Magnesium, Dissolved	mg/L	0.00215	0.0462	5.00	39.9	39.9	5.23	4.25 to 5.75	106	70.0 to 130	0.00	20.0
BD17113	Magnesium, Total	mg/L	-0.0156	0.0462	5.00	21.3	21.5	5.25	4.25 to 5.75	104	70.0 to 130	0.935	20.0
BD17114	Manganese, Dissolved	mg/L	-0.0000103	0.00033	0.100	1.48	1.49	0.0977	0.0850 to 0.115	70.0	70.0 to 130	0.673	20.0
BD17113	Manganese, Total	mg/L	-0.0000601	0.00033	0.100	0.268	0.273	0.0972	0.0850 to 0.115	98.0	70.0 to 130	1.85	20.0
BD17113	Mercury, Total by CVAA	mg/L	4.000E-05	0.000500	0.004	0.00403	0.00403	0.00404	0.00340 to 0.00460	101	70.0 to 130	0.00	20.0
BD17114	Molybdenum, Dissolved	mg/L	0.00120	0.0100	0.2	0.202	0.203	0.202	0.170 to 0.230	101	70.0 to 130	0.494	20.0
BD17113	Molybdenum, Total	mg/L	0.001	0.0100	0.2	0.215	0.216	0.204	0.170 to 0.230	102	70.0 to 130	0.464	20.0
BD17114	Potassium, Dissolved	mg/L	-0.0436	0.367	10.0	11.7	12.1	9.65	8.50 to 11.5	97.6	70.0 to 130	3.36	20.0
BD17113	Potassium, Total	mg/L	-0.00994	0.367	10.0	12.0	12.0	10.3	8.50 to 11.5	97.4	70.0 to 130	0.00	20.0
BD17114	Selenium, Dissolved	mg/L	-0.0000491	0.00100	0.100	0.104	0.107	0.103	0.0850 to 0.115	104	70.0 to 130	2.84	20.0
BD17113	Selenium, Total	mg/L	-0.0000097	0.00100	0.100	0.103	0.102	0.101	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BD17114	Silicon, Dissolved	mg/L	0.000595	0.0440	1.00	14.6	14.6	1.04	0.850 to 1.15	100	70.0 to 130	0.00	20.0
BD17113	Silicon, Total	mg/L	0.00200	0.0440	1.00	7.96	8.01	1.04	0.850 to 1.15	104	70.0 to 130	0.626	20.0
BD17114	Sodium, Dissolved	mg/L	0.00544	0.0880	5.00	24.6	24.3	5.13	4.25 to 5.75	106	70.0 to 130	1.23	20.0
BD17113	Sodium, Total	mg/L	0.00259	0.0880	5.00	32.3	32.8	5.11	4.25 to 5.75	104	70.0 to 130	1.54	20.0
BD17116	Sulfate	mg/L	-0.105	2.0	20.0	27.1	28.5	20.8	18.0 to 22.0	96.9	80.0 to 120	5.04	20.0
BD17114	Thallium, Dissolved	mg/L	-0.0000048	0.000147	0.100	0.0923	0.0938	0.0997	0.0850 to 0.115	92.3	70.0 to 130	1.61	20.0
BD17113	Thallium, Total	mg/L	0.0000085	0.000147	0.100	0.0950	0.0970	0.0982	0.0850 to 0.115	95.0	70.0 to 130	2.08	20.0
BD17113	Total Organic Carbon	mg/L	0.140	1.00	10.0	10.1	9.98	10.2		89.8	80.0 to 120	1.20	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/6/23 15:22
Customer ID:
Delivery Date: 9/7/23 10:51

Description: Gorgas Ash Pond - MW-36H

Laboratory ID Number: BD17110

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17116	Alkalinity	mg CaCO3/L					222	51.9	45.0 to 55.0			0.00	10.0
BD17116	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.03	0.200	2.00	2.03	-0.026	1.92	1.80 to 2.20	102	90.0 to 110	0.00	15.0
BD17111	Solids, Dissolved	mg/L	2.00	25.0			308	55.0	40.0 to 60.0			0.325	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 10/25/2023
Version: 3.5
COA_CCR

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-6S

Location Code: WMWGORAP
Collected: 9/5/23 13:17
Customer ID:
Submittal Date: 9/7/23 10:51

Laboratory ID Number: BD17111

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	9/8/23 07:51	9/14/23 15:39		1.015	1.16	mg/L	0.030000	0.1015	
* Calcium, Total	9/8/23 07:51	9/14/23 19:22		10.15	55.7	mg/L	0.70035	4.06	
* Iron, Total	9/8/23 07:51	9/14/23 19:22		10.15	8.48	mg/L	0.08120	0.406	
* Lithium, Total	9/8/23 07:51	9/14/23 15:39		1.015	0.0806	mg/L	0.007105	0.01999956	
* Magnesium, Total	9/8/23 07:51	9/14/23 15:39		1.015	22.8	mg/L	0.021315	0.406	
* Molybdenum, Total	9/8/23 07:51	9/14/23 15:39		1.015	0.0408	mg/L	0.005075	0.01015	
* Silica, Total (calc.)	9/8/23 07:51	9/14/23 15:39		1	13.0	mg/L			
* Silicon, Total	9/8/23 07:51	9/14/23 15:39		1.015	6.08	mg/L	0.02030	0.25375	
* Sodium, Total	9/8/23 07:51	9/14/23 15:39		1.015	11.1	mg/L	0.04060	0.406	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	9/17/23 14:38	9/14/23 14:26		1.015	1.18	mg/L	0.030000	0.1015	
* Calcium, Dissolved	9/17/23 14:38	9/14/23 18:02		10.15	58.1	mg/L	0.70035	4.06	
* Iron, Dissolved	9/17/23 14:38	9/14/23 18:02		10.15	7.96	mg/L	0.08120	0.406	
* Lithium, Dissolved	9/17/23 14:38	9/14/23 14:26		1.015	0.0873	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	9/17/23 14:38	9/14/23 14:26		1.015	22.9	mg/L	0.021315	0.406	
* Molybdenum, Dissolved	9/17/23 14:38	9/14/23 14:26		1.015	0.0436	mg/L	0.005075	0.01015	
* Silica, Dissolved (calc.)	9/17/23 14:38	9/14/23 14:26		1	12.9	mg/L			
* Silicon, Dissolved	9/17/23 14:38	9/14/23 14:26		1.015	6.05	mg/L	0.02030	0.25375	
* Sodium, Dissolved	9/17/23 14:38	9/14/23 14:26		1.015	11.2	mg/L	0.04060	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	9/8/23 07:51	9/8/23 11:39		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Arsenic, Total	9/8/23 07:51	9/8/23 11:39		1.015	0.0126	mg/L	0.000112	0.000203	
* Aluminum, Total	9/8/23 07:51	9/8/23 11:39		1.015	0.0321	mg/L	0.009135	0.05075	J
* Barium, Total	9/8/23 07:51	9/8/23 11:39		1.015	0.102	mg/L	0.000508	0.001015	
* Beryllium, Total	9/8/23 07:51	9/8/23 11:39		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	9/8/23 07:51	9/8/23 11:39		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	9/8/23 07:51	9/8/23 11:39		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	9/8/23 07:51	9/8/23 11:39		1.015	0.000639	mg/L	0.000068	0.000203	
* Lead, Total	9/8/23 07:51	9/8/23 11:39		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	9/8/23 07:51	9/12/23 16:24		5.075	2.69	mg/L	0.000761	0.005075	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-6S

Location Code: WMWGORAP
Collected: 9/5/23 13:17
Customer ID:
Submittal Date: 9/7/23 10:51

Laboratory ID Number: BD17111

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	9/8/23 07:51	9/8/23 11:39		1.015	4.22	mg/L	0.169505	0.5075	
* Selenium, Total	9/8/23 07:51	9/8/23 11:39		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	9/8/23 07:51	9/8/23 11:39		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	9/7/23 14:38	9/8/23 13:40		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	9/7/23 14:38	9/8/23 13:40		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Dissolved	9/7/23 14:38	9/8/23 13:40		1.015	0.0110	mg/L	0.000112	0.000203	
* Barium, Dissolved	9/7/23 14:38	9/8/23 13:40		1.015	0.100	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	9/7/23 14:38	9/8/23 13:40		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	9/7/23 14:38	9/8/23 13:40		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	9/7/23 14:38	9/8/23 13:40		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	9/7/23 14:38	9/8/23 13:40		1.015	0.000556	mg/L	0.000068	0.000203	
* Lead, Dissolved	9/7/23 14:38	9/8/23 13:40		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	9/7/23 14:38	9/8/23 14:33		5.075	2.75	mg/L	0.000761	0.005075	
* Potassium, Dissolved	9/7/23 14:38	9/8/23 13:40		1.015	4.26	mg/L	0.169505	0.5075	
* Selenium, Dissolved	9/7/23 14:38	9/8/23 13:40		1.015	0.000797	mg/L	0.000508	0.001015	J
* Thallium, Dissolved	9/7/23 14:38	9/8/23 13:40		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	9/7/23 16:09	9/7/23 21:05		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	9/11/23 09:05	9/11/23 09:05		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: DHC***								
Alkalinity pH Endpoint	9/12/23 10:42	9/12/23 15:34		1	4.44	SU		2	
* Alkalinity	9/12/23 10:42	9/12/23 15:34		1	133	mg CaCO3/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	9/7/23 13:50	9/11/23 13:15		1	307	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: DHC***								
* Bicarbonate Alkalinity, (calc.)	9/12/23 10:42	9/12/23 15:34		1	132	mg CaCO3/L		1	
* Carbonate Alkalinity, (calc.)	9/12/23 10:42	9/12/23 15:34		1	Not Detected	mg CaCO3/L		0.5	
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	9/14/23 12:35	9/14/23 12:35		1	1.20	mg/L	1.00	2	J

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-6S

Location Code: WMWGORAP
Collected: 9/5/23 13:17
Customer ID:
Submittal Date: 9/7/23 10:51

Laboratory ID Number: BD17111

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	9/11/23 12:27	9/11/23 12:27		1	19.2	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	9/11/23 15:51	9/11/23 15:51		1	0.152	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	9/7/23 15:22	9/7/23 15:22		4	107	mg/L	2.4	8	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	9/5/23 13:14	9/5/23 13:14			474.95	uS/cm			FA
pH	9/5/23 13:14	9/5/23 13:14			6.69	SU			FA
Temperature	9/5/23 13:14	9/5/23 13:14			19.96	C			FA
Turbidity	9/5/23 13:14	9/5/23 13:14			9.12	NTU			FA
Sulfide	9/5/23 13:14	9/5/23 13:14			0	mg/L			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/5/23 13:17
Customer ID:
Delivery Date: 9/7/23 10:51

Description: Gorgas Ash Pond - MW-6S

Laboratory ID Number: BD17111

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17114	Aluminum, Dissolved	mg/L	0.000425	0.0198	0.100	0.0980	0.0999	0.0938	0.0850 to 0.115	98.0	70.0 to 130	1.92	20.0
BD17113	Aluminum, Total	mg/L	0.000780	0.0198	0.100	0.0995	0.100	0.0986	0.0850 to 0.115	99.5	70.0 to 130	0.501	20.0
BD17114	Antimony, Dissolved	mg/L	0.000270	0.00100	0.100	0.107	0.105	0.0935	0.0850 to 0.115	107	70.0 to 130	1.89	20.0
BD17113	Antimony, Total	mg/L	0.000278	0.00100	0.100	0.101	0.101	0.0972	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BD17114	Arsenic, Dissolved	mg/L	0.0000525	0.000200	0.100	0.174	0.174	0.104	0.0850 to 0.115	109	70.0 to 130	0.00	20.0
BD17113	Arsenic, Total	mg/L	0.0000220	0.000200	0.100	0.204	0.203	0.0991	0.0850 to 0.115	104	70.0 to 130	0.491	20.0
BD17114	Barium, Dissolved	mg/L	0.0000082	0.00100	0.100	0.112	0.111	0.0954	0.0850 to 0.115	98.2	70.0 to 130	0.897	20.0
BD17113	Barium, Total	mg/L	-0.0000007	0.00100	0.100	0.674	0.653	0.0932	0.0850 to 0.115	103	70.0 to 130	3.17	20.0
BD17114	Beryllium, Dissolved	mg/L	0.0000831	0.000880	0.100	0.0974	0.0977	0.0980	0.0850 to 0.115	97.4	70.0 to 130	0.308	20.0
BD17113	Beryllium, Total	mg/L	0.000110	0.000880	0.100	0.0948	0.0961	0.0900	0.0850 to 0.115	94.8	70.0 to 130	1.36	20.0
BD17114	Boron, Dissolved	mg/L	-0.000333	0.0650	1.00	1.08	1.07	1.02	0.850 to 1.15	104	70.0 to 130	0.930	20.0
BD17113	Boron, Total	mg/L	0.000355	0.0650	1.00	2.38	2.39	1.01	0.850 to 1.15	102	70.0 to 130	0.419	20.0
BD17114	Cadmium, Dissolved	mg/L	-0.0000081	0.000147	0.100	0.103	0.102	0.102	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BD17113	Cadmium, Total	mg/L	-0.0000002	0.000147	0.100	0.0987	0.101	0.0998	0.0850 to 0.115	98.7	70.0 to 130	2.30	20.0
BD17114	Calcium, Dissolved	mg/L	-0.0117	0.152	5.00	85.6	84.3	5.08	4.25 to 5.75	204	70.0 to 130	1.53	20.0
BD17113	Calcium, Total	mg/L	-0.0276	0.152	5.00	58.8	60.7	5.12	4.25 to 5.75	98.0	70.0 to 130	3.18	20.0
BD17116	Chloride	mg/L	0.0345	1.00	10.0	13.2	12.9	10.2	9.00 to 11.0	101	80.0 to 120	2.30	20.0
BD17114	Chromium, Dissolved	mg/L	-0.000104	0.000440	0.100	0.0983	0.101	0.0972	0.0850 to 0.115	98.3	70.0 to 130	2.71	20.0
BD17113	Chromium, Total	mg/L	-0.0000753	0.000440	0.100	0.0985	0.0995	0.0980	0.0850 to 0.115	98.5	70.0 to 130	1.01	20.0
BD17114	Cobalt, Dissolved	mg/L	0.0000006	0.000147	0.100	0.101	0.103	0.100	0.0850 to 0.115	100	70.0 to 130	1.96	20.0
BD17113	Cobalt, Total	mg/L	0.0000106	0.000147	0.100	0.0992	0.0998	0.101	0.0850 to 0.115	99.2	70.0 to 130	0.603	20.0
BD17116	Fluoride	mg/L	0.0243	0.125	2.50	2.78	2.79	2.65	2.25 to 2.75	104	80.0 to 120	0.359	20.0
BD17114	Iron, Dissolved	mg/L	0.00162	0.0176	0.2	47.4	46.1	0.202	0.170 to 0.230	350	70.0 to 130	2.78	20.0
BD17113	Iron, Total	mg/L	-0.00332	0.0176	0.2	0.227	0.225	0.200	0.170 to 0.230	102	70.0 to 130	0.885	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/5/23 13:17
Customer ID:
Delivery Date: 9/7/23 10:51

Description: Gorgas Ash Pond - MW-6S

Laboratory ID Number: BD17111

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17114	Lead, Dissolved	mg/L	0.0000049	0.000147	0.100	0.0927	0.0940	0.0969	0.0850 to 0.115	92.7	70.0 to 130	1.39	20.0
BD17113	Lead, Total	mg/L	0.0000076	0.000147	0.100	0.0955	0.0971	0.0976	0.0850 to 0.115	95.5	70.0 to 130	1.66	20.0
BD17114	Lithium, Dissolved	mg/L	0.000425	0.0154	0.200	0.238	0.234	0.200	0.170 to 0.230	104	70.0 to 130	1.69	20.0
BD17113	Lithium, Total	mg/L	0.000205	0.0154	0.200	0.515	0.523	0.203	0.170 to 0.230	103	70.0 to 130	1.54	20.0
BD17114	Magnesium, Dissolved	mg/L	0.00215	0.0462	5.00	39.9	39.9	5.23	4.25 to 5.75	106	70.0 to 130	0.00	20.0
BD17113	Magnesium, Total	mg/L	-0.0156	0.0462	5.00	21.3	21.5	5.25	4.25 to 5.75	104	70.0 to 130	0.935	20.0
BD17114	Manganese, Dissolved	mg/L	-0.0000103	0.00033	0.100	1.48	1.49	0.0977	0.0850 to 0.115	70.0	70.0 to 130	0.673	20.0
BD17113	Manganese, Total	mg/L	-0.0000601	0.00033	0.100	0.268	0.273	0.0972	0.0850 to 0.115	98.0	70.0 to 130	1.85	20.0
BD17113	Mercury, Total by CVAA	mg/L	4.000E-05	0.000500	0.004	0.00403	0.00403	0.00404	0.00340 to 0.00460	101	70.0 to 130	0.00	20.0
BD17114	Molybdenum, Dissolved	mg/L	0.00120	0.0100	0.2	0.202	0.203	0.202	0.170 to 0.230	101	70.0 to 130	0.494	20.0
BD17113	Molybdenum, Total	mg/L	0.001	0.0100	0.2	0.215	0.216	0.204	0.170 to 0.230	102	70.0 to 130	0.464	20.0
BD17114	Potassium, Dissolved	mg/L	-0.0436	0.367	10.0	11.7	12.1	9.65	8.50 to 11.5	97.6	70.0 to 130	3.36	20.0
BD17113	Potassium, Total	mg/L	-0.00994	0.367	10.0	12.0	12.0	10.3	8.50 to 11.5	97.4	70.0 to 130	0.00	20.0
BD17114	Selenium, Dissolved	mg/L	-0.0000491	0.00100	0.100	0.104	0.107	0.103	0.0850 to 0.115	104	70.0 to 130	2.84	20.0
BD17113	Selenium, Total	mg/L	-0.0000097	0.00100	0.100	0.103	0.102	0.101	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BD17114	Silicon, Dissolved	mg/L	0.000595	0.0440	1.00	14.6	14.6	1.04	0.850 to 1.15	100	70.0 to 130	0.00	20.0
BD17113	Silicon, Total	mg/L	0.00200	0.0440	1.00	7.96	8.01	1.04	0.850 to 1.15	104	70.0 to 130	0.626	20.0
BD17114	Sodium, Dissolved	mg/L	0.00544	0.0880	5.00	24.6	24.3	5.13	4.25 to 5.75	106	70.0 to 130	1.23	20.0
BD17113	Sodium, Total	mg/L	0.00259	0.0880	5.00	32.3	32.8	5.11	4.25 to 5.75	104	70.0 to 130	1.54	20.0
BD17116	Sulfate	mg/L	-0.105	2.0	20.0	27.1	28.5	20.8	18.0 to 22.0	96.9	80.0 to 120	5.04	20.0
BD17114	Thallium, Dissolved	mg/L	-0.0000048	0.000147	0.100	0.0923	0.0938	0.0997	0.0850 to 0.115	92.3	70.0 to 130	1.61	20.0
BD17113	Thallium, Total	mg/L	0.0000085	0.000147	0.100	0.0950	0.0970	0.0982	0.0850 to 0.115	95.0	70.0 to 130	2.08	20.0
BD17113	Total Organic Carbon	mg/L	0.140	1.00	10.0	10.1	9.98	10.2		89.8	80.0 to 120	1.20	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/5/23 13:17
Customer ID:
Delivery Date: 9/7/23 10:51

Description: Gorgas Ash Pond - MW-6S

Laboratory ID Number: BD17111

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17116	Alkalinity	mg CaCO3/L					222	51.9	45.0 to 55.0			0.00	10.0
BD17116	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.03	0.200	2.00	2.03	-0.026	1.92	1.80 to 2.20	102	90.0 to 110	0.00	15.0
BD17111	Solids, Dissolved	mg/L	2.00	25.0			308	55.0	40.0 to 60.0			0.325	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-6S Dup

Location Code: WMWGORAP
Collected: 9/5/23 13:17
Customer ID:
Submittal Date: 9/7/23 10:51

Laboratory ID Number: BD17112

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	9/8/23 07:51	9/14/23 15:42		1.015	1.15	mg/L	0.030000	0.1015	
* Calcium, Total	9/8/23 07:51	9/14/23 19:25		10.15	56.9	mg/L	0.70035	4.06	
* Iron, Total	9/8/23 07:51	9/14/23 19:25		10.15	8.74	mg/L	0.08120	0.406	
* Lithium, Total	9/8/23 07:51	9/14/23 15:42		1.015	0.0773	mg/L	0.007105	0.01999956	
* Magnesium, Total	9/8/23 07:51	9/14/23 15:42		1.015	22.4	mg/L	0.021315	0.406	
* Molybdenum, Total	9/8/23 07:51	9/14/23 15:42		1.015	0.0395	mg/L	0.005075	0.01015	
* Silica, Total (calc.)	9/8/23 07:51	9/14/23 15:42		1	13.0	mg/L			
* Silicon, Total	9/8/23 07:51	9/14/23 15:42		1.015	6.07	mg/L	0.02030	0.25375	
* Sodium, Total	9/8/23 07:51	9/14/23 15:42		1.015	10.9	mg/L	0.04060	0.406	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	9/17/23 14:38	9/14/23 14:29		1.015	1.17	mg/L	0.030000	0.1015	
* Calcium, Dissolved	9/17/23 14:38	9/14/23 18:05		10.15	58.1	mg/L	0.70035	4.06	
* Iron, Dissolved	9/17/23 14:38	9/14/23 18:05		10.15	8.71	mg/L	0.08120	0.406	
* Lithium, Dissolved	9/17/23 14:38	9/14/23 14:29		1.015	0.0858	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	9/17/23 14:38	9/14/23 14:29		1.015	22.5	mg/L	0.021315	0.406	
* Molybdenum, Dissolved	9/17/23 14:38	9/14/23 14:29		1.015	0.0437	mg/L	0.005075	0.01015	
* Silica, Dissolved (calc.)	9/17/23 14:38	9/14/23 14:29		1	12.8	mg/L			
* Silicon, Dissolved	9/17/23 14:38	9/14/23 14:29		1.015	5.99	mg/L	0.02030	0.25375	
* Sodium, Dissolved	9/17/23 14:38	9/14/23 14:29		1.015	11.0	mg/L	0.04060	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	9/8/23 07:51	9/8/23 11:43		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Arsenic, Total	9/8/23 07:51	9/8/23 11:43		1.015	0.0135	mg/L	0.000112	0.000203	
* Aluminum, Total	9/8/23 07:51	9/8/23 11:43		1.015	0.0310	mg/L	0.009135	0.05075	J
* Barium, Total	9/8/23 07:51	9/8/23 11:43		1.015	0.108	mg/L	0.000508	0.001015	
* Beryllium, Total	9/8/23 07:51	9/8/23 11:43		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	9/8/23 07:51	9/8/23 11:43		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	9/8/23 07:51	9/8/23 11:43		1.015	0.000215	mg/L	0.000203	0.001015	J
* Cobalt, Total	9/8/23 07:51	9/8/23 11:43		1.015	0.000668	mg/L	0.000068	0.000203	
* Lead, Total	9/8/23 07:51	9/8/23 11:43		1.015	0.0000757	mg/L	0.000068	0.000203	J
* Manganese, Total	9/8/23 07:51	9/8/23 16:49		5.075	2.94	mg/L	0.000761	0.005075	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-6S Dup

Location Code: WMWGORAP
Collected: 9/5/23 13:17
Customer ID:
Submittal Date: 9/7/23 10:51

Laboratory ID Number: BD17112

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	9/8/23 07:51	9/8/23 11:43		1.015	4.56	mg/L	0.169505	0.5075	
* Selenium, Total	9/8/23 07:51	9/8/23 11:43		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	9/8/23 07:51	9/8/23 11:43		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8		***Analyst: DLJ***							
* Antimony, Dissolved	9/7/23 14:38	9/8/23 13:44		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	9/7/23 14:38	9/8/23 13:44		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Dissolved	9/7/23 14:38	9/8/23 13:44		1.015	0.0112	mg/L	0.000112	0.000203	
* Barium, Dissolved	9/7/23 14:38	9/8/23 13:44		1.015	0.0988	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	9/7/23 14:38	9/8/23 13:44		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	9/7/23 14:38	9/8/23 13:44		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	9/7/23 14:38	9/8/23 13:44		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	9/7/23 14:38	9/8/23 13:44		1.015	0.000569	mg/L	0.000068	0.000203	
* Lead, Dissolved	9/7/23 14:38	9/8/23 13:44		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	9/7/23 14:38	9/8/23 14:37		5.075	2.76	mg/L	0.000761	0.005075	
* Potassium, Dissolved	9/7/23 14:38	9/8/23 13:44		1.015	4.25	mg/L	0.169505	0.5075	
* Selenium, Dissolved	9/7/23 14:38	9/8/23 13:44		1.015	0.000578	mg/L	0.000508	0.001015	J
* Thallium, Dissolved	9/7/23 14:38	9/8/23 13:44		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1		***Analyst: ABB***							
* Mercury, Total by CVAA	9/7/23 16:09	9/7/23 21:09		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2		***Analyst: SC***							
* Nitrogen, Nitrate/Nitrite	9/11/23 09:07	9/11/23 09:07		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B		***Analyst: DHC***							
Alkalinity pH Endpoint	9/12/23 10:42	9/12/23 15:34		1	4.56	SU		2	
* Alkalinity	9/12/23 10:42	9/12/23 15:34		1	130	mg CaCO3/L		0.1	
Analytical Method: SM 2540C		***Analyst: CNJ***							
* Solids, Dissolved	9/7/23 13:50	9/11/23 13:15		1	315	mg/L		25	
Analytical Method: SM 4500CO2 D		***Analyst: DHC***							
* Bicarbonate Alkalinity, (calc.)	9/12/23 10:42	9/12/23 15:34		1	130	mg CaCO3/L		1	
* Carbonate Alkalinity, (calc.)	9/12/23 10:42	9/12/23 15:34		1	Not Detected	mg CaCO3/L		0.5	
Analytical Method: SM 5310 B		***Analyst: SC***							
* Total Organic Carbon	9/14/23 12:50	9/14/23 12:50		1	1.16	mg/L	1.00	2	J

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-6S Dup

Location Code: WMWGORAP
Collected: 9/5/23 13:17
Customer ID:
Submittal Date: 9/7/23 10:51

Laboratory ID Number: BD17112

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	9/11/23 12:28	9/11/23 12:28		1	19.1	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	9/11/23 15:52	9/11/23 15:52		1	0.153	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	9/7/23 15:23	9/7/23 15:23		4	111	mg/L	2.4	8	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	9/5/23 13:14	9/5/23 13:14			474.95	uS/cm			FA
pH	9/5/23 13:14	9/5/23 13:14			6.69	SU			FA
Temperature	9/5/23 13:14	9/5/23 13:14			19.96	C			FA
Turbidity	9/5/23 13:14	9/5/23 13:14			9.12	NTU			FA
Sulfide	9/5/23 13:14	9/5/23 13:14			0	mg/L			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 10/25/2023
Version: 3.5
COA_CCR

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/5/23 13:17
Customer ID:
Delivery Date: 9/7/23 10:51

Description: Gorgas Ash Pond - MW-6S Dup

Laboratory ID Number: BD17112

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17114	Aluminum, Dissolved	mg/L	0.000425	0.0198	0.100	0.0980	0.0999	0.0938	0.0850 to 0.115	98.0	70.0 to 130	1.92	20.0
BD17113	Aluminum, Total	mg/L	0.000780	0.0198	0.100	0.0995	0.100	0.0986	0.0850 to 0.115	99.5	70.0 to 130	0.501	20.0
BD17114	Antimony, Dissolved	mg/L	0.000270	0.00100	0.100	0.107	0.105	0.0935	0.0850 to 0.115	107	70.0 to 130	1.89	20.0
BD17113	Antimony, Total	mg/L	0.000278	0.00100	0.100	0.101	0.101	0.0972	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BD17114	Arsenic, Dissolved	mg/L	0.0000525	0.000200	0.100	0.174	0.174	0.104	0.0850 to 0.115	109	70.0 to 130	0.00	20.0
BD17113	Arsenic, Total	mg/L	0.0000220	0.000200	0.100	0.204	0.203	0.0991	0.0850 to 0.115	104	70.0 to 130	0.491	20.0
BD17114	Barium, Dissolved	mg/L	0.0000082	0.00100	0.100	0.112	0.111	0.0954	0.0850 to 0.115	98.2	70.0 to 130	0.897	20.0
BD17113	Barium, Total	mg/L	-0.0000007	0.00100	0.100	0.674	0.653	0.0932	0.0850 to 0.115	103	70.0 to 130	3.17	20.0
BD17114	Beryllium, Dissolved	mg/L	0.0000831	0.000880	0.100	0.0974	0.0977	0.0980	0.0850 to 0.115	97.4	70.0 to 130	0.308	20.0
BD17113	Beryllium, Total	mg/L	0.000110	0.000880	0.100	0.0948	0.0961	0.0900	0.0850 to 0.115	94.8	70.0 to 130	1.36	20.0
BD17114	Boron, Dissolved	mg/L	-0.000333	0.0650	1.00	1.08	1.07	1.02	0.850 to 1.15	104	70.0 to 130	0.930	20.0
BD17113	Boron, Total	mg/L	0.000355	0.0650	1.00	2.38	2.39	1.01	0.850 to 1.15	102	70.0 to 130	0.419	20.0
BD17114	Cadmium, Dissolved	mg/L	-0.0000081	0.000147	0.100	0.103	0.102	0.102	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BD17113	Cadmium, Total	mg/L	-0.0000002	0.000147	0.100	0.0987	0.101	0.0998	0.0850 to 0.115	98.7	70.0 to 130	2.30	20.0
BD17114	Calcium, Dissolved	mg/L	-0.0117	0.152	5.00	85.6	84.3	5.08	4.25 to 5.75	204	70.0 to 130	1.53	20.0
BD17113	Calcium, Total	mg/L	-0.0276	0.152	5.00	58.8	60.7	5.12	4.25 to 5.75	98.0	70.0 to 130	3.18	20.0
BD17116	Chloride	mg/L	0.0345	1.00	10.0	13.2	12.9	10.2	9.00 to 11.0	101	80.0 to 120	2.30	20.0
BD17114	Chromium, Dissolved	mg/L	-0.000104	0.000440	0.100	0.0983	0.101	0.0972	0.0850 to 0.115	98.3	70.0 to 130	2.71	20.0
BD17113	Chromium, Total	mg/L	-0.0000753	0.000440	0.100	0.0985	0.0995	0.0980	0.0850 to 0.115	98.5	70.0 to 130	1.01	20.0
BD17114	Cobalt, Dissolved	mg/L	0.0000006	0.000147	0.100	0.101	0.103	0.100	0.0850 to 0.115	100	70.0 to 130	1.96	20.0
BD17113	Cobalt, Total	mg/L	0.0000106	0.000147	0.100	0.0992	0.0998	0.101	0.0850 to 0.115	99.2	70.0 to 130	0.603	20.0
BD17116	Fluoride	mg/L	0.0243	0.125	2.50	2.78	2.79	2.65	2.25 to 2.75	104	80.0 to 120	0.359	20.0
BD17114	Iron, Dissolved	mg/L	0.00162	0.0176	0.2	47.4	46.1	0.202	0.170 to 0.230	350	70.0 to 130	2.78	20.0
BD17113	Iron, Total	mg/L	-0.00332	0.0176	0.2	0.227	0.225	0.200	0.170 to 0.230	102	70.0 to 130	0.885	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/5/23 13:17
Customer ID:
Delivery Date: 9/7/23 10:51

Description: Gorgas Ash Pond - MW-6S Dup

Laboratory ID Number: BD17112

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17114	Lead, Dissolved	mg/L	0.0000049	0.000147	0.100	0.0927	0.0940	0.0969	0.0850 to 0.115	92.7	70.0 to 130	1.39	20.0
BD17113	Lead, Total	mg/L	0.0000076	0.000147	0.100	0.0955	0.0971	0.0976	0.0850 to 0.115	95.5	70.0 to 130	1.66	20.0
BD17114	Lithium, Dissolved	mg/L	0.000425	0.0154	0.200	0.238	0.234	0.200	0.170 to 0.230	104	70.0 to 130	1.69	20.0
BD17113	Lithium, Total	mg/L	0.000205	0.0154	0.200	0.515	0.523	0.203	0.170 to 0.230	103	70.0 to 130	1.54	20.0
BD17114	Magnesium, Dissolved	mg/L	0.00215	0.0462	5.00	39.9	39.9	5.23	4.25 to 5.75	106	70.0 to 130	0.00	20.0
BD17113	Magnesium, Total	mg/L	-0.0156	0.0462	5.00	21.3	21.5	5.25	4.25 to 5.75	104	70.0 to 130	0.935	20.0
BD17114	Manganese, Dissolved	mg/L	-0.0000103	0.00033	0.100	1.48	1.49	0.0977	0.0850 to 0.115	70.0	70.0 to 130	0.673	20.0
BD17113	Manganese, Total	mg/L	-0.0000601	0.00033	0.100	0.268	0.273	0.0972	0.0850 to 0.115	98.0	70.0 to 130	1.85	20.0
BD17113	Mercury, Total by CVAA	mg/L	4.000E-05	0.000500	0.004	0.00403	0.00403	0.00404	0.00340 to 0.00460	101	70.0 to 130	0.00	20.0
BD17114	Molybdenum, Dissolved	mg/L	0.00120	0.0100	0.2	0.202	0.203	0.202	0.170 to 0.230	101	70.0 to 130	0.494	20.0
BD17113	Molybdenum, Total	mg/L	0.001	0.0100	0.2	0.215	0.216	0.204	0.170 to 0.230	102	70.0 to 130	0.464	20.0
BD17114	Potassium, Dissolved	mg/L	-0.0436	0.367	10.0	11.7	12.1	9.65	8.50 to 11.5	97.6	70.0 to 130	3.36	20.0
BD17113	Potassium, Total	mg/L	-0.00994	0.367	10.0	12.0	12.0	10.3	8.50 to 11.5	97.4	70.0 to 130	0.00	20.0
BD17114	Selenium, Dissolved	mg/L	-0.0000491	0.00100	0.100	0.104	0.107	0.103	0.0850 to 0.115	104	70.0 to 130	2.84	20.0
BD17113	Selenium, Total	mg/L	-0.0000097	0.00100	0.100	0.103	0.102	0.101	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BD17114	Silicon, Dissolved	mg/L	0.000595	0.0440	1.00	14.6	14.6	1.04	0.850 to 1.15	100	70.0 to 130	0.00	20.0
BD17113	Silicon, Total	mg/L	0.00200	0.0440	1.00	7.96	8.01	1.04	0.850 to 1.15	104	70.0 to 130	0.626	20.0
BD17114	Sodium, Dissolved	mg/L	0.00544	0.0880	5.00	24.6	24.3	5.13	4.25 to 5.75	106	70.0 to 130	1.23	20.0
BD17113	Sodium, Total	mg/L	0.00259	0.0880	5.00	32.3	32.8	5.11	4.25 to 5.75	104	70.0 to 130	1.54	20.0
BD17116	Sulfate	mg/L	-0.105	2.0	20.0	27.1	28.5	20.8	18.0 to 22.0	96.9	80.0 to 120	5.04	20.0
BD17114	Thallium, Dissolved	mg/L	-0.0000048	0.000147	0.100	0.0923	0.0938	0.0997	0.0850 to 0.115	92.3	70.0 to 130	1.61	20.0
BD17113	Thallium, Total	mg/L	0.0000085	0.000147	0.100	0.0950	0.0970	0.0982	0.0850 to 0.115	95.0	70.0 to 130	2.08	20.0
BD17113	Total Organic Carbon	mg/L	0.140	1.00	10.0	10.1	9.98	10.2		89.8	80.0 to 120	1.20	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/5/23 13:17
Customer ID:
Delivery Date: 9/7/23 10:51

Description: Gorgas Ash Pond - MW-6S Dup

Laboratory ID Number: BD17112

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17116	Alkalinity	mg CaCO3/L					222	51.9	45.0 to 55.0			0.00	10.0
BD17116	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.03	0.200	2.00	2.03	-0.026	1.92	1.80 to 2.20	102	90.0 to 110	0.00	15.0
BD17116	Solids, Dissolved	mg/L	2.00	25.0			251	55.0	40.0 to 60.0			0.00	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-6D

Location Code: WMWGORAP
Collected: 9/5/23 14:28
Customer ID:
Submittal Date: 9/7/23 10:51

Laboratory ID Number: BD17113

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	9/8/23 07:51	9/14/23 15:45		1.015	1.36	mg/L	0.030000	0.1015	
* Calcium, Total	9/8/23 07:51	9/14/23 19:35		10.15	53.9	mg/L	0.70035	4.06	RA
* Iron, Total	9/8/23 07:51	9/14/23 15:45		1.015	0.0233	mg/L	0.008120	0.0406	J
* Lithium, Total	9/8/23 07:51	9/14/23 15:45		1.015	0.309	mg/L	0.007105	0.01999956	
* Magnesium, Total	9/8/23 07:51	9/14/23 15:45		1.015	16.1	mg/L	0.021315	0.406	
* Molybdenum, Total	9/8/23 07:51	9/14/23 15:45		1.015	0.0110	mg/L	0.005075	0.01015	
* Silica, Total (calc.)	9/8/23 07:51	9/14/23 15:45		1	14.8	mg/L			
* Silicon, Total	9/8/23 07:51	9/14/23 15:45		1.015	6.92	mg/L	0.02030	0.25375	
* Sodium, Total	9/8/23 07:51	9/14/23 15:45		1.015	27.1	mg/L	0.04060	0.406	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	9/17/23 14:38	9/14/23 14:33		1.015	1.36	mg/L	0.030000	0.1015	
* Calcium, Dissolved	9/17/23 14:38	9/14/23 18:15		10.15	58.5	mg/L	0.70035	4.06	
* Iron, Dissolved	9/17/23 14:38	9/14/23 14:33		1.015	0.0177	mg/L	0.008120	0.0406	J
* Lithium, Dissolved	9/17/23 14:38	9/14/23 14:33		1.015	0.313	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	9/17/23 14:38	9/14/23 14:33		1.015	16.0	mg/L	0.021315	0.406	
* Molybdenum, Dissolved	9/17/23 14:38	9/14/23 14:33		1.015	0.00773	mg/L	0.005075	0.01015	J
* Silica, Dissolved (calc.)	9/17/23 14:38	9/14/23 14:33		1	14.7	mg/L			
* Silicon, Dissolved	9/17/23 14:38	9/14/23 14:33		1.015	6.89	mg/L	0.02030	0.25375	
* Sodium, Dissolved	9/17/23 14:38	9/14/23 14:33		1.015	27.1	mg/L	0.04060	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	9/8/23 07:51	9/8/23 11:47		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Arsenic, Total	9/8/23 07:51	9/8/23 11:47		1.015	0.100	mg/L	0.000112	0.000203	
* Aluminum, Total	9/8/23 07:51	9/8/23 11:47		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Barium, Total	9/8/23 07:51	9/8/23 11:47		1.015	0.571	mg/L	0.000508	0.001015	
* Beryllium, Total	9/8/23 07:51	9/8/23 11:47		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	9/8/23 07:51	9/8/23 11:47		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	9/8/23 07:51	9/8/23 11:47		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	9/8/23 07:51	9/8/23 11:47		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	9/8/23 07:51	9/8/23 11:47		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	9/8/23 07:51	9/8/23 11:47		1.015	0.170	mg/L	0.000152	0.001015	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-6D

Location Code: WMWGORAP
Collected: 9/5/23 14:28
Customer ID:
Submittal Date: 9/7/23 10:51

Laboratory ID Number: BD17113

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	9/8/23 07:51	9/8/23 11:47		1.015	2.26	mg/L	0.169505	0.5075	
* Selenium, Total	9/8/23 07:51	9/8/23 11:47		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	9/8/23 07:51	9/8/23 11:47		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	9/7/23 14:38	9/8/23 13:48		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	9/7/23 14:38	9/8/23 13:48		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Dissolved	9/7/23 14:38	9/8/23 13:48		1.015	0.125	mg/L	0.000112	0.000203	
* Barium, Dissolved	9/7/23 14:38	9/8/23 13:48		1.015	0.684	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	9/7/23 14:38	9/8/23 13:48		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	9/7/23 14:38	9/8/23 13:48		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	9/7/23 14:38	9/8/23 13:48		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	9/7/23 14:38	9/8/23 13:48		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Dissolved	9/7/23 14:38	9/8/23 13:48		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	9/7/23 14:38	9/8/23 13:48		1.015	0.204	mg/L	0.000152	0.001015	
* Potassium, Dissolved	9/7/23 14:38	9/8/23 13:48		1.015	2.65	mg/L	0.169505	0.5075	
* Selenium, Dissolved	9/7/23 14:38	9/8/23 13:48		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	9/7/23 14:38	9/8/23 13:48		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	9/7/23 16:09	9/7/23 21:13		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	9/11/23 09:08	9/11/23 09:08		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: DHC***								
Alkalinity pH Endpoint	9/12/23 10:42	9/12/23 15:34		1	4.45	SU		2	
* Alkalinity	9/12/23 10:42	9/12/23 15:34		1	187	mg CaCO3/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	9/7/23 13:50	9/11/23 13:15		1	294	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: DHC***								
* Bicarbonate Alkalinity, (calc.)	9/12/23 10:42	9/12/23 15:34		1	185	mg CaCO3/L		1	
* Carbonate Alkalinity, (calc.)	9/12/23 10:42	9/12/23 15:34		1	2.09	mg CaCO3/L		0.5	
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	9/14/23 13:30	9/14/23 13:30		1	1.12	mg/L	1.00	2	J

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description:	Gorgas Ash Pond - MW-6D	**Location Code:**	WMWGORAP
		Collected:	9/5/23 14:28
		Customer ID:	
Laboratory ID Number:	BD17113	**Submittal Date:**	9/7/23 10:51

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	9/11/23 12:29	9/11/23 12:29		1	9.14	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	9/11/23 15:54	9/11/23 15:54		1	0.107	mg/L	0.06	0.125	J
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	9/7/23 15:25	9/7/23 15:25		2	58.7	mg/L	1.2	4	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	9/5/23 14:24	9/5/23 14:24			465.44	uS/cm			FA
pH	9/5/23 14:24	9/5/23 14:24			7.23	SU			FA
Temperature	9/5/23 14:24	9/5/23 14:24			19.68	C			FA
Turbidity	9/5/23 14:24	9/5/23 14:24			2.45	NTU			FA
Sulfide	9/5/23 14:24	9/5/23 14:24			7	mg/L			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/5/23 14:28
Customer ID:
Delivery Date: 9/7/23 10:51

Description: Gorgas Ash Pond - MW-6D

Laboratory ID Number: BD17113

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17114	Aluminum, Dissolved	mg/L	0.000425	0.0198	0.100	0.0980	0.0999	0.0938	0.0850 to 0.115	98.0	70.0 to 130	1.92	20.0
BD17113	Aluminum, Total	mg/L	0.000780	0.0198	0.100	0.0995	0.100	0.0986	0.0850 to 0.115	99.5	70.0 to 130	0.501	20.0
BD17114	Antimony, Dissolved	mg/L	0.000270	0.00100	0.100	0.107	0.105	0.0935	0.0850 to 0.115	107	70.0 to 130	1.89	20.0
BD17113	Antimony, Total	mg/L	0.000278	0.00100	0.100	0.101	0.101	0.0972	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BD17114	Arsenic, Dissolved	mg/L	0.0000525	0.000200	0.100	0.174	0.174	0.104	0.0850 to 0.115	109	70.0 to 130	0.00	20.0
BD17113	Arsenic, Total	mg/L	0.0000220	0.000200	0.100	0.204	0.203	0.0991	0.0850 to 0.115	104	70.0 to 130	0.491	20.0
BD17114	Barium, Dissolved	mg/L	0.0000082	0.00100	0.100	0.112	0.111	0.0954	0.0850 to 0.115	98.2	70.0 to 130	0.897	20.0
BD17113	Barium, Total	mg/L	-0.0000007	0.00100	0.100	0.674	0.653	0.0932	0.0850 to 0.115	103	70.0 to 130	3.17	20.0
BD17114	Beryllium, Dissolved	mg/L	0.0000831	0.000880	0.100	0.0974	0.0977	0.0980	0.0850 to 0.115	97.4	70.0 to 130	0.308	20.0
BD17113	Beryllium, Total	mg/L	0.000110	0.000880	0.100	0.0948	0.0961	0.0900	0.0850 to 0.115	94.8	70.0 to 130	1.36	20.0
BD17114	Boron, Dissolved	mg/L	-0.000333	0.0650	1.00	1.08	1.07	1.02	0.850 to 1.15	104	70.0 to 130	0.930	20.0
BD17113	Boron, Total	mg/L	0.000355	0.0650	1.00	2.38	2.39	1.01	0.850 to 1.15	102	70.0 to 130	0.419	20.0
BD17114	Cadmium, Dissolved	mg/L	-0.0000081	0.000147	0.100	0.103	0.102	0.102	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BD17113	Cadmium, Total	mg/L	-0.0000002	0.000147	0.100	0.0987	0.101	0.0998	0.0850 to 0.115	98.7	70.0 to 130	2.30	20.0
BD17114	Calcium, Dissolved	mg/L	-0.0117	0.152	5.00	85.6	84.3	5.08	4.25 to 5.75	204	70.0 to 130	1.53	20.0
BD17113	Calcium, Total	mg/L	-0.0276	0.152	5.00	58.8	60.7	5.12	4.25 to 5.75	98.0	70.0 to 130	3.18	20.0
BD17116	Chloride	mg/L	0.0345	1.00	10.0	13.2	12.9	10.2	9.00 to 11.0	101	80.0 to 120	2.30	20.0
BD17114	Chromium, Dissolved	mg/L	-0.000104	0.000440	0.100	0.0983	0.101	0.0972	0.0850 to 0.115	98.3	70.0 to 130	2.71	20.0
BD17113	Chromium, Total	mg/L	-0.0000753	0.000440	0.100	0.0985	0.0995	0.0980	0.0850 to 0.115	98.5	70.0 to 130	1.01	20.0
BD17114	Cobalt, Dissolved	mg/L	0.0000006	0.000147	0.100	0.101	0.103	0.100	0.0850 to 0.115	100	70.0 to 130	1.96	20.0
BD17113	Cobalt, Total	mg/L	0.0000106	0.000147	0.100	0.0992	0.0998	0.101	0.0850 to 0.115	99.2	70.0 to 130	0.603	20.0
BD17116	Fluoride	mg/L	0.0243	0.125	2.50	2.78	2.79	2.65	2.25 to 2.75	104	80.0 to 120	0.359	20.0
BD17114	Iron, Dissolved	mg/L	0.00162	0.0176	0.2	47.4	46.1	0.202	0.170 to 0.230	350	70.0 to 130	2.78	20.0
BD17113	Iron, Total	mg/L	-0.00332	0.0176	0.2	0.227	0.225	0.200	0.170 to 0.230	102	70.0 to 130	0.885	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/5/23 14:28
Customer ID:
Delivery Date: 9/7/23 10:51

Description: Gorgas Ash Pond - MW-6D

Laboratory ID Number: BD17113

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17114	Lead, Dissolved	mg/L	0.0000049	0.000147	0.100	0.0927	0.0940	0.0969	0.0850 to 0.115	92.7	70.0 to 130	1.39	20.0
BD17113	Lead, Total	mg/L	0.0000076	0.000147	0.100	0.0955	0.0971	0.0976	0.0850 to 0.115	95.5	70.0 to 130	1.66	20.0
BD17114	Lithium, Dissolved	mg/L	0.000425	0.0154	0.200	0.238	0.234	0.200	0.170 to 0.230	104	70.0 to 130	1.69	20.0
BD17113	Lithium, Total	mg/L	0.000205	0.0154	0.200	0.515	0.523	0.203	0.170 to 0.230	103	70.0 to 130	1.54	20.0
BD17114	Magnesium, Dissolved	mg/L	0.00215	0.0462	5.00	39.9	39.9	5.23	4.25 to 5.75	106	70.0 to 130	0.00	20.0
BD17113	Magnesium, Total	mg/L	-0.0156	0.0462	5.00	21.3	21.5	5.25	4.25 to 5.75	104	70.0 to 130	0.935	20.0
BD17114	Manganese, Dissolved	mg/L	-0.0000103	0.00033	0.100	1.48	1.49	0.0977	0.0850 to 0.115	70.0	70.0 to 130	0.673	20.0
BD17113	Manganese, Total	mg/L	-0.0000601	0.00033	0.100	0.268	0.273	0.0972	0.0850 to 0.115	98.0	70.0 to 130	1.85	20.0
BD17113	Mercury, Total by CVAA	mg/L	4.000E-05	0.000500	0.004	0.00403	0.00403	0.00404	0.00340 to 0.00460	101	70.0 to 130	0.00	20.0
BD17114	Molybdenum, Dissolved	mg/L	0.00120	0.0100	0.2	0.202	0.203	0.202	0.170 to 0.230	101	70.0 to 130	0.494	20.0
BD17113	Molybdenum, Total	mg/L	0.001	0.0100	0.2	0.215	0.216	0.204	0.170 to 0.230	102	70.0 to 130	0.464	20.0
BD17114	Potassium, Dissolved	mg/L	-0.0436	0.367	10.0	11.7	12.1	9.65	8.50 to 11.5	97.6	70.0 to 130	3.36	20.0
BD17113	Potassium, Total	mg/L	-0.00994	0.367	10.0	12.0	12.0	10.3	8.50 to 11.5	97.4	70.0 to 130	0.00	20.0
BD17114	Selenium, Dissolved	mg/L	-0.0000491	0.00100	0.100	0.104	0.107	0.103	0.0850 to 0.115	104	70.0 to 130	2.84	20.0
BD17113	Selenium, Total	mg/L	-0.0000097	0.00100	0.100	0.103	0.102	0.101	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BD17114	Silicon, Dissolved	mg/L	0.000595	0.0440	1.00	14.6	14.6	1.04	0.850 to 1.15	100	70.0 to 130	0.00	20.0
BD17113	Silicon, Total	mg/L	0.00200	0.0440	1.00	7.96	8.01	1.04	0.850 to 1.15	104	70.0 to 130	0.626	20.0
BD17114	Sodium, Dissolved	mg/L	0.00544	0.0880	5.00	24.6	24.3	5.13	4.25 to 5.75	106	70.0 to 130	1.23	20.0
BD17113	Sodium, Total	mg/L	0.00259	0.0880	5.00	32.3	32.8	5.11	4.25 to 5.75	104	70.0 to 130	1.54	20.0
BD17116	Sulfate	mg/L	-0.105	2.0	20.0	27.1	28.5	20.8	18.0 to 22.0	96.9	80.0 to 120	5.04	20.0
BD17114	Thallium, Dissolved	mg/L	-0.0000048	0.000147	0.100	0.0923	0.0938	0.0997	0.0850 to 0.115	92.3	70.0 to 130	1.61	20.0
BD17113	Thallium, Total	mg/L	0.0000085	0.000147	0.100	0.0950	0.0970	0.0982	0.0850 to 0.115	95.0	70.0 to 130	2.08	20.0
BD17113	Total Organic Carbon	mg/L	0.140	1.00	10.0	10.1	9.98	10.2		89.8	80.0 to 120	1.20	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/5/23 14:28
Customer ID:
Delivery Date: 9/7/23 10:51

Description: Gorgas Ash Pond - MW-6D

Laboratory ID Number: BD17113

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17116	Alkalinity	mg CaCO3/L					222	51.9	45.0 to 55.0			0.00	10.0
BD17116	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.03	0.200	2.00	2.03	-0.026	1.92	1.80 to 2.20	102	90.0 to 110	0.00	15.0
BD17116	Solids, Dissolved	mg/L	2.00	25.0			251	55.0	40.0 to 60.0			0.00	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-23H

Location Code: WMWGORAP
Collected: 9/6/23 11:15
Customer ID:
Submittal Date: 9/7/23 10:51

Laboratory ID Number: BD17114

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	9/8/23 07:51	9/14/23 16:01		1.015	0.0411	mg/L	0.030000	0.1015	J
* Calcium, Total	9/8/23 07:51	9/14/23 19:45		10.15	76.3	mg/L	0.70035	4.06	
* Iron, Total	9/8/23 07:51	9/14/23 19:48		101.5	49.2	mg/L	0.8120	4.06	
* Lithium, Total	9/8/23 07:51	9/14/23 16:01		1.015	0.0305	mg/L	0.007105	0.01999956	
* Magnesium, Total	9/8/23 07:51	9/14/23 16:01		1.015	35.3	mg/L	0.021315	0.406	
* Molybdenum, Total	9/8/23 07:51	9/14/23 16:01		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Total (calc.)	9/8/23 07:51	9/14/23 16:01		1	29.3	mg/L			
* Silicon, Total	9/8/23 07:51	9/14/23 16:01		1.015	13.7	mg/L	0.02030	0.25375	
* Sodium, Total	9/8/23 07:51	9/14/23 16:01		1.015	19.5	mg/L	0.04060	0.406	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	9/17/23 14:38	9/14/23 14:36		1.015	0.0402	mg/L	0.030000	0.1015	J
* Calcium, Dissolved	9/17/23 14:38	9/14/23 18:18		10.15	75.4	mg/L	0.70035	4.06	RA
* Iron, Dissolved	9/17/23 14:38	9/14/23 18:28		101.5	46.7	mg/L	0.8120	4.06	RA
* Lithium, Dissolved	9/17/23 14:38	9/14/23 14:36		1.015	0.0296	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	9/17/23 14:38	9/14/23 14:36		1.015	34.6	mg/L	0.021315	0.406	
* Molybdenum, Dissolved	9/17/23 14:38	9/14/23 14:36		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Dissolved (calc.)	9/17/23 14:38	9/14/23 14:36		1	29.1	mg/L			
* Silicon, Dissolved	9/17/23 14:38	9/14/23 14:36		1.015	13.6	mg/L	0.02030	0.25375	
* Sodium, Dissolved	9/17/23 14:38	9/14/23 14:36		1.015	19.3	mg/L	0.04060	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	9/8/23 07:51	9/8/23 12:09		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Total	9/8/23 07:51	9/8/23 12:09		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Total	9/8/23 07:51	9/8/23 12:09		1.015	0.0652	mg/L	0.000112	0.000203	
* Barium, Total	9/8/23 07:51	9/8/23 12:09		1.015	0.0127	mg/L	0.000508	0.001015	
* Beryllium, Total	9/8/23 07:51	9/8/23 12:09		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	9/8/23 07:51	9/8/23 12:09		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	9/8/23 07:51	9/8/23 12:09		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	9/8/23 07:51	9/8/23 12:09		1.015	0.000700	mg/L	0.000068	0.000203	
* Lead, Total	9/8/23 07:51	9/8/23 12:09		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	9/8/23 07:51	9/8/23 16:53		5.075	1.40	mg/L	0.000761	0.005075	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-23H

Location Code: WMWGORAP
Collected: 9/6/23 11:15
Customer ID:
Submittal Date: 9/7/23 10:51

Laboratory ID Number: BD17114

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	9/8/23 07:51	9/8/23 12:09		1.015	1.99	mg/L	0.169505	0.5075	
* Selenium, Total	9/8/23 07:51	9/8/23 12:09		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	9/8/23 07:51	9/8/23 12:09		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	9/7/23 14:38	9/8/23 13:51		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	9/7/23 14:38	9/8/23 13:51		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Dissolved	9/7/23 14:38	9/8/23 13:51		1.015	0.0650	mg/L	0.000112	0.000203	
* Barium, Dissolved	9/7/23 14:38	9/8/23 13:51		1.015	0.0138	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	9/7/23 14:38	9/8/23 13:51		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	9/7/23 14:38	9/8/23 13:51		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	9/7/23 14:38	9/8/23 13:51		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	9/7/23 14:38	9/8/23 13:51		1.015	0.000702	mg/L	0.000068	0.000203	
* Lead, Dissolved	9/7/23 14:38	9/8/23 13:51		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	9/7/23 14:38	9/8/23 14:40		5.075	1.41	mg/L	0.000761	0.005075	
* Potassium, Dissolved	9/7/23 14:38	9/8/23 13:51		1.015	1.94	mg/L	0.169505	0.5075	
* Selenium, Dissolved	9/7/23 14:38	9/8/23 13:51		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	9/7/23 14:38	9/8/23 13:51		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	9/7/23 16:09	9/7/23 21:32		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	9/11/23 09:09	9/11/23 09:09		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: DHC***								
Alkalinity pH Endpoint	9/12/23 10:42	9/12/23 15:34		1	4.44	SU		2	
* Alkalinity	9/12/23 10:42	9/12/23 15:34		1	84.6	mg CaCO3/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	9/7/23 13:50	9/11/23 13:15		1	591	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: DHC***								
* Bicarbonate Alkalinity, (calc.)	9/12/23 10:42	9/12/23 15:34		1	84.6	mg CaCO3/L		1	A
* Carbonate Alkalinity, (calc.)	9/12/23 10:42	9/12/23 15:34		1	Not Detected	mg CaCO3/L		0.5	A
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	9/14/23 14:40	9/14/23 14:40		1	Not Detected	mg/L	1.00	2	U

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-23H

Location Code: WMWGORAP
Collected: 9/6/23 11:15
Customer ID:
Submittal Date: 9/7/23 10:51

Laboratory ID Number: BD17114

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	9/11/23 12:31	9/11/23 12:31		1	5.93	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	9/11/23 15:55	9/11/23 15:55		1	0.0905	mg/L	0.06	0.125	J
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	9/7/23 15:26	9/7/23 15:26		20	335	mg/L	12.0	40	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	9/6/23 11:11	9/6/23 11:11			768.24	uS/cm			FA
pH	9/6/23 11:11	9/6/23 11:11			5.49	SU			FA
Temperature	9/6/23 11:11	9/6/23 11:11			18.47	C			FA
Turbidity	9/6/23 11:11	9/6/23 11:11			3.25	NTU			FA
Sulfide	9/6/23 11:11	9/6/23 11:11			0	mg/L			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 10/25/2023
Version: 3.5
COA_CCR

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/6/23 11:15
Customer ID:
Delivery Date: 9/7/23 10:51

Description: Gorgas Ash Pond - MW-23H

Laboratory ID Number: BD17114

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17114	Aluminum, Dissolved	mg/L	0.000425	0.0198	0.100	0.0980	0.0999	0.0938	0.0850 to 0.115	98.0	70.0 to 130	1.92	20.0
BD17116	Aluminum, Total	mg/L	0.000780	0.0198	0.100	0.159	0.152	0.0986	0.0850 to 0.115	109	70.0 to 130	4.50	20.0
BD17114	Antimony, Dissolved	mg/L	0.000270	0.00100	0.100	0.107	0.105	0.0935	0.0850 to 0.115	107	70.0 to 130	1.89	20.0
BD17116	Antimony, Total	mg/L	0.000278	0.00100	0.100	0.103	0.0999	0.0972	0.0850 to 0.115	103	70.0 to 130	3.06	20.0
BD17114	Arsenic, Dissolved	mg/L	0.0000525	0.000200	0.100	0.174	0.174	0.104	0.0850 to 0.115	109	70.0 to 130	0.00	20.0
BD17116	Arsenic, Total	mg/L	0.0000220	0.000200	0.100	0.103	0.102	0.0991	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BD17114	Barium, Dissolved	mg/L	0.0000082	0.00100	0.100	0.112	0.111	0.0954	0.0850 to 0.115	98.2	70.0 to 130	0.897	20.0
BD17116	Barium, Total	mg/L	-0.0000007	0.00100	0.100	1.08	1.07	0.0932	0.0850 to 0.115	30.0	70.0 to 130	0.930	20.0
BD17114	Beryllium, Dissolved	mg/L	0.0000831	0.000880	0.100	0.0974	0.0977	0.0980	0.0850 to 0.115	97.4	70.0 to 130	0.308	20.0
BD17116	Beryllium, Total	mg/L	0.000110	0.000880	0.100	0.0928	0.0964	0.0900	0.0850 to 0.115	92.8	70.0 to 130	3.81	20.0
BD17114	Boron, Dissolved	mg/L	-0.000333	0.0650	1.00	1.08	1.07	1.02	0.850 to 1.15	104	70.0 to 130	0.930	20.0
BD17116	Boron, Total	mg/L	0.000355	0.0650	1.00	1.10	1.10	1.01	0.850 to 1.15	103	70.0 to 130	0.00	20.0
BD17114	Cadmium, Dissolved	mg/L	-0.0000081	0.000147	0.100	0.103	0.102	0.102	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BD17116	Cadmium, Total	mg/L	-0.0000002	0.000147	0.100	0.104	0.102	0.0998	0.0850 to 0.115	104	70.0 to 130	1.94	20.0
BD17114	Calcium, Dissolved	mg/L	-0.0117	0.152	5.00	85.6	84.3	5.08	4.25 to 5.75	204	70.0 to 130	1.53	20.0
BD17116	Calcium, Total	mg/L	-0.0276	0.152	5.00	47.4	47.8	5.12	4.25 to 5.75	72.0	70.0 to 130	0.840	20.0
BD17116	Chloride	mg/L	0.0345	1.00	10.0	13.2	12.9	10.2	9.00 to 11.0	101	80.0 to 120	2.30	20.0
BD17114	Chromium, Dissolved	mg/L	-0.000104	0.000440	0.100	0.0983	0.101	0.0972	0.0850 to 0.115	98.3	70.0 to 130	2.71	20.0
BD17116	Chromium, Total	mg/L	-0.0000753	0.000440	0.100	0.103	0.0996	0.0980	0.0850 to 0.115	103	70.0 to 130	3.36	20.0
BD17114	Cobalt, Dissolved	mg/L	0.0000006	0.000147	0.100	0.101	0.103	0.100	0.0850 to 0.115	100	70.0 to 130	1.96	20.0
BD17116	Cobalt, Total	mg/L	0.0000106	0.000147	0.100	0.104	0.101	0.101	0.0850 to 0.115	104	70.0 to 130	2.93	20.0
BD17116	Fluoride	mg/L	0.0243	0.125	2.50	2.78	2.79	2.65	2.25 to 2.75	104	80.0 to 120	0.359	20.0
BD17114	Iron, Dissolved	mg/L	0.00162	0.0176	0.2	47.4	46.1	0.202	0.170 to 0.230	350	70.0 to 130	2.78	20.0
BD17116	Iron, Total	mg/L	-0.00332	0.0176	0.2	2.18	2.18	0.200	0.170 to 0.230	95.0	70.0 to 130	0.00	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/6/23 11:15
Customer ID:
Delivery Date: 9/7/23 10:51

Description: Gorgas Ash Pond - MW-23H

Laboratory ID Number: BD17114

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17114	Lead, Dissolved	mg/L	0.0000049	0.000147	0.100	0.0927	0.0940	0.0969	0.0850 to 0.115	92.7	70.0 to 130	1.39	20.0
BD17116	Lead, Total	mg/L	0.0000076	0.000147	0.100	0.0957	0.0958	0.0976	0.0850 to 0.115	95.7	70.0 to 130	0.104	20.0
BD17114	Lithium, Dissolved	mg/L	0.000425	0.0154	0.200	0.238	0.234	0.200	0.170 to 0.230	104	70.0 to 130	1.69	20.0
BD17116	Lithium, Total	mg/L	0.000205	0.0154	0.200	0.227	0.226	0.203	0.170 to 0.230	101	70.0 to 130	0.442	20.0
BD17114	Magnesium, Dissolved	mg/L	0.00215	0.0462	5.00	39.9	39.9	5.23	4.25 to 5.75	106	70.0 to 130	0.00	20.0
BD17116	Magnesium, Total	mg/L	-0.0156	0.0462	5.00	19.8	19.8	5.25	4.25 to 5.75	102	70.0 to 130	0.00	20.0
BD17114	Manganese, Dissolved	mg/L	-0.0000103	0.00033	0.100	1.48	1.49	0.0977	0.0850 to 0.115	70.0	70.0 to 130	0.673	20.0
BD17116	Manganese, Total	mg/L	-0.0000601	0.00033	0.100	0.202	0.198	0.0972	0.0850 to 0.115	97.0	70.0 to 130	2.00	20.0
BD17116	Mercury, Total by CVAA	mg/L	4.000E-05	0.000500	0.004	0.00399	0.00402	0.00404	0.00340 to 0.00460	99.8	70.0 to 130	0.749	20.0
BD17114	Molybdenum, Dissolved	mg/L	0.00120	0.0100	0.2	0.202	0.203	0.202	0.170 to 0.230	101	70.0 to 130	0.494	20.0
BD17116	Molybdenum, Total	mg/L	0.001	0.0100	0.2	0.204	0.206	0.204	0.170 to 0.230	102	70.0 to 130	0.976	20.0
BD17114	Potassium, Dissolved	mg/L	-0.0436	0.367	10.0	11.7	12.1	9.65	8.50 to 11.5	97.6	70.0 to 130	3.36	20.0
BD17116	Potassium, Total	mg/L	-0.00994	0.367	10.0	11.6	11.3	10.3	8.50 to 11.5	101	70.0 to 130	2.62	20.0
BD17114	Selenium, Dissolved	mg/L	-0.0000491	0.00100	0.100	0.104	0.107	0.103	0.0850 to 0.115	104	70.0 to 130	2.84	20.0
BD17116	Selenium, Total	mg/L	-0.0000097	0.00100	0.100	0.101	0.104	0.101	0.0850 to 0.115	101	70.0 to 130	2.93	20.0
BD17114	Silicon, Dissolved	mg/L	0.000595	0.0440	1.00	14.6	14.6	1.04	0.850 to 1.15	100	70.0 to 130	0.00	20.0
BD17116	Silicon, Total	mg/L	0.00200	0.0440	1.00	14.8	14.8	1.04	0.850 to 1.15	100	70.0 to 130	0.00	20.0
BD17114	Sodium, Dissolved	mg/L	0.00544	0.0880	5.00	24.6	24.3	5.13	4.25 to 5.75	106	70.0 to 130	1.23	20.0
BD17116	Sodium, Total	mg/L	0.00259	0.0880	5.00	36.6	36.4	5.11	4.25 to 5.75	96.0	70.0 to 130	0.548	20.0
BD17116	Sulfate	mg/L	-0.105	2.0	20.0	27.1	28.5	20.8	18.0 to 22.0	96.9	80.0 to 120	5.04	20.0
BD17114	Thallium, Dissolved	mg/L	-0.0000048	0.000147	0.100	0.0923	0.0938	0.0997	0.0850 to 0.115	92.3	70.0 to 130	1.61	20.0
BD17116	Thallium, Total	mg/L	0.0000085	0.000147	0.100	0.0958	0.0978	0.0982	0.0850 to 0.115	95.8	70.0 to 130	2.07	20.0
BD17116	Total Organic Carbon	mg/L	0.157	1.00	10.0	9.63	10.8	8.80		96.3	80.0 to 120	11.5	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/6/23 11:15
Customer ID:
Delivery Date: 9/7/23 10:51

Description: Gorgas Ash Pond - MW-23H

Laboratory ID Number: BD17114

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17116	Alkalinity	mg CaCO3/L					222	51.9	45.0 to 55.0			0.00	10.0
BD17116	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.03	0.200	2.00	2.03	-0.026	1.92	1.80 to 2.20	102	90.0 to 110	0.00	15.0
BD17116	Solids, Dissolved	mg/L	2.00	25.0			251	55.0	40.0 to 60.0			0.00	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-23V

Location Code: WMWGORAP
Collected: 9/6/23 12:15
Customer ID:
Submittal Date: 9/7/23 10:51

Laboratory ID Number: BD17115

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	9/8/23 07:51	9/14/23 16:04		1.015	0.515	mg/L	0.030000	0.1015	
* Calcium, Total	9/8/23 07:51	9/14/23 19:51		10.15	57.9	mg/L	0.70035	4.06	
* Iron, Total	9/8/23 07:51	9/14/23 16:04		1.015	0.196	mg/L	0.008120	0.0406	
* Lithium, Total	9/8/23 07:51	9/14/23 16:04		1.015	0.0418	mg/L	0.007105	0.01999956	
* Magnesium, Total	9/8/23 07:51	9/14/23 16:04		1.015	17.2	mg/L	0.021315	0.406	
* Molybdenum, Total	9/8/23 07:51	9/14/23 16:04		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Total (calc.)	9/8/23 07:51	9/14/23 16:04		1	22.7	mg/L			
* Silicon, Total	9/8/23 07:51	9/14/23 16:04		1.015	10.6	mg/L	0.02030	0.25375	
* Sodium, Total	9/8/23 07:51	9/14/23 19:51		10.15	47.9	mg/L	0.4060	4.06	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	9/17/23 14:38	9/14/23 14:52		1.015	0.517	mg/L	0.030000	0.1015	
* Calcium, Dissolved	9/17/23 14:38	9/14/23 18:37		10.15	55.7	mg/L	0.70035	4.06	
* Iron, Dissolved	9/17/23 14:38	9/14/23 14:52		1.015	0.171	mg/L	0.008120	0.0406	
* Lithium, Dissolved	9/17/23 14:38	9/14/23 14:52		1.015	0.0411	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	9/17/23 14:38	9/14/23 14:52		1.015	16.9	mg/L	0.021315	0.406	
* Molybdenum, Dissolved	9/17/23 14:38	9/14/23 14:52		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Dissolved (calc.)	9/17/23 14:38	9/14/23 14:52		1	22.5	mg/L			
* Silicon, Dissolved	9/17/23 14:38	9/14/23 14:52		1.015	10.5	mg/L	0.02030	0.25375	
* Sodium, Dissolved	9/17/23 14:38	9/14/23 18:37		10.15	47.1	mg/L	0.4060	4.06	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	9/8/23 07:51	9/8/23 12:13		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Arsenic, Total	9/8/23 07:51	9/8/23 12:13		1.015	Not Detected	mg/L	0.000112	0.000203	U
* Aluminum, Total	9/8/23 07:51	9/8/23 12:13		1.015	0.0150	mg/L	0.009135	0.05075	J
* Barium, Total	9/8/23 07:51	9/8/23 12:13		1.015	0.0771	mg/L	0.000508	0.001015	
* Beryllium, Total	9/8/23 07:51	9/8/23 12:13		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	9/8/23 07:51	9/8/23 12:13		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	9/8/23 07:51	9/8/23 12:13		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	9/8/23 07:51	9/8/23 12:13		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	9/8/23 07:51	9/8/23 12:13		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	9/8/23 07:51	9/8/23 12:13		1.015	0.0516	mg/L	0.000152	0.001015	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-23V

Location Code: WMWGORAP
Collected: 9/6/23 12:15
Customer ID:
Submittal Date: 9/7/23 10:51

Laboratory ID Number: BD17115

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	9/8/23 07:51	9/8/23 12:13		1.015	1.85	mg/L	0.169505	0.5075	
* Selenium, Total	9/8/23 07:51	9/8/23 12:13		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	9/8/23 07:51	9/8/23 12:13		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	9/7/23 14:38	9/8/23 14:14		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	9/7/23 14:38	9/8/23 14:14		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Dissolved	9/7/23 14:38	9/8/23 14:14		1.015	Not Detected	mg/L	0.000112	0.000203	U
* Barium, Dissolved	9/7/23 14:38	9/8/23 14:14		1.015	0.0787	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	9/7/23 14:38	9/8/23 14:14		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	9/7/23 14:38	9/8/23 14:14		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	9/7/23 14:38	9/8/23 14:14		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	9/7/23 14:38	9/8/23 14:14		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Dissolved	9/7/23 14:38	9/8/23 14:14		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	9/7/23 14:38	9/8/23 14:14		1.015	0.0515	mg/L	0.000152	0.001015	
* Potassium, Dissolved	9/7/23 14:38	9/8/23 14:14		1.015	1.80	mg/L	0.169505	0.5075	
* Selenium, Dissolved	9/7/23 14:38	9/8/23 14:14		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	9/7/23 14:38	9/8/23 14:14		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	9/7/23 16:09	9/7/23 21:36		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	9/11/23 09:09	9/11/23 09:09		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: DHC***								
Alkalinity pH Endpoint	9/12/23 10:42	9/12/23 15:34		1	4.49	SU		2	
* Alkalinity	9/12/23 10:42	9/12/23 15:34		1	223	mg CaCO3/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	9/7/23 13:50	9/11/23 13:15		1	364	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: DHC***								
* Bicarbonate Alkalinity, (calc.)	9/12/23 10:42	9/12/23 15:34		1	221	mg CaCO3/L		1	
* Carbonate Alkalinity, (calc.)	9/12/23 10:42	9/12/23 15:34		1	2.38	mg CaCO3/L		0.5	
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	9/14/23 14:55	9/14/23 14:55		1	1.01	mg/L	1.00	2	J

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-23V

Location Code: WMWGORAP
Collected: 9/6/23 12:15
Customer ID:
Submittal Date: 9/7/23 10:51

Laboratory ID Number: BD17115

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	9/11/23 12:32	9/11/23 12:32		1	7.04	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	9/11/23 15:56	9/11/23 15:56		1	0.158	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	9/7/23 15:27	9/7/23 15:27		2	77.5	mg/L	1.2	4	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	9/6/23 12:12	9/6/23 12:12			570.87	uS/cm			FA
pH	9/6/23 12:12	9/6/23 12:12			6.12	SU			FA
Temperature	9/6/23 12:12	9/6/23 12:12			17.99	C			FA
Turbidity	9/6/23 12:12	9/6/23 12:12			1.86	NTU			FA
Sulfide	9/6/23 12:12	9/6/23 12:12			0	mg/L			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/6/23 12:15
Customer ID:
Delivery Date: 9/7/23 10:51

Description: Gorgas Ash Pond - MW-23V

Laboratory ID Number: BD17115

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17116	Aluminum, Dissolved	mg/L	0.000425	0.0198	0.100	0.0951	0.0968	0.0938	0.0850 to 0.115	95.1	70.0 to 130	1.77	20.0
BD17116	Aluminum, Total	mg/L	0.000780	0.0198	0.100	0.159	0.152	0.0986	0.0850 to 0.115	109	70.0 to 130	4.50	20.0
BD17116	Antimony, Dissolved	mg/L	0.000270	0.00100	0.100	0.100	0.104	0.0935	0.0850 to 0.115	100	70.0 to 130	3.92	20.0
BD17116	Antimony, Total	mg/L	0.000278	0.00100	0.100	0.103	0.0999	0.0972	0.0850 to 0.115	103	70.0 to 130	3.06	20.0
BD17116	Arsenic, Dissolved	mg/L	0.0000525	0.000200	0.100	0.108	0.111	0.104	0.0850 to 0.115	108	70.0 to 130	2.74	20.0
BD17116	Arsenic, Total	mg/L	0.0000220	0.000200	0.100	0.103	0.102	0.0991	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BD17116	Barium, Dissolved	mg/L	0.0000082	0.00100	0.100	1.10	1.11	0.0954	0.0850 to 0.115	102	70.0 to 130	0.905	20.0
BD17116	Barium, Total	mg/L	-0.0000007	0.00100	0.100	1.08	1.07	0.0932	0.0850 to 0.115	30.0	70.0 to 130	0.930	20.0
BD17116	Beryllium, Dissolved	mg/L	0.0000831	0.000880	0.100	0.105	0.106	0.0980	0.0850 to 0.115	105	70.0 to 130	0.948	20.0
BD17116	Beryllium, Total	mg/L	0.000110	0.000880	0.100	0.0928	0.0964	0.0900	0.0850 to 0.115	92.8	70.0 to 130	3.81	20.0
BD17116	Boron, Dissolved	mg/L	-0.000333	0.0650	1.00	1.09	1.10	1.02	0.850 to 1.15	102	70.0 to 130	0.913	20.0
BD17116	Boron, Total	mg/L	0.000355	0.0650	1.00	1.10	1.10	1.01	0.850 to 1.15	103	70.0 to 130	0.00	20.0
BD17116	Cadmium, Dissolved	mg/L	-0.0000081	0.000147	0.100	0.102	0.105	0.102	0.0850 to 0.115	102	70.0 to 130	2.90	20.0
BD17116	Cadmium, Total	mg/L	-0.0000002	0.000147	0.100	0.104	0.102	0.0998	0.0850 to 0.115	104	70.0 to 130	1.94	20.0
BD17116	Calcium, Dissolved	mg/L	-0.0117	0.152	5.00	49.0	47.8	5.08	4.25 to 5.75	114	70.0 to 130	2.48	20.0
BD17116	Calcium, Total	mg/L	-0.0276	0.152	5.00	47.4	47.8	5.12	4.25 to 5.75	72.0	70.0 to 130	0.840	20.0
BD17116	Chloride	mg/L	0.0345	1.00	10.0	13.2	12.9	10.2	9.00 to 11.0	101	80.0 to 120	2.30	20.0
BD17116	Chromium, Dissolved	mg/L	-0.000104	0.000440	0.100	0.0985	0.101	0.0972	0.0850 to 0.115	98.5	70.0 to 130	2.51	20.0
BD17116	Chromium, Total	mg/L	-0.0000753	0.000440	0.100	0.103	0.0996	0.0980	0.0850 to 0.115	103	70.0 to 130	3.36	20.0
BD17116	Cobalt, Dissolved	mg/L	0.0000006	0.000147	0.100	0.100	0.102	0.100	0.0850 to 0.115	99.8	70.0 to 130	1.98	20.0
BD17116	Cobalt, Total	mg/L	0.0000106	0.000147	0.100	0.104	0.101	0.101	0.0850 to 0.115	104	70.0 to 130	2.93	20.0
BD17116	Fluoride	mg/L	0.0243	0.125	2.50	2.78	2.79	2.65	2.25 to 2.75	104	80.0 to 120	0.359	20.0
BD17116	Iron, Dissolved	mg/L	0.00162	0.0176	0.2	2.03	2.03	0.202	0.170 to 0.230	95.0	70.0 to 130	0.00	20.0
BD17116	Iron, Total	mg/L	-0.00332	0.0176	0.2	2.18	2.18	0.200	0.170 to 0.230	95.0	70.0 to 130	0.00	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/6/23 12:15
Customer ID:
Delivery Date: 9/7/23 10:51

Description: Gorgas Ash Pond - MW-23V

Laboratory ID Number: BD17115

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17116	Lead, Dissolved	mg/L	0.0000049	0.000147	0.100	0.0955	0.0941	0.0969	0.0850 to 0.115	95.5	70.0 to 130	1.48	20.0
BD17116	Lead, Total	mg/L	0.0000076	0.000147	0.100	0.0957	0.0958	0.0976	0.0850 to 0.115	95.7	70.0 to 130	0.104	20.0
BD17116	Lithium, Dissolved	mg/L	0.000425	0.0154	0.200	0.224	0.227	0.200	0.170 to 0.230	100	70.0 to 130	1.33	20.0
BD17116	Lithium, Total	mg/L	0.000205	0.0154	0.200	0.227	0.226	0.203	0.170 to 0.230	101	70.0 to 130	0.442	20.0
BD17116	Magnesium, Dissolved	mg/L	0.00215	0.0462	5.00	19.6	19.5	5.23	4.25 to 5.75	106	70.0 to 130	0.512	20.0
BD17116	Magnesium, Total	mg/L	-0.0156	0.0462	5.00	19.8	19.8	5.25	4.25 to 5.75	102	70.0 to 130	0.00	20.0
BD17116	Manganese, Dissolved	mg/L	-0.0000103	0.00033	0.100	0.193	0.194	0.0977	0.0850 to 0.115	97.8	70.0 to 130	0.517	20.0
BD17116	Manganese, Total	mg/L	-0.0000601	0.00033	0.100	0.202	0.198	0.0972	0.0850 to 0.115	97.0	70.0 to 130	2.00	20.0
BD17116	Mercury, Total by CVAA	mg/L	4.000E-05	0.000500	0.004	0.00399	0.00402	0.00404	0.00340 to 0.00460	99.8	70.0 to 130	0.749	20.0
BD17116	Molybdenum, Dissolved	mg/L	0.00120	0.0100	0.2	0.201	0.205	0.202	0.170 to 0.230	100	70.0 to 130	1.97	20.0
BD17116	Molybdenum, Total	mg/L	0.001	0.0100	0.2	0.204	0.206	0.204	0.170 to 0.230	102	70.0 to 130	0.976	20.0
BD17116	Potassium, Dissolved	mg/L	-0.0436	0.367	10.0	11.1	11.1	9.65	8.50 to 11.5	96.9	70.0 to 130	0.00	20.0
BD17116	Potassium, Total	mg/L	-0.00994	0.367	10.0	11.6	11.3	10.3	8.50 to 11.5	101	70.0 to 130	2.62	20.0
BD17116	Selenium, Dissolved	mg/L	-0.0000491	0.00100	0.100	0.105	0.110	0.103	0.0850 to 0.115	105	70.0 to 130	4.65	20.0
BD17116	Selenium, Total	mg/L	-0.0000097	0.00100	0.100	0.101	0.104	0.101	0.0850 to 0.115	101	70.0 to 130	2.93	20.0
BD17116	Silicon, Dissolved	mg/L	0.000595	0.0440	1.00	14.7	14.7	1.04	0.850 to 1.15	100	70.0 to 130	0.00	20.0
BD17116	Silicon, Total	mg/L	0.00200	0.0440	1.00	14.8	14.8	1.04	0.850 to 1.15	100	70.0 to 130	0.00	20.0
BD17116	Sodium, Dissolved	mg/L	0.00544	0.0880	5.00	36.4	36.4	5.13	4.25 to 5.75	104	70.0 to 130	0.00	20.0
BD17116	Sodium, Total	mg/L	0.00259	0.0880	5.00	36.6	36.4	5.11	4.25 to 5.75	96.0	70.0 to 130	0.548	20.0
BD17116	Sulfate	mg/L	-0.105	2.0	20.0	27.1	28.5	20.8	18.0 to 22.0	96.9	80.0 to 120	5.04	20.0
BD17116	Thallium, Dissolved	mg/L	-0.0000048	0.000147	0.100	0.0994	0.0971	0.0997	0.0850 to 0.115	99.4	70.0 to 130	2.34	20.0
BD17116	Thallium, Total	mg/L	0.0000085	0.000147	0.100	0.0958	0.0978	0.0982	0.0850 to 0.115	95.8	70.0 to 130	2.07	20.0
BD17116	Total Organic Carbon	mg/L	0.157	1.00	10.0	9.63	10.8	8.80		96.3	80.0 to 120	11.5	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/6/23 12:15
Customer ID:
Delivery Date: 9/7/23 10:51

Description: Gorgas Ash Pond - MW-23V

Laboratory ID Number: BD17115

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17116	Alkalinity	mg CaCO3/L					222	51.9	45.0 to 55.0			0.00	10.0
BD17116	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.03	0.200	2.00	2.03	-0.026	1.92	1.80 to 2.20	102	90.0 to 110	0.00	15.0
BD17116	Solids, Dissolved	mg/L	2.00	25.0			251	55.0	40.0 to 60.0			0.00	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-24H

Location Code: WMWGORAP
Collected: 9/6/23 14:05
Customer ID:
Submittal Date: 9/7/23 10:51

Laboratory ID Number: BD17116

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7		***Analyst: ABB***			***Preparation Method: EPA 1638***				
* Boron, Total	9/8/23 07:51	9/14/23 16:07		1.015	0.0665	mg/L	0.030000	0.1015	J
* Calcium, Total	9/8/23 07:51	9/14/23 19:54		10.15	43.8	mg/L	0.70035	4.06	
* Iron, Total	9/8/23 07:51	9/14/23 16:07		1.015	1.99	mg/L	0.008120	0.0406	
* Lithium, Total	9/8/23 07:51	9/14/23 16:07		1.015	0.0245	mg/L	0.007105	0.01999956	
* Magnesium, Total	9/8/23 07:51	9/14/23 16:07		1.015	14.7	mg/L	0.021315	0.406	
* Molybdenum, Total	9/8/23 07:51	9/14/23 16:07		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Total (calc.)	9/8/23 07:51	9/14/23 16:07		1	29.5	mg/L			
* Silicon, Total	9/8/23 07:51	9/14/23 16:07		1.015	13.8	mg/L	0.02030	0.25375	
* Sodium, Total	9/8/23 07:51	9/14/23 16:07		1.015	31.8	mg/L	0.04060	0.406	
Analytical Method: EPA 200.7		***Analyst: ABB***							
* Boron, Dissolved	9/17/23 14:38	9/14/23 14:55		1.015	0.0656	mg/L	0.030000	0.1015	J
* Calcium, Dissolved	9/17/23 14:38	9/14/23 18:41		10.15	43.3	mg/L	0.70035	4.06	
* Iron, Dissolved	9/17/23 14:38	9/14/23 14:55		1.015	1.84	mg/L	0.008120	0.0406	
* Lithium, Dissolved	9/17/23 14:38	9/14/23 14:55		1.015	0.0238	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	9/17/23 14:38	9/14/23 14:55		1.015	14.3	mg/L	0.021315	0.406	
* Molybdenum, Dissolved	9/17/23 14:38	9/14/23 14:55		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Dissolved (calc.)	9/17/23 14:38	9/14/23 14:55		1	29.3	mg/L			
* Silicon, Dissolved	9/17/23 14:38	9/14/23 14:55		1.015	13.7	mg/L	0.02030	0.25375	
* Sodium, Dissolved	9/17/23 14:38	9/14/23 14:55		1.015	31.2	mg/L	0.04060	0.406	
Analytical Method: EPA 200.8		***Analyst: DLJ***			***Preparation Method: EPA 1638***				
* Antimony, Total	9/8/23 07:51	9/8/23 12:17		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Total	9/8/23 07:51	9/8/23 12:17		1.015	0.0504	mg/L	0.009135	0.05075	J
* Arsenic, Total	9/8/23 07:51	9/8/23 12:17		1.015	0.000239	mg/L	0.000112	0.000203	
* Barium, Total	9/8/23 07:51	9/8/23 12:17		1.015	1.05	mg/L	0.000508	0.001015	RA
* Beryllium, Total	9/8/23 07:51	9/8/23 12:17		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	9/8/23 07:51	9/8/23 12:17		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	9/8/23 07:51	9/8/23 12:17		1.015	0.000248	mg/L	0.000203	0.001015	J
* Cobalt, Total	9/8/23 07:51	9/8/23 12:17		1.015	0.000313	mg/L	0.000068	0.000203	
* Lead, Total	9/8/23 07:51	9/8/23 12:17		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	9/8/23 07:51	9/8/23 12:17		1.015	0.105	mg/L	0.000152	0.001015	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-24H

Location Code: WMWGORAP
Collected: 9/6/23 14:05
Customer ID:
Submittal Date: 9/7/23 10:51

Laboratory ID Number: BD17116

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	9/8/23 07:51	9/8/23 12:17		1.015	1.51	mg/L	0.169505	0.5075	
* Selenium, Total	9/8/23 07:51	9/8/23 12:17		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	9/8/23 07:51	9/8/23 12:17		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	9/7/23 14:38	9/8/23 14:18		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	9/7/23 14:38	9/8/23 14:18		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Dissolved	9/7/23 14:38	9/8/23 14:18		1.015	0.000264	mg/L	0.000112	0.000203	
* Barium, Dissolved	9/7/23 14:38	9/8/23 14:18		1.015	0.998	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	9/7/23 14:38	9/8/23 14:18		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	9/7/23 14:38	9/8/23 14:18		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	9/7/23 14:38	9/8/23 14:18		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	9/7/23 14:38	9/8/23 14:18		1.015	0.000241	mg/L	0.000068	0.000203	
* Lead, Dissolved	9/7/23 14:38	9/8/23 14:18		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	9/7/23 14:38	9/8/23 14:18		1.015	0.0952	mg/L	0.000152	0.001015	
* Potassium, Dissolved	9/7/23 14:38	9/8/23 14:18		1.015	1.41	mg/L	0.169505	0.5075	
* Selenium, Dissolved	9/7/23 14:38	9/8/23 14:18		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	9/7/23 14:38	9/8/23 14:18		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	9/7/23 16:09	9/7/23 21:40		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	9/11/23 09:10	9/11/23 09:10		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: DHC***								
Alkalinity pH Endpoint	9/12/23 10:42	9/12/23 15:34		1	4.50	SU		2	
* Alkalinity	9/12/23 10:42	9/12/23 15:34		1	222	mg CaCO3/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	9/7/23 13:50	9/11/23 13:15		1	251	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: DHC***								
* Bicarbonate Alkalinity, (calc.)	9/12/23 10:42	9/12/23 15:34		1	221	mg CaCO3/L		1	
* Carbonate Alkalinity, (calc.)	9/12/23 10:42	9/12/23 15:34		1	1.04	mg CaCO3/L		0.5	
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	9/14/23 15:10	9/14/23 15:10		1	Not Detected	mg/L	1.00	2	U

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-24H

Location Code: WMWGORAP
Collected: 9/6/23 14:05
Customer ID:
Submittal Date: 9/7/23 10:51

Laboratory ID Number: BD17116

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	9/11/23 12:33	9/11/23 12:33		1	3.11	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	9/11/23 15:57	9/11/23 15:57		1	0.175	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	9/7/23 15:17	9/7/23 15:17		1	7.72	mg/L	0.6	2	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	9/6/23 14:01	9/6/23 14:01			396.88	uS/cm			FA
pH	9/6/23 14:01	9/6/23 14:01			5.56	SU			FA
Temperature	9/6/23 14:01	9/6/23 14:01			19.54	C			FA
Turbidity	9/6/23 14:01	9/6/23 14:01			2.72	NTU			FA
Sulfide	9/6/23 14:01	9/6/23 14:01			0	mg/L			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 10/25/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/6/23 14:05
Customer ID:
Delivery Date: 9/7/23 10:51

Description: Gorgas Ash Pond - MW-24H

Laboratory ID Number: BD17116

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17116	Aluminum, Dissolved	mg/L	0.000425	0.0198	0.100	0.0951	0.0968	0.0938	0.0850 to 0.115	95.1	70.0 to 130	1.77	20.0
BD17116	Aluminum, Total	mg/L	0.000780	0.0198	0.100	0.159	0.152	0.0986	0.0850 to 0.115	109	70.0 to 130	4.50	20.0
BD17116	Antimony, Dissolved	mg/L	0.000270	0.00100	0.100	0.100	0.104	0.0935	0.0850 to 0.115	100	70.0 to 130	3.92	20.0
BD17116	Antimony, Total	mg/L	0.000278	0.00100	0.100	0.103	0.0999	0.0972	0.0850 to 0.115	103	70.0 to 130	3.06	20.0
BD17116	Arsenic, Dissolved	mg/L	0.0000525	0.000200	0.100	0.108	0.111	0.104	0.0850 to 0.115	108	70.0 to 130	2.74	20.0
BD17116	Arsenic, Total	mg/L	0.0000220	0.000200	0.100	0.103	0.102	0.0991	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BD17116	Barium, Dissolved	mg/L	0.0000082	0.00100	0.100	1.10	1.11	0.0954	0.0850 to 0.115	102	70.0 to 130	0.905	20.0
BD17116	Barium, Total	mg/L	-0.0000007	0.00100	0.100	1.08	1.07	0.0932	0.0850 to 0.115	30.0	70.0 to 130	0.930	20.0
BD17116	Beryllium, Dissolved	mg/L	0.0000831	0.000880	0.100	0.105	0.106	0.0980	0.0850 to 0.115	105	70.0 to 130	0.948	20.0
BD17116	Beryllium, Total	mg/L	0.000110	0.000880	0.100	0.0928	0.0964	0.0900	0.0850 to 0.115	92.8	70.0 to 130	3.81	20.0
BD17116	Boron, Dissolved	mg/L	-0.000333	0.0650	1.00	1.09	1.10	1.02	0.850 to 1.15	102	70.0 to 130	0.913	20.0
BD17116	Boron, Total	mg/L	0.000355	0.0650	1.00	1.10	1.10	1.01	0.850 to 1.15	103	70.0 to 130	0.00	20.0
BD17116	Cadmium, Dissolved	mg/L	-0.0000081	0.000147	0.100	0.102	0.105	0.102	0.0850 to 0.115	102	70.0 to 130	2.90	20.0
BD17116	Cadmium, Total	mg/L	-0.0000002	0.000147	0.100	0.104	0.102	0.0998	0.0850 to 0.115	104	70.0 to 130	1.94	20.0
BD17116	Calcium, Dissolved	mg/L	-0.0117	0.152	5.00	49.0	47.8	5.08	4.25 to 5.75	114	70.0 to 130	2.48	20.0
BD17116	Calcium, Total	mg/L	-0.0276	0.152	5.00	47.4	47.8	5.12	4.25 to 5.75	72.0	70.0 to 130	0.840	20.0
BD17116	Chloride	mg/L	0.0345	1.00	10.0	13.2	12.9	10.2	9.00 to 11.0	101	80.0 to 120	2.30	20.0
BD17116	Chromium, Dissolved	mg/L	-0.000104	0.000440	0.100	0.0985	0.101	0.0972	0.0850 to 0.115	98.5	70.0 to 130	2.51	20.0
BD17116	Chromium, Total	mg/L	-0.0000753	0.000440	0.100	0.103	0.0996	0.0980	0.0850 to 0.115	103	70.0 to 130	3.36	20.0
BD17116	Cobalt, Dissolved	mg/L	0.0000006	0.000147	0.100	0.100	0.102	0.100	0.0850 to 0.115	99.8	70.0 to 130	1.98	20.0
BD17116	Cobalt, Total	mg/L	0.0000106	0.000147	0.100	0.104	0.101	0.101	0.0850 to 0.115	104	70.0 to 130	2.93	20.0
BD17116	Fluoride	mg/L	0.0243	0.125	2.50	2.78	2.79	2.65	2.25 to 2.75	104	80.0 to 120	0.359	20.0
BD17116	Iron, Dissolved	mg/L	0.00162	0.0176	0.2	2.03	2.03	0.202	0.170 to 0.230	95.0	70.0 to 130	0.00	20.0
BD17116	Iron, Total	mg/L	-0.00332	0.0176	0.2	2.18	2.18	0.200	0.170 to 0.230	95.0	70.0 to 130	0.00	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/6/23 14:05
Customer ID:
Delivery Date: 9/7/23 10:51

Description: Gorgas Ash Pond - MW-24H

Laboratory ID Number: BD17116

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17116	Lead, Dissolved	mg/L	0.0000049	0.000147	0.100	0.0955	0.0941	0.0969	0.0850 to 0.115	95.5	70.0 to 130	1.48	20.0
BD17116	Lead, Total	mg/L	0.0000076	0.000147	0.100	0.0957	0.0958	0.0976	0.0850 to 0.115	95.7	70.0 to 130	0.104	20.0
BD17116	Lithium, Dissolved	mg/L	0.000425	0.0154	0.200	0.224	0.227	0.200	0.170 to 0.230	100	70.0 to 130	1.33	20.0
BD17116	Lithium, Total	mg/L	0.000205	0.0154	0.200	0.227	0.226	0.203	0.170 to 0.230	101	70.0 to 130	0.442	20.0
BD17116	Magnesium, Dissolved	mg/L	0.00215	0.0462	5.00	19.6	19.5	5.23	4.25 to 5.75	106	70.0 to 130	0.512	20.0
BD17116	Magnesium, Total	mg/L	-0.0156	0.0462	5.00	19.8	19.8	5.25	4.25 to 5.75	102	70.0 to 130	0.00	20.0
BD17116	Manganese, Dissolved	mg/L	-0.0000103	0.00033	0.100	0.193	0.194	0.0977	0.0850 to 0.115	97.8	70.0 to 130	0.517	20.0
BD17116	Manganese, Total	mg/L	-0.0000601	0.00033	0.100	0.202	0.198	0.0972	0.0850 to 0.115	97.0	70.0 to 130	2.00	20.0
BD17116	Mercury, Total by CVAA	mg/L	4.000E-05	0.000500	0.004	0.00399	0.00402	0.00404	0.00340 to 0.00460	99.8	70.0 to 130	0.749	20.0
BD17116	Molybdenum, Dissolved	mg/L	0.00120	0.0100	0.2	0.201	0.205	0.202	0.170 to 0.230	100	70.0 to 130	1.97	20.0
BD17116	Molybdenum, Total	mg/L	0.001	0.0100	0.2	0.204	0.206	0.204	0.170 to 0.230	102	70.0 to 130	0.976	20.0
BD17116	Potassium, Dissolved	mg/L	-0.0436	0.367	10.0	11.1	11.1	9.65	8.50 to 11.5	96.9	70.0 to 130	0.00	20.0
BD17116	Potassium, Total	mg/L	-0.00994	0.367	10.0	11.6	11.3	10.3	8.50 to 11.5	101	70.0 to 130	2.62	20.0
BD17116	Selenium, Dissolved	mg/L	-0.0000491	0.00100	0.100	0.105	0.110	0.103	0.0850 to 0.115	105	70.0 to 130	4.65	20.0
BD17116	Selenium, Total	mg/L	-0.0000097	0.00100	0.100	0.101	0.104	0.101	0.0850 to 0.115	101	70.0 to 130	2.93	20.0
BD17116	Silicon, Dissolved	mg/L	0.000595	0.0440	1.00	14.7	14.7	1.04	0.850 to 1.15	100	70.0 to 130	0.00	20.0
BD17116	Silicon, Total	mg/L	0.00200	0.0440	1.00	14.8	14.8	1.04	0.850 to 1.15	100	70.0 to 130	0.00	20.0
BD17116	Sodium, Dissolved	mg/L	0.00544	0.0880	5.00	36.4	36.4	5.13	4.25 to 5.75	104	70.0 to 130	0.00	20.0
BD17116	Sodium, Total	mg/L	0.00259	0.0880	5.00	36.6	36.4	5.11	4.25 to 5.75	96.0	70.0 to 130	0.548	20.0
BD17116	Sulfate	mg/L	-0.105	2.0	20.0	27.1	28.5	20.8	18.0 to 22.0	96.9	80.0 to 120	5.04	20.0
BD17116	Thallium, Dissolved	mg/L	-0.0000048	0.000147	0.100	0.0994	0.0971	0.0997	0.0850 to 0.115	99.4	70.0 to 130	2.34	20.0
BD17116	Thallium, Total	mg/L	0.0000085	0.000147	0.100	0.0958	0.0978	0.0982	0.0850 to 0.115	95.8	70.0 to 130	2.07	20.0
BD17116	Total Organic Carbon	mg/L	0.157	1.00	10.0	9.63	10.8	8.80		96.3	80.0 to 120	11.5	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/6/23 14:05
Customer ID:
Delivery Date: 9/7/23 10:51

Description: Gorgas Ash Pond - MW-24H

Laboratory ID Number: BD17116

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17116	Alkalinity	mg CaCO3/L					222	51.9	45.0 to 55.0			0.00	10.0
BD17116	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.03	0.200	2.00	2.03	-0.026	1.92	1.80 to 2.20	102	90.0 to 110	0.00	15.0
BD17116	Solids, Dissolved	mg/L	2.00	25.0			251	55.0	40.0 to 60.0			0.00	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-17V

Location Code: WMWGORAP
Collected: 9/11/23 13:10
Customer ID:
Submittal Date: 9/14/23 10:02

Laboratory ID Number: BD17492

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	9/15/23 06:33	9/19/23 15:47		1.015	0.0388	mg/L	0.030000	0.1015	J
* Calcium, Total	9/15/23 06:33	9/19/23 15:47		1.015	31.1	mg/L	0.070035	0.406	
* Iron, Total	9/15/23 06:33	9/19/23 15:47		1.015	0.820	mg/L	0.008120	0.0406	
* Lithium, Total	9/15/23 06:33	9/19/23 15:47		1.015	0.0516	mg/L	0.007105	0.01999956	
* Magnesium, Total	9/15/23 06:33	9/19/23 15:47		1.015	12.9	mg/L	0.021315	0.406	
* Molybdenum, Total	9/15/23 06:33	9/19/23 15:47		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Total (calc.)	9/15/23 06:33	9/19/23 15:47		1	24.0	mg/L			
* Silicon, Total	9/15/23 06:33	9/19/23 15:47		1.015	11.2	mg/L	0.02030	0.25375	
* Sodium, Total	9/15/23 06:33	9/20/23 12:12		10.15	92.9	mg/L	0.4060	4.06	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	9/14/23 14:15	9/19/23 13:25		1.015	0.0365	mg/L	0.030000	0.1015	J
* Calcium, Dissolved	9/14/23 14:15	9/19/23 13:25		1.015	31.4	mg/L	0.070035	0.406	
* Iron, Dissolved	9/14/23 14:15	9/19/23 13:25		1.015	0.754	mg/L	0.008120	0.0406	
* Lithium, Dissolved	9/14/23 14:15	9/19/23 13:25		1.015	0.0503	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	9/14/23 14:15	9/19/23 13:25		1.015	12.9	mg/L	0.021315	0.406	
* Molybdenum, Dissolved	9/14/23 14:15	9/19/23 13:25		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Dissolved (calc.)	9/14/23 14:15	9/19/23 13:25		1	24.4	mg/L			
* Silicon, Dissolved	9/14/23 14:15	9/19/23 13:25		1.015	11.4	mg/L	0.02030	0.25375	
* Sodium, Dissolved	9/14/23 14:15	9/20/23 10:22		10.15	87.8	mg/L	0.4060	4.06	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	9/15/23 06:33	9/18/23 10:10		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Total	9/15/23 06:33	9/18/23 10:10		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Total	9/15/23 06:33	9/18/23 10:10		1.015	0.000554	mg/L	0.000112	0.000203	
* Barium, Total	9/15/23 06:33	9/18/23 10:10		1.015	0.288	mg/L	0.000508	0.001015	
* Beryllium, Total	9/15/23 06:33	9/18/23 10:10		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	9/15/23 06:33	9/18/23 10:10		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	9/15/23 06:33	9/18/23 10:10		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	9/15/23 06:33	9/18/23 10:10		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	9/15/23 06:33	9/18/23 10:10		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	9/15/23 06:33	9/18/23 10:10		1.015	0.0238	mg/L	0.000152	0.001015	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-17V

Location Code: WMWGORAP
Collected: 9/11/23 13:10
Customer ID:
Submittal Date: 9/14/23 10:02

Laboratory ID Number: BD17492

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	9/15/23 06:33	9/18/23 10:10		1.015	2.03	mg/L	0.169505	0.5075	
* Selenium, Total	9/15/23 06:33	9/18/23 10:10		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	9/15/23 06:33	9/18/23 10:10		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	9/14/23 14:15	9/14/23 15:07		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	9/14/23 14:15	9/14/23 15:07		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Dissolved	9/14/23 14:15	9/14/23 15:07		1.015	0.000336	mg/L	0.000112	0.000203	
* Barium, Dissolved	9/14/23 14:15	9/14/23 15:07		1.015	0.312	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	9/14/23 14:15	9/14/23 15:07		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	9/14/23 14:15	9/14/23 15:07		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	9/14/23 14:15	9/14/23 15:07		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	9/14/23 14:15	9/14/23 15:07		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Dissolved	9/14/23 14:15	9/14/23 15:07		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	9/14/23 14:15	9/14/23 15:07		1.015	0.0238	mg/L	0.000152	0.001015	
* Potassium, Dissolved	9/14/23 14:15	9/14/23 15:07		1.015	2.02	mg/L	0.169505	0.5075	
* Selenium, Dissolved	9/14/23 14:15	9/14/23 15:07		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	9/14/23 14:15	9/14/23 15:07		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	9/14/23 17:22	9/14/23 22:09		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	9/18/23 11:59	9/18/23 11:59		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: DHC***								
Alkalinity pH Endpoint	9/20/23 12:02	9/20/23 13:53		1	4.50	SU		2	
* Alkalinity	9/20/23 12:02	9/20/23 13:53		1	300	mg CaCO3/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	9/14/23 13:40	9/15/23 13:10		1	338	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: DHC***								
* Bicarbonate Alkalinity, (calc.)	9/20/23 12:02	9/20/23 13:53		1	298	mg CaCO3/L		1	
* Carbonate Alkalinity, (calc.)	9/20/23 12:02	9/20/23 13:53		1	2.22	mg CaCO3/L		0.5	
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	9/18/23 12:22	9/18/23 12:22		1	1.52	mg/L	1.00	2	J

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-17V

Location Code: WMWGORAP
Collected: 9/11/23 13:10
Customer ID:
Submittal Date: 9/14/23 10:02

Laboratory ID Number: BD17492

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	9/18/23 10:45	9/18/23 10:45		1	2.83	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	9/18/23 14:30	9/18/23 14:30		1	0.278	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	9/26/23 14:34	9/26/23 14:34		1	10.7	mg/L	0.6	2	
Analytical Method: Field Measurements	***Analyst: AWG***								
Conductivity	9/11/23 13:07	9/11/23 13:07			529.90	uS/cm			FA
pH	9/11/23 13:07	9/11/23 13:07			7.61	SU			FA
Temperature	9/11/23 13:07	9/11/23 13:07			21.32	C			FA
Turbidity	9/11/23 13:07	9/11/23 13:07			1.64	NTU			FA
Sulfide	9/11/23 13:07	9/11/23 13:07			0	mg/L			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 10/25/2023
Version: 3.5
COA_CCR

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/11/23 13:10
Customer ID:
Delivery Date: 9/14/23 10:02

Description: Gorgas Ash Pond - MW-17V

Laboratory ID Number: BD17492

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17502	Aluminum, Dissolved	mg/L	-0.000290	0.0198	0.100	0.105	0.106	0.105	0.0850 to 0.115	105	70.0 to 130	0.948	20.0
BD17501	Aluminum, Total	mg/L	0.000208	0.0198	0.100	0.538	0.665	0.104	0.0850 to 0.115	97.0	70.0 to 130	21.1	20.0
BD17502	Antimony, Dissolved	mg/L	0.000229	0.00100	0.100	0.0929	0.0942	0.0919	0.0850 to 0.115	92.1	70.0 to 130	1.39	20.0
BD17501	Antimony, Total	mg/L	0.000567	0.00100	0.100	0.0971	0.0985	0.0960	0.0850 to 0.115	96.1	70.0 to 130	1.43	20.0
BD17502	Arsenic, Dissolved	mg/L	-0.0000089	0.000200	0.100	0.101	0.102	0.0987	0.0850 to 0.115	97.2	70.0 to 130	0.985	20.0
BD17501	Arsenic, Total	mg/L	0.000105	0.000200	0.100	0.101	0.100	0.100	0.0850 to 0.115	95.6	70.0 to 130	0.995	20.0
BD17502	Barium, Dissolved	mg/L	-0.0000262	0.00100	0.100	0.252	0.256	0.0998	0.0850 to 0.115	97.0	70.0 to 130	1.57	20.0
BD17501	Barium, Total	mg/L	0.0000393	0.00100	0.100	0.277	0.280	0.0908	0.0850 to 0.115	89.0	70.0 to 130	1.08	20.0
BD17502	Beryllium, Dissolved	mg/L	0.0000283	0.000880	0.100	0.101	0.0988	0.101	0.0850 to 0.115	101	70.0 to 130	2.20	20.0
BD17501	Beryllium, Total	mg/L	0.0000483	0.000880	0.100	0.101	0.101	0.0970	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BD17502	Boron, Dissolved	mg/L	-0.00109	0.0650	1.00	1.08	1.08	1.00	0.850 to 1.15	103	70.0 to 130	0.00	20.0
BD17501	Boron, Total	mg/L	0.000005	0.0650	1.00	1.07	1.09	1.02	0.850 to 1.15	104	70.0 to 130	1.85	20.0
BD17502	Cadmium, Dissolved	mg/L	0.0000030	0.000147	0.100	0.0974	0.0984	0.0978	0.0850 to 0.115	97.4	70.0 to 130	1.02	20.0
BD17501	Cadmium, Total	mg/L	-0.0000075	0.000147	0.100	0.0943	0.0987	0.101	0.0850 to 0.115	94.3	70.0 to 130	4.56	20.0
BD17502	Calcium, Dissolved	mg/L	-0.0266	0.152	5.00	21.2	21.1	5.06	4.25 to 5.75	102	70.0 to 130	0.473	20.0
BD17501	Calcium, Total	mg/L	-0.0189	0.152	5.00	10.0	10.1	5.06	4.25 to 5.75	95.8	70.0 to 130	0.995	20.0
BD17501	Chloride	mg/L	0.00138	1.00	10.0	15.5	15.7	10.5	9.00 to 11.0	105	80.0 to 120	1.28	20.0
BD17502	Chromium, Dissolved	mg/L	-0.000168	0.000440	0.100	0.0972	0.0965	0.101	0.0850 to 0.115	97.2	70.0 to 130	0.723	20.0
BD17501	Chromium, Total	mg/L	-0.0000841	0.000440	0.100	0.0950	0.0966	0.0994	0.0850 to 0.115	94.5	70.0 to 130	1.67	20.0
BD17502	Cobalt, Dissolved	mg/L	-0.0000695	0.000147	0.100	0.0985	0.0989	0.102	0.0850 to 0.115	98.5	70.0 to 130	0.405	20.0
BD17501	Cobalt, Total	mg/L	0.0000025	0.000147	0.100	0.0972	0.0994	0.103	0.0850 to 0.115	97.2	70.0 to 130	2.24	20.0
BD17501	Fluoride	mg/L	0.00769	0.125	2.50	3.06	3.07	2.68	2.25 to 2.75	105	80.0 to 120	0.326	20.0
BD17502	Iron, Dissolved	mg/L	0.00154	0.0176	0.2	0.205	0.202	0.202	0.170 to 0.230	97.6	70.0 to 130	1.47	20.0
BD17501	Iron, Total	mg/L	-0.000348	0.0176	0.2	0.214	0.218	0.204	0.170 to 0.230	100	70.0 to 130	1.85	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/11/23 13:10
Customer ID:
Delivery Date: 9/14/23 10:02

Description: Gorgas Ash Pond - MW-17V

Laboratory ID Number: BD17492

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17502	Lead, Dissolved	mg/L	0.0000056	0.000147	0.100	0.101	0.103	0.105	0.0850 to 0.115	101	70.0 to 130	1.96	20.0
BD17501	Lead, Total	mg/L	0.0000068	0.000147	0.100	0.0965	0.0977	0.0988	0.0850 to 0.115	96.5	70.0 to 130	1.24	20.0
BD17502	Lithium, Dissolved	mg/L	-0.000209	0.0154	0.200	0.284	0.282	0.205	0.170 to 0.230	104	70.0 to 130	0.707	20.0
BD17501	Lithium, Total	mg/L	-0.000449	0.0154	0.200	0.518	0.520	0.209	0.170 to 0.230	106	70.0 to 130	0.385	20.0
BD17502	Magnesium, Dissolved	mg/L	-0.00780	0.0462	5.00	8.94	8.93	5.14	4.25 to 5.75	102	70.0 to 130	0.112	20.0
BD17501	Magnesium, Total	mg/L	-0.0162	0.0462	5.00	5.73	5.82	5.21	4.25 to 5.75	103	70.0 to 130	1.56	20.0
BD17502	Manganese, Dissolved	mg/L	0.0000089	0.00033	0.100	0.111	0.111	0.103	0.0850 to 0.115	99.0	70.0 to 130	0.00	20.0
BD17501	Manganese, Total	mg/L	0.0000048	0.00033	0.100	0.0971	0.101	0.103	0.0850 to 0.115	96.9	70.0 to 130	3.94	20.0
BD17501	Mercury, Total by CVAA	mg/L	5.000E-05	0.000500	0.004	0.00401	0.00411	0.00406	0.00340 to 0.00460	100	70.0 to 130	2.46	20.0
BD17502	Molybdenum, Dissolved	mg/L	0.000202	0.0100	0.2	0.222	0.219	0.204	0.170 to 0.230	104	70.0 to 130	1.36	20.0
BD17501	Molybdenum, Total	mg/L	0.000	0.0100	0.2	0.243	0.247	0.207	0.170 to 0.230	102	70.0 to 130	1.63	20.0
BD17502	Potassium, Dissolved	mg/L	-0.0106	0.367	10.0	16.4	16.0	10.1	8.50 to 11.5	97.2	70.0 to 130	2.47	20.0
BD17501	Potassium, Total	mg/L	-0.00235	0.367	10.0	15.1	15.5	10.2	8.50 to 11.5	97.3	70.0 to 130	2.61	20.0
BD17502	Selenium, Dissolved	mg/L	-0.0000900	0.00100	0.100	0.102	0.0993	0.103	0.0850 to 0.115	101	70.0 to 130	2.68	20.0
BD17501	Selenium, Total	mg/L	0.0000683	0.00100	0.100	0.0968	0.100	0.103	0.0850 to 0.115	96.8	70.0 to 130	3.25	20.0
BD17502	Silicon, Dissolved	mg/L	0.000692	0.0440	1.00	9.39	9.42	1.02	0.850 to 1.15	97.0	70.0 to 130	0.319	20.0
BD17501	Silicon, Total	mg/L	0.00106	0.0440	1.00	39.1	36.3	1.03	0.850 to 1.15	340	70.0 to 130	7.43	20.0
BD17502	Sodium, Dissolved	mg/L	0.0636	0.0880	5.00	187	187	5.10	4.25 to 5.75	240	70.0 to 130	0.00	20.0
BD17501	Sodium, Total	mg/L	0.00811	0.0880	5.00	206	187	5.17	4.25 to 5.75	400	70.0 to 130	9.67	20.0
BD17501	Sulfate	mg/L	-0.0293	2.0	20.0	27.5	27.6	19.2	18.0 to 22.0	95.4	80.0 to 120	0.363	20.0
BD17502	Thallium, Dissolved	mg/L	-0.0000854	0.000147	0.100	0.0993	0.0997	0.102	0.0850 to 0.115	99.3	70.0 to 130	0.402	20.0
BD17501	Thallium, Total	mg/L	0.0000056	0.000147	0.100	0.0973	0.0983	0.100	0.0850 to 0.115	97.3	70.0 to 130	1.02	20.0
BD17501	Total Organic Carbon	mg/L	0.309	1.00	10.0	19.4	18.5	8.66		87.0	80.0 to 120	4.75	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/11/23 13:10
Customer ID:
Delivery Date: 9/14/23 10:02

Description: Gorgas Ash Pond - MW-17V

Laboratory ID Number: BD17492

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17516	Alkalinity	mg CaCO3/L					185	52.0	45.0 to 55.0			0.00	10.0
BD17501	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.15	0.200	2.00	1.82	-0.154	1.86	1.80 to 2.20	91.0	90.0 to 110	0.00	15.0
BD17501	Solids, Dissolved	mg/L	2.00	25.0			550	55.0	40.0 to 60.0			2.69	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 10/25/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-17

Location Code: WMWGORAP
Collected: 9/11/23 14:08
Customer ID:
Submittal Date: 9/14/23 10:03

Laboratory ID Number: BD17493

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	9/15/23 06:33	9/19/23 15:51		1.015	0.0835	mg/L	0.030000	0.1015	J
* Calcium, Total	9/15/23 06:33	9/19/23 15:51		1.015	2.93	mg/L	0.070035	0.406	
* Iron, Total	9/15/23 06:33	9/19/23 15:51		1.015	0.0775	mg/L	0.008120	0.0406	
* Lithium, Total	9/15/23 06:33	9/19/23 15:51		1.015	0.0569	mg/L	0.007105	0.01999956	
* Magnesium, Total	9/15/23 06:33	9/19/23 15:51		1.015	0.775	mg/L	0.021315	0.406	
* Molybdenum, Total	9/15/23 06:33	9/19/23 15:51		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Total (calc.)	9/15/23 06:33	9/19/23 15:51		1	16.0	mg/L			
* Silicon, Total	9/15/23 06:33	9/19/23 15:51		1.015	7.49	mg/L	0.02030	0.25375	
* Sodium, Total	9/15/23 06:33	9/20/23 12:15		10.15	222	mg/L	0.4060	4.06	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	9/14/23 14:15	9/19/23 13:28		1.015	0.0787	mg/L	0.030000	0.1015	J
* Calcium, Dissolved	9/14/23 14:15	9/19/23 13:28		1.015	2.98	mg/L	0.070035	0.406	
* Iron, Dissolved	9/14/23 14:15	9/19/23 13:28		1.015	0.0579	mg/L	0.008120	0.0406	
* Lithium, Dissolved	9/14/23 14:15	9/19/23 13:28		1.015	0.0580	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	9/14/23 14:15	9/19/23 13:28		1.015	0.732	mg/L	0.021315	0.406	
* Molybdenum, Dissolved	9/14/23 14:15	9/19/23 13:28		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Dissolved (calc.)	9/14/23 14:15	9/19/23 13:28		1	16.3	mg/L			
* Silicon, Dissolved	9/14/23 14:15	9/19/23 13:28		1.015	7.64	mg/L	0.02030	0.25375	
* Sodium, Dissolved	9/14/23 14:15	9/20/23 10:25		10.15	202	mg/L	0.4060	4.06	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	9/15/23 06:33	9/18/23 10:13		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Total	9/15/23 06:33	9/18/23 10:13		1.015	0.0232	mg/L	0.009135	0.05075	J
* Arsenic, Total	9/15/23 06:33	9/18/23 10:13		1.015	0.00337	mg/L	0.000112	0.000203	
* Barium, Total	9/15/23 06:33	9/18/23 10:13		1.015	0.100	mg/L	0.000508	0.001015	
* Beryllium, Total	9/15/23 06:33	9/18/23 10:13		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	9/15/23 06:33	9/18/23 10:13		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	9/15/23 06:33	9/18/23 10:13		1.015	0.000262	mg/L	0.000203	0.001015	J
* Cobalt, Total	9/15/23 06:33	9/18/23 10:13		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	9/15/23 06:33	9/18/23 10:13		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	9/15/23 06:33	9/18/23 10:13		1.015	0.00592	mg/L	0.000152	0.001015	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-17

Location Code: WMWGORAP
Collected: 9/11/23 14:08
Customer ID:
Submittal Date: 9/14/23 10:03

Laboratory ID Number: BD17493

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	9/15/23 06:33	9/18/23 10:13		1.015	1.09	mg/L	0.169505	0.5075	
* Selenium, Total	9/15/23 06:33	9/18/23 10:13		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	9/15/23 06:33	9/18/23 10:13		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	9/14/23 14:15	9/14/23 15:11		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	9/14/23 14:15	9/14/23 15:11		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Dissolved	9/14/23 14:15	9/14/23 15:11		1.015	0.00237	mg/L	0.000112	0.000203	
* Barium, Dissolved	9/14/23 14:15	9/14/23 15:11		1.015	0.101	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	9/14/23 14:15	9/14/23 15:11		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	9/14/23 14:15	9/14/23 15:11		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	9/14/23 14:15	9/14/23 15:11		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	9/14/23 14:15	9/14/23 15:11		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Dissolved	9/14/23 14:15	9/14/23 15:11		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	9/14/23 14:15	9/14/23 15:11		1.015	0.00559	mg/L	0.000152	0.001015	
* Potassium, Dissolved	9/14/23 14:15	9/14/23 15:11		1.015	1.12	mg/L	0.169505	0.5075	
* Selenium, Dissolved	9/14/23 14:15	9/14/23 15:11		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	9/14/23 14:15	9/14/23 15:11		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	9/14/23 17:22	9/14/23 22:13		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	9/18/23 12:01	9/18/23 12:01		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: DHC***								
Alkalinity pH Endpoint	9/20/23 12:02	9/20/23 13:53		1	4.42	SU		2	
* Alkalinity	9/20/23 12:02	9/20/23 13:53		1	407	mg CaCO3/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	9/14/23 13:40	9/15/23 13:10		1	480	mg/L		50	
Analytical Method: SM 4500CO2 D	***Analyst: DHC***								
* Bicarbonate Alkalinity, (calc.)	9/20/23 12:02	9/20/23 13:53		1	392	mg CaCO3/L		1	
* Carbonate Alkalinity, (calc.)	9/20/23 12:02	9/20/23 13:53		1	14.7	mg CaCO3/L		0.5	
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	9/18/23 12:39	9/18/23 12:39		1	1.84	mg/L	1.00	2	J

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-17

Location Code: WMWGORAP
Collected: 9/11/23 14:08
Customer ID:
Submittal Date: 9/14/23 10:03

Laboratory ID Number: BD17493

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	9/18/23 10:46	9/18/23 10:46		1	7.59	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	9/18/23 14:31	9/18/23 14:31		1	0.269	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	9/26/23 14:35	9/26/23 14:35		1	23.1	mg/L	0.6	2	
Analytical Method: Field Measurements	***Analyst: AWG***								
Conductivity	9/11/23 14:06	9/11/23 14:06			800.15	uS/cm			FA
pH	9/11/23 14:06	9/11/23 14:06			8.19	SU			FA
Temperature	9/11/23 14:06	9/11/23 14:06			21.81	C			FA
Turbidity	9/11/23 14:06	9/11/23 14:06			1.31	NTU			FA
Sulfide	9/11/23 14:06	9/11/23 14:06			0	mg/L			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 10/25/2023
Version: 3.5
COA_CCR

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/11/23 14:08
Customer ID:
Delivery Date: 9/14/23 10:03

Description: Gorgas Ash Pond - MW-17

Laboratory ID Number: BD17493

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17502	Aluminum, Dissolved	mg/L	-0.000290	0.0198	0.100	0.105	0.106	0.105	0.0850 to 0.115	105	70.0 to 130	0.948	20.0
BD17501	Aluminum, Total	mg/L	0.000208	0.0198	0.100	0.538	0.665	0.104	0.0850 to 0.115	97.0	70.0 to 130	21.1	20.0
BD17502	Antimony, Dissolved	mg/L	0.000229	0.00100	0.100	0.0929	0.0942	0.0919	0.0850 to 0.115	92.1	70.0 to 130	1.39	20.0
BD17501	Antimony, Total	mg/L	0.000567	0.00100	0.100	0.0971	0.0985	0.0960	0.0850 to 0.115	96.1	70.0 to 130	1.43	20.0
BD17502	Arsenic, Dissolved	mg/L	-0.0000089	0.000200	0.100	0.101	0.102	0.0987	0.0850 to 0.115	97.2	70.0 to 130	0.985	20.0
BD17501	Arsenic, Total	mg/L	0.000105	0.000200	0.100	0.101	0.100	0.100	0.0850 to 0.115	95.6	70.0 to 130	0.995	20.0
BD17502	Barium, Dissolved	mg/L	-0.0000262	0.00100	0.100	0.252	0.256	0.0998	0.0850 to 0.115	97.0	70.0 to 130	1.57	20.0
BD17501	Barium, Total	mg/L	0.0000393	0.00100	0.100	0.277	0.280	0.0908	0.0850 to 0.115	89.0	70.0 to 130	1.08	20.0
BD17502	Beryllium, Dissolved	mg/L	0.0000283	0.000880	0.100	0.101	0.0988	0.101	0.0850 to 0.115	101	70.0 to 130	2.20	20.0
BD17501	Beryllium, Total	mg/L	0.0000483	0.000880	0.100	0.101	0.101	0.0970	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BD17502	Boron, Dissolved	mg/L	-0.00109	0.0650	1.00	1.08	1.08	1.00	0.850 to 1.15	103	70.0 to 130	0.00	20.0
BD17501	Boron, Total	mg/L	0.000005	0.0650	1.00	1.07	1.09	1.02	0.850 to 1.15	104	70.0 to 130	1.85	20.0
BD17502	Cadmium, Dissolved	mg/L	0.0000030	0.000147	0.100	0.0974	0.0984	0.0978	0.0850 to 0.115	97.4	70.0 to 130	1.02	20.0
BD17501	Cadmium, Total	mg/L	-0.0000075	0.000147	0.100	0.0943	0.0987	0.101	0.0850 to 0.115	94.3	70.0 to 130	4.56	20.0
BD17502	Calcium, Dissolved	mg/L	-0.0266	0.152	5.00	21.2	21.1	5.06	4.25 to 5.75	102	70.0 to 130	0.473	20.0
BD17501	Calcium, Total	mg/L	-0.0189	0.152	5.00	10.0	10.1	5.06	4.25 to 5.75	95.8	70.0 to 130	0.995	20.0
BD17501	Chloride	mg/L	0.00138	1.00	10.0	15.5	15.7	10.5	9.00 to 11.0	105	80.0 to 120	1.28	20.0
BD17502	Chromium, Dissolved	mg/L	-0.000168	0.000440	0.100	0.0972	0.0965	0.101	0.0850 to 0.115	97.2	70.0 to 130	0.723	20.0
BD17501	Chromium, Total	mg/L	-0.0000841	0.000440	0.100	0.0950	0.0966	0.0994	0.0850 to 0.115	94.5	70.0 to 130	1.67	20.0
BD17502	Cobalt, Dissolved	mg/L	-0.0000695	0.000147	0.100	0.0985	0.0989	0.102	0.0850 to 0.115	98.5	70.0 to 130	0.405	20.0
BD17501	Cobalt, Total	mg/L	0.0000025	0.000147	0.100	0.0972	0.0994	0.103	0.0850 to 0.115	97.2	70.0 to 130	2.24	20.0
BD17501	Fluoride	mg/L	0.00769	0.125	2.50	3.06	3.07	2.68	2.25 to 2.75	105	80.0 to 120	0.326	20.0
BD17502	Iron, Dissolved	mg/L	0.00154	0.0176	0.2	0.205	0.202	0.202	0.170 to 0.230	97.6	70.0 to 130	1.47	20.0
BD17501	Iron, Total	mg/L	-0.000348	0.0176	0.2	0.214	0.218	0.204	0.170 to 0.230	100	70.0 to 130	1.85	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/11/23 14:08
Customer ID:
Delivery Date: 9/14/23 10:03

Description: Gorgas Ash Pond - MW-17

Laboratory ID Number: BD17493

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17502	Lead, Dissolved	mg/L	0.0000056	0.000147	0.100	0.101	0.103	0.105	0.0850 to 0.115	101	70.0 to 130	1.96	20.0
BD17501	Lead, Total	mg/L	0.0000068	0.000147	0.100	0.0965	0.0977	0.0988	0.0850 to 0.115	96.5	70.0 to 130	1.24	20.0
BD17502	Lithium, Dissolved	mg/L	-0.000209	0.0154	0.200	0.284	0.282	0.205	0.170 to 0.230	104	70.0 to 130	0.707	20.0
BD17501	Lithium, Total	mg/L	-0.000449	0.0154	0.200	0.518	0.520	0.209	0.170 to 0.230	106	70.0 to 130	0.385	20.0
BD17502	Magnesium, Dissolved	mg/L	-0.00780	0.0462	5.00	8.94	8.93	5.14	4.25 to 5.75	102	70.0 to 130	0.112	20.0
BD17501	Magnesium, Total	mg/L	-0.0162	0.0462	5.00	5.73	5.82	5.21	4.25 to 5.75	103	70.0 to 130	1.56	20.0
BD17502	Manganese, Dissolved	mg/L	0.0000089	0.00033	0.100	0.111	0.111	0.103	0.0850 to 0.115	99.0	70.0 to 130	0.00	20.0
BD17501	Manganese, Total	mg/L	0.0000048	0.00033	0.100	0.0971	0.101	0.103	0.0850 to 0.115	96.9	70.0 to 130	3.94	20.0
BD17501	Mercury, Total by CVAA	mg/L	5.000E-05	0.000500	0.004	0.00401	0.00411	0.00406	0.00340 to 0.00460	100	70.0 to 130	2.46	20.0
BD17502	Molybdenum, Dissolved	mg/L	0.000202	0.0100	0.2	0.222	0.219	0.204	0.170 to 0.230	104	70.0 to 130	1.36	20.0
BD17501	Molybdenum, Total	mg/L	0.000	0.0100	0.2	0.243	0.247	0.207	0.170 to 0.230	102	70.0 to 130	1.63	20.0
BD17502	Potassium, Dissolved	mg/L	-0.0106	0.367	10.0	16.4	16.0	10.1	8.50 to 11.5	97.2	70.0 to 130	2.47	20.0
BD17501	Potassium, Total	mg/L	-0.00235	0.367	10.0	15.1	15.5	10.2	8.50 to 11.5	97.3	70.0 to 130	2.61	20.0
BD17502	Selenium, Dissolved	mg/L	-0.0000900	0.00100	0.100	0.102	0.0993	0.103	0.0850 to 0.115	101	70.0 to 130	2.68	20.0
BD17501	Selenium, Total	mg/L	0.0000683	0.00100	0.100	0.0968	0.100	0.103	0.0850 to 0.115	96.8	70.0 to 130	3.25	20.0
BD17502	Silicon, Dissolved	mg/L	0.000692	0.0440	1.00	9.39	9.42	1.02	0.850 to 1.15	97.0	70.0 to 130	0.319	20.0
BD17501	Silicon, Total	mg/L	0.00106	0.0440	1.00	39.1	36.3	1.03	0.850 to 1.15	340	70.0 to 130	7.43	20.0
BD17502	Sodium, Dissolved	mg/L	0.0636	0.0880	5.00	187	187	5.10	4.25 to 5.75	240	70.0 to 130	0.00	20.0
BD17501	Sodium, Total	mg/L	0.00811	0.0880	5.00	206	187	5.17	4.25 to 5.75	400	70.0 to 130	9.67	20.0
BD17501	Sulfate	mg/L	-0.0293	2.0	20.0	27.5	27.6	19.2	18.0 to 22.0	95.4	80.0 to 120	0.363	20.0
BD17502	Thallium, Dissolved	mg/L	-0.0000854	0.000147	0.100	0.0993	0.0997	0.102	0.0850 to 0.115	99.3	70.0 to 130	0.402	20.0
BD17501	Thallium, Total	mg/L	0.0000056	0.000147	0.100	0.0973	0.0983	0.100	0.0850 to 0.115	97.3	70.0 to 130	1.02	20.0
BD17501	Total Organic Carbon	mg/L	0.309	1.00	10.0	19.4	18.5	8.66		87.0	80.0 to 120	4.75	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/11/23 14:08
Customer ID:
Delivery Date: 9/14/23 10:03

Description: Gorgas Ash Pond - MW-17

Laboratory ID Number: BD17493

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17516	Alkalinity	mg CaCO3/L					185	52.0	45.0 to 55.0			0.00	10.0
BD17501	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.15	0.200	2.00	1.82	-0.154	1.86	1.80 to 2.20	91.0	90.0 to 110	0.00	15.0
BD17501	Solids, Dissolved	mg/L	2.00	25.0			550	55.0	40.0 to 60.0			2.69	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - PZ-22

Location Code: WMWGORAP
Collected: 9/11/23 15:10
Customer ID:
Submittal Date: 9/14/23 10:03

Laboratory ID Number: BD17494

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	9/15/23 06:33	9/19/23 15:54		1.015	0.0460	mg/L	0.030000	0.1015	J
* Calcium, Total	9/15/23 06:33	9/19/23 15:54		1.015	9.05	mg/L	0.070035	0.406	
* Iron, Total	9/15/23 06:33	9/19/23 15:54		1.015	0.649	mg/L	0.008120	0.0406	
* Lithium, Total	9/15/23 06:33	9/19/23 15:54		1.015	0.0940	mg/L	0.007105	0.01999956	
* Magnesium, Total	9/15/23 06:33	9/19/23 15:54		1.015	3.61	mg/L	0.021315	0.406	
* Molybdenum, Total	9/15/23 06:33	9/19/23 15:54		1.015	0.00755	mg/L	0.005075	0.01015	J
* Silica, Total (calc.)	9/15/23 06:33	9/19/23 15:54		1	9.46	mg/L			
* Silicon, Total	9/15/23 06:33	9/19/23 15:54		1.015	4.42	mg/L	0.02030	0.25375	
* Sodium, Total	9/15/23 06:33	9/20/23 12:18		10.15	183	mg/L	0.4060	4.06	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	9/14/23 14:15	9/19/23 13:32		1.015	0.0453	mg/L	0.030000	0.1015	J
* Calcium, Dissolved	9/14/23 14:15	9/19/23 13:32		1.015	9.96	mg/L	0.070035	0.406	
* Iron, Dissolved	9/14/23 14:15	9/19/23 13:32		1.015	0.304	mg/L	0.008120	0.0406	
* Lithium, Dissolved	9/14/23 14:15	9/19/23 13:32		1.015	0.0826	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	9/14/23 14:15	9/19/23 13:32		1.015	3.96	mg/L	0.021315	0.406	
* Molybdenum, Dissolved	9/14/23 14:15	9/19/23 13:32		1.015	0.00715	mg/L	0.005075	0.01015	J
* Silica, Dissolved (calc.)	9/14/23 14:15	9/19/23 13:32		1	9.59	mg/L			
* Silicon, Dissolved	9/14/23 14:15	9/19/23 13:32		1.015	4.48	mg/L	0.02030	0.25375	
* Sodium, Dissolved	9/14/23 14:15	9/20/23 10:28		10.15	165	mg/L	0.4060	4.06	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	9/15/23 06:33	9/18/23 10:17		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Total	9/15/23 06:33	9/18/23 10:17		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Total	9/15/23 06:33	9/18/23 10:17		1.015	0.00229	mg/L	0.000112	0.000203	
* Barium, Total	9/15/23 06:33	9/18/23 10:17		1.015	0.0543	mg/L	0.000508	0.001015	
* Beryllium, Total	9/15/23 06:33	9/18/23 10:17		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	9/15/23 06:33	9/18/23 10:17		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	9/15/23 06:33	9/18/23 10:17		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	9/15/23 06:33	9/18/23 10:17		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	9/15/23 06:33	9/18/23 10:17		1.015	0.000117	mg/L	0.000068	0.000203	J
* Manganese, Total	9/15/23 06:33	9/18/23 10:17		1.015	0.0245	mg/L	0.000152	0.001015	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - PZ-22

Location Code: WMWGORAP
Collected: 9/11/23 15:10
Customer ID:
Submittal Date: 9/14/23 10:03

Laboratory ID Number: BD17494

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	9/15/23 06:33	9/18/23 10:17		1.015	3.67	mg/L	0.169505	0.5075	
* Selenium, Total	9/15/23 06:33	9/18/23 10:17		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	9/15/23 06:33	9/18/23 10:17		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	9/14/23 14:15	9/14/23 15:15		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	9/14/23 14:15	9/14/23 15:15		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Dissolved	9/14/23 14:15	9/14/23 15:15		1.015	0.00180	mg/L	0.000112	0.000203	
* Barium, Dissolved	9/14/23 14:15	9/14/23 15:15		1.015	0.0659	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	9/14/23 14:15	9/14/23 15:15		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	9/14/23 14:15	9/14/23 15:15		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	9/14/23 14:15	9/14/23 15:15		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	9/14/23 14:15	9/14/23 15:15		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Dissolved	9/14/23 14:15	9/14/23 15:15		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	9/14/23 14:15	9/14/23 15:15		1.015	0.0264	mg/L	0.000152	0.001015	
* Potassium, Dissolved	9/14/23 14:15	9/14/23 15:15		1.015	2.93	mg/L	0.169505	0.5075	
* Selenium, Dissolved	9/14/23 14:15	9/14/23 15:15		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	9/14/23 14:15	9/14/23 15:15		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	9/14/23 17:22	9/14/23 22:17		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	9/18/23 12:03	9/18/23 12:03		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: DHC***								
Alkalinity pH Endpoint	9/20/23 12:02	9/20/23 13:53		1	4.55	SU		2	
* Alkalinity	9/20/23 12:02	9/20/23 13:53		1	305	mg CaCO3/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	9/14/23 13:40	9/15/23 13:10		1	420	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: DHC***								
* Bicarbonate Alkalinity, (calc.)	9/20/23 12:02	9/20/23 13:53		1	269	mg CaCO3/L		1	
* Carbonate Alkalinity, (calc.)	9/20/23 12:02	9/20/23 13:53		1	35.0	mg CaCO3/L		0.5	
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	9/18/23 12:54	9/18/23 12:54		1	1.14	mg/L	1.00	2	J

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - PZ-22

Location Code: WMWGORAP
Collected: 9/11/23 15:10
Customer ID:
Submittal Date: 9/14/23 10:03

Laboratory ID Number: BD17494

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	9/18/23 10:47	9/18/23 10:47		1	2.96	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	9/18/23 14:32	9/18/23 14:32		1	0.472	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	9/26/23 14:48	9/26/23 14:48		5	64.2	mg/L	3.0	10	
Analytical Method: Field Measurements	***Analyst: AWG***								
Conductivity	9/11/23 15:08	9/11/23 15:08			660.67	uS/cm			FA
pH	9/11/23 15:08	9/11/23 15:08			9.27	SU			FA
Temperature	9/11/23 15:08	9/11/23 15:08			20.45	C			FA
Turbidity	9/11/23 15:08	9/11/23 15:08			2.89	NTU			FA
Sulfide	9/11/23 15:08	9/11/23 15:08			0	mg/L			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 10/25/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/11/23 15:10
Customer ID:
Delivery Date: 9/14/23 10:03

Description: Gorgas Ash Pond - PZ-22

Laboratory ID Number: BD17494

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17502	Aluminum, Dissolved	mg/L	-0.000290	0.0198	0.100	0.105	0.106	0.105	0.0850 to 0.115	105	70.0 to 130	0.948	20.0
BD17501	Aluminum, Total	mg/L	0.000208	0.0198	0.100	0.538	0.665	0.104	0.0850 to 0.115	97.0	70.0 to 130	21.1	20.0
BD17502	Antimony, Dissolved	mg/L	0.000229	0.00100	0.100	0.0929	0.0942	0.0919	0.0850 to 0.115	92.1	70.0 to 130	1.39	20.0
BD17501	Antimony, Total	mg/L	0.000567	0.00100	0.100	0.0971	0.0985	0.0960	0.0850 to 0.115	96.1	70.0 to 130	1.43	20.0
BD17502	Arsenic, Dissolved	mg/L	-0.0000089	0.000200	0.100	0.101	0.102	0.0987	0.0850 to 0.115	97.2	70.0 to 130	0.985	20.0
BD17501	Arsenic, Total	mg/L	0.000105	0.000200	0.100	0.101	0.100	0.100	0.0850 to 0.115	95.6	70.0 to 130	0.995	20.0
BD17502	Barium, Dissolved	mg/L	-0.0000262	0.00100	0.100	0.252	0.256	0.0998	0.0850 to 0.115	97.0	70.0 to 130	1.57	20.0
BD17501	Barium, Total	mg/L	0.0000393	0.00100	0.100	0.277	0.280	0.0908	0.0850 to 0.115	89.0	70.0 to 130	1.08	20.0
BD17502	Beryllium, Dissolved	mg/L	0.0000283	0.000880	0.100	0.101	0.0988	0.101	0.0850 to 0.115	101	70.0 to 130	2.20	20.0
BD17501	Beryllium, Total	mg/L	0.0000483	0.000880	0.100	0.101	0.101	0.0970	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BD17502	Boron, Dissolved	mg/L	-0.00109	0.0650	1.00	1.08	1.08	1.00	0.850 to 1.15	103	70.0 to 130	0.00	20.0
BD17501	Boron, Total	mg/L	0.000005	0.0650	1.00	1.07	1.09	1.02	0.850 to 1.15	104	70.0 to 130	1.85	20.0
BD17502	Cadmium, Dissolved	mg/L	0.0000030	0.000147	0.100	0.0974	0.0984	0.0978	0.0850 to 0.115	97.4	70.0 to 130	1.02	20.0
BD17501	Cadmium, Total	mg/L	-0.0000075	0.000147	0.100	0.0943	0.0987	0.101	0.0850 to 0.115	94.3	70.0 to 130	4.56	20.0
BD17502	Calcium, Dissolved	mg/L	-0.0266	0.152	5.00	21.2	21.1	5.06	4.25 to 5.75	102	70.0 to 130	0.473	20.0
BD17501	Calcium, Total	mg/L	-0.0189	0.152	5.00	10.0	10.1	5.06	4.25 to 5.75	95.8	70.0 to 130	0.995	20.0
BD17501	Chloride	mg/L	0.00138	1.00	10.0	15.5	15.7	10.5	9.00 to 11.0	105	80.0 to 120	1.28	20.0
BD17502	Chromium, Dissolved	mg/L	-0.000168	0.000440	0.100	0.0972	0.0965	0.101	0.0850 to 0.115	97.2	70.0 to 130	0.723	20.0
BD17501	Chromium, Total	mg/L	-0.0000841	0.000440	0.100	0.0950	0.0966	0.0994	0.0850 to 0.115	94.5	70.0 to 130	1.67	20.0
BD17502	Cobalt, Dissolved	mg/L	-0.0000695	0.000147	0.100	0.0985	0.0989	0.102	0.0850 to 0.115	98.5	70.0 to 130	0.405	20.0
BD17501	Cobalt, Total	mg/L	0.0000025	0.000147	0.100	0.0972	0.0994	0.103	0.0850 to 0.115	97.2	70.0 to 130	2.24	20.0
BD17501	Fluoride	mg/L	0.00769	0.125	2.50	3.06	3.07	2.68	2.25 to 2.75	105	80.0 to 120	0.326	20.0
BD17502	Iron, Dissolved	mg/L	0.00154	0.0176	0.2	0.205	0.202	0.202	0.170 to 0.230	97.6	70.0 to 130	1.47	20.0
BD17501	Iron, Total	mg/L	-0.000348	0.0176	0.2	0.214	0.218	0.204	0.170 to 0.230	100	70.0 to 130	1.85	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/11/23 15:10
Customer ID:
Delivery Date: 9/14/23 10:03

Description: Gorgas Ash Pond - PZ-22

Laboratory ID Number: BD17494

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17502	Lead, Dissolved	mg/L	0.0000056	0.000147	0.100	0.101	0.103	0.105	0.0850 to 0.115	101	70.0 to 130	1.96	20.0
BD17501	Lead, Total	mg/L	0.0000068	0.000147	0.100	0.0965	0.0977	0.0988	0.0850 to 0.115	96.5	70.0 to 130	1.24	20.0
BD17502	Lithium, Dissolved	mg/L	-0.000209	0.0154	0.200	0.284	0.282	0.205	0.170 to 0.230	104	70.0 to 130	0.707	20.0
BD17501	Lithium, Total	mg/L	-0.000449	0.0154	0.200	0.518	0.520	0.209	0.170 to 0.230	106	70.0 to 130	0.385	20.0
BD17502	Magnesium, Dissolved	mg/L	-0.00780	0.0462	5.00	8.94	8.93	5.14	4.25 to 5.75	102	70.0 to 130	0.112	20.0
BD17501	Magnesium, Total	mg/L	-0.0162	0.0462	5.00	5.73	5.82	5.21	4.25 to 5.75	103	70.0 to 130	1.56	20.0
BD17502	Manganese, Dissolved	mg/L	0.0000089	0.00033	0.100	0.111	0.111	0.103	0.0850 to 0.115	99.0	70.0 to 130	0.00	20.0
BD17501	Manganese, Total	mg/L	0.0000048	0.00033	0.100	0.0971	0.101	0.103	0.0850 to 0.115	96.9	70.0 to 130	3.94	20.0
BD17501	Mercury, Total by CVAA	mg/L	5.000E-05	0.000500	0.004	0.00401	0.00411	0.00406	0.00340 to 0.00460	100	70.0 to 130	2.46	20.0
BD17502	Molybdenum, Dissolved	mg/L	0.000202	0.0100	0.2	0.222	0.219	0.204	0.170 to 0.230	104	70.0 to 130	1.36	20.0
BD17501	Molybdenum, Total	mg/L	0.000	0.0100	0.2	0.243	0.247	0.207	0.170 to 0.230	102	70.0 to 130	1.63	20.0
BD17502	Potassium, Dissolved	mg/L	-0.0106	0.367	10.0	16.4	16.0	10.1	8.50 to 11.5	97.2	70.0 to 130	2.47	20.0
BD17501	Potassium, Total	mg/L	-0.00235	0.367	10.0	15.1	15.5	10.2	8.50 to 11.5	97.3	70.0 to 130	2.61	20.0
BD17502	Selenium, Dissolved	mg/L	-0.0000900	0.00100	0.100	0.102	0.0993	0.103	0.0850 to 0.115	101	70.0 to 130	2.68	20.0
BD17501	Selenium, Total	mg/L	0.0000683	0.00100	0.100	0.0968	0.100	0.103	0.0850 to 0.115	96.8	70.0 to 130	3.25	20.0
BD17502	Silicon, Dissolved	mg/L	0.000692	0.0440	1.00	9.39	9.42	1.02	0.850 to 1.15	97.0	70.0 to 130	0.319	20.0
BD17501	Silicon, Total	mg/L	0.00106	0.0440	1.00	39.1	36.3	1.03	0.850 to 1.15	340	70.0 to 130	7.43	20.0
BD17502	Sodium, Dissolved	mg/L	0.0636	0.0880	5.00	187	187	5.10	4.25 to 5.75	240	70.0 to 130	0.00	20.0
BD17501	Sodium, Total	mg/L	0.00811	0.0880	5.00	206	187	5.17	4.25 to 5.75	400	70.0 to 130	9.67	20.0
BD17501	Sulfate	mg/L	-0.0293	2.0	20.0	27.5	27.6	19.2	18.0 to 22.0	95.4	80.0 to 120	0.363	20.0
BD17502	Thallium, Dissolved	mg/L	-0.0000854	0.000147	0.100	0.0993	0.0997	0.102	0.0850 to 0.115	99.3	70.0 to 130	0.402	20.0
BD17501	Thallium, Total	mg/L	0.0000056	0.000147	0.100	0.0973	0.0983	0.100	0.0850 to 0.115	97.3	70.0 to 130	1.02	20.0
BD17501	Total Organic Carbon	mg/L	0.309	1.00	10.0	19.4	18.5	8.66		87.0	80.0 to 120	4.75	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/11/23 15:10
Customer ID:
Delivery Date: 9/14/23 10:03

Description: Gorgas Ash Pond - PZ-22

Laboratory ID Number: BD17494

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17516	Alkalinity	mg CaCO3/L					185	52.0	45.0 to 55.0			0.00	10.0
BD17501	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.15	0.200	2.00	1.82	-0.154	1.86	1.80 to 2.20	91.0	90.0 to 110	0.00	15.0
BD17501	Solids, Dissolved	mg/L	2.00	25.0			550	55.0	40.0 to 60.0			2.69	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - PZ-22 Dup

Location Code: WMWGORAP
Collected: 9/11/23 15:10
Customer ID:
Submittal Date: 9/14/23 10:03

Laboratory ID Number: BD17495

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	9/15/23 06:33	9/19/23 15:57		1.015	0.0462	mg/L	0.030000	0.1015	J
* Calcium, Total	9/15/23 06:33	9/19/23 15:57		1.015	9.75	mg/L	0.070035	0.406	
* Iron, Total	9/15/23 06:33	9/19/23 15:57		1.015	0.732	mg/L	0.008120	0.0406	
* Lithium, Total	9/15/23 06:33	9/19/23 15:57		1.015	0.0885	mg/L	0.007105	0.01999956	
* Magnesium, Total	9/15/23 06:33	9/19/23 15:57		1.015	3.85	mg/L	0.021315	0.406	
* Molybdenum, Total	9/15/23 06:33	9/19/23 15:57		1.015	0.00720	mg/L	0.005075	0.01015	J
* Silica, Total (calc.)	9/15/23 06:33	9/19/23 15:57		1	9.54	mg/L			
* Silicon, Total	9/15/23 06:33	9/19/23 15:57		1.015	4.46	mg/L	0.02030	0.25375	
* Sodium, Total	9/15/23 06:33	9/20/23 12:22		10.15	181	mg/L	0.4060	4.06	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	9/14/23 14:15	9/19/23 13:35		1.015	0.0452	mg/L	0.030000	0.1015	J
* Calcium, Dissolved	9/14/23 14:15	9/19/23 13:35		1.015	10.2	mg/L	0.070035	0.406	
* Iron, Dissolved	9/14/23 14:15	9/19/23 13:35		1.015	0.236	mg/L	0.008120	0.0406	
* Lithium, Dissolved	9/14/23 14:15	9/19/23 13:35		1.015	0.0820	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	9/14/23 14:15	9/19/23 13:35		1.015	4.08	mg/L	0.021315	0.406	
* Molybdenum, Dissolved	9/14/23 14:15	9/19/23 13:35		1.015	0.00734	mg/L	0.005075	0.01015	J
* Silica, Dissolved (calc.)	9/14/23 14:15	9/19/23 13:35		1	9.57	mg/L			
* Silicon, Dissolved	9/14/23 14:15	9/19/23 13:35		1.015	4.47	mg/L	0.02030	0.25375	
* Sodium, Dissolved	9/14/23 14:15	9/20/23 10:31		10.15	164	mg/L	0.4060	4.06	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	9/15/23 06:33	9/18/23 10:21		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Total	9/15/23 06:33	9/18/23 10:21		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Total	9/15/23 06:33	9/18/23 10:21		1.015	0.00207	mg/L	0.000112	0.000203	
* Barium, Total	9/15/23 06:33	9/18/23 10:21		1.015	0.0620	mg/L	0.000508	0.001015	
* Beryllium, Total	9/15/23 06:33	9/18/23 10:21		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	9/15/23 06:33	9/18/23 10:21		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	9/15/23 06:33	9/18/23 10:21		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	9/15/23 06:33	9/18/23 10:21		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	9/15/23 06:33	9/18/23 10:21		1.015	0.000157	mg/L	0.000068	0.000203	J
* Manganese, Total	9/15/23 06:33	9/18/23 10:21		1.015	0.0265	mg/L	0.000152	0.001015	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - PZ-22 Dup

Location Code: WMWGORAP
Collected: 9/11/23 15:10
Customer ID:
Submittal Date: 9/14/23 10:03

Laboratory ID Number: BD17495

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	9/15/23 06:33	9/18/23 10:21		1.015	3.21	mg/L	0.169505	0.5075	
* Selenium, Total	9/15/23 06:33	9/18/23 10:21		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	9/15/23 06:33	9/18/23 10:21		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	9/14/23 14:15	9/14/23 15:18		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	9/14/23 14:15	9/14/23 15:18		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Dissolved	9/14/23 14:15	9/14/23 15:18		1.015	0.00188	mg/L	0.000112	0.000203	
* Barium, Dissolved	9/14/23 14:15	9/14/23 15:18		1.015	0.0660	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	9/14/23 14:15	9/14/23 15:18		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	9/14/23 14:15	9/14/23 15:18		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	9/14/23 14:15	9/14/23 15:18		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	9/14/23 14:15	9/14/23 15:18		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Dissolved	9/14/23 14:15	9/14/23 15:18		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	9/14/23 14:15	9/14/23 15:18		1.015	0.0270	mg/L	0.000152	0.001015	
* Potassium, Dissolved	9/14/23 14:15	9/14/23 15:18		1.015	2.91	mg/L	0.169505	0.5075	
* Selenium, Dissolved	9/14/23 14:15	9/14/23 15:18		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	9/14/23 14:15	9/14/23 15:18		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	9/14/23 17:22	9/14/23 22:21		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	9/18/23 12:05	9/18/23 12:05		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: DHC***								
Alkalinity pH Endpoint	9/20/23 12:02	9/20/23 13:53		1	4.50	SU		2	
* Alkalinity	9/20/23 12:02	9/20/23 13:53		1	309	mg CaCO3/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	9/14/23 13:40	9/15/23 13:10		1	433	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: DHC***								
* Bicarbonate Alkalinity, (calc.)	9/20/23 12:02	9/20/23 13:53		1	278	mg CaCO3/L		1	
* Carbonate Alkalinity, (calc.)	9/20/23 12:02	9/20/23 13:53		1	30.7	mg CaCO3/L		0.5	
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	9/18/23 13:11	9/18/23 13:11		1	1.21	mg/L	1.00	2	J

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 10/25/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - PZ-22 Dup

Location Code: WMWGORAP
Collected: 9/11/23 15:10
Customer ID:
Submittal Date: 9/14/23 10:03

Laboratory ID Number: BD17495

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	9/18/23 10:48	9/18/23 10:48		1	2.90	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	9/18/23 14:33	9/18/23 14:33		1	0.468	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	9/26/23 14:49	9/26/23 14:49		5	66.8	mg/L	3.0	10	
Analytical Method: Field Measurements	***Analyst: AWG***								
Conductivity	9/11/23 15:08	9/11/23 15:08			660.67	uS/cm			FA
pH	9/11/23 15:08	9/11/23 15:08			9.27	SU			FA
Temperature	9/11/23 15:08	9/11/23 15:08			20.45	C			FA
Turbidity	9/11/23 15:08	9/11/23 15:08			2.89	NTU			FA
Sulfide	9/11/23 15:08	9/11/23 15:08			0	mg/L			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/11/23 15:10
Customer ID:
Delivery Date: 9/14/23 10:03

Description: Gorgas Ash Pond - PZ-22 Dup

Laboratory ID Number: BD17495

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17502	Aluminum, Dissolved	mg/L	-0.000290	0.0198	0.100	0.105	0.106	0.105	0.0850 to 0.115	105	70.0 to 130	0.948	20.0
BD17501	Aluminum, Total	mg/L	0.000208	0.0198	0.100	0.538	0.665	0.104	0.0850 to 0.115	97.0	70.0 to 130	21.1	20.0
BD17502	Antimony, Dissolved	mg/L	0.000229	0.00100	0.100	0.0929	0.0942	0.0919	0.0850 to 0.115	92.1	70.0 to 130	1.39	20.0
BD17501	Antimony, Total	mg/L	0.000567	0.00100	0.100	0.0971	0.0985	0.0960	0.0850 to 0.115	96.1	70.0 to 130	1.43	20.0
BD17502	Arsenic, Dissolved	mg/L	-0.0000089	0.000200	0.100	0.101	0.102	0.0987	0.0850 to 0.115	97.2	70.0 to 130	0.985	20.0
BD17501	Arsenic, Total	mg/L	0.000105	0.000200	0.100	0.101	0.100	0.100	0.0850 to 0.115	95.6	70.0 to 130	0.995	20.0
BD17502	Barium, Dissolved	mg/L	-0.0000262	0.00100	0.100	0.252	0.256	0.0998	0.0850 to 0.115	97.0	70.0 to 130	1.57	20.0
BD17501	Barium, Total	mg/L	0.0000393	0.00100	0.100	0.277	0.280	0.0908	0.0850 to 0.115	89.0	70.0 to 130	1.08	20.0
BD17502	Beryllium, Dissolved	mg/L	0.0000283	0.000880	0.100	0.101	0.0988	0.101	0.0850 to 0.115	101	70.0 to 130	2.20	20.0
BD17501	Beryllium, Total	mg/L	0.0000483	0.000880	0.100	0.101	0.101	0.0970	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BD17502	Boron, Dissolved	mg/L	-0.00109	0.0650	1.00	1.08	1.08	1.00	0.850 to 1.15	103	70.0 to 130	0.00	20.0
BD17501	Boron, Total	mg/L	0.000005	0.0650	1.00	1.07	1.09	1.02	0.850 to 1.15	104	70.0 to 130	1.85	20.0
BD17502	Cadmium, Dissolved	mg/L	0.0000030	0.000147	0.100	0.0974	0.0984	0.0978	0.0850 to 0.115	97.4	70.0 to 130	1.02	20.0
BD17501	Cadmium, Total	mg/L	-0.0000075	0.000147	0.100	0.0943	0.0987	0.101	0.0850 to 0.115	94.3	70.0 to 130	4.56	20.0
BD17502	Calcium, Dissolved	mg/L	-0.0266	0.152	5.00	21.2	21.1	5.06	4.25 to 5.75	102	70.0 to 130	0.473	20.0
BD17501	Calcium, Total	mg/L	-0.0189	0.152	5.00	10.0	10.1	5.06	4.25 to 5.75	95.8	70.0 to 130	0.995	20.0
BD17501	Chloride	mg/L	0.00138	1.00	10.0	15.5	15.7	10.5	9.00 to 11.0	105	80.0 to 120	1.28	20.0
BD17502	Chromium, Dissolved	mg/L	-0.000168	0.000440	0.100	0.0972	0.0965	0.101	0.0850 to 0.115	97.2	70.0 to 130	0.723	20.0
BD17501	Chromium, Total	mg/L	-0.0000841	0.000440	0.100	0.0950	0.0966	0.0994	0.0850 to 0.115	94.5	70.0 to 130	1.67	20.0
BD17502	Cobalt, Dissolved	mg/L	-0.0000695	0.000147	0.100	0.0985	0.0989	0.102	0.0850 to 0.115	98.5	70.0 to 130	0.405	20.0
BD17501	Cobalt, Total	mg/L	0.0000025	0.000147	0.100	0.0972	0.0994	0.103	0.0850 to 0.115	97.2	70.0 to 130	2.24	20.0
BD17501	Fluoride	mg/L	0.00769	0.125	2.50	3.06	3.07	2.68	2.25 to 2.75	105	80.0 to 120	0.326	20.0
BD17502	Iron, Dissolved	mg/L	0.00154	0.0176	0.2	0.205	0.202	0.202	0.170 to 0.230	97.6	70.0 to 130	1.47	20.0
BD17501	Iron, Total	mg/L	-0.000348	0.0176	0.2	0.214	0.218	0.204	0.170 to 0.230	100	70.0 to 130	1.85	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/11/23 15:10
Customer ID:
Delivery Date: 9/14/23 10:03

Description: Gorgas Ash Pond - PZ-22 Dup

Laboratory ID Number: BD17495

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17502	Lead, Dissolved	mg/L	0.0000056	0.000147	0.100	0.101	0.103	0.105	0.0850 to 0.115	101	70.0 to 130	1.96	20.0
BD17501	Lead, Total	mg/L	0.0000068	0.000147	0.100	0.0965	0.0977	0.0988	0.0850 to 0.115	96.5	70.0 to 130	1.24	20.0
BD17502	Lithium, Dissolved	mg/L	-0.000209	0.0154	0.200	0.284	0.282	0.205	0.170 to 0.230	104	70.0 to 130	0.707	20.0
BD17501	Lithium, Total	mg/L	-0.000449	0.0154	0.200	0.518	0.520	0.209	0.170 to 0.230	106	70.0 to 130	0.385	20.0
BD17502	Magnesium, Dissolved	mg/L	-0.00780	0.0462	5.00	8.94	8.93	5.14	4.25 to 5.75	102	70.0 to 130	0.112	20.0
BD17501	Magnesium, Total	mg/L	-0.0162	0.0462	5.00	5.73	5.82	5.21	4.25 to 5.75	103	70.0 to 130	1.56	20.0
BD17502	Manganese, Dissolved	mg/L	0.0000089	0.00033	0.100	0.111	0.111	0.103	0.0850 to 0.115	99.0	70.0 to 130	0.00	20.0
BD17501	Manganese, Total	mg/L	0.0000048	0.00033	0.100	0.0971	0.101	0.103	0.0850 to 0.115	96.9	70.0 to 130	3.94	20.0
BD17501	Mercury, Total by CVAA	mg/L	5.000E-05	0.000500	0.004	0.00401	0.00411	0.00406	0.00340 to 0.00460	100	70.0 to 130	2.46	20.0
BD17502	Molybdenum, Dissolved	mg/L	0.000202	0.0100	0.2	0.222	0.219	0.204	0.170 to 0.230	104	70.0 to 130	1.36	20.0
BD17501	Molybdenum, Total	mg/L	0.000	0.0100	0.2	0.243	0.247	0.207	0.170 to 0.230	102	70.0 to 130	1.63	20.0
BD17502	Potassium, Dissolved	mg/L	-0.0106	0.367	10.0	16.4	16.0	10.1	8.50 to 11.5	97.2	70.0 to 130	2.47	20.0
BD17501	Potassium, Total	mg/L	-0.00235	0.367	10.0	15.1	15.5	10.2	8.50 to 11.5	97.3	70.0 to 130	2.61	20.0
BD17502	Selenium, Dissolved	mg/L	-0.0000900	0.00100	0.100	0.102	0.0993	0.103	0.0850 to 0.115	101	70.0 to 130	2.68	20.0
BD17501	Selenium, Total	mg/L	0.0000683	0.00100	0.100	0.0968	0.100	0.103	0.0850 to 0.115	96.8	70.0 to 130	3.25	20.0
BD17502	Silicon, Dissolved	mg/L	0.000692	0.0440	1.00	9.39	9.42	1.02	0.850 to 1.15	97.0	70.0 to 130	0.319	20.0
BD17501	Silicon, Total	mg/L	0.00106	0.0440	1.00	39.1	36.3	1.03	0.850 to 1.15	340	70.0 to 130	7.43	20.0
BD17502	Sodium, Dissolved	mg/L	0.0636	0.0880	5.00	187	187	5.10	4.25 to 5.75	240	70.0 to 130	0.00	20.0
BD17501	Sodium, Total	mg/L	0.00811	0.0880	5.00	206	187	5.17	4.25 to 5.75	400	70.0 to 130	9.67	20.0
BD17501	Sulfate	mg/L	-0.0293	2.0	20.0	27.5	27.6	19.2	18.0 to 22.0	95.4	80.0 to 120	0.363	20.0
BD17502	Thallium, Dissolved	mg/L	-0.0000854	0.000147	0.100	0.0993	0.0997	0.102	0.0850 to 0.115	99.3	70.0 to 130	0.402	20.0
BD17501	Thallium, Total	mg/L	0.0000056	0.000147	0.100	0.0973	0.0983	0.100	0.0850 to 0.115	97.3	70.0 to 130	1.02	20.0
BD17501	Total Organic Carbon	mg/L	0.309	1.00	10.0	19.4	18.5	8.66		87.0	80.0 to 120	4.75	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/11/23 15:10
Customer ID:
Delivery Date: 9/14/23 10:03

Description: Gorgas Ash Pond - PZ-22 Dup

Laboratory ID Number: BD17495

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17516	Alkalinity	mg CaCO3/L					185	52.0	45.0 to 55.0			0.00	10.0
BD17501	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.15	0.200	2.00	1.82	-0.154	1.86	1.80 to 2.20	91.0	90.0 to 110	0.00	15.0
BD17501	Solids, Dissolved	mg/L	2.00	25.0			550	55.0	40.0 to 60.0			2.69	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond Field Blank-6

Location Code: WMWGORAPFB
Collected: 9/11/23 15:50
Customer ID:
Submittal Date: 9/14/23 10:03

Laboratory ID Number: BD17496

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	9/15/23 06:33	9/19/23 16:00		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	9/15/23 06:33	9/19/23 16:00		1.015	Not Detected	mg/L	0.070035	0.406	U
* Iron, Total	9/15/23 06:33	9/19/23 16:00		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Total	9/15/23 06:33	9/19/23 16:00		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	9/15/23 06:33	9/19/23 16:00		1.015	Not Detected	mg/L	0.021315	0.406	U
* Molybdenum, Total	9/15/23 06:33	9/19/23 16:00		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Total (calc.)	9/15/23 06:33	9/19/23 16:00		1	Not Detected	mg/L			
* Silicon, Total	9/15/23 06:33	9/19/23 16:00		1.015	Not Detected	mg/L	0.02030	0.25375	U
* Sodium, Total	9/15/23 06:33	9/19/23 16:00		1.015	Not Detected	mg/L	0.04060	0.406	U
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	9/15/23 06:33	9/18/23 10:25		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Total	9/15/23 06:33	9/18/23 10:25		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Total	9/15/23 06:33	9/18/23 10:25		1.015	Not Detected	mg/L	0.000112	0.000203	U
* Barium, Total	9/15/23 06:33	9/18/23 10:25		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Beryllium, Total	9/15/23 06:33	9/18/23 10:25		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	9/15/23 06:33	9/18/23 10:25		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	9/15/23 06:33	9/18/23 10:25		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	9/15/23 06:33	9/18/23 10:25		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	9/15/23 06:33	9/18/23 10:25		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	9/15/23 06:33	9/18/23 10:25		1.015	Not Detected	mg/L	0.000152	0.001015	U
* Potassium, Total	9/15/23 06:33	9/18/23 10:25		1.015	Not Detected	mg/L	0.169505	0.5075	U
* Selenium, Total	9/15/23 06:33	9/18/23 10:25		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	9/15/23 06:33	9/18/23 10:25		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	9/14/23 17:22	9/14/23 22:25		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	9/18/23 12:06	9/18/23 12:06		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	9/14/23 13:40	9/15/23 13:10		1	Not Detected	mg/L		25	U

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments:

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond Field Blank-6

Location Code: WMWGORAPFB
Collected: 9/11/23 15:50
Customer ID:
Submittal Date: 9/14/23 10:03

Laboratory ID Number: BD17496

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	9/18/23 13:26	9/18/23 13:26		1	Not Detected	mg/L	1.00	2	U
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	9/18/23 10:50	9/18/23 10:50		1	Not Detected	mg/L	0.50	1	U
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	9/18/23 14:35	9/18/23 14:35		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	9/26/23 14:38	9/26/23 14:38		1	Not Detected	mg/L	0.6	2	U

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments:

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAPFB
Sample Date: 9/11/23 15:50
Customer ID:
Delivery Date: 9/14/23 10:03

Description: Gorgas Ash Pond Field Blank-6

Laboratory ID Number: BD17496

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17501	Aluminum, Total	mg/L	0.000208	0.0198	0.100	0.538	0.665	0.104	0.0850 to 0.115	97.0	70.0 to 130	21.1	20.0
BD17501	Antimony, Total	mg/L	0.000567	0.00100	0.100	0.0971	0.0985	0.0960	0.0850 to 0.115	96.1	70.0 to 130	1.43	20.0
BD17501	Arsenic, Total	mg/L	0.000105	0.000200	0.100	0.101	0.100	0.100	0.0850 to 0.115	95.6	70.0 to 130	0.995	20.0
BD17501	Barium, Total	mg/L	0.0000393	0.00100	0.100	0.277	0.280	0.0908	0.0850 to 0.115	89.0	70.0 to 130	1.08	20.0
BD17501	Beryllium, Total	mg/L	0.0000483	0.000880	0.100	0.101	0.101	0.0970	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BD17501	Boron, Total	mg/L	0.000005	0.0650	1.00	1.07	1.09	1.02	0.850 to 1.15	104	70.0 to 130	1.85	20.0
BD17501	Cadmium, Total	mg/L	-0.0000075	0.000147	0.100	0.0943	0.0987	0.101	0.0850 to 0.115	94.3	70.0 to 130	4.56	20.0
BD17501	Calcium, Total	mg/L	-0.0189	0.152	5.00	10.0	10.1	5.06	4.25 to 5.75	95.8	70.0 to 130	0.995	20.0
BD17501	Chloride	mg/L	0.00138	1.00	10.0	15.5	15.7	10.5	9.00 to 11.0	105	80.0 to 120	1.28	20.0
BD17501	Chromium, Total	mg/L	-0.0000841	0.000440	0.100	0.0950	0.0966	0.0994	0.0850 to 0.115	94.5	70.0 to 130	1.67	20.0
BD17501	Cobalt, Total	mg/L	0.0000025	0.000147	0.100	0.0972	0.0994	0.103	0.0850 to 0.115	97.2	70.0 to 130	2.24	20.0
BD17501	Fluoride	mg/L	0.00769	0.125	2.50	3.06	3.07	2.68	2.25 to 2.75	105	80.0 to 120	0.326	20.0
BD17501	Iron, Total	mg/L	-0.000348	0.0176	0.2	0.214	0.218	0.204	0.170 to 0.230	100	70.0 to 130	1.85	20.0
BD17501	Lead, Total	mg/L	0.0000068	0.000147	0.100	0.0965	0.0977	0.0988	0.0850 to 0.115	96.5	70.0 to 130	1.24	20.0
BD17501	Lithium, Total	mg/L	-0.000449	0.0154	0.200	0.518	0.520	0.209	0.170 to 0.230	106	70.0 to 130	0.385	20.0
BD17501	Magnesium, Total	mg/L	-0.0162	0.0462	5.00	5.73	5.82	5.21	4.25 to 5.75	103	70.0 to 130	1.56	20.0
BD17501	Manganese, Total	mg/L	0.0000048	0.00033	0.100	0.0971	0.101	0.103	0.0850 to 0.115	96.9	70.0 to 130	3.94	20.0
BD17501	Mercury, Total by CVAA	mg/L	5.000E-05	0.000500	0.004	0.00401	0.00411	0.00406	0.00340 to 0.00460	100	70.0 to 130	2.46	20.0
BD17501	Molybdenum, Total	mg/L	0.000	0.0100	0.2	0.243	0.247	0.207	0.170 to 0.230	102	70.0 to 130	1.63	20.0
BD17501	Potassium, Total	mg/L	-0.00235	0.367	10.0	15.1	15.5	10.2	8.50 to 11.5	97.3	70.0 to 130	2.61	20.0
BD17501	Selenium, Total	mg/L	0.0000683	0.00100	0.100	0.0968	0.100	0.103	0.0850 to 0.115	96.8	70.0 to 130	3.25	20.0
BD17501	Silicon, Total	mg/L	0.00106	0.0440	1.00	39.1	36.3	1.03	0.850 to 1.15	340	70.0 to 130	7.43	20.0
BD17501	Sodium, Total	mg/L	0.00811	0.0880	5.00	206	187	5.17	4.25 to 5.75	400	70.0 to 130	9.67	20.0
BD17501	Sulfate	mg/L	-0.0293	2.0	20.0	27.5	27.6	19.2	18.0 to 22.0	95.4	80.0 to 120	0.363	20.0

Comments:

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAPFB
Sample Date: 9/11/23 15:50
Customer ID:
Delivery Date: 9/14/23 10:03

Description: Gorgas Ash Pond Field Blank-6

Laboratory ID Number: BD17496

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17501	Thallium, Total	mg/L	0.0000056	0.000147	0.100	0.0973	0.0983	0.100	0.0850 to 0.115	97.3	70.0 to 130	1.02	20.0
BD17501	Total Organic Carbon	mg/L	0.309	1.00	10.0	19.4	18.5	8.66		87.0	80.0 to 120	4.75	20.0

Comments:

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAPFB
Sample Date: 9/11/23 15:50
Customer ID:
Delivery Date: 9/14/23 10:03

Description: Gorgas Ash Pond Field Blank-6

Laboratory ID Number: BD17496

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17501	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.15	0.200	2.00	1.82	-0.154	1.86	1.80 to 2.20	91.0	90.0 to 110	0.00	15.0
BD17501	Solids, Dissolved	mg/L	2.00	25.0			550	55.0	40.0 to 60.0			2.69	10.0

Comments:

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-28H

Location Code: WMWGORAP
Collected: 9/11/23 16:45
Customer ID:
Submittal Date: 9/14/23 10:03

Laboratory ID Number: BD17497

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	9/15/23 06:33	9/19/23 16:03		1.015	0.0745	mg/L	0.030000	0.1015	J
* Calcium, Total	9/15/23 06:33	9/19/23 16:03		1.015	1.84	mg/L	0.070035	0.406	
* Iron, Total	9/15/23 06:33	9/19/23 16:03		1.015	0.0982	mg/L	0.008120	0.0406	
* Lithium, Total	9/15/23 06:33	9/19/23 16:03		1.015	0.0607	mg/L	0.007105	0.01999956	
* Magnesium, Total	9/15/23 06:33	9/19/23 16:03		1.015	0.591	mg/L	0.021315	0.406	
* Molybdenum, Total	9/15/23 06:33	9/19/23 16:03		1.015	0.00893	mg/L	0.005075	0.01015	J
* Silica, Total (calc.)	9/15/23 06:33	9/19/23 16:03		1	17.8	mg/L			
* Silicon, Total	9/15/23 06:33	9/19/23 16:03		1.015	8.30	mg/L	0.02030	0.25375	
* Sodium, Total	9/15/23 06:33	9/20/23 12:28		10.15	213	mg/L	0.4060	4.06	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	9/14/23 14:15	9/19/23 13:38		1.015	0.0727	mg/L	0.030000	0.1015	J
* Calcium, Dissolved	9/14/23 14:15	9/19/23 13:38		1.015	1.59	mg/L	0.070035	0.406	
* Iron, Dissolved	9/14/23 14:15	9/19/23 13:38		1.015	0.0550	mg/L	0.008120	0.0406	
* Lithium, Dissolved	9/14/23 14:15	9/19/23 13:38		1.015	0.0589	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	9/14/23 14:15	9/19/23 13:38		1.015	0.513	mg/L	0.021315	0.406	
* Molybdenum, Dissolved	9/14/23 14:15	9/19/23 13:38		1.015	0.00785	mg/L	0.005075	0.01015	J
* Silica, Dissolved (calc.)	9/14/23 14:15	9/19/23 13:38		1	17.7	mg/L			
* Silicon, Dissolved	9/14/23 14:15	9/19/23 13:38		1.015	8.27	mg/L	0.02030	0.25375	
* Sodium, Dissolved	9/14/23 14:15	9/20/23 10:34		10.15	217	mg/L	0.4060	4.06	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	9/15/23 06:33	9/18/23 10:28		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Arsenic, Total	9/15/23 06:33	9/18/23 10:28		1.015	0.000957	mg/L	0.000112	0.000203	
* Aluminum, Total	9/15/23 06:33	9/18/23 10:28		1.015	0.0189	mg/L	0.009135	0.05075	J
* Barium, Total	9/15/23 06:33	9/18/23 10:28		1.015	0.0484	mg/L	0.000508	0.001015	
* Beryllium, Total	9/15/23 06:33	9/18/23 10:28		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	9/15/23 06:33	9/18/23 10:28		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	9/15/23 06:33	9/18/23 10:28		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	9/15/23 06:33	9/18/23 10:28		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	9/15/23 06:33	9/18/23 10:28		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	9/15/23 06:33	9/18/23 10:28		1.015	0.00610	mg/L	0.000152	0.001015	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-28H

Location Code: WMWGORAP
Collected: 9/11/23 16:45
Customer ID:
Submittal Date: 9/14/23 10:03

Laboratory ID Number: BD17497

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	9/15/23 06:33	9/18/23 10:28		1.015	1.03	mg/L	0.169505	0.5075	
* Selenium, Total	9/15/23 06:33	9/18/23 10:28		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	9/15/23 06:33	9/18/23 10:28		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	9/14/23 14:15	9/14/23 15:22		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	9/14/23 14:15	9/14/23 15:22		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Dissolved	9/14/23 14:15	9/14/23 15:22		1.015	0.000757	mg/L	0.000112	0.000203	
* Barium, Dissolved	9/14/23 14:15	9/14/23 15:22		1.015	0.0469	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	9/14/23 14:15	9/14/23 15:22		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	9/14/23 14:15	9/14/23 15:22		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	9/14/23 14:15	9/14/23 15:22		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	9/14/23 14:15	9/14/23 15:22		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Dissolved	9/14/23 14:15	9/14/23 15:22		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	9/14/23 14:15	9/14/23 15:22		1.015	0.00478	mg/L	0.000152	0.001015	
* Potassium, Dissolved	9/14/23 14:15	9/14/23 15:22		1.015	0.970	mg/L	0.169505	0.5075	
* Selenium, Dissolved	9/14/23 14:15	9/14/23 15:22		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	9/14/23 14:15	9/14/23 15:22		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	9/14/23 17:22	9/14/23 22:29		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	9/18/23 12:08	9/18/23 12:08		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: DHC***								
Alkalinity pH Endpoint	9/20/23 12:02	9/20/23 13:53		1	4.45	SU		2	
* Alkalinity	9/20/23 12:02	9/20/23 13:53		1	405	mg CaCO3/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	9/14/23 13:40	9/15/23 13:10		1	466	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: DHC***								
* Bicarbonate Alkalinity, (calc.)	9/20/23 12:02	9/20/23 13:53		1	389	mg CaCO3/L		1	
* Carbonate Alkalinity, (calc.)	9/20/23 12:02	9/20/23 13:53		1	16.0	mg CaCO3/L		0.5	
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	9/18/23 13:38	9/18/23 13:38		1	Not Detected	mg/L	1.00	2	U

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-28H

Location Code: WMWGORAP
Collected: 9/11/23 16:45
Customer ID:
Submittal Date: 9/14/23 10:03

Laboratory ID Number: BD17497

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	9/18/23 10:51	9/18/23 10:51		1	9.86	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	9/18/23 14:36	9/18/23 14:36		1	0.176	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	9/26/23 14:40	9/26/23 14:40		1	9.05	mg/L	0.6	2	
Analytical Method: Field Measurements	***Analyst: AWG***								
Conductivity	9/11/23 16:41	9/11/23 16:41			727.55	uS/cm			FA
pH	9/11/23 16:41	9/11/23 16:41			8.16	SU			FA
Temperature	9/11/23 16:41	9/11/23 16:41			21.38	C			FA
Turbidity	9/11/23 16:41	9/11/23 16:41			1.17	NTU			FA
Sulfide	9/11/23 16:41	9/11/23 16:41			0	mg/L			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/11/23 16:45
Customer ID:
Delivery Date: 9/14/23 10:03

Description: Gorgas Ash Pond - MW-28H

Laboratory ID Number: BD17497

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17502	Aluminum, Dissolved	mg/L	-0.000290	0.0198	0.100	0.105	0.106	0.105	0.0850 to 0.115	105	70.0 to 130	0.948	20.0
BD17501	Aluminum, Total	mg/L	0.000208	0.0198	0.100	0.538	0.665	0.104	0.0850 to 0.115	97.0	70.0 to 130	21.1	20.0
BD17502	Antimony, Dissolved	mg/L	0.000229	0.00100	0.100	0.0929	0.0942	0.0919	0.0850 to 0.115	92.1	70.0 to 130	1.39	20.0
BD17501	Antimony, Total	mg/L	0.000567	0.00100	0.100	0.0971	0.0985	0.0960	0.0850 to 0.115	96.1	70.0 to 130	1.43	20.0
BD17502	Arsenic, Dissolved	mg/L	-0.0000089	0.000200	0.100	0.101	0.102	0.0987	0.0850 to 0.115	97.2	70.0 to 130	0.985	20.0
BD17501	Arsenic, Total	mg/L	0.000105	0.000200	0.100	0.101	0.100	0.100	0.0850 to 0.115	95.6	70.0 to 130	0.995	20.0
BD17502	Barium, Dissolved	mg/L	-0.0000262	0.00100	0.100	0.252	0.256	0.0998	0.0850 to 0.115	97.0	70.0 to 130	1.57	20.0
BD17501	Barium, Total	mg/L	0.0000393	0.00100	0.100	0.277	0.280	0.0908	0.0850 to 0.115	89.0	70.0 to 130	1.08	20.0
BD17502	Beryllium, Dissolved	mg/L	0.0000283	0.000880	0.100	0.101	0.0988	0.101	0.0850 to 0.115	101	70.0 to 130	2.20	20.0
BD17501	Beryllium, Total	mg/L	0.0000483	0.000880	0.100	0.101	0.101	0.0970	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BD17502	Boron, Dissolved	mg/L	-0.00109	0.0650	1.00	1.08	1.08	1.00	0.850 to 1.15	103	70.0 to 130	0.00	20.0
BD17501	Boron, Total	mg/L	0.000005	0.0650	1.00	1.07	1.09	1.02	0.850 to 1.15	104	70.0 to 130	1.85	20.0
BD17502	Cadmium, Dissolved	mg/L	0.0000030	0.000147	0.100	0.0974	0.0984	0.0978	0.0850 to 0.115	97.4	70.0 to 130	1.02	20.0
BD17501	Cadmium, Total	mg/L	-0.0000075	0.000147	0.100	0.0943	0.0987	0.101	0.0850 to 0.115	94.3	70.0 to 130	4.56	20.0
BD17502	Calcium, Dissolved	mg/L	-0.0266	0.152	5.00	21.2	21.1	5.06	4.25 to 5.75	102	70.0 to 130	0.473	20.0
BD17501	Calcium, Total	mg/L	-0.0189	0.152	5.00	10.0	10.1	5.06	4.25 to 5.75	95.8	70.0 to 130	0.995	20.0
BD17501	Chloride	mg/L	0.00138	1.00	10.0	15.5	15.7	10.5	9.00 to 11.0	105	80.0 to 120	1.28	20.0
BD17502	Chromium, Dissolved	mg/L	-0.000168	0.000440	0.100	0.0972	0.0965	0.101	0.0850 to 0.115	97.2	70.0 to 130	0.723	20.0
BD17501	Chromium, Total	mg/L	-0.0000841	0.000440	0.100	0.0950	0.0966	0.0994	0.0850 to 0.115	94.5	70.0 to 130	1.67	20.0
BD17502	Cobalt, Dissolved	mg/L	-0.0000695	0.000147	0.100	0.0985	0.0989	0.102	0.0850 to 0.115	98.5	70.0 to 130	0.405	20.0
BD17501	Cobalt, Total	mg/L	0.0000025	0.000147	0.100	0.0972	0.0994	0.103	0.0850 to 0.115	97.2	70.0 to 130	2.24	20.0
BD17501	Fluoride	mg/L	0.00769	0.125	2.50	3.06	3.07	2.68	2.25 to 2.75	105	80.0 to 120	0.326	20.0
BD17502	Iron, Dissolved	mg/L	0.00154	0.0176	0.2	0.205	0.202	0.202	0.170 to 0.230	97.6	70.0 to 130	1.47	20.0
BD17501	Iron, Total	mg/L	-0.000348	0.0176	0.2	0.214	0.218	0.204	0.170 to 0.230	100	70.0 to 130	1.85	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/11/23 16:45
Customer ID:
Delivery Date: 9/14/23 10:03

Description: Gorgas Ash Pond - MW-28H

Laboratory ID Number: BD17497

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17502	Lead, Dissolved	mg/L	0.0000056	0.000147	0.100	0.101	0.103	0.105	0.0850 to 0.115	101	70.0 to 130	1.96	20.0
BD17501	Lead, Total	mg/L	0.0000068	0.000147	0.100	0.0965	0.0977	0.0988	0.0850 to 0.115	96.5	70.0 to 130	1.24	20.0
BD17502	Lithium, Dissolved	mg/L	-0.000209	0.0154	0.200	0.284	0.282	0.205	0.170 to 0.230	104	70.0 to 130	0.707	20.0
BD17501	Lithium, Total	mg/L	-0.000449	0.0154	0.200	0.518	0.520	0.209	0.170 to 0.230	106	70.0 to 130	0.385	20.0
BD17502	Magnesium, Dissolved	mg/L	-0.00780	0.0462	5.00	8.94	8.93	5.14	4.25 to 5.75	102	70.0 to 130	0.112	20.0
BD17501	Magnesium, Total	mg/L	-0.0162	0.0462	5.00	5.73	5.82	5.21	4.25 to 5.75	103	70.0 to 130	1.56	20.0
BD17502	Manganese, Dissolved	mg/L	0.0000089	0.00033	0.100	0.111	0.111	0.103	0.0850 to 0.115	99.0	70.0 to 130	0.00	20.0
BD17501	Manganese, Total	mg/L	0.0000048	0.00033	0.100	0.0971	0.101	0.103	0.0850 to 0.115	96.9	70.0 to 130	3.94	20.0
BD17501	Mercury, Total by CVAA	mg/L	5.000E-05	0.000500	0.004	0.00401	0.00411	0.00406	0.00340 to 0.00460	100	70.0 to 130	2.46	20.0
BD17502	Molybdenum, Dissolved	mg/L	0.000202	0.0100	0.2	0.222	0.219	0.204	0.170 to 0.230	104	70.0 to 130	1.36	20.0
BD17501	Molybdenum, Total	mg/L	0.000	0.0100	0.2	0.243	0.247	0.207	0.170 to 0.230	102	70.0 to 130	1.63	20.0
BD17502	Potassium, Dissolved	mg/L	-0.0106	0.367	10.0	16.4	16.0	10.1	8.50 to 11.5	97.2	70.0 to 130	2.47	20.0
BD17501	Potassium, Total	mg/L	-0.00235	0.367	10.0	15.1	15.5	10.2	8.50 to 11.5	97.3	70.0 to 130	2.61	20.0
BD17502	Selenium, Dissolved	mg/L	-0.0000900	0.00100	0.100	0.102	0.0993	0.103	0.0850 to 0.115	101	70.0 to 130	2.68	20.0
BD17501	Selenium, Total	mg/L	0.0000683	0.00100	0.100	0.0968	0.100	0.103	0.0850 to 0.115	96.8	70.0 to 130	3.25	20.0
BD17502	Silicon, Dissolved	mg/L	0.000692	0.0440	1.00	9.39	9.42	1.02	0.850 to 1.15	97.0	70.0 to 130	0.319	20.0
BD17501	Silicon, Total	mg/L	0.00106	0.0440	1.00	39.1	36.3	1.03	0.850 to 1.15	340	70.0 to 130	7.43	20.0
BD17502	Sodium, Dissolved	mg/L	0.0636	0.0880	5.00	187	187	5.10	4.25 to 5.75	240	70.0 to 130	0.00	20.0
BD17501	Sodium, Total	mg/L	0.00811	0.0880	5.00	206	187	5.17	4.25 to 5.75	400	70.0 to 130	9.67	20.0
BD17501	Sulfate	mg/L	-0.0293	2.0	20.0	27.5	27.6	19.2	18.0 to 22.0	95.4	80.0 to 120	0.363	20.0
BD17502	Thallium, Dissolved	mg/L	-0.0000854	0.000147	0.100	0.0993	0.0997	0.102	0.0850 to 0.115	99.3	70.0 to 130	0.402	20.0
BD17501	Thallium, Total	mg/L	0.0000056	0.000147	0.100	0.0973	0.0983	0.100	0.0850 to 0.115	97.3	70.0 to 130	1.02	20.0
BD17501	Total Organic Carbon	mg/L	0.309	1.00	10.0	19.4	18.5	8.66		87.0	80.0 to 120	4.75	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/11/23 16:45
Customer ID:
Delivery Date: 9/14/23 10:03

Description: Gorgas Ash Pond - MW-28H

Laboratory ID Number: BD17497

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17516	Alkalinity	mg CaCO3/L					185	52.0	45.0 to 55.0			0.00	10.0
BD17501	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.15	0.200	2.00	1.82	-0.154	1.86	1.80 to 2.20	91.0	90.0 to 110	0.00	15.0
BD17501	Solids, Dissolved	mg/L	2.00	25.0			550	55.0	40.0 to 60.0			2.69	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-29H

Location Code: WMWGORAP
Collected: 9/13/23 10:15
Customer ID:
Submittal Date: 9/14/23 10:03

Laboratory ID Number: BD17498

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	9/15/23 06:33	9/19/23 16:06		1.015	0.292	mg/L	0.030000	0.1015	
* Calcium, Total	9/15/23 06:33	9/19/23 16:06		1.015	11.6	mg/L	0.070035	0.406	
* Iron, Total	9/15/23 06:33	9/19/23 16:06		1.015	0.123	mg/L	0.008120	0.0406	
* Lithium, Total	9/15/23 06:33	9/19/23 16:06		1.015	0.0678	mg/L	0.007105	0.01999956	
* Magnesium, Total	9/15/23 06:33	9/19/23 16:06		1.015	4.12	mg/L	0.021315	0.406	
* Molybdenum, Total	9/15/23 06:33	9/19/23 16:06		1.015	0.0658	mg/L	0.005075	0.01015	
* Silica, Total (calc.)	9/15/23 06:33	9/19/23 16:06		1	19.8	mg/L			
* Silicon, Total	9/15/23 06:33	9/19/23 16:06		1.015	9.24	mg/L	0.02030	0.25375	
* Sodium, Total	9/15/23 06:33	9/20/23 12:31		10.15	142	mg/L	0.4060	4.06	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	9/14/23 14:15	9/19/23 13:41		1.015	0.287	mg/L	0.030000	0.1015	
* Calcium, Dissolved	9/14/23 14:15	9/19/23 13:41		1.015	11.8	mg/L	0.070035	0.406	
* Iron, Dissolved	9/14/23 14:15	9/19/23 13:41		1.015	0.268	mg/L	0.008120	0.0406	
* Lithium, Dissolved	9/14/23 14:15	9/19/23 13:41		1.015	0.0674	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	9/14/23 14:15	9/19/23 13:41		1.015	4.13	mg/L	0.021315	0.406	
* Molybdenum, Dissolved	9/14/23 14:15	9/19/23 13:41		1.015	0.0668	mg/L	0.005075	0.01015	
* Silica, Dissolved (calc.)	9/14/23 14:15	9/19/23 13:41		1	19.6	mg/L			
* Silicon, Dissolved	9/14/23 14:15	9/19/23 13:41		1.015	9.18	mg/L	0.02030	0.25375	
* Sodium, Dissolved	9/14/23 14:15	9/20/23 10:37		10.15	148	mg/L	0.4060	4.06	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	9/15/23 06:33	9/18/23 10:32		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Total	9/15/23 06:33	9/18/23 10:32		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Total	9/15/23 06:33	9/18/23 10:32		1.015	0.00158	mg/L	0.000112	0.000203	
* Barium, Total	9/15/23 06:33	9/18/23 10:32		1.015	0.242	mg/L	0.000508	0.001015	
* Beryllium, Total	9/15/23 06:33	9/18/23 10:32		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	9/15/23 06:33	9/18/23 10:32		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	9/15/23 06:33	9/18/23 10:32		1.015	0.000216	mg/L	0.000203	0.001015	J
* Cobalt, Total	9/15/23 06:33	9/18/23 10:32		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	9/15/23 06:33	9/18/23 10:32		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	9/15/23 06:33	9/18/23 10:32		1.015	0.00700	mg/L	0.000152	0.001015	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-29H

Location Code: WMWGORAP
Collected: 9/13/23 10:15
Customer ID:
Submittal Date: 9/14/23 10:03

Laboratory ID Number: BD17498

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	9/15/23 06:33	9/18/23 10:32		1.015	1.28	mg/L	0.169505	0.5075	
* Selenium, Total	9/15/23 06:33	9/18/23 10:32		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	9/15/23 06:33	9/18/23 10:32		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	9/14/23 14:15	9/14/23 15:26		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	9/14/23 14:15	9/14/23 15:26		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Dissolved	9/14/23 14:15	9/14/23 15:26		1.015	0.00136	mg/L	0.000112	0.000203	
* Barium, Dissolved	9/14/23 14:15	9/14/23 15:26		1.015	0.272	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	9/14/23 14:15	9/14/23 15:26		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	9/14/23 14:15	9/14/23 15:26		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	9/14/23 14:15	9/14/23 15:26		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	9/14/23 14:15	9/14/23 15:26		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Dissolved	9/14/23 14:15	9/14/23 15:26		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	9/14/23 14:15	9/14/23 15:26		1.015	0.00778	mg/L	0.000152	0.001015	
* Potassium, Dissolved	9/14/23 14:15	9/14/23 15:26		1.015	1.27	mg/L	0.169505	0.5075	
* Selenium, Dissolved	9/14/23 14:15	9/14/23 15:26		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	9/14/23 14:15	9/14/23 15:26		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	9/14/23 17:22	9/14/23 22:33		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	9/18/23 12:10	9/18/23 12:10		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: JAG***								
Alkalinity pH Endpoint	9/26/23 10:23	9/26/23 11:17		1	4.51	SU		2	
* Alkalinity	9/26/23 10:23	9/26/23 11:17		1	314	mg CaCO3/L		1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	9/14/23 13:40	9/15/23 13:10		1	373	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: JAG***								
* Bicarbonate Alkalinity, (calc.)	9/26/23 10:23	9/26/23 11:17		1	310	mg CaCO3/L		1	
* Carbonate Alkalinity, (calc.)	9/26/23 10:23	9/26/23 11:17		1	4.30	mg CaCO3/L		0.5	
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	9/18/23 13:53	9/18/23 13:53		1	1.01	mg/L	1.00	2	J

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-29H

Location Code: WMWGORAP
Collected: 9/13/23 10:15
Customer ID:
Submittal Date: 9/14/23 10:03

Laboratory ID Number: BD17498

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	9/18/23 10:52	9/18/23 10:52		1	5.63	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	9/18/23 14:37	9/18/23 14:37		1	0.371	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	9/26/23 14:41	9/26/23 14:41		1	28.5	mg/L	0.6	2	
Analytical Method: Field Measurements	***Analyst: AWG***								
Conductivity	9/13/23 10:12	9/13/23 10:12			573.57	uS/cm			FA
pH	9/13/23 10:12	9/13/23 10:12			7.83	SU			FA
Temperature	9/13/23 10:12	9/13/23 10:12			18.75	C			FA
Turbidity	9/13/23 10:12	9/13/23 10:12			1.61	NTU			FA
Sulfide	9/13/23 10:12	9/13/23 10:12			0	mg/L			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/13/23 10:15
Customer ID:
Delivery Date: 9/14/23 10:03

Description: Gorgas Ash Pond - MW-29H

Laboratory ID Number: BD17498

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17502	Aluminum, Dissolved	mg/L	-0.000290	0.0198	0.100	0.105	0.106	0.105	0.0850 to 0.115	105	70.0 to 130	0.948	20.0
BD17501	Aluminum, Total	mg/L	0.000208	0.0198	0.100	0.538	0.665	0.104	0.0850 to 0.115	97.0	70.0 to 130	21.1	20.0
BD17502	Antimony, Dissolved	mg/L	0.000229	0.00100	0.100	0.0929	0.0942	0.0919	0.0850 to 0.115	92.1	70.0 to 130	1.39	20.0
BD17501	Antimony, Total	mg/L	0.000567	0.00100	0.100	0.0971	0.0985	0.0960	0.0850 to 0.115	96.1	70.0 to 130	1.43	20.0
BD17502	Arsenic, Dissolved	mg/L	-0.0000089	0.000200	0.100	0.101	0.102	0.0987	0.0850 to 0.115	97.2	70.0 to 130	0.985	20.0
BD17501	Arsenic, Total	mg/L	0.000105	0.000200	0.100	0.101	0.100	0.100	0.0850 to 0.115	95.6	70.0 to 130	0.995	20.0
BD17502	Barium, Dissolved	mg/L	-0.0000262	0.00100	0.100	0.252	0.256	0.0998	0.0850 to 0.115	97.0	70.0 to 130	1.57	20.0
BD17501	Barium, Total	mg/L	0.0000393	0.00100	0.100	0.277	0.280	0.0908	0.0850 to 0.115	89.0	70.0 to 130	1.08	20.0
BD17502	Beryllium, Dissolved	mg/L	0.0000283	0.000880	0.100	0.101	0.0988	0.101	0.0850 to 0.115	101	70.0 to 130	2.20	20.0
BD17501	Beryllium, Total	mg/L	0.0000483	0.000880	0.100	0.101	0.101	0.0970	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BD17502	Boron, Dissolved	mg/L	-0.00109	0.0650	1.00	1.08	1.08	1.00	0.850 to 1.15	103	70.0 to 130	0.00	20.0
BD17501	Boron, Total	mg/L	0.000005	0.0650	1.00	1.07	1.09	1.02	0.850 to 1.15	104	70.0 to 130	1.85	20.0
BD17502	Cadmium, Dissolved	mg/L	0.0000030	0.000147	0.100	0.0974	0.0984	0.0978	0.0850 to 0.115	97.4	70.0 to 130	1.02	20.0
BD17501	Cadmium, Total	mg/L	-0.0000075	0.000147	0.100	0.0943	0.0987	0.101	0.0850 to 0.115	94.3	70.0 to 130	4.56	20.0
BD17502	Calcium, Dissolved	mg/L	-0.0266	0.152	5.00	21.2	21.1	5.06	4.25 to 5.75	102	70.0 to 130	0.473	20.0
BD17501	Calcium, Total	mg/L	-0.0189	0.152	5.00	10.0	10.1	5.06	4.25 to 5.75	95.8	70.0 to 130	0.995	20.0
BD17501	Chloride	mg/L	0.00138	1.00	10.0	15.5	15.7	10.5	9.00 to 11.0	105	80.0 to 120	1.28	20.0
BD17502	Chromium, Dissolved	mg/L	-0.000168	0.000440	0.100	0.0972	0.0965	0.101	0.0850 to 0.115	97.2	70.0 to 130	0.723	20.0
BD17501	Chromium, Total	mg/L	-0.0000841	0.000440	0.100	0.0950	0.0966	0.0994	0.0850 to 0.115	94.5	70.0 to 130	1.67	20.0
BD17502	Cobalt, Dissolved	mg/L	-0.0000695	0.000147	0.100	0.0985	0.0989	0.102	0.0850 to 0.115	98.5	70.0 to 130	0.405	20.0
BD17501	Cobalt, Total	mg/L	0.0000025	0.000147	0.100	0.0972	0.0994	0.103	0.0850 to 0.115	97.2	70.0 to 130	2.24	20.0
BD17501	Fluoride	mg/L	0.00769	0.125	2.50	3.06	3.07	2.68	2.25 to 2.75	105	80.0 to 120	0.326	20.0
BD17502	Iron, Dissolved	mg/L	0.00154	0.0176	0.2	0.205	0.202	0.202	0.170 to 0.230	97.6	70.0 to 130	1.47	20.0
BD17501	Iron, Total	mg/L	-0.000348	0.0176	0.2	0.214	0.218	0.204	0.170 to 0.230	100	70.0 to 130	1.85	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/13/23 10:15
Customer ID:
Delivery Date: 9/14/23 10:03

Description: Gorgas Ash Pond - MW-29H

Laboratory ID Number: BD17498

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17502	Lead, Dissolved	mg/L	0.0000056	0.000147	0.100	0.101	0.103	0.105	0.0850 to 0.115	101	70.0 to 130	1.96	20.0
BD17501	Lead, Total	mg/L	0.0000068	0.000147	0.100	0.0965	0.0977	0.0988	0.0850 to 0.115	96.5	70.0 to 130	1.24	20.0
BD17502	Lithium, Dissolved	mg/L	-0.000209	0.0154	0.200	0.284	0.282	0.205	0.170 to 0.230	104	70.0 to 130	0.707	20.0
BD17501	Lithium, Total	mg/L	-0.000449	0.0154	0.200	0.518	0.520	0.209	0.170 to 0.230	106	70.0 to 130	0.385	20.0
BD17502	Magnesium, Dissolved	mg/L	-0.00780	0.0462	5.00	8.94	8.93	5.14	4.25 to 5.75	102	70.0 to 130	0.112	20.0
BD17501	Magnesium, Total	mg/L	-0.0162	0.0462	5.00	5.73	5.82	5.21	4.25 to 5.75	103	70.0 to 130	1.56	20.0
BD17502	Manganese, Dissolved	mg/L	0.0000089	0.00033	0.100	0.111	0.111	0.103	0.0850 to 0.115	99.0	70.0 to 130	0.00	20.0
BD17501	Manganese, Total	mg/L	0.0000048	0.00033	0.100	0.0971	0.101	0.103	0.0850 to 0.115	96.9	70.0 to 130	3.94	20.0
BD17501	Mercury, Total by CVAA	mg/L	5.000E-05	0.000500	0.004	0.00401	0.00411	0.00406	0.00340 to 0.00460	100	70.0 to 130	2.46	20.0
BD17502	Molybdenum, Dissolved	mg/L	0.000202	0.0100	0.2	0.222	0.219	0.204	0.170 to 0.230	104	70.0 to 130	1.36	20.0
BD17501	Molybdenum, Total	mg/L	0.000	0.0100	0.2	0.243	0.247	0.207	0.170 to 0.230	102	70.0 to 130	1.63	20.0
BD17502	Potassium, Dissolved	mg/L	-0.0106	0.367	10.0	16.4	16.0	10.1	8.50 to 11.5	97.2	70.0 to 130	2.47	20.0
BD17501	Potassium, Total	mg/L	-0.00235	0.367	10.0	15.1	15.5	10.2	8.50 to 11.5	97.3	70.0 to 130	2.61	20.0
BD17502	Selenium, Dissolved	mg/L	-0.0000900	0.00100	0.100	0.102	0.0993	0.103	0.0850 to 0.115	101	70.0 to 130	2.68	20.0
BD17501	Selenium, Total	mg/L	0.0000683	0.00100	0.100	0.0968	0.100	0.103	0.0850 to 0.115	96.8	70.0 to 130	3.25	20.0
BD17502	Silicon, Dissolved	mg/L	0.000692	0.0440	1.00	9.39	9.42	1.02	0.850 to 1.15	97.0	70.0 to 130	0.319	20.0
BD17501	Silicon, Total	mg/L	0.00106	0.0440	1.00	39.1	36.3	1.03	0.850 to 1.15	340	70.0 to 130	7.43	20.0
BD17502	Sodium, Dissolved	mg/L	0.0636	0.0880	5.00	187	187	5.10	4.25 to 5.75	240	70.0 to 130	0.00	20.0
BD17501	Sodium, Total	mg/L	0.00811	0.0880	5.00	206	187	5.17	4.25 to 5.75	400	70.0 to 130	9.67	20.0
BD17501	Sulfate	mg/L	-0.0293	2.0	20.0	27.5	27.6	19.2	18.0 to 22.0	95.4	80.0 to 120	0.363	20.0
BD17502	Thallium, Dissolved	mg/L	-0.0000854	0.000147	0.100	0.0993	0.0997	0.102	0.0850 to 0.115	99.3	70.0 to 130	0.402	20.0
BD17501	Thallium, Total	mg/L	0.0000056	0.000147	0.100	0.0973	0.0983	0.100	0.0850 to 0.115	97.3	70.0 to 130	1.02	20.0
BD17501	Total Organic Carbon	mg/L	0.309	1.00	10.0	19.4	18.5	8.66		87.0	80.0 to 120	4.75	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/13/23 10:15
Customer ID:
Delivery Date: 9/14/23 10:03

Description: Gorgas Ash Pond - MW-29H

Laboratory ID Number: BD17498

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17523	Alkalinity	mg CaCO3/L					206	52.7	45.0 to 55.0			2.87	10.0
BD17501	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.15	0.200	2.00	1.82	-0.154	1.86	1.80 to 2.20	91.0	90.0 to 110	0.00	15.0
BD17501	Solids, Dissolved	mg/L	2.00	25.0			550	55.0	40.0 to 60.0			2.69	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 10/25/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-29H Dup

Location Code: WMWGORAP
Collected: 9/13/23 10:15
Customer ID:
Submittal Date: 9/14/23 10:03

Laboratory ID Number: BD17499

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	9/15/23 06:33	9/19/23 16:10		1.015	0.293	mg/L	0.030000	0.1015	
* Calcium, Total	9/15/23 06:33	9/19/23 16:10		1.015	11.7	mg/L	0.070035	0.406	
* Iron, Total	9/15/23 06:33	9/19/23 16:10		1.015	0.120	mg/L	0.008120	0.0406	
* Lithium, Total	9/15/23 06:33	9/19/23 16:10		1.015	0.0677	mg/L	0.007105	0.01999956	
* Magnesium, Total	9/15/23 06:33	9/19/23 16:10		1.015	4.14	mg/L	0.021315	0.406	
* Molybdenum, Total	9/15/23 06:33	9/19/23 16:10		1.015	0.0660	mg/L	0.005075	0.01015	
* Silica, Total (calc.)	9/15/23 06:33	9/19/23 16:10		1	19.8	mg/L			
* Silicon, Total	9/15/23 06:33	9/19/23 16:10		1.015	9.27	mg/L	0.02030	0.25375	
* Sodium, Total	9/15/23 06:33	9/20/23 12:34		10.15	152	mg/L	0.4060	4.06	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	9/14/23 14:15	9/19/23 13:44		1.015	0.288	mg/L	0.030000	0.1015	
* Calcium, Dissolved	9/14/23 14:15	9/19/23 13:44		1.015	11.5	mg/L	0.070035	0.406	
* Iron, Dissolved	9/14/23 14:15	9/19/23 13:44		1.015	0.101	mg/L	0.008120	0.0406	
* Lithium, Dissolved	9/14/23 14:15	9/19/23 13:44		1.015	0.0658	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	9/14/23 14:15	9/19/23 13:44		1.015	3.98	mg/L	0.021315	0.406	
* Molybdenum, Dissolved	9/14/23 14:15	9/19/23 13:44		1.015	0.0664	mg/L	0.005075	0.01015	
* Silica, Dissolved (calc.)	9/14/23 14:15	9/19/23 13:44		1	19.9	mg/L			
* Silicon, Dissolved	9/14/23 14:15	9/19/23 13:44		1.015	9.30	mg/L	0.02030	0.25375	
* Sodium, Dissolved	9/14/23 14:15	9/20/23 10:41		10.15	145	mg/L	0.4060	4.06	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	9/15/23 06:33	9/18/23 10:36		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Arsenic, Total	9/15/23 06:33	9/18/23 10:36		1.015	0.00156	mg/L	0.000112	0.000203	
* Aluminum, Total	9/15/23 06:33	9/18/23 10:36		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Barium, Total	9/15/23 06:33	9/18/23 10:36		1.015	0.254	mg/L	0.000508	0.001015	
* Beryllium, Total	9/15/23 06:33	9/18/23 10:36		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	9/15/23 06:33	9/18/23 10:36		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	9/15/23 06:33	9/18/23 10:36		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	9/15/23 06:33	9/18/23 10:36		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	9/15/23 06:33	9/18/23 10:36		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	9/15/23 06:33	9/18/23 10:36		1.015	0.00683	mg/L	0.000152	0.001015	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-29H Dup

Location Code: WMWGORAP
Collected: 9/13/23 10:15
Customer ID:
Submittal Date: 9/14/23 10:03

Laboratory ID Number: BD17499

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	9/15/23 06:33	9/18/23 10:36		1.015	1.31	mg/L	0.169505	0.5075	
* Selenium, Total	9/15/23 06:33	9/18/23 10:36		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	9/15/23 06:33	9/18/23 10:36		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	9/14/23 14:15	9/14/23 15:30		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	9/14/23 14:15	9/14/23 15:30		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Dissolved	9/14/23 14:15	9/14/23 15:30		1.015	0.00131	mg/L	0.000112	0.000203	
* Barium, Dissolved	9/14/23 14:15	9/14/23 15:30		1.015	0.261	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	9/14/23 14:15	9/14/23 15:30		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	9/14/23 14:15	9/14/23 15:30		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	9/14/23 14:15	9/14/23 15:30		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	9/14/23 14:15	9/14/23 15:30		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Dissolved	9/14/23 14:15	9/14/23 15:30		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	9/14/23 14:15	9/14/23 15:30		1.015	0.00702	mg/L	0.000152	0.001015	
* Potassium, Dissolved	9/14/23 14:15	9/14/23 15:30		1.015	1.27	mg/L	0.169505	0.5075	
* Selenium, Dissolved	9/14/23 14:15	9/14/23 15:30		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	9/14/23 14:15	9/14/23 15:30		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	9/14/23 17:22	9/14/23 22:37		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	9/18/23 12:12	9/18/23 12:12		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: JAG***								
Alkalinity pH Endpoint	9/26/23 10:23	9/26/23 11:17		1	4.49	SU		2	
* Alkalinity	9/26/23 10:23	9/26/23 11:17		1	312	mg CaCO3/L		1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	9/14/23 13:40	9/15/23 13:10		1	373	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: JAG***								
* Bicarbonate Alkalinity, (calc.)	9/26/23 10:23	9/26/23 11:17		1	305	mg CaCO3/L		1	
* Carbonate Alkalinity, (calc.)	9/26/23 10:23	9/26/23 11:17		1	6.57	mg CaCO3/L		0.5	
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	9/18/23 14:10	9/18/23 14:10		1	1.09	mg/L	1.00	2	J

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-29H Dup

Location Code: WMWGORAP
Collected: 9/13/23 10:15
Customer ID:
Submittal Date: 9/14/23 10:03

Laboratory ID Number: BD17499

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	9/18/23 10:53	9/18/23 10:53		1	5.70	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	9/18/23 14:38	9/18/23 14:38		1	0.376	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	9/26/23 14:42	9/26/23 14:42		1	28.1	mg/L	0.6	2	
Analytical Method: Field Measurements	***Analyst: AWG***								
Conductivity	9/13/23 10:12	9/13/23 10:12			573.57	uS/cm			FA
pH	9/13/23 10:12	9/13/23 10:12			7.83	SU			FA
Temperature	9/13/23 10:12	9/13/23 10:12			18.75	C			FA
Turbidity	9/13/23 10:12	9/13/23 10:12			1.61	NTU			FA
Sulfide	9/13/23 10:12	9/13/23 10:12			0	mg/L			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 10/25/2023
Version: 3.5
COA_CCR

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/13/23 10:15
Customer ID:
Delivery Date: 9/14/23 10:03

Description: Gorgas Ash Pond - MW-29H Dup

Laboratory ID Number: BD17499

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17502	Aluminum, Dissolved	mg/L	-0.000290	0.0198	0.100	0.105	0.106	0.105	0.0850 to 0.115	105	70.0 to 130	0.948	20.0
BD17501	Aluminum, Total	mg/L	0.000208	0.0198	0.100	0.538	0.665	0.104	0.0850 to 0.115	97.0	70.0 to 130	21.1	20.0
BD17502	Antimony, Dissolved	mg/L	0.000229	0.00100	0.100	0.0929	0.0942	0.0919	0.0850 to 0.115	92.1	70.0 to 130	1.39	20.0
BD17501	Antimony, Total	mg/L	0.000567	0.00100	0.100	0.0971	0.0985	0.0960	0.0850 to 0.115	96.1	70.0 to 130	1.43	20.0
BD17502	Arsenic, Dissolved	mg/L	-0.0000089	0.000200	0.100	0.101	0.102	0.0987	0.0850 to 0.115	97.2	70.0 to 130	0.985	20.0
BD17501	Arsenic, Total	mg/L	0.000105	0.000200	0.100	0.101	0.100	0.100	0.0850 to 0.115	95.6	70.0 to 130	0.995	20.0
BD17502	Barium, Dissolved	mg/L	-0.0000262	0.00100	0.100	0.252	0.256	0.0998	0.0850 to 0.115	97.0	70.0 to 130	1.57	20.0
BD17501	Barium, Total	mg/L	0.0000393	0.00100	0.100	0.277	0.280	0.0908	0.0850 to 0.115	89.0	70.0 to 130	1.08	20.0
BD17502	Beryllium, Dissolved	mg/L	0.0000283	0.000880	0.100	0.101	0.0988	0.101	0.0850 to 0.115	101	70.0 to 130	2.20	20.0
BD17501	Beryllium, Total	mg/L	0.0000483	0.000880	0.100	0.101	0.101	0.0970	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BD17502	Boron, Dissolved	mg/L	-0.00109	0.0650	1.00	1.08	1.08	1.00	0.850 to 1.15	103	70.0 to 130	0.00	20.0
BD17501	Boron, Total	mg/L	0.000005	0.0650	1.00	1.07	1.09	1.02	0.850 to 1.15	104	70.0 to 130	1.85	20.0
BD17502	Cadmium, Dissolved	mg/L	0.0000030	0.000147	0.100	0.0974	0.0984	0.0978	0.0850 to 0.115	97.4	70.0 to 130	1.02	20.0
BD17501	Cadmium, Total	mg/L	-0.0000075	0.000147	0.100	0.0943	0.0987	0.101	0.0850 to 0.115	94.3	70.0 to 130	4.56	20.0
BD17502	Calcium, Dissolved	mg/L	-0.0266	0.152	5.00	21.2	21.1	5.06	4.25 to 5.75	102	70.0 to 130	0.473	20.0
BD17501	Calcium, Total	mg/L	-0.0189	0.152	5.00	10.0	10.1	5.06	4.25 to 5.75	95.8	70.0 to 130	0.995	20.0
BD17501	Chloride	mg/L	0.00138	1.00	10.0	15.5	15.7	10.5	9.00 to 11.0	105	80.0 to 120	1.28	20.0
BD17502	Chromium, Dissolved	mg/L	-0.000168	0.000440	0.100	0.0972	0.0965	0.101	0.0850 to 0.115	97.2	70.0 to 130	0.723	20.0
BD17501	Chromium, Total	mg/L	-0.0000841	0.000440	0.100	0.0950	0.0966	0.0994	0.0850 to 0.115	94.5	70.0 to 130	1.67	20.0
BD17502	Cobalt, Dissolved	mg/L	-0.0000695	0.000147	0.100	0.0985	0.0989	0.102	0.0850 to 0.115	98.5	70.0 to 130	0.405	20.0
BD17501	Cobalt, Total	mg/L	0.0000025	0.000147	0.100	0.0972	0.0994	0.103	0.0850 to 0.115	97.2	70.0 to 130	2.24	20.0
BD17501	Fluoride	mg/L	0.00769	0.125	2.50	3.06	3.07	2.68	2.25 to 2.75	105	80.0 to 120	0.326	20.0
BD17502	Iron, Dissolved	mg/L	0.00154	0.0176	0.2	0.205	0.202	0.202	0.170 to 0.230	97.6	70.0 to 130	1.47	20.0
BD17501	Iron, Total	mg/L	-0.000348	0.0176	0.2	0.214	0.218	0.204	0.170 to 0.230	100	70.0 to 130	1.85	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/13/23 10:15
Customer ID:
Delivery Date: 9/14/23 10:03

Description: Gorgas Ash Pond - MW-29H Dup

Laboratory ID Number: BD17499

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17502	Lead, Dissolved	mg/L	0.0000056	0.000147	0.100	0.101	0.103	0.105	0.0850 to 0.115	101	70.0 to 130	1.96	20.0
BD17501	Lead, Total	mg/L	0.0000068	0.000147	0.100	0.0965	0.0977	0.0988	0.0850 to 0.115	96.5	70.0 to 130	1.24	20.0
BD17502	Lithium, Dissolved	mg/L	-0.000209	0.0154	0.200	0.284	0.282	0.205	0.170 to 0.230	104	70.0 to 130	0.707	20.0
BD17501	Lithium, Total	mg/L	-0.000449	0.0154	0.200	0.518	0.520	0.209	0.170 to 0.230	106	70.0 to 130	0.385	20.0
BD17502	Magnesium, Dissolved	mg/L	-0.00780	0.0462	5.00	8.94	8.93	5.14	4.25 to 5.75	102	70.0 to 130	0.112	20.0
BD17501	Magnesium, Total	mg/L	-0.0162	0.0462	5.00	5.73	5.82	5.21	4.25 to 5.75	103	70.0 to 130	1.56	20.0
BD17502	Manganese, Dissolved	mg/L	0.0000089	0.00033	0.100	0.111	0.111	0.103	0.0850 to 0.115	99.0	70.0 to 130	0.00	20.0
BD17501	Manganese, Total	mg/L	0.0000048	0.00033	0.100	0.0971	0.101	0.103	0.0850 to 0.115	96.9	70.0 to 130	3.94	20.0
BD17501	Mercury, Total by CVAA	mg/L	5.000E-05	0.000500	0.004	0.00401	0.00411	0.00406	0.00340 to 0.00460	100	70.0 to 130	2.46	20.0
BD17502	Molybdenum, Dissolved	mg/L	0.000202	0.0100	0.2	0.222	0.219	0.204	0.170 to 0.230	104	70.0 to 130	1.36	20.0
BD17501	Molybdenum, Total	mg/L	0.000	0.0100	0.2	0.243	0.247	0.207	0.170 to 0.230	102	70.0 to 130	1.63	20.0
BD17502	Potassium, Dissolved	mg/L	-0.0106	0.367	10.0	16.4	16.0	10.1	8.50 to 11.5	97.2	70.0 to 130	2.47	20.0
BD17501	Potassium, Total	mg/L	-0.00235	0.367	10.0	15.1	15.5	10.2	8.50 to 11.5	97.3	70.0 to 130	2.61	20.0
BD17502	Selenium, Dissolved	mg/L	-0.0000900	0.00100	0.100	0.102	0.0993	0.103	0.0850 to 0.115	101	70.0 to 130	2.68	20.0
BD17501	Selenium, Total	mg/L	0.0000683	0.00100	0.100	0.0968	0.100	0.103	0.0850 to 0.115	96.8	70.0 to 130	3.25	20.0
BD17502	Silicon, Dissolved	mg/L	0.000692	0.0440	1.00	9.39	9.42	1.02	0.850 to 1.15	97.0	70.0 to 130	0.319	20.0
BD17501	Silicon, Total	mg/L	0.00106	0.0440	1.00	39.1	36.3	1.03	0.850 to 1.15	340	70.0 to 130	7.43	20.0
BD17502	Sodium, Dissolved	mg/L	0.0636	0.0880	5.00	187	187	5.10	4.25 to 5.75	240	70.0 to 130	0.00	20.0
BD17501	Sodium, Total	mg/L	0.00811	0.0880	5.00	206	187	5.17	4.25 to 5.75	400	70.0 to 130	9.67	20.0
BD17501	Sulfate	mg/L	-0.0293	2.0	20.0	27.5	27.6	19.2	18.0 to 22.0	95.4	80.0 to 120	0.363	20.0
BD17502	Thallium, Dissolved	mg/L	-0.0000854	0.000147	0.100	0.0993	0.0997	0.102	0.0850 to 0.115	99.3	70.0 to 130	0.402	20.0
BD17501	Thallium, Total	mg/L	0.0000056	0.000147	0.100	0.0973	0.0983	0.100	0.0850 to 0.115	97.3	70.0 to 130	1.02	20.0
BD17501	Total Organic Carbon	mg/L	0.309	1.00	10.0	19.4	18.5	8.66		87.0	80.0 to 120	4.75	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/13/23 10:15
Customer ID:
Delivery Date: 9/14/23 10:03

Description: Gorgas Ash Pond - MW-29H Dup

Laboratory ID Number: BD17499

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17523	Alkalinity	mg CaCO3/L					206	52.7	45.0 to 55.0			2.87	10.0
BD17501	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.15	0.200	2.00	1.82	-0.154	1.86	1.80 to 2.20	91.0	90.0 to 110	0.00	15.0
BD17501	Solids, Dissolved	mg/L	2.00	25.0			550	55.0	40.0 to 60.0			2.69	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-32H

Location Code: WMWGORAP
Collected: 9/13/23 11:45
Customer ID:
Submittal Date: 9/14/23 10:03

Laboratory ID Number: BD17500

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	9/15/23 06:33	9/19/23 16:13		1.015	0.0464	mg/L	0.030000	0.1015	J
* Calcium, Total	9/15/23 06:33	9/19/23 16:13		1.015	2.08	mg/L	0.070035	0.406	
* Iron, Total	9/15/23 06:33	9/19/23 16:13		1.015	0.0350	mg/L	0.008120	0.0406	J
* Lithium, Total	9/15/23 06:33	9/19/23 16:13		1.015	0.0424	mg/L	0.007105	0.01999956	
* Magnesium, Total	9/15/23 06:33	9/19/23 16:13		1.015	0.463	mg/L	0.021315	0.406	
* Molybdenum, Total	9/15/23 06:33	9/19/23 16:13		1.015	0.0898	mg/L	0.005075	0.01015	
* Silica, Total (calc.)	9/15/23 06:33	9/19/23 16:13		1	11.3	mg/L			
* Silicon, Total	9/15/23 06:33	9/19/23 16:13		1.015	5.30	mg/L	0.02030	0.25375	
* Sodium, Total	9/15/23 06:33	9/20/23 12:37		10.15	146	mg/L	0.4060	4.06	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	9/14/23 14:15	9/19/23 13:47		1.015	0.0451	mg/L	0.030000	0.1015	J
* Calcium, Dissolved	9/14/23 14:15	9/19/23 13:47		1.015	1.81	mg/L	0.070035	0.406	
* Iron, Dissolved	9/14/23 14:15	9/19/23 13:47		1.015	0.0213	mg/L	0.008120	0.0406	J
* Lithium, Dissolved	9/14/23 14:15	9/19/23 13:47		1.015	0.0420	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	9/14/23 14:15	9/19/23 13:47		1.015	0.411	mg/L	0.021315	0.406	
* Molybdenum, Dissolved	9/14/23 14:15	9/19/23 13:47		1.015	0.0886	mg/L	0.005075	0.01015	
* Silica, Dissolved (calc.)	9/14/23 14:15	9/19/23 13:47		1	11.3	mg/L			
* Silicon, Dissolved	9/14/23 14:15	9/19/23 13:47		1.015	5.28	mg/L	0.02030	0.25375	
* Sodium, Dissolved	9/14/23 14:15	9/20/23 10:44		10.15	139	mg/L	0.4060	4.06	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	9/15/23 06:33	9/18/23 10:40		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Total	9/15/23 06:33	9/18/23 10:40		1.015	0.0283	mg/L	0.009135	0.05075	J
* Arsenic, Total	9/15/23 06:33	9/18/23 10:40		1.015	0.000575	mg/L	0.000112	0.000203	
* Barium, Total	9/15/23 06:33	9/18/23 10:40		1.015	0.0408	mg/L	0.000508	0.001015	
* Beryllium, Total	9/15/23 06:33	9/18/23 10:40		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	9/15/23 06:33	9/18/23 10:40		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	9/15/23 06:33	9/18/23 10:40		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	9/15/23 06:33	9/18/23 10:40		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	9/15/23 06:33	9/18/23 10:40		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	9/15/23 06:33	9/18/23 10:40		1.015	0.00550	mg/L	0.000152	0.001015	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-32H

Location Code: WMWGORAP
Collected: 9/13/23 11:45
Customer ID:
Submittal Date: 9/14/23 10:03

Laboratory ID Number: BD17500

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	9/15/23 06:33	9/18/23 10:40		1.015	1.89	mg/L	0.169505	0.5075	
* Selenium, Total	9/15/23 06:33	9/18/23 10:40		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	9/15/23 06:33	9/18/23 10:40		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	9/14/23 14:15	9/14/23 15:33		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	9/14/23 14:15	9/14/23 15:33		1.015	0.0117	mg/L	0.009135	0.05075	J
* Arsenic, Dissolved	9/14/23 14:15	9/14/23 15:33		1.015	0.000398	mg/L	0.000112	0.000203	
* Barium, Dissolved	9/14/23 14:15	9/14/23 15:33		1.015	0.0370	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	9/14/23 14:15	9/14/23 15:33		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	9/14/23 14:15	9/14/23 15:33		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	9/14/23 14:15	9/14/23 15:33		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	9/14/23 14:15	9/14/23 15:33		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Dissolved	9/14/23 14:15	9/14/23 15:33		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	9/14/23 14:15	9/14/23 15:33		1.015	0.00449	mg/L	0.000152	0.001015	
* Potassium, Dissolved	9/14/23 14:15	9/14/23 15:33		1.015	1.84	mg/L	0.169505	0.5075	
* Selenium, Dissolved	9/14/23 14:15	9/14/23 15:33		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	9/14/23 14:15	9/14/23 15:33		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	9/14/23 17:22	9/14/23 22:41		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	9/18/23 12:14	9/18/23 12:14		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: JAG***								
Alkalinity pH Endpoint	9/26/23 10:23	9/26/23 11:17		1	4.52	SU		2	
* Alkalinity	9/26/23 10:23	9/26/23 11:17		1	237	mg CaCO3/L		1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	9/14/23 13:40	9/15/23 13:10		1	349	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: JAG***								
* Bicarbonate Alkalinity, (calc.)	9/26/23 10:23	9/26/23 11:17		1	232	mg CaCO3/L		1	
* Carbonate Alkalinity, (calc.)	9/26/23 10:23	9/26/23 11:17		1	4.88	mg CaCO3/L		0.5	
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	9/18/23 14:25	9/18/23 14:25		1	Not Detected	mg/L	1.00	2	U

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-32H

Location Code: WMWGORAP
Collected: 9/13/23 11:45
Customer ID:
Submittal Date: 9/14/23 10:03

Laboratory ID Number: BD17500

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	9/18/23 11:00	9/18/23 11:00		4	26.5	mg/L	2.00	4	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	9/18/23 14:39	9/18/23 14:39		1	0.172	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	9/26/23 14:43	9/26/23 14:43		1	35.6	mg/L	0.6	2	
Analytical Method: Field Measurements	***Analyst: AWG***								
Conductivity	9/13/23 11:41	9/13/23 11:41			550.45	uS/cm			FA
pH	9/13/23 11:41	9/13/23 11:41			8.07	SU			FA
Temperature	9/13/23 11:41	9/13/23 11:41			24.98	C			FA
Turbidity	9/13/23 11:41	9/13/23 11:41			2.64	NTU			FA
Sulfide	9/13/23 11:41	9/13/23 11:41			0	mg/L			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/13/23 11:45
Customer ID:
Delivery Date: 9/14/23 10:03

Description: Gorgas Ash Pond - MW-32H

Laboratory ID Number: BD17500

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17502	Aluminum, Dissolved	mg/L	-0.000290	0.0198	0.100	0.105	0.106	0.105	0.0850 to 0.115	105	70.0 to 130	0.948	20.0
BD17501	Aluminum, Total	mg/L	0.000208	0.0198	0.100	0.538	0.665	0.104	0.0850 to 0.115	97.0	70.0 to 130	21.1	20.0
BD17502	Antimony, Dissolved	mg/L	0.000229	0.00100	0.100	0.0929	0.0942	0.0919	0.0850 to 0.115	92.1	70.0 to 130	1.39	20.0
BD17501	Antimony, Total	mg/L	0.000567	0.00100	0.100	0.0971	0.0985	0.0960	0.0850 to 0.115	96.1	70.0 to 130	1.43	20.0
BD17502	Arsenic, Dissolved	mg/L	-0.0000089	0.000200	0.100	0.101	0.102	0.0987	0.0850 to 0.115	97.2	70.0 to 130	0.985	20.0
BD17501	Arsenic, Total	mg/L	0.000105	0.000200	0.100	0.101	0.100	0.100	0.0850 to 0.115	95.6	70.0 to 130	0.995	20.0
BD17502	Barium, Dissolved	mg/L	-0.0000262	0.00100	0.100	0.252	0.256	0.0998	0.0850 to 0.115	97.0	70.0 to 130	1.57	20.0
BD17501	Barium, Total	mg/L	0.0000393	0.00100	0.100	0.277	0.280	0.0908	0.0850 to 0.115	89.0	70.0 to 130	1.08	20.0
BD17502	Beryllium, Dissolved	mg/L	0.0000283	0.000880	0.100	0.101	0.0988	0.101	0.0850 to 0.115	101	70.0 to 130	2.20	20.0
BD17501	Beryllium, Total	mg/L	0.0000483	0.000880	0.100	0.101	0.101	0.0970	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BD17502	Boron, Dissolved	mg/L	-0.00109	0.0650	1.00	1.08	1.08	1.00	0.850 to 1.15	103	70.0 to 130	0.00	20.0
BD17501	Boron, Total	mg/L	0.000005	0.0650	1.00	1.07	1.09	1.02	0.850 to 1.15	104	70.0 to 130	1.85	20.0
BD17502	Cadmium, Dissolved	mg/L	0.0000030	0.000147	0.100	0.0974	0.0984	0.0978	0.0850 to 0.115	97.4	70.0 to 130	1.02	20.0
BD17501	Cadmium, Total	mg/L	-0.0000075	0.000147	0.100	0.0943	0.0987	0.101	0.0850 to 0.115	94.3	70.0 to 130	4.56	20.0
BD17502	Calcium, Dissolved	mg/L	-0.0266	0.152	5.00	21.2	21.1	5.06	4.25 to 5.75	102	70.0 to 130	0.473	20.0
BD17501	Calcium, Total	mg/L	-0.0189	0.152	5.00	10.0	10.1	5.06	4.25 to 5.75	95.8	70.0 to 130	0.995	20.0
BD17501	Chloride	mg/L	0.00138	1.00	10.0	15.5	15.7	10.5	9.00 to 11.0	105	80.0 to 120	1.28	20.0
BD17502	Chromium, Dissolved	mg/L	-0.000168	0.000440	0.100	0.0972	0.0965	0.101	0.0850 to 0.115	97.2	70.0 to 130	0.723	20.0
BD17501	Chromium, Total	mg/L	-0.0000841	0.000440	0.100	0.0950	0.0966	0.0994	0.0850 to 0.115	94.5	70.0 to 130	1.67	20.0
BD17502	Cobalt, Dissolved	mg/L	-0.0000695	0.000147	0.100	0.0985	0.0989	0.102	0.0850 to 0.115	98.5	70.0 to 130	0.405	20.0
BD17501	Cobalt, Total	mg/L	0.0000025	0.000147	0.100	0.0972	0.0994	0.103	0.0850 to 0.115	97.2	70.0 to 130	2.24	20.0
BD17501	Fluoride	mg/L	0.00769	0.125	2.50	3.06	3.07	2.68	2.25 to 2.75	105	80.0 to 120	0.326	20.0
BD17502	Iron, Dissolved	mg/L	0.00154	0.0176	0.2	0.205	0.202	0.202	0.170 to 0.230	97.6	70.0 to 130	1.47	20.0
BD17501	Iron, Total	mg/L	-0.000348	0.0176	0.2	0.214	0.218	0.204	0.170 to 0.230	100	70.0 to 130	1.85	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/13/23 11:45
Customer ID:
Delivery Date: 9/14/23 10:03

Description: Gorgas Ash Pond - MW-32H

Laboratory ID Number: BD17500

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17502	Lead, Dissolved	mg/L	0.0000056	0.000147	0.100	0.101	0.103	0.105	0.0850 to 0.115	101	70.0 to 130	1.96	20.0
BD17501	Lead, Total	mg/L	0.0000068	0.000147	0.100	0.0965	0.0977	0.0988	0.0850 to 0.115	96.5	70.0 to 130	1.24	20.0
BD17502	Lithium, Dissolved	mg/L	-0.000209	0.0154	0.200	0.284	0.282	0.205	0.170 to 0.230	104	70.0 to 130	0.707	20.0
BD17501	Lithium, Total	mg/L	-0.000449	0.0154	0.200	0.518	0.520	0.209	0.170 to 0.230	106	70.0 to 130	0.385	20.0
BD17502	Magnesium, Dissolved	mg/L	-0.00780	0.0462	5.00	8.94	8.93	5.14	4.25 to 5.75	102	70.0 to 130	0.112	20.0
BD17501	Magnesium, Total	mg/L	-0.0162	0.0462	5.00	5.73	5.82	5.21	4.25 to 5.75	103	70.0 to 130	1.56	20.0
BD17502	Manganese, Dissolved	mg/L	0.0000089	0.00033	0.100	0.111	0.111	0.103	0.0850 to 0.115	99.0	70.0 to 130	0.00	20.0
BD17501	Manganese, Total	mg/L	0.0000048	0.00033	0.100	0.0971	0.101	0.103	0.0850 to 0.115	96.9	70.0 to 130	3.94	20.0
BD17501	Mercury, Total by CVAA	mg/L	5.000E-05	0.000500	0.004	0.00401	0.00411	0.00406	0.00340 to 0.00460	100	70.0 to 130	2.46	20.0
BD17502	Molybdenum, Dissolved	mg/L	0.000202	0.0100	0.2	0.222	0.219	0.204	0.170 to 0.230	104	70.0 to 130	1.36	20.0
BD17501	Molybdenum, Total	mg/L	0.000	0.0100	0.2	0.243	0.247	0.207	0.170 to 0.230	102	70.0 to 130	1.63	20.0
BD17502	Potassium, Dissolved	mg/L	-0.0106	0.367	10.0	16.4	16.0	10.1	8.50 to 11.5	97.2	70.0 to 130	2.47	20.0
BD17501	Potassium, Total	mg/L	-0.00235	0.367	10.0	15.1	15.5	10.2	8.50 to 11.5	97.3	70.0 to 130	2.61	20.0
BD17502	Selenium, Dissolved	mg/L	-0.0000900	0.00100	0.100	0.102	0.0993	0.103	0.0850 to 0.115	101	70.0 to 130	2.68	20.0
BD17501	Selenium, Total	mg/L	0.0000683	0.00100	0.100	0.0968	0.100	0.103	0.0850 to 0.115	96.8	70.0 to 130	3.25	20.0
BD17502	Silicon, Dissolved	mg/L	0.000692	0.0440	1.00	9.39	9.42	1.02	0.850 to 1.15	97.0	70.0 to 130	0.319	20.0
BD17501	Silicon, Total	mg/L	0.00106	0.0440	1.00	39.1	36.3	1.03	0.850 to 1.15	340	70.0 to 130	7.43	20.0
BD17502	Sodium, Dissolved	mg/L	0.0636	0.0880	5.00	187	187	5.10	4.25 to 5.75	240	70.0 to 130	0.00	20.0
BD17501	Sodium, Total	mg/L	0.00811	0.0880	5.00	206	187	5.17	4.25 to 5.75	400	70.0 to 130	9.67	20.0
BD17501	Sulfate	mg/L	-0.0293	2.0	20.0	27.5	27.6	19.2	18.0 to 22.0	95.4	80.0 to 120	0.363	20.0
BD17502	Thallium, Dissolved	mg/L	-0.0000854	0.000147	0.100	0.0993	0.0997	0.102	0.0850 to 0.115	99.3	70.0 to 130	0.402	20.0
BD17501	Thallium, Total	mg/L	0.0000056	0.000147	0.100	0.0973	0.0983	0.100	0.0850 to 0.115	97.3	70.0 to 130	1.02	20.0
BD17501	Total Organic Carbon	mg/L	0.309	1.00	10.0	19.4	18.5	8.66		87.0	80.0 to 120	4.75	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/13/23 11:45
Customer ID:
Delivery Date: 9/14/23 10:03

Description: Gorgas Ash Pond - MW-32H

Laboratory ID Number: BD17500

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17523	Alkalinity	mg CaCO3/L					206	52.7	45.0 to 55.0			2.87	10.0
BD17501	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.15	0.200	2.00	1.82	-0.154	1.86	1.80 to 2.20	91.0	90.0 to 110	0.00	15.0
BD17501	Solids, Dissolved	mg/L	2.00	25.0			550	55.0	40.0 to 60.0			2.69	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-15

Location Code: WMWGORAP
Collected: 9/11/23 11:43
Customer ID:
Submittal Date: 9/14/23 10:03

Laboratory ID Number: BD17501

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	9/15/23 06:33	9/19/23 16:16		1.015	0.0337	mg/L	0.030000	0.1015	J
* Calcium, Total	9/15/23 06:33	9/19/23 16:16		1.015	5.21	mg/L	0.070035	0.406	
* Iron, Total	9/15/23 06:33	9/19/23 16:16		1.015	0.0131	mg/L	0.008120	0.0406	J
* Lithium, Total	9/15/23 06:33	9/19/23 16:16		1.015	0.307	mg/L	0.007105	0.01999956	
* Magnesium, Total	9/15/23 06:33	9/19/23 16:16		1.015	0.570	mg/L	0.021315	0.406	
* Molybdenum, Total	9/15/23 06:33	9/19/23 16:16		1.015	0.0387	mg/L	0.005075	0.01015	
* Silica, Total (calc.)	9/15/23 06:33	9/20/23 12:41		1	76.4	mg/L			
* Silicon, Total	9/15/23 06:33	9/20/23 12:41		10.15	35.7	mg/L	0.2030	2.5375	RA
* Sodium, Total	9/15/23 06:33	9/20/23 12:41		10.15	186	mg/L	0.4060	4.06	RA
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	9/14/23 14:15	9/19/23 13:51		1.015	0.0344	mg/L	0.030000	0.1015	J
* Calcium, Dissolved	9/14/23 14:15	9/19/23 13:51		1.015	4.11	mg/L	0.070035	0.406	
* Iron, Dissolved	9/14/23 14:15	9/19/23 13:51		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Dissolved	9/14/23 14:15	9/19/23 13:51		1.015	0.328	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	9/14/23 14:15	9/19/23 13:51		1.015	0.119	mg/L	0.021315	0.406	J
* Molybdenum, Dissolved	9/14/23 14:15	9/19/23 13:51		1.015	0.0427	mg/L	0.005075	0.01015	
* Silica, Dissolved (calc.)	9/14/23 14:15	9/20/23 10:47		1	82.2	mg/L			
* Silicon, Dissolved	9/14/23 14:15	9/20/23 10:47		10.15	38.4	mg/L	0.2030	2.5375	
* Sodium, Dissolved	9/14/23 14:15	9/20/23 10:47		10.15	195	mg/L	0.4060	4.06	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	9/15/23 06:33	9/18/23 10:44		1.015	0.00100	mg/L	0.000710	0.001015	J
* Aluminum, Total	9/15/23 06:33	9/18/23 10:44		1.015	0.441	mg/L	0.009135	0.05075	RA
* Arsenic, Total	9/15/23 06:33	9/18/23 10:44		1.015	0.00545	mg/L	0.000112	0.000203	
* Barium, Total	9/15/23 06:33	9/18/23 10:44		1.015	0.188	mg/L	0.000508	0.001015	
* Beryllium, Total	9/15/23 06:33	9/18/23 10:44		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	9/15/23 06:33	9/18/23 10:44		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	9/15/23 06:33	9/18/23 10:44		1.015	0.000451	mg/L	0.000203	0.001015	J
* Cobalt, Total	9/15/23 06:33	9/18/23 10:44		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	9/15/23 06:33	9/18/23 10:44		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	9/15/23 06:33	9/18/23 10:44		1.015	0.000186	mg/L	0.000152	0.001015	J

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-15

Location Code: WMWGORAP
Collected: 9/11/23 11:43
Customer ID:
Submittal Date: 9/14/23 10:03

Laboratory ID Number: BD17501

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	9/15/23 06:33	9/18/23 10:44		1.015	5.37	mg/L	0.169505	0.5075	
* Selenium, Total	9/15/23 06:33	9/18/23 10:44		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	9/15/23 06:33	9/18/23 10:44		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	9/14/23 14:15	9/14/23 15:37		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	9/14/23 14:15	9/14/23 15:37		1.015	0.450	mg/L	0.009135	0.05075	
* Arsenic, Dissolved	9/14/23 14:15	9/14/23 15:37		1.015	0.00600	mg/L	0.000112	0.000203	
* Barium, Dissolved	9/14/23 14:15	9/14/23 15:37		1.015	0.164	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	9/14/23 14:15	9/14/23 15:37		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	9/14/23 14:15	9/14/23 15:37		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	9/14/23 14:15	9/14/23 15:37		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	9/14/23 14:15	9/14/23 15:37		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Dissolved	9/14/23 14:15	9/14/23 15:37		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	9/14/23 14:15	9/14/23 15:37		1.015	Not Detected	mg/L	0.000152	0.001015	U
* Potassium, Dissolved	9/14/23 14:15	9/14/23 15:37		1.015	5.56	mg/L	0.169505	0.5075	
* Selenium, Dissolved	10/12/23 23:23	10/12/23 13:02		1.015	0.000660	mg/L	0.000508	0.001015	J
* Thallium, Dissolved	9/14/23 14:15	9/14/23 15:37		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	9/14/23 17:22	9/14/23 22:45		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	9/18/23 12:16	9/18/23 12:16		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: DHC***								
Alkalinity pH Endpoint	9/20/23 12:02	9/20/23 13:53		1	4.54	SU		2	
* Alkalinity	9/20/23 12:02	9/20/23 13:53		1	477	mg CaCO3/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	9/14/23 13:40	9/15/23 13:10		1	565	mg/L		125	
Analytical Method: SM 4500CO2 D	***Analyst: DHC***								
* Bicarbonate Alkalinity, (calc.)	9/20/23 12:02	9/20/23 13:53		1	2.68	mg CaCO3/L		1	A
* Carbonate Alkalinity, (calc.)	9/20/23 12:02	9/20/23 13:53		1	159	mg CaCO3/L		0.5	A
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	9/18/23 14:39	9/18/23 14:39		1	10.7	mg/L	1.00	2	R

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-15

Location Code: WMWGORAP
Collected: 9/11/23 11:43
Customer ID:
Submittal Date: 9/14/23 10:03

Laboratory ID Number: BD17501

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	9/18/23 10:56	9/18/23 10:56		1	5.04	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	9/18/23 14:41	9/18/23 14:41		1	0.425	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	9/26/23 14:44	9/26/23 14:44		1	8.43	mg/L	0.6	2	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	9/11/23 11:39	9/11/23 11:39			2082.77	uS/cm			FA
pH	9/11/23 11:39	9/11/23 11:39			11.61	SU			FA
Temperature	9/11/23 11:39	9/11/23 11:39			22.99	C			FA
Turbidity	9/11/23 11:39	9/11/23 11:39			2.09	NTU			FA
Sulfide	9/11/23 11:39	9/11/23 11:39			1.0	mg/L			FA

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/11/23 11:43
Customer ID:
Delivery Date: 9/14/23 10:03

Description: Gorgas Ash Pond - MW-15

Laboratory ID Number: BD17501

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17502	Aluminum, Dissolved	mg/L	-0.000290	0.0198	0.100	0.105	0.106	0.105	0.0850 to 0.115	105	70.0 to 130	0.948	20.0
BD17501	Aluminum, Total	mg/L	0.000208	0.0198	0.100	0.538	0.665	0.104	0.0850 to 0.115	97.0	70.0 to 130	21.1	20.0
BD17502	Antimony, Dissolved	mg/L	0.000229	0.00100	0.100	0.0929	0.0942	0.0919	0.0850 to 0.115	92.1	70.0 to 130	1.39	20.0
BD17501	Antimony, Total	mg/L	0.000567	0.00100	0.100	0.0971	0.0985	0.0960	0.0850 to 0.115	96.1	70.0 to 130	1.43	20.0
BD17502	Arsenic, Dissolved	mg/L	-0.0000089	0.000200	0.100	0.101	0.102	0.0987	0.0850 to 0.115	97.2	70.0 to 130	0.985	20.0
BD17501	Arsenic, Total	mg/L	0.000105	0.000200	0.100	0.101	0.100	0.100	0.0850 to 0.115	95.6	70.0 to 130	0.995	20.0
BD17502	Barium, Dissolved	mg/L	-0.0000262	0.00100	0.100	0.252	0.256	0.0998	0.0850 to 0.115	97.0	70.0 to 130	1.57	20.0
BD17501	Barium, Total	mg/L	0.0000393	0.00100	0.100	0.277	0.280	0.0908	0.0850 to 0.115	89.0	70.0 to 130	1.08	20.0
BD17502	Beryllium, Dissolved	mg/L	0.0000283	0.000880	0.100	0.101	0.0988	0.101	0.0850 to 0.115	101	70.0 to 130	2.20	20.0
BD17501	Beryllium, Total	mg/L	0.0000483	0.000880	0.100	0.101	0.101	0.0970	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BD17502	Boron, Dissolved	mg/L	-0.00109	0.0650	1.00	1.08	1.08	1.00	0.850 to 1.15	103	70.0 to 130	0.00	20.0
BD17501	Boron, Total	mg/L	0.000005	0.0650	1.00	1.07	1.09	1.02	0.850 to 1.15	104	70.0 to 130	1.85	20.0
BD17502	Cadmium, Dissolved	mg/L	0.0000030	0.000147	0.100	0.0974	0.0984	0.0978	0.0850 to 0.115	97.4	70.0 to 130	1.02	20.0
BD17501	Cadmium, Total	mg/L	-0.0000075	0.000147	0.100	0.0943	0.0987	0.101	0.0850 to 0.115	94.3	70.0 to 130	4.56	20.0
BD17502	Calcium, Dissolved	mg/L	-0.0266	0.152	5.00	21.2	21.1	5.06	4.25 to 5.75	102	70.0 to 130	0.473	20.0
BD17501	Calcium, Total	mg/L	-0.0189	0.152	5.00	10.0	10.1	5.06	4.25 to 5.75	95.8	70.0 to 130	0.995	20.0
BD17501	Chloride	mg/L	0.00138	1.00	10.0	15.5	15.7	10.5	9.00 to 11.0	105	80.0 to 120	1.28	20.0
BD17502	Chromium, Dissolved	mg/L	-0.000168	0.000440	0.100	0.0972	0.0965	0.101	0.0850 to 0.115	97.2	70.0 to 130	0.723	20.0
BD17501	Chromium, Total	mg/L	-0.0000841	0.000440	0.100	0.0950	0.0966	0.0994	0.0850 to 0.115	94.5	70.0 to 130	1.67	20.0
BD17502	Cobalt, Dissolved	mg/L	-0.0000695	0.000147	0.100	0.0985	0.0989	0.102	0.0850 to 0.115	98.5	70.0 to 130	0.405	20.0
BD17501	Cobalt, Total	mg/L	0.0000025	0.000147	0.100	0.0972	0.0994	0.103	0.0850 to 0.115	97.2	70.0 to 130	2.24	20.0
BD17501	Fluoride	mg/L	0.00769	0.125	2.50	3.06	3.07	2.68	2.25 to 2.75	105	80.0 to 120	0.326	20.0
BD17502	Iron, Dissolved	mg/L	0.00154	0.0176	0.2	0.205	0.202	0.202	0.170 to 0.230	97.6	70.0 to 130	1.47	20.0
BD17501	Iron, Total	mg/L	-0.000348	0.0176	0.2	0.214	0.218	0.204	0.170 to 0.230	100	70.0 to 130	1.85	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/11/23 11:43
Customer ID:
Delivery Date: 9/14/23 10:03

Description: Gorgas Ash Pond - MW-15

Laboratory ID Number: BD17501

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17502	Lead, Dissolved	mg/L	0.0000056	0.000147	0.100	0.101	0.103	0.105	0.0850 to 0.115	101	70.0 to 130	1.96	20.0
BD17501	Lead, Total	mg/L	0.0000068	0.000147	0.100	0.0965	0.0977	0.0988	0.0850 to 0.115	96.5	70.0 to 130	1.24	20.0
BD17502	Lithium, Dissolved	mg/L	-0.000209	0.0154	0.200	0.284	0.282	0.205	0.170 to 0.230	104	70.0 to 130	0.707	20.0
BD17501	Lithium, Total	mg/L	-0.000449	0.0154	0.200	0.518	0.520	0.209	0.170 to 0.230	106	70.0 to 130	0.385	20.0
BD17502	Magnesium, Dissolved	mg/L	-0.00780	0.0462	5.00	8.94	8.93	5.14	4.25 to 5.75	102	70.0 to 130	0.112	20.0
BD17501	Magnesium, Total	mg/L	-0.0162	0.0462	5.00	5.73	5.82	5.21	4.25 to 5.75	103	70.0 to 130	1.56	20.0
BD17502	Manganese, Dissolved	mg/L	0.0000089	0.00033	0.100	0.111	0.111	0.103	0.0850 to 0.115	99.0	70.0 to 130	0.00	20.0
BD17501	Manganese, Total	mg/L	0.0000048	0.00033	0.100	0.0971	0.101	0.103	0.0850 to 0.115	96.9	70.0 to 130	3.94	20.0
BD17501	Mercury, Total by CVAA	mg/L	5.000E-05	0.000500	0.004	0.00401	0.00411	0.00406	0.00340 to 0.00460	100	70.0 to 130	2.46	20.0
BD17502	Molybdenum, Dissolved	mg/L	0.000202	0.0100	0.2	0.222	0.219	0.204	0.170 to 0.230	104	70.0 to 130	1.36	20.0
BD17501	Molybdenum, Total	mg/L	0.000	0.0100	0.2	0.243	0.247	0.207	0.170 to 0.230	102	70.0 to 130	1.63	20.0
BD17502	Potassium, Dissolved	mg/L	-0.0106	0.367	10.0	16.4	16.0	10.1	8.50 to 11.5	97.2	70.0 to 130	2.47	20.0
BD17501	Potassium, Total	mg/L	-0.00235	0.367	10.0	15.1	15.5	10.2	8.50 to 11.5	97.3	70.0 to 130	2.61	20.0
BD17510	Selenium, Dissolved	mg/L	0.0000623	0.00100	0.100	0.108	0.111	0.0999	0.0850 to 0.115	107	70.0 to 130	2.74	20.0
BD17501	Selenium, Total	mg/L	0.0000683	0.00100	0.100	0.0968	0.100	0.103	0.0850 to 0.115	96.8	70.0 to 130	3.25	20.0
BD17502	Silicon, Dissolved	mg/L	0.000692	0.0440	1.00	9.39	9.42	1.02	0.850 to 1.15	97.0	70.0 to 130	0.319	20.0
BD17501	Silicon, Total	mg/L	0.00106	0.0440	1.00	39.1	36.3	1.03	0.850 to 1.15	340	70.0 to 130	7.43	20.0
BD17502	Sodium, Dissolved	mg/L	0.0636	0.0880	5.00	187	187	5.10	4.25 to 5.75	240	70.0 to 130	0.00	20.0
BD17501	Sodium, Total	mg/L	0.00811	0.0880	5.00	206	187	5.17	4.25 to 5.75	400	70.0 to 130	9.67	20.0
BD17501	Sulfate	mg/L	-0.0293	2.0	20.0	27.5	27.6	19.2	18.0 to 22.0	95.4	80.0 to 120	0.363	20.0
BD17502	Thallium, Dissolved	mg/L	-0.0000854	0.000147	0.100	0.0993	0.0997	0.102	0.0850 to 0.115	99.3	70.0 to 130	0.402	20.0
BD17501	Thallium, Total	mg/L	0.0000056	0.000147	0.100	0.0973	0.0983	0.100	0.0850 to 0.115	97.3	70.0 to 130	1.02	20.0
BD17501	Total Organic Carbon	mg/L	0.309	1.00	10.0	19.4	18.5	8.66		87.0	80.0 to 120	4.75	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/11/23 11:43
Customer ID:
Delivery Date: 9/14/23 10:03

Description: Gorgas Ash Pond - MW-15

Laboratory ID Number: BD17501

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17516	Alkalinity	mg CaCO3/L					185	52.0	45.0 to 55.0			0.00	10.0
BD17501	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.15	0.200	2.00	1.82	-0.154	1.86	1.80 to 2.20	91.0	90.0 to 110	0.00	15.0
BD17501	Solids, Dissolved	mg/L	2.00	25.0			550	55.0	40.0 to 60.0			2.69	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-15V

Laboratory ID Number: BD17502

Location Code: WMWGORAP
Collected: 9/11/23 13:11
Customer ID:
Submittal Date: 9/14/23 10:03

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	9/15/23 06:33	9/19/23 16:32		1.015	0.0573	mg/L	0.030000	0.1015	J
* Calcium, Total	9/15/23 06:33	9/19/23 16:32		1.015	20.3	mg/L	0.070035	0.406	
* Iron, Total	9/15/23 06:33	9/19/23 16:32		1.015	0.0153	mg/L	0.008120	0.0406	J
* Lithium, Total	9/15/23 06:33	9/19/23 16:32		1.015	0.0849	mg/L	0.007105	0.01999956	
* Magnesium, Total	9/15/23 06:33	9/19/23 16:32		1.015	4.74	mg/L	0.021315	0.406	
* Molybdenum, Total	9/15/23 06:33	9/19/23 16:32		1.015	0.0205	mg/L	0.005075	0.01015	
* Silica, Total (calc.)	9/15/23 06:33	9/19/23 16:32		1	17.7	mg/L			
* Silicon, Total	9/15/23 06:33	9/19/23 16:32		1.015	8.27	mg/L	0.02030	0.25375	
* Sodium, Total	9/15/23 06:33	9/20/23 12:56		10.15	223	mg/L	0.4060	4.06	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	9/14/23 14:15	9/19/23 13:54		1.015	0.0482	mg/L	0.030000	0.1015	J
* Calcium, Dissolved	9/14/23 14:15	9/19/23 13:54		1.015	16.1	mg/L	0.070035	0.406	
* Iron, Dissolved	9/14/23 14:15	9/19/23 13:54		1.015	0.00983	mg/L	0.008120	0.0406	J
* Lithium, Dissolved	9/14/23 14:15	9/19/23 13:54		1.015	0.0755	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	9/14/23 14:15	9/19/23 13:54		1.015	3.85	mg/L	0.021315	0.406	
* Molybdenum, Dissolved	9/14/23 14:15	9/19/23 13:54		1.015	0.0150	mg/L	0.005075	0.01015	
* Silica, Dissolved (calc.)	9/14/23 14:15	9/19/23 13:54		1	18.0	mg/L			
* Silicon, Dissolved	9/14/23 14:15	9/19/23 13:54		1.015	8.42	mg/L	0.02030	0.25375	
* Sodium, Dissolved	9/14/23 14:15	9/20/23 10:50		10.15	175	mg/L	0.4060	4.06	RA
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	9/15/23 06:33	9/18/23 11:06		1.015	0.00129	mg/L	0.000710	0.001015	
* Aluminum, Total	9/15/23 06:33	9/18/23 11:06		1.015	0.0122	mg/L	0.009135	0.05075	J
* Arsenic, Total	9/15/23 06:33	9/18/23 11:06		1.015	0.00436	mg/L	0.000112	0.000203	
* Barium, Total	9/15/23 06:33	9/18/23 11:06		1.015	0.186	mg/L	0.000508	0.001015	
* Beryllium, Total	9/15/23 06:33	9/18/23 11:06		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	9/15/23 06:33	9/18/23 11:06		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	9/15/23 06:33	9/18/23 11:06		1.015	0.000264	mg/L	0.000203	0.001015	J
* Cobalt, Total	9/15/23 06:33	9/18/23 11:06		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	9/15/23 06:33	9/18/23 11:06		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	9/15/23 06:33	9/18/23 11:06		1.015	0.0143	mg/L	0.000152	0.001015	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-15V

Location Code: WMWGORAP
Collected: 9/11/23 13:11
Customer ID:
Submittal Date: 9/14/23 10:03

Laboratory ID Number: BD17502

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	9/15/23 06:33	9/18/23 11:06		1.015	8.62	mg/L	0.169505	0.5075	
* Selenium, Total	9/15/23 06:33	9/18/23 11:06		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	9/15/23 06:33	9/18/23 11:06		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	9/14/23 14:15	9/14/23 15:41		1.015	0.000800	mg/L	0.000710	0.001015	J
* Aluminum, Dissolved	9/14/23 14:15	9/14/23 15:41		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Dissolved	9/14/23 14:15	9/14/23 15:41		1.015	0.00382	mg/L	0.000112	0.000203	
* Barium, Dissolved	9/14/23 14:15	9/14/23 15:41		1.015	0.155	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	9/14/23 14:15	9/14/23 15:41		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	9/14/23 14:15	9/14/23 15:41		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	9/14/23 14:15	9/14/23 15:41		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	9/14/23 14:15	9/14/23 15:41		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Dissolved	9/14/23 14:15	9/14/23 15:41		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	9/14/23 14:15	9/14/23 15:41		1.015	0.0120	mg/L	0.000152	0.001015	
* Potassium, Dissolved	9/14/23 14:15	9/14/23 15:41		1.015	6.68	mg/L	0.169505	0.5075	
* Selenium, Dissolved	9/14/23 14:15	9/14/23 15:41		1.015	0.000556	mg/L	0.000508	0.001015	J
* Thallium, Dissolved	9/14/23 14:15	9/14/23 15:41		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	9/14/23 17:22	9/14/23 23:04		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	9/18/23 13:02	9/18/23 13:02		1	0.208	mg/L as N	0.20	0.3	J
Analytical Method: SM 2320 B	***Analyst: DHC***								
Alkalinity pH Endpoint	9/20/23 12:02	9/20/23 13:53		1	4.44	SU		2	
* Alkalinity	9/20/23 12:02	9/20/23 13:53		1	235	mg CaCO3/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	9/14/23 13:40	9/15/23 13:10		1	615	mg/L		75.8	
Analytical Method: SM 4500CO2 D	***Analyst: DHC***								
* Bicarbonate Alkalinity, (calc.)	9/20/23 12:02	9/20/23 13:53		1	229	mg CaCO3/L		1	A
* Carbonate Alkalinity, (calc.)	9/20/23 12:02	9/20/23 13:53		1	5.54	mg CaCO3/L		0.5	A
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	9/18/23 15:52	9/18/23 15:52		1	5.57	mg/L	1.00	2	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-15V

Location Code: WMWGORAP
Collected: 9/11/23 13:11
Customer ID:
Submittal Date: 9/14/23 10:03

Laboratory ID Number: BD17502

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	9/18/23 12:07	9/18/23 12:07		5	83.9	mg/L	2.50	5	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	9/18/23 14:53	9/18/23 14:53		1	0.183	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	9/26/23 15:14	9/26/23 15:14		8	140	mg/L	4.8	16	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	9/11/23 13:08	9/11/23 13:08			1538.03	uS/cm			FA
pH	9/11/23 13:08	9/11/23 13:08			7.64	SU			FA
Temperature	9/11/23 13:08	9/11/23 13:08			23.73	C			FA
Turbidity	9/11/23 13:08	9/11/23 13:08			3.56	NTU			FA
Sulfide	9/11/23 13:08	9/11/23 13:08			0	mg/L			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/11/23 13:11
Customer ID:
Delivery Date: 9/14/23 10:03

Description: Gorgas Ash Pond - MW-15V

Laboratory ID Number: BD17502

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17502	Aluminum, Dissolved	mg/L	-0.000290	0.0198	0.100	0.105	0.106	0.105	0.0850 to 0.115	105	70.0 to 130	0.948	20.0
BD17511	Aluminum, Total	mg/L	0.000208	0.0198	0.100	0.112	0.112	0.104	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BD17502	Antimony, Dissolved	mg/L	0.000229	0.00100	0.100	0.0929	0.0942	0.0919	0.0850 to 0.115	92.1	70.0 to 130	1.39	20.0
BD17511	Antimony, Total	mg/L	0.000567	0.00100	0.100	0.104	0.105	0.0960	0.0850 to 0.115	104	70.0 to 130	0.957	20.0
BD17502	Arsenic, Dissolved	mg/L	-0.0000089	0.000200	0.100	0.101	0.102	0.0987	0.0850 to 0.115	97.2	70.0 to 130	0.985	20.0
BD17511	Arsenic, Total	mg/L	0.000105	0.000200	0.100	0.103	0.102	0.100	0.0850 to 0.115	101	70.0 to 130	0.976	20.0
BD17502	Barium, Dissolved	mg/L	-0.0000262	0.00100	0.100	0.252	0.256	0.0998	0.0850 to 0.115	97.0	70.0 to 130	1.57	20.0
BD17511	Barium, Total	mg/L	0.0000393	0.00100	0.100	0.276	0.278	0.0908	0.0850 to 0.115	84.0	70.0 to 130	0.722	20.0
BD17502	Beryllium, Dissolved	mg/L	0.0000283	0.000880	0.100	0.101	0.0988	0.101	0.0850 to 0.115	101	70.0 to 130	2.20	20.0
BD17511	Beryllium, Total	mg/L	0.0000483	0.000880	0.100	0.0987	0.100	0.0970	0.0850 to 0.115	98.7	70.0 to 130	1.31	20.0
BD17502	Boron, Dissolved	mg/L	-0.00109	0.0650	1.00	1.08	1.08	1.00	0.850 to 1.15	103	70.0 to 130	0.00	20.0
BD17511	Boron, Total	mg/L	0.000005	0.0650	1.00	1.09	1.10	1.02	0.850 to 1.15	104	70.0 to 130	0.913	20.0
BD17502	Cadmium, Dissolved	mg/L	0.0000030	0.000147	0.100	0.0974	0.0984	0.0978	0.0850 to 0.115	97.4	70.0 to 130	1.02	20.0
BD17511	Cadmium, Total	mg/L	-0.0000075	0.000147	0.100	0.100	0.0983	0.101	0.0850 to 0.115	100	70.0 to 130	1.71	20.0
BD17502	Calcium, Dissolved	mg/L	-0.0266	0.152	5.00	21.2	21.1	5.06	4.25 to 5.75	102	70.0 to 130	0.473	20.0
BD17511	Calcium, Total	mg/L	-0.0189	0.152	5.00	29.6	29.3	5.06	4.25 to 5.75	98.0	70.0 to 130	1.02	20.0
BD17511	Chloride	mg/L	0.0415	1.00	250	582	579	10.4	9.00 to 11.0	88.8	80.0 to 120	0.517	20.0
BD17502	Chromium, Dissolved	mg/L	-0.000168	0.000440	0.100	0.0972	0.0965	0.101	0.0850 to 0.115	97.2	70.0 to 130	0.723	20.0
BD17511	Chromium, Total	mg/L	-0.0000841	0.000440	0.100	0.102	0.0996	0.0994	0.0850 to 0.115	102	70.0 to 130	2.38	20.0
BD17502	Cobalt, Dissolved	mg/L	-0.0000695	0.000147	0.100	0.0985	0.0989	0.102	0.0850 to 0.115	98.5	70.0 to 130	0.405	20.0
BD17511	Cobalt, Total	mg/L	0.0000025	0.000147	0.100	0.104	0.103	0.103	0.0850 to 0.115	104	70.0 to 130	0.966	20.0
BD17511	Fluoride	mg/L	0.00763	0.125	2.50	2.81	2.84	2.67	2.25 to 2.75	104	80.0 to 120	1.06	20.0
BD17502	Iron, Dissolved	mg/L	0.00154	0.0176	0.2	0.205	0.202	0.202	0.170 to 0.230	97.6	70.0 to 130	1.47	20.0
BD17511	Iron, Total	mg/L	-0.000348	0.0176	0.2	0.207	0.210	0.204	0.170 to 0.230	99.1	70.0 to 130	1.44	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/11/23 13:11
Customer ID:
Delivery Date: 9/14/23 10:03

Description: Gorgas Ash Pond - MW-15V

Laboratory ID Number: BD17502

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17502	Lead, Dissolved	mg/L	0.0000056	0.000147	0.100	0.101	0.103	0.105	0.0850 to 0.115	101	70.0 to 130	1.96	20.0
BD17511	Lead, Total	mg/L	0.0000068	0.000147	0.100	0.0985	0.0980	0.0988	0.0850 to 0.115	98.5	70.0 to 130	0.509	20.0
BD17502	Lithium, Dissolved	mg/L	-0.000209	0.0154	0.200	0.284	0.282	0.205	0.170 to 0.230	104	70.0 to 130	0.707	20.0
BD17511	Lithium, Total	mg/L	-0.000449	0.0154	0.200	0.288	0.291	0.209	0.170 to 0.230	107	70.0 to 130	1.04	20.0
BD17502	Magnesium, Dissolved	mg/L	-0.00780	0.0462	5.00	8.94	8.93	5.14	4.25 to 5.75	102	70.0 to 130	0.112	20.0
BD17511	Magnesium, Total	mg/L	-0.0162	0.0462	5.00	14.1	14.1	5.21	4.25 to 5.75	102	70.0 to 130	0.00	20.0
BD17502	Manganese, Dissolved	mg/L	0.0000089	0.00033	0.100	0.111	0.111	0.103	0.0850 to 0.115	99.0	70.0 to 130	0.00	20.0
BD17511	Manganese, Total	mg/L	0.0000048	0.00033	0.100	0.148	0.148	0.103	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BD17511	Mercury, Total by CVAA	mg/L	5.000E-05	0.000500	0.004	0.00406	0.00404	0.00406	0.00340 to 0.00460	102	70.0 to 130	0.494	20.0
BD17502	Molybdenum, Dissolved	mg/L	0.000202	0.0100	0.2	0.222	0.219	0.204	0.170 to 0.230	104	70.0 to 130	1.36	20.0
BD17511	Molybdenum, Total	mg/L	0.000	0.0100	0.2	0.269	0.270	0.207	0.170 to 0.230	102	70.0 to 130	0.371	20.0
BD17502	Potassium, Dissolved	mg/L	-0.0106	0.367	10.0	16.4	16.0	10.1	8.50 to 11.5	97.2	70.0 to 130	2.47	20.0
BD17511	Potassium, Total	mg/L	-0.00235	0.367	10.0	53.9	53.5	10.2	8.50 to 11.5	83.0	70.0 to 130	0.745	20.0
BD17502	Selenium, Dissolved	mg/L	-0.0000900	0.00100	0.100	0.102	0.0993	0.103	0.0850 to 0.115	101	70.0 to 130	2.68	20.0
BD17511	Selenium, Total	mg/L	0.0000683	0.00100	0.100	0.0990	0.101	0.103	0.0850 to 0.115	99.0	70.0 to 130	2.00	20.0
BD17502	Silicon, Dissolved	mg/L	0.000692	0.0440	1.00	9.39	9.42	1.02	0.850 to 1.15	97.0	70.0 to 130	0.319	20.0
BD17511	Silicon, Total	mg/L	0.00106	0.0440	1.00	6.52	6.52	1.03	0.850 to 1.15	96.0	70.0 to 130	0.00	20.0
BD17502	Sodium, Dissolved	mg/L	0.0636	0.0880	5.00	187	187	5.10	4.25 to 5.75	240	70.0 to 130	0.00	20.0
BD17511	Sodium, Total	mg/L	0.00811	0.0880	5.00	483	484	5.17	4.25 to 5.75	-60.0	70.0 to 130	0.207	20.0
BD17511	Sulfate	mg/L	0.0717	2.0	640	948	925	19.0	18.0 to 22.0	97.5	80.0 to 120	2.46	20.0
BD17502	Thallium, Dissolved	mg/L	-0.0000854	0.000147	0.100	0.0993	0.0997	0.102	0.0850 to 0.115	99.3	70.0 to 130	0.402	20.0
BD17511	Thallium, Total	mg/L	0.0000056	0.000147	0.100	0.0996	0.0981	0.100	0.0850 to 0.115	99.6	70.0 to 130	1.52	20.0
BD17511	Total Organic Carbon	mg/L	0.297	1.00	10.0	12.5	12.4	9.64		102	80.0 to 120	0.803	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/11/23 13:11
Customer ID:
Delivery Date: 9/14/23 10:03

Description: Gorgas Ash Pond - MW-15V

Laboratory ID Number: BD17502

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17516	Alkalinity	mg CaCO3/L					185	52.0	45.0 to 55.0			0.00	10.0
BD17511	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.15	0.200	2.00	2.11	0.031	1.88	1.80 to 2.20	106	90.0 to 110	0.00	15.0
BD17511	Solids, Dissolved	mg/L	2.00	25.0			1500	55.0	40.0 to 60.0			0.00	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-37HR

Location Code: WMWGORAP
Collected: 9/11/23 14:55
Customer ID:
Submittal Date: 9/14/23 10:03

Laboratory ID Number: BD17503

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	9/15/23 06:33	9/19/23 16:35		1.015	0.0347	mg/L	0.030000	0.1015	J
* Calcium, Total	9/15/23 06:33	9/19/23 16:35		1.015	5.59	mg/L	0.070035	0.406	
* Iron, Total	9/15/23 06:33	9/19/23 16:35		1.015	0.0619	mg/L	0.008120	0.0406	
* Lithium, Total	9/15/23 06:33	9/19/23 16:35		1.015	0.0369	mg/L	0.007105	0.01999956	
* Magnesium, Total	9/15/23 06:33	9/19/23 16:35		1.015	1.94	mg/L	0.021315	0.406	
* Molybdenum, Total	9/15/23 06:33	9/19/23 16:35		1.015	0.00930	mg/L	0.005075	0.01015	J
* Silica, Total (calc.)	9/15/23 06:33	9/19/23 16:35		1	17.6	mg/L			
* Silicon, Total	9/15/23 06:33	9/19/23 16:35		1.015	8.23	mg/L	0.02030	0.25375	
* Sodium, Total	9/15/23 06:33	9/20/23 13:00		10.15	214	mg/L	0.4060	4.06	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	9/14/23 14:15	9/19/23 14:09		1.015	0.0315	mg/L	0.030000	0.1015	J
* Calcium, Dissolved	9/14/23 14:15	9/19/23 14:09		1.015	4.78	mg/L	0.070035	0.406	
* Iron, Dissolved	9/14/23 14:15	9/19/23 14:09		1.015	0.0454	mg/L	0.008120	0.0406	
* Lithium, Dissolved	9/14/23 14:15	9/19/23 14:09		1.015	0.0357	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	9/14/23 14:15	9/19/23 14:09		1.015	1.62	mg/L	0.021315	0.406	
* Molybdenum, Dissolved	9/14/23 14:15	9/19/23 14:09		1.015	0.00765	mg/L	0.005075	0.01015	J
* Silica, Dissolved (calc.)	9/14/23 14:15	9/19/23 14:09		1	17.9	mg/L			
* Silicon, Dissolved	9/14/23 14:15	9/19/23 14:09		1.015	8.37	mg/L	0.02030	0.25375	
* Sodium, Dissolved	9/14/23 14:15	9/20/23 11:06		10.15	172	mg/L	0.4060	4.06	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	9/15/23 06:33	9/18/23 11:10		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Total	9/15/23 06:33	9/18/23 11:10		1.015	0.0130	mg/L	0.009135	0.05075	J
* Arsenic, Total	9/15/23 06:33	9/18/23 11:10		1.015	0.00137	mg/L	0.000112	0.000203	
* Barium, Total	9/15/23 06:33	9/18/23 11:10		1.015	0.0771	mg/L	0.000508	0.001015	
* Beryllium, Total	9/15/23 06:33	9/18/23 11:10		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	9/15/23 06:33	9/18/23 11:10		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	9/15/23 06:33	9/18/23 11:10		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	9/15/23 06:33	9/18/23 11:10		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	9/15/23 06:33	9/18/23 11:10		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	9/15/23 06:33	9/18/23 11:10		1.015	0.0108	mg/L	0.000152	0.001015	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-37HR

Location Code: WMWGORAP
Collected: 9/11/23 14:55
Customer ID:
Submittal Date: 9/14/23 10:03

Laboratory ID Number: BD17503

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	9/15/23 06:33	9/18/23 11:10		1.015	11.3	mg/L	0.169505	0.5075	
* Selenium, Total	9/15/23 06:33	9/18/23 11:10		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	9/15/23 06:33	9/18/23 11:10		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	9/14/23 14:15	9/14/23 16:03		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	9/14/23 14:15	9/14/23 16:03		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Dissolved	9/14/23 14:15	9/14/23 16:03		1.015	0.00107	mg/L	0.000112	0.000203	
* Barium, Dissolved	9/14/23 14:15	9/14/23 16:03		1.015	0.0702	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	9/14/23 14:15	9/14/23 16:03		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	9/14/23 14:15	9/14/23 16:03		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	9/14/23 14:15	9/14/23 16:03		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	9/14/23 14:15	9/14/23 16:03		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Dissolved	9/14/23 14:15	9/14/23 16:03		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	9/14/23 14:15	9/14/23 16:03		1.015	0.00965	mg/L	0.000152	0.001015	
* Potassium, Dissolved	9/14/23 14:15	9/14/23 16:03		1.015	9.62	mg/L	0.169505	0.5075	
* Selenium, Dissolved	9/14/23 14:15	9/14/23 16:03		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	9/14/23 14:15	9/14/23 16:03		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	9/14/23 17:22	9/14/23 23:08		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	9/18/23 13:03	9/18/23 13:03		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: DHC***								
Alkalinity pH Endpoint	9/20/23 12:02	9/20/23 13:53		1	4.50	SU		2	
* Alkalinity	9/20/23 12:02	9/20/23 13:53		1	219	mg CaCO3/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	9/14/23 13:40	9/15/23 13:10		1	518	mg/L		75.8	
Analytical Method: SM 4500CO2 D	***Analyst: DHC***								
* Bicarbonate Alkalinity, (calc.)	9/20/23 12:02	9/20/23 13:53		1	216	mg CaCO3/L		1	A
* Carbonate Alkalinity, (calc.)	9/20/23 12:02	9/20/23 13:53		1	3.14	mg CaCO3/L		0.5	A
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	9/18/23 16:09	9/18/23 16:09		1	1.41	mg/L	1.00	2	J

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-37HR

Location Code: WMWGORAP
Collected: 9/11/23 14:55
Customer ID:
Submittal Date: 9/14/23 10:03

Laboratory ID Number: BD17503

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	9/18/23 12:08	9/18/23 12:08		5	87.4	mg/L	2.50	5	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	9/18/23 14:54	9/18/23 14:54		1	0.182	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	9/26/23 15:15	9/26/23 15:15		4	81.4	mg/L	2.4	8	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	9/11/23 14:51	9/11/23 14:51			1278.82	uS/cm			FA
pH	9/11/23 14:51	9/11/23 14:51			7.51	SU			FA
Temperature	9/11/23 14:51	9/11/23 14:51			24.75	C			FA
Turbidity	9/11/23 14:51	9/11/23 14:51			3.65	NTU			FA
Sulfide	9/11/23 14:51	9/11/23 14:51			0	mg/L			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/11/23 14:55
Customer ID:
Delivery Date: 9/14/23 10:03

Description: Gorgas Ash Pond - MW-37HR

Laboratory ID Number: BD17503

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17513	Aluminum, Dissolved	mg/L	-0.000290	0.0198	0.100	0.108	0.106	0.105	0.0850 to 0.115	108	70.0 to 130	1.87	20.0
BD17511	Aluminum, Total	mg/L	0.000208	0.0198	0.100	0.112	0.112	0.104	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BD17513	Antimony, Dissolved	mg/L	0.000229	0.00100	0.100	0.0963	0.0944	0.0919	0.0850 to 0.115	96.3	70.0 to 130	1.99	20.0
BD17511	Antimony, Total	mg/L	0.000567	0.00100	0.100	0.104	0.105	0.0960	0.0850 to 0.115	104	70.0 to 130	0.957	20.0
BD17513	Arsenic, Dissolved	mg/L	-0.0000089	0.000200	0.100	0.332	0.336	0.0987	0.0850 to 0.115	91.0	70.0 to 130	1.20	20.0
BD17511	Arsenic, Total	mg/L	0.000105	0.000200	0.100	0.103	0.102	0.100	0.0850 to 0.115	101	70.0 to 130	0.976	20.0
BD17513	Barium, Dissolved	mg/L	-0.0000262	0.00100	0.100	0.160	0.154	0.0998	0.0850 to 0.115	103	70.0 to 130	3.82	20.0
BD17511	Barium, Total	mg/L	0.0000393	0.00100	0.100	0.276	0.278	0.0908	0.0850 to 0.115	84.0	70.0 to 130	0.722	20.0
BD17513	Beryllium, Dissolved	mg/L	0.0000283	0.000880	0.100	0.101	0.103	0.101	0.0850 to 0.115	101	70.0 to 130	1.96	20.0
BD17511	Beryllium, Total	mg/L	0.0000483	0.000880	0.100	0.0987	0.100	0.0970	0.0850 to 0.115	98.7	70.0 to 130	1.31	20.0
BD17513	Boron, Dissolved	mg/L	-0.00109	0.0650	1.00	2.72	2.72	1.00	0.850 to 1.15	102	70.0 to 130	0.00	20.0
BD17511	Boron, Total	mg/L	0.000005	0.0650	1.00	1.09	1.10	1.02	0.850 to 1.15	104	70.0 to 130	0.913	20.0
BD17513	Cadmium, Dissolved	mg/L	0.0000030	0.000147	0.100	0.0979	0.0988	0.0978	0.0850 to 0.115	97.9	70.0 to 130	0.915	20.0
BD17511	Cadmium, Total	mg/L	-0.0000075	0.000147	0.100	0.100	0.0983	0.101	0.0850 to 0.115	100	70.0 to 130	1.71	20.0
BD17513	Calcium, Dissolved	mg/L	-0.0266	0.152	5.00	16.1	16.1	5.06	4.25 to 5.75	100	70.0 to 130	0.00	20.0
BD17511	Calcium, Total	mg/L	-0.0189	0.152	5.00	29.6	29.3	5.06	4.25 to 5.75	98.0	70.0 to 130	1.02	20.0
BD17511	Chloride	mg/L	0.0415	1.00	250	582	579	10.4	9.00 to 11.0	88.8	80.0 to 120	0.517	20.0
BD17513	Chromium, Dissolved	mg/L	-0.000168	0.000440	0.100	0.100	0.0971	0.101	0.0850 to 0.115	100	70.0 to 130	2.94	20.0
BD17511	Chromium, Total	mg/L	-0.0000841	0.000440	0.100	0.102	0.0996	0.0994	0.0850 to 0.115	102	70.0 to 130	2.38	20.0
BD17513	Cobalt, Dissolved	mg/L	-0.0000695	0.000147	0.100	0.102	0.100	0.102	0.0850 to 0.115	102	70.0 to 130	1.98	20.0
BD17511	Cobalt, Total	mg/L	0.0000025	0.000147	0.100	0.104	0.103	0.103	0.0850 to 0.115	104	70.0 to 130	0.966	20.0
BD17511	Fluoride	mg/L	0.00763	0.125	2.50	2.81	2.84	2.67	2.25 to 2.75	104	80.0 to 120	1.06	20.0
BD17513	Iron, Dissolved	mg/L	0.00154	0.0176	0.2	0.414	0.417	0.202	0.170 to 0.230	100	70.0 to 130	0.722	20.0
BD17511	Iron, Total	mg/L	-0.000348	0.0176	0.2	0.207	0.210	0.204	0.170 to 0.230	99.1	70.0 to 130	1.44	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/11/23 14:55
Customer ID:
Delivery Date: 9/14/23 10:03

Description: Gorgas Ash Pond - MW-37HR

Laboratory ID Number: BD17503

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17513	Lead, Dissolved	mg/L	0.0000056	0.000147	0.100	0.105	0.105	0.105	0.0850 to 0.115	105	70.0 to 130	0.00	20.0
BD17511	Lead, Total	mg/L	0.0000068	0.000147	0.100	0.0985	0.0980	0.0988	0.0850 to 0.115	98.5	70.0 to 130	0.509	20.0
BD17513	Lithium, Dissolved	mg/L	-0.000209	0.0154	0.200	0.413	0.414	0.205	0.170 to 0.230	102	70.0 to 130	0.242	20.0
BD17511	Lithium, Total	mg/L	-0.000449	0.0154	0.200	0.288	0.291	0.209	0.170 to 0.230	107	70.0 to 130	1.04	20.0
BD17513	Magnesium, Dissolved	mg/L	-0.00780	0.0462	5.00	8.97	9.03	5.14	4.25 to 5.75	101	70.0 to 130	0.667	20.0
BD17511	Magnesium, Total	mg/L	-0.0162	0.0462	5.00	14.1	14.1	5.21	4.25 to 5.75	102	70.0 to 130	0.00	20.0
BD17513	Manganese, Dissolved	mg/L	0.0000089	0.00033	0.100	0.139	0.137	0.103	0.0850 to 0.115	103	70.0 to 130	1.45	20.0
BD17511	Manganese, Total	mg/L	0.0000048	0.00033	0.100	0.148	0.148	0.103	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BD17511	Mercury, Total by CVAA	mg/L	5.000E-05	0.000500	0.004	0.00406	0.00404	0.00406	0.00340 to 0.00460	102	70.0 to 130	0.494	20.0
BD17513	Molybdenum, Dissolved	mg/L	0.000202	0.0100	0.2	0.429	0.432	0.204	0.170 to 0.230	102	70.0 to 130	0.697	20.0
BD17511	Molybdenum, Total	mg/L	0.000	0.0100	0.2	0.269	0.270	0.207	0.170 to 0.230	102	70.0 to 130	0.371	20.0
BD17513	Potassium, Dissolved	mg/L	-0.0106	0.367	10.0	11.1	11.0	10.1	8.50 to 11.5	98.4	70.0 to 130	0.905	20.0
BD17511	Potassium, Total	mg/L	-0.00235	0.367	10.0	53.9	53.5	10.2	8.50 to 11.5	83.0	70.0 to 130	0.745	20.0
BD17513	Selenium, Dissolved	mg/L	-0.0000900	0.00100	0.100	0.100	0.101	0.103	0.0850 to 0.115	100	70.0 to 130	0.995	20.0
BD17511	Selenium, Total	mg/L	0.0000683	0.00100	0.100	0.0990	0.101	0.103	0.0850 to 0.115	99.0	70.0 to 130	2.00	20.0
BD17513	Silicon, Dissolved	mg/L	0.000692	0.0440	1.00	6.61	6.59	1.02	0.850 to 1.15	102	70.0 to 130	0.303	20.0
BD17511	Silicon, Total	mg/L	0.00106	0.0440	1.00	6.52	6.52	1.03	0.850 to 1.15	96.0	70.0 to 130	0.00	20.0
BD17513	Sodium, Dissolved	mg/L	0.0636	0.0880	5.00	105	103	5.10	4.25 to 5.75	0.00	70.0 to 130	1.92	20.0
BD17511	Sodium, Total	mg/L	0.00811	0.0880	5.00	483	484	5.17	4.25 to 5.75	-60.0	70.0 to 130	0.207	20.0
BD17511	Sulfate	mg/L	0.0717	2.0	640	948	925	19.0	18.0 to 22.0	97.5	80.0 to 120	2.46	20.0
BD17513	Thallium, Dissolved	mg/L	-0.0000854	0.000147	0.100	0.103	0.103	0.102	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BD17511	Thallium, Total	mg/L	0.0000056	0.000147	0.100	0.0996	0.0981	0.100	0.0850 to 0.115	99.6	70.0 to 130	1.52	20.0
BD17511	Total Organic Carbon	mg/L	0.297	1.00	10.0	12.5	12.4	9.64		102	80.0 to 120	0.803	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/11/23 14:55
Customer ID:
Delivery Date: 9/14/23 10:03

Description: Gorgas Ash Pond - MW-37HR

Laboratory ID Number: BD17503

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17516	Alkalinity	mg CaCO3/L					185	52.0	45.0 to 55.0			0.00	10.0
BD17511	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.15	0.200	2.00	2.11	0.031	1.88	1.80 to 2.20	106	90.0 to 110	0.00	15.0
BD17511	Solids, Dissolved	mg/L	2.00	25.0			1500	55.0	40.0 to 60.0			0.00	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 10/25/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond Field Blank-5

Location Code: WMWGORAPFB
Collected: 9/11/23 15:50
Customer ID:
Submittal Date: 9/14/23 10:03

Laboratory ID Number: BD17504

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	9/15/23 06:33	9/19/23 16:38		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	9/15/23 06:33	9/19/23 16:38		1.015	Not Detected	mg/L	0.070035	0.406	U
* Iron, Total	9/15/23 06:33	9/19/23 16:38		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Total	9/15/23 06:33	9/19/23 16:38		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	9/15/23 06:33	9/19/23 16:38		1.015	Not Detected	mg/L	0.021315	0.406	U
* Molybdenum, Total	9/15/23 06:33	9/19/23 16:38		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Total (calc.)	9/15/23 06:33	9/19/23 16:38		1	Not Detected	mg/L			
* Silicon, Total	9/15/23 06:33	9/19/23 16:38		1.015	Not Detected	mg/L	0.02030	0.25375	U
* Sodium, Total	9/15/23 06:33	9/19/23 16:38		1.015	Not Detected	mg/L	0.04060	0.406	U
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	9/15/23 06:33	9/18/23 11:14		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Arsenic, Total	9/15/23 06:33	9/18/23 11:14		1.015	Not Detected	mg/L	0.000112	0.000203	U
* Aluminum, Total	9/15/23 06:33	9/18/23 11:14		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Barium, Total	9/15/23 06:33	9/18/23 11:14		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Beryllium, Total	9/15/23 06:33	9/18/23 11:14		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	9/15/23 06:33	9/18/23 11:14		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	9/15/23 06:33	9/18/23 11:14		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	9/15/23 06:33	9/18/23 11:14		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	9/15/23 06:33	9/18/23 11:14		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	9/15/23 06:33	9/18/23 11:14		1.015	Not Detected	mg/L	0.000152	0.001015	U
* Potassium, Total	9/15/23 06:33	9/18/23 11:14		1.015	Not Detected	mg/L	0.169505	0.5075	U
* Selenium, Total	9/15/23 06:33	9/18/23 11:14		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	9/15/23 06:33	9/18/23 11:14		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	9/14/23 17:22	9/14/23 23:12		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	9/18/23 13:05	9/18/23 13:05		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	9/14/23 13:40	9/15/23 13:10		1	Not Detected	mg/L		25	U

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments:

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond Field Blank-5

Location Code: WMWGORAPFB
Collected: 9/11/23 15:50
Customer ID:
Submittal Date: 9/14/23 10:03

Laboratory ID Number: BD17504

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	9/18/23 16:24	9/18/23 16:24		1	Not Detected	mg/L	1.00	2	U
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	9/18/23 11:19	9/18/23 11:19		1	Not Detected	mg/L	0.50	1	U
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	9/18/23 14:55	9/18/23 14:55		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	9/26/23 15:02	9/26/23 15:02		1	Not Detected	mg/L	0.6	2	U

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments:

Reported: 10/25/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAPFB
Sample Date: 9/11/23 15:50
Customer ID:
Delivery Date: 9/14/23 10:03

Description: Gorgas Ash Pond Field Blank-5

Laboratory ID Number: BD17504

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17511	Aluminum, Total	mg/L	0.000208	0.0198	0.100	0.112	0.112	0.104	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BD17511	Antimony, Total	mg/L	0.000567	0.00100	0.100	0.104	0.105	0.0960	0.0850 to 0.115	104	70.0 to 130	0.957	20.0
BD17511	Arsenic, Total	mg/L	0.000105	0.000200	0.100	0.103	0.102	0.100	0.0850 to 0.115	101	70.0 to 130	0.976	20.0
BD17511	Barium, Total	mg/L	0.0000393	0.00100	0.100	0.276	0.278	0.0908	0.0850 to 0.115	84.0	70.0 to 130	0.722	20.0
BD17511	Beryllium, Total	mg/L	0.0000483	0.000880	0.100	0.0987	0.100	0.0970	0.0850 to 0.115	98.7	70.0 to 130	1.31	20.0
BD17511	Boron, Total	mg/L	0.000005	0.0650	1.00	1.09	1.10	1.02	0.850 to 1.15	104	70.0 to 130	0.913	20.0
BD17511	Cadmium, Total	mg/L	-0.0000075	0.000147	0.100	0.100	0.0983	0.101	0.0850 to 0.115	100	70.0 to 130	1.71	20.0
BD17511	Calcium, Total	mg/L	-0.0189	0.152	5.00	29.6	29.3	5.06	4.25 to 5.75	98.0	70.0 to 130	1.02	20.0
BD17511	Chloride	mg/L	0.0415	1.00	250	582	579	10.4	9.00 to 11.0	88.8	80.0 to 120	0.517	20.0
BD17511	Chromium, Total	mg/L	-0.0000841	0.000440	0.100	0.102	0.0996	0.0994	0.0850 to 0.115	102	70.0 to 130	2.38	20.0
BD17511	Cobalt, Total	mg/L	0.0000025	0.000147	0.100	0.104	0.103	0.103	0.0850 to 0.115	104	70.0 to 130	0.966	20.0
BD17511	Fluoride	mg/L	0.00763	0.125	2.50	2.81	2.84	2.67	2.25 to 2.75	104	80.0 to 120	1.06	20.0
BD17511	Iron, Total	mg/L	-0.000348	0.0176	0.2	0.207	0.210	0.204	0.170 to 0.230	99.1	70.0 to 130	1.44	20.0
BD17511	Lead, Total	mg/L	0.0000068	0.000147	0.100	0.0985	0.0980	0.0988	0.0850 to 0.115	98.5	70.0 to 130	0.509	20.0
BD17511	Lithium, Total	mg/L	-0.000449	0.0154	0.200	0.288	0.291	0.209	0.170 to 0.230	107	70.0 to 130	1.04	20.0
BD17511	Magnesium, Total	mg/L	-0.0162	0.0462	5.00	14.1	14.1	5.21	4.25 to 5.75	102	70.0 to 130	0.00	20.0
BD17511	Manganese, Total	mg/L	0.0000048	0.00033	0.100	0.148	0.148	0.103	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BD17511	Mercury, Total by CVAA	mg/L	5.000E-05	0.000500	0.004	0.00406	0.00404	0.00406	0.00340 to 0.00460	102	70.0 to 130	0.494	20.0
BD17511	Molybdenum, Total	mg/L	0.000	0.0100	0.2	0.269	0.270	0.207	0.170 to 0.230	102	70.0 to 130	0.371	20.0
BD17511	Potassium, Total	mg/L	-0.00235	0.367	10.0	53.9	53.5	10.2	8.50 to 11.5	83.0	70.0 to 130	0.745	20.0
BD17511	Selenium, Total	mg/L	0.0000683	0.00100	0.100	0.0990	0.101	0.103	0.0850 to 0.115	99.0	70.0 to 130	2.00	20.0
BD17511	Silicon, Total	mg/L	0.00106	0.0440	1.00	6.52	6.52	1.03	0.850 to 1.15	96.0	70.0 to 130	0.00	20.0
BD17511	Sodium, Total	mg/L	0.00811	0.0880	5.00	483	484	5.17	4.25 to 5.75	-60.0	70.0 to 130	0.207	20.0
BD17511	Sulfate	mg/L	0.0717	2.0	640	948	925	19.0	18.0 to 22.0	97.5	80.0 to 120	2.46	20.0

Comments:

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAPFB
Sample Date: 9/11/23 15:50
Customer ID:
Delivery Date: 9/14/23 10:03

Description: Gorgas Ash Pond Field Blank-5

Laboratory ID Number: BD17504

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17511	Thallium, Total	mg/L	0.0000056	0.000147	0.100	0.0996	0.0981	0.100	0.0850 to 0.115	99.6	70.0 to 130	1.52	20.0
BD17511	Total Organic Carbon	mg/L	0.297	1.00	10.0	12.5	12.4	9.64		102	80.0 to 120	0.803	20.0

Comments:

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAPFB
Sample Date: 9/11/23 15:50
Customer ID:
Delivery Date: 9/14/23 10:03

Description: Gorgas Ash Pond Field Blank-5

Laboratory ID Number: BD17504

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17511	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.15	0.200	2.00	2.11	0.031	1.88	1.80 to 2.20	106	90.0 to 110	0.00	15.0
BD17511	Solids, Dissolved	mg/L	2.00	25.0			1500	55.0	40.0 to 60.0			0.00	10.0

Comments:

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-16S

Location Code: WMWGORAP
Collected: 9/12/23 09:46
Customer ID:
Submittal Date: 9/14/23 10:03

Laboratory ID Number: BD17505

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	9/15/23 06:33	9/19/23 16:41		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	9/15/23 06:33	9/20/23 13:03		10.15	56.7	mg/L	0.70035	4.06	
* Iron, Total	9/15/23 06:33	9/19/23 16:41		1.015	0.0993	mg/L	0.008120	0.0406	
* Lithium, Total	9/15/23 06:33	9/19/23 16:41		1.015	0.102	mg/L	0.007105	0.01999956	
* Magnesium, Total	9/15/23 06:33	9/19/23 16:41		1.015	Not Detected	mg/L	0.021315	0.406	U
* Molybdenum, Total	9/15/23 06:33	9/19/23 16:41		1.015	0.0432	mg/L	0.005075	0.01015	
* Silica, Total (calc.)	9/15/23 06:33	9/19/23 16:41		1	17.9	mg/L			
* Silicon, Total	9/15/23 06:33	9/19/23 16:41		1.015	8.37	mg/L	0.02030	0.25375	
* Sodium, Total	9/15/23 06:33	9/20/23 13:03		10.15	209	mg/L	0.4060	4.06	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	9/14/23 14:15	9/19/23 14:13		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Dissolved	9/14/23 14:15	9/20/23 11:09		10.15	58.8	mg/L	0.70035	4.06	
* Iron, Dissolved	9/14/23 14:15	9/19/23 14:13		1.015	0.0847	mg/L	0.008120	0.0406	
* Lithium, Dissolved	9/14/23 14:15	9/19/23 14:13		1.015	0.0995	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	9/14/23 14:15	9/19/23 14:13		1.015	Not Detected	mg/L	0.021315	0.406	U
* Molybdenum, Dissolved	9/14/23 14:15	9/19/23 14:13		1.015	0.0437	mg/L	0.005075	0.01015	
* Silica, Dissolved (calc.)	9/14/23 14:15	9/19/23 14:13		1	18.0	mg/L			
* Silicon, Dissolved	9/14/23 14:15	9/19/23 14:13		1.015	8.42	mg/L	0.02030	0.25375	
* Sodium, Dissolved	9/14/23 14:15	9/20/23 11:09		10.15	221	mg/L	0.4060	4.06	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	9/15/23 06:33	9/18/23 11:18		1.015	0.000728	mg/L	0.000710	0.001015	J
* Aluminum, Total	9/15/23 06:33	9/18/23 11:18		1.015	3.51	mg/L	0.009135	0.05075	
* Arsenic, Total	9/15/23 06:33	9/18/23 11:18		1.015	0.00259	mg/L	0.000112	0.000203	
* Barium, Total	9/15/23 06:33	9/18/23 11:18		1.015	0.252	mg/L	0.000508	0.001015	
* Beryllium, Total	9/15/23 06:33	9/18/23 11:18		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	9/15/23 06:33	9/18/23 11:18		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	9/15/23 06:33	9/18/23 11:18		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	9/15/23 06:33	9/18/23 11:18		1.015	0.000162	mg/L	0.000068	0.000203	J
* Lead, Total	9/15/23 06:33	9/18/23 11:18		1.015	0.0000769	mg/L	0.000068	0.000203	J
* Manganese, Total	9/15/23 06:33	9/18/23 11:18		1.015	0.000176	mg/L	0.000152	0.001015	J

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-16S

Location Code: WMWGORAP
Collected: 9/12/23 09:46
Customer ID:
Submittal Date: 9/14/23 10:03

Laboratory ID Number: BD17505

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	9/15/23 06:33	9/18/23 11:18		1.015	3.50	mg/L	0.169505	0.5075	
* Selenium, Total	9/15/23 06:33	9/18/23 11:18		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	9/15/23 06:33	9/18/23 11:18		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	9/14/23 14:15	9/14/23 16:07		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	9/14/23 14:15	9/14/23 16:07		1.015	3.81	mg/L	0.009135	0.05075	
* Arsenic, Dissolved	9/14/23 14:15	9/14/23 16:07		1.015	0.00242	mg/L	0.000112	0.000203	
* Barium, Dissolved	9/14/23 14:15	9/14/23 16:07		1.015	0.308	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	9/14/23 14:15	9/14/23 16:07		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	9/14/23 14:15	9/14/23 16:07		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	9/14/23 14:15	9/14/23 16:07		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	9/14/23 14:15	9/14/23 16:07		1.015	0.0000889	mg/L	0.000068	0.000203	J
* Lead, Dissolved	9/14/23 14:15	9/14/23 16:07		1.015	0.0000727	mg/L	0.000068	0.000203	J
* Manganese, Dissolved	9/14/23 14:15	9/14/23 16:07		1.015	Not Detected	mg/L	0.000152	0.001015	U
* Potassium, Dissolved	9/14/23 14:15	9/14/23 16:07		1.015	3.73	mg/L	0.169505	0.5075	
* Selenium, Dissolved	9/14/23 14:15	9/14/23 16:07		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	9/14/23 14:15	9/14/23 16:07		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	9/14/23 17:22	9/14/23 23:16		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	9/18/23 13:07	9/18/23 13:07		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: DHC***								
Alkalinity pH Endpoint	9/22/23 09:18	9/22/23 12:40		1	4.43	SU		2	
* Alkalinity	9/22/23 09:18	9/22/23 12:40		1	524	mg CaCO3/L		0.1	AI
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	9/14/23 13:40	9/15/23 13:10		1	555	mg/L		227.3	
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	9/18/23 16:37	9/18/23 16:37		1	2.15	mg/L	1.00	2	
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	9/18/23 11:20	9/18/23 11:20		1	4.22	mg/L	0.50	1	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-16S

Location Code: WMWGORAP
Collected: 9/12/23 09:46
Customer ID:
Submittal Date: 9/14/23 10:03

Laboratory ID Number: BD17505

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	9/18/23 14:56	9/18/23 14:56		1	0.134	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	9/26/23 15:03	9/26/23 15:03		1	7.94	mg/L	0.6	2	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	9/12/23 09:43	9/12/23 09:43			3869.21	uS/cm			FA
pH	9/12/23 09:43	9/12/23 09:43			12.20	SU			FA
Temperature	9/12/23 09:43	9/12/23 09:43			18.79	C			FA
Turbidity	9/12/23 09:43	9/12/23 09:43			1.08	NTU			FA
Sulfide	9/12/23 09:43	9/12/23 09:43			0	mg/L			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 10/25/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/12/23 09:46
Customer ID:
Delivery Date: 9/14/23 10:03

Description: Gorgas Ash Pond - MW-16S

Laboratory ID Number: BD17505

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17513	Aluminum, Dissolved	mg/L	-0.000290	0.0198	0.100	0.108	0.106	0.105	0.0850 to 0.115	108	70.0 to 130	1.87	20.0
BD17511	Aluminum, Total	mg/L	0.000208	0.0198	0.100	0.112	0.112	0.104	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BD17513	Antimony, Dissolved	mg/L	0.000229	0.00100	0.100	0.0963	0.0944	0.0919	0.0850 to 0.115	96.3	70.0 to 130	1.99	20.0
BD17511	Antimony, Total	mg/L	0.000567	0.00100	0.100	0.104	0.105	0.0960	0.0850 to 0.115	104	70.0 to 130	0.957	20.0
BD17513	Arsenic, Dissolved	mg/L	-0.0000089	0.000200	0.100	0.332	0.336	0.0987	0.0850 to 0.115	91.0	70.0 to 130	1.20	20.0
BD17511	Arsenic, Total	mg/L	0.000105	0.000200	0.100	0.103	0.102	0.100	0.0850 to 0.115	101	70.0 to 130	0.976	20.0
BD17513	Barium, Dissolved	mg/L	-0.0000262	0.00100	0.100	0.160	0.154	0.0998	0.0850 to 0.115	103	70.0 to 130	3.82	20.0
BD17511	Barium, Total	mg/L	0.0000393	0.00100	0.100	0.276	0.278	0.0908	0.0850 to 0.115	84.0	70.0 to 130	0.722	20.0
BD17513	Beryllium, Dissolved	mg/L	0.0000283	0.000880	0.100	0.101	0.103	0.101	0.0850 to 0.115	101	70.0 to 130	1.96	20.0
BD17511	Beryllium, Total	mg/L	0.0000483	0.000880	0.100	0.0987	0.100	0.0970	0.0850 to 0.115	98.7	70.0 to 130	1.31	20.0
BD17513	Boron, Dissolved	mg/L	-0.00109	0.0650	1.00	2.72	2.72	1.00	0.850 to 1.15	102	70.0 to 130	0.00	20.0
BD17511	Boron, Total	mg/L	0.000005	0.0650	1.00	1.09	1.10	1.02	0.850 to 1.15	104	70.0 to 130	0.913	20.0
BD17513	Cadmium, Dissolved	mg/L	0.0000030	0.000147	0.100	0.0979	0.0988	0.0978	0.0850 to 0.115	97.9	70.0 to 130	0.915	20.0
BD17511	Cadmium, Total	mg/L	-0.0000075	0.000147	0.100	0.100	0.0983	0.101	0.0850 to 0.115	100	70.0 to 130	1.71	20.0
BD17513	Calcium, Dissolved	mg/L	-0.0266	0.152	5.00	16.1	16.1	5.06	4.25 to 5.75	100	70.0 to 130	0.00	20.0
BD17511	Calcium, Total	mg/L	-0.0189	0.152	5.00	29.6	29.3	5.06	4.25 to 5.75	98.0	70.0 to 130	1.02	20.0
BD17511	Chloride	mg/L	0.0415	1.00	250	582	579	10.4	9.00 to 11.0	88.8	80.0 to 120	0.517	20.0
BD17513	Chromium, Dissolved	mg/L	-0.000168	0.000440	0.100	0.100	0.0971	0.101	0.0850 to 0.115	100	70.0 to 130	2.94	20.0
BD17511	Chromium, Total	mg/L	-0.0000841	0.000440	0.100	0.102	0.0996	0.0994	0.0850 to 0.115	102	70.0 to 130	2.38	20.0
BD17513	Cobalt, Dissolved	mg/L	-0.0000695	0.000147	0.100	0.102	0.100	0.102	0.0850 to 0.115	102	70.0 to 130	1.98	20.0
BD17511	Cobalt, Total	mg/L	0.0000025	0.000147	0.100	0.104	0.103	0.103	0.0850 to 0.115	104	70.0 to 130	0.966	20.0
BD17511	Fluoride	mg/L	0.00763	0.125	2.50	2.81	2.84	2.67	2.25 to 2.75	104	80.0 to 120	1.06	20.0
BD17513	Iron, Dissolved	mg/L	0.00154	0.0176	0.2	0.414	0.417	0.202	0.170 to 0.230	100	70.0 to 130	0.722	20.0
BD17511	Iron, Total	mg/L	-0.000348	0.0176	0.2	0.207	0.210	0.204	0.170 to 0.230	99.1	70.0 to 130	1.44	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/12/23 09:46
Customer ID:
Delivery Date: 9/14/23 10:03

Description: Gorgas Ash Pond - MW-16S

Laboratory ID Number: BD17505

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17513	Lead, Dissolved	mg/L	0.0000056	0.000147	0.100	0.105	0.105	0.105	0.0850 to 0.115	105	70.0 to 130	0.00	20.0
BD17511	Lead, Total	mg/L	0.0000068	0.000147	0.100	0.0985	0.0980	0.0988	0.0850 to 0.115	98.5	70.0 to 130	0.509	20.0
BD17513	Lithium, Dissolved	mg/L	-0.000209	0.0154	0.200	0.413	0.414	0.205	0.170 to 0.230	102	70.0 to 130	0.242	20.0
BD17511	Lithium, Total	mg/L	-0.000449	0.0154	0.200	0.288	0.291	0.209	0.170 to 0.230	107	70.0 to 130	1.04	20.0
BD17513	Magnesium, Dissolved	mg/L	-0.00780	0.0462	5.00	8.97	9.03	5.14	4.25 to 5.75	101	70.0 to 130	0.667	20.0
BD17511	Magnesium, Total	mg/L	-0.0162	0.0462	5.00	14.1	14.1	5.21	4.25 to 5.75	102	70.0 to 130	0.00	20.0
BD17513	Manganese, Dissolved	mg/L	0.0000089	0.00033	0.100	0.139	0.137	0.103	0.0850 to 0.115	103	70.0 to 130	1.45	20.0
BD17511	Manganese, Total	mg/L	0.0000048	0.00033	0.100	0.148	0.148	0.103	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BD17511	Mercury, Total by CVAA	mg/L	5.000E-05	0.000500	0.004	0.00406	0.00404	0.00406	0.00340 to 0.00460	102	70.0 to 130	0.494	20.0
BD17513	Molybdenum, Dissolved	mg/L	0.000202	0.0100	0.2	0.429	0.432	0.204	0.170 to 0.230	102	70.0 to 130	0.697	20.0
BD17511	Molybdenum, Total	mg/L	0.000	0.0100	0.2	0.269	0.270	0.207	0.170 to 0.230	102	70.0 to 130	0.371	20.0
BD17513	Potassium, Dissolved	mg/L	-0.0106	0.367	10.0	11.1	11.0	10.1	8.50 to 11.5	98.4	70.0 to 130	0.905	20.0
BD17511	Potassium, Total	mg/L	-0.00235	0.367	10.0	53.9	53.5	10.2	8.50 to 11.5	83.0	70.0 to 130	0.745	20.0
BD17513	Selenium, Dissolved	mg/L	-0.0000900	0.00100	0.100	0.100	0.101	0.103	0.0850 to 0.115	100	70.0 to 130	0.995	20.0
BD17511	Selenium, Total	mg/L	0.0000683	0.00100	0.100	0.0990	0.101	0.103	0.0850 to 0.115	99.0	70.0 to 130	2.00	20.0
BD17513	Silicon, Dissolved	mg/L	0.000692	0.0440	1.00	6.61	6.59	1.02	0.850 to 1.15	102	70.0 to 130	0.303	20.0
BD17511	Silicon, Total	mg/L	0.00106	0.0440	1.00	6.52	6.52	1.03	0.850 to 1.15	96.0	70.0 to 130	0.00	20.0
BD17513	Sodium, Dissolved	mg/L	0.0636	0.0880	5.00	105	103	5.10	4.25 to 5.75	0.00	70.0 to 130	1.92	20.0
BD17511	Sodium, Total	mg/L	0.00811	0.0880	5.00	483	484	5.17	4.25 to 5.75	-60.0	70.0 to 130	0.207	20.0
BD17511	Sulfate	mg/L	0.0717	2.0	640	948	925	19.0	18.0 to 22.0	97.5	80.0 to 120	2.46	20.0
BD17513	Thallium, Dissolved	mg/L	-0.0000854	0.000147	0.100	0.103	0.103	0.102	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BD17511	Thallium, Total	mg/L	0.0000056	0.000147	0.100	0.0996	0.0981	0.100	0.0850 to 0.115	99.6	70.0 to 130	1.52	20.0
BD17511	Total Organic Carbon	mg/L	0.297	1.00	10.0	12.5	12.4	9.64		102	80.0 to 120	0.803	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/12/23 09:46
Customer ID:
Delivery Date: 9/14/23 10:03

Description: Gorgas Ash Pond - MW-16S

Laboratory ID Number: BD17505

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17518	Alkalinity	mg CaCO3/L					242	51.6	45.0 to 55.0			0.412	10.0
BD17511	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.15	0.200	2.00	2.11	0.031	1.88	1.80 to 2.20	106	90.0 to 110	0.00	15.0
BD17511	Solids, Dissolved	mg/L	2.00	25.0			1500	55.0	40.0 to 60.0			0.00	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-16D

Location Code: WMWGORAP
Collected: 9/12/23 10:57
Customer ID:
Submittal Date: 9/14/23 10:03

Laboratory ID Number: BD17506

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	9/15/23 06:33	9/19/23 16:44		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	9/15/23 06:33	9/19/23 16:44		1.015	33.1	mg/L	0.070035	0.406	
* Iron, Total	9/15/23 06:33	9/19/23 16:44		1.015	0.370	mg/L	0.008120	0.0406	
* Lithium, Total	9/15/23 06:33	9/19/23 16:44		1.015	0.0348	mg/L	0.007105	0.01999956	
* Magnesium, Total	9/15/23 06:33	9/19/23 16:44		1.015	12.6	mg/L	0.021315	0.406	
* Molybdenum, Total	9/15/23 06:33	9/19/23 16:44		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Total (calc.)	9/15/23 06:33	9/19/23 16:44		1	23.5	mg/L			
* Silicon, Total	9/15/23 06:33	9/19/23 16:44		1.015	11.0	mg/L	0.02030	0.25375	
* Sodium, Total	9/15/23 06:33	9/19/23 16:44		1.015	29.9	mg/L	0.04060	0.406	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	9/14/23 14:15	9/19/23 14:16		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Dissolved	9/14/23 14:15	9/19/23 14:16		1.015	33.6	mg/L	0.070035	0.406	
* Iron, Dissolved	9/14/23 14:15	9/19/23 14:16		1.015	0.181	mg/L	0.008120	0.0406	
* Lithium, Dissolved	9/14/23 14:15	9/19/23 14:16		1.015	0.0332	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	9/14/23 14:15	9/19/23 14:16		1.015	12.5	mg/L	0.021315	0.406	
* Molybdenum, Dissolved	9/14/23 14:15	9/19/23 14:16		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Dissolved (calc.)	9/14/23 14:15	9/19/23 14:16		1	22.9	mg/L			
* Silicon, Dissolved	9/14/23 14:15	9/19/23 14:16		1.015	10.7	mg/L	0.02030	0.25375	
* Sodium, Dissolved	9/14/23 14:15	9/19/23 14:16		1.015	29.6	mg/L	0.04060	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	9/15/23 06:33	9/18/23 11:21		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Total	9/15/23 06:33	9/18/23 11:21		1.015	0.0857	mg/L	0.009135	0.05075	
* Arsenic, Total	9/15/23 06:33	9/18/23 11:21		1.015	0.000205	mg/L	0.000112	0.000203	
* Barium, Total	9/15/23 06:33	9/18/23 11:21		1.015	0.324	mg/L	0.000508	0.001015	
* Beryllium, Total	9/15/23 06:33	9/18/23 11:21		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	9/15/23 06:33	9/18/23 11:21		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	9/15/23 06:33	9/18/23 11:21		1.015	0.000226	mg/L	0.000203	0.001015	J
* Cobalt, Total	9/15/23 06:33	9/18/23 11:21		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	9/15/23 06:33	9/18/23 11:21		1.015	0.0000899	mg/L	0.000068	0.000203	J
* Manganese, Total	9/15/23 06:33	9/18/23 11:21		1.015	0.0118	mg/L	0.000152	0.001015	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-16D

Location Code: WMWGORAP
Collected: 9/12/23 10:57
Customer ID:
Submittal Date: 9/14/23 10:03

Laboratory ID Number: BD17506

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	9/15/23 06:33	9/18/23 11:21		1.015	1.48	mg/L	0.169505	0.5075	
* Selenium, Total	9/15/23 06:33	9/18/23 11:21		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	9/15/23 06:33	9/18/23 11:21		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	9/14/23 14:15	9/14/23 16:11		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	9/14/23 14:15	9/14/23 16:11		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Dissolved	9/14/23 14:15	9/14/23 16:11		1.015	Not Detected	mg/L	0.000112	0.000203	U
* Barium, Dissolved	9/14/23 14:15	9/14/23 16:11		1.015	0.345	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	9/14/23 14:15	9/14/23 16:11		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	9/14/23 14:15	9/14/23 16:11		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	9/14/23 14:15	9/14/23 16:11		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	9/14/23 14:15	9/14/23 16:11		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Dissolved	9/14/23 14:15	9/14/23 16:11		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	9/14/23 14:15	9/14/23 16:11		1.015	0.0106	mg/L	0.000152	0.001015	
* Potassium, Dissolved	9/14/23 14:15	9/14/23 16:11		1.015	1.47	mg/L	0.169505	0.5075	
* Selenium, Dissolved	9/14/23 14:15	9/14/23 16:11		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	9/14/23 14:15	9/14/23 16:11		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	9/14/23 17:22	9/14/23 23:20		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	9/18/23 13:09	9/18/23 13:09		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: DHC***								
Alkalinity pH Endpoint	9/20/23 12:02	9/20/23 13:53		1	4.45	SU		2	
* Alkalinity	9/20/23 12:02	9/20/23 13:53		1	185	mg CaCO3/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	9/14/23 13:40	9/15/23 13:10		1	219	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: DHC***								
* Bicarbonate Alkalinity, (calc.)	9/20/23 12:02	9/20/23 13:53		1	182	mg CaCO3/L		1	
* Carbonate Alkalinity, (calc.)	9/20/23 12:02	9/20/23 13:53		1	2.65	mg CaCO3/L		0.5	
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	9/18/23 16:51	9/18/23 16:51		1	Not Detected	mg/L	1.00	2	U

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-16D

Location Code: WMWGORAP
Collected: 9/12/23 10:57
Customer ID:
Submittal Date: 9/14/23 10:03

Laboratory ID Number: BD17506

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	9/18/23 11:22	9/18/23 11:22		1	4.14	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	9/18/23 14:58	9/18/23 14:58		1	0.106	mg/L	0.06	0.125	J
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	9/26/23 15:04	9/26/23 15:04		1	15.3	mg/L	0.6	2	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	9/12/23 10:54	9/12/23 10:54			449.81	uS/cm			FA
pH	9/12/23 10:54	9/12/23 10:54			7.22	SU			FA
Temperature	9/12/23 10:54	9/12/23 10:54			20.05	C			FA
Turbidity	9/12/23 10:54	9/12/23 10:54			3.12	NTU			FA
Sulfide	9/12/23 10:54	9/12/23 10:54			0	mg/L			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 10/25/2023
Version: 3.5
COA_CCR

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/12/23 10:57
Customer ID:
Delivery Date: 9/14/23 10:03

Description: Gorgas Ash Pond - MW-16D

Laboratory ID Number: BD17506

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17513	Aluminum, Dissolved	mg/L	-0.000290	0.0198	0.100	0.108	0.106	0.105	0.0850 to 0.115	108	70.0 to 130	1.87	20.0
BD17511	Aluminum, Total	mg/L	0.000208	0.0198	0.100	0.112	0.112	0.104	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BD17513	Antimony, Dissolved	mg/L	0.000229	0.00100	0.100	0.0963	0.0944	0.0919	0.0850 to 0.115	96.3	70.0 to 130	1.99	20.0
BD17511	Antimony, Total	mg/L	0.000567	0.00100	0.100	0.104	0.105	0.0960	0.0850 to 0.115	104	70.0 to 130	0.957	20.0
BD17513	Arsenic, Dissolved	mg/L	-0.0000089	0.000200	0.100	0.332	0.336	0.0987	0.0850 to 0.115	91.0	70.0 to 130	1.20	20.0
BD17511	Arsenic, Total	mg/L	0.000105	0.000200	0.100	0.103	0.102	0.100	0.0850 to 0.115	101	70.0 to 130	0.976	20.0
BD17513	Barium, Dissolved	mg/L	-0.0000262	0.00100	0.100	0.160	0.154	0.0998	0.0850 to 0.115	103	70.0 to 130	3.82	20.0
BD17511	Barium, Total	mg/L	0.0000393	0.00100	0.100	0.276	0.278	0.0908	0.0850 to 0.115	84.0	70.0 to 130	0.722	20.0
BD17513	Beryllium, Dissolved	mg/L	0.0000283	0.000880	0.100	0.101	0.103	0.101	0.0850 to 0.115	101	70.0 to 130	1.96	20.0
BD17511	Beryllium, Total	mg/L	0.0000483	0.000880	0.100	0.0987	0.100	0.0970	0.0850 to 0.115	98.7	70.0 to 130	1.31	20.0
BD17513	Boron, Dissolved	mg/L	-0.00109	0.0650	1.00	2.72	2.72	1.00	0.850 to 1.15	102	70.0 to 130	0.00	20.0
BD17511	Boron, Total	mg/L	0.000005	0.0650	1.00	1.09	1.10	1.02	0.850 to 1.15	104	70.0 to 130	0.913	20.0
BD17513	Cadmium, Dissolved	mg/L	0.0000030	0.000147	0.100	0.0979	0.0988	0.0978	0.0850 to 0.115	97.9	70.0 to 130	0.915	20.0
BD17511	Cadmium, Total	mg/L	-0.0000075	0.000147	0.100	0.100	0.0983	0.101	0.0850 to 0.115	100	70.0 to 130	1.71	20.0
BD17513	Calcium, Dissolved	mg/L	-0.0266	0.152	5.00	16.1	16.1	5.06	4.25 to 5.75	100	70.0 to 130	0.00	20.0
BD17511	Calcium, Total	mg/L	-0.0189	0.152	5.00	29.6	29.3	5.06	4.25 to 5.75	98.0	70.0 to 130	1.02	20.0
BD17511	Chloride	mg/L	0.0415	1.00	250	582	579	10.4	9.00 to 11.0	88.8	80.0 to 120	0.517	20.0
BD17513	Chromium, Dissolved	mg/L	-0.000168	0.000440	0.100	0.100	0.0971	0.101	0.0850 to 0.115	100	70.0 to 130	2.94	20.0
BD17511	Chromium, Total	mg/L	-0.0000841	0.000440	0.100	0.102	0.0996	0.0994	0.0850 to 0.115	102	70.0 to 130	2.38	20.0
BD17513	Cobalt, Dissolved	mg/L	-0.0000695	0.000147	0.100	0.102	0.100	0.102	0.0850 to 0.115	102	70.0 to 130	1.98	20.0
BD17511	Cobalt, Total	mg/L	0.0000025	0.000147	0.100	0.104	0.103	0.103	0.0850 to 0.115	104	70.0 to 130	0.966	20.0
BD17511	Fluoride	mg/L	0.00763	0.125	2.50	2.81	2.84	2.67	2.25 to 2.75	104	80.0 to 120	1.06	20.0
BD17513	Iron, Dissolved	mg/L	0.00154	0.0176	0.2	0.414	0.417	0.202	0.170 to 0.230	100	70.0 to 130	0.722	20.0
BD17511	Iron, Total	mg/L	-0.000348	0.0176	0.2	0.207	0.210	0.204	0.170 to 0.230	99.1	70.0 to 130	1.44	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/12/23 10:57
Customer ID:
Delivery Date: 9/14/23 10:03

Description: Gorgas Ash Pond - MW-16D

Laboratory ID Number: BD17506

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17513	Lead, Dissolved	mg/L	0.0000056	0.000147	0.100	0.105	0.105	0.105	0.0850 to 0.115	105	70.0 to 130	0.00	20.0
BD17511	Lead, Total	mg/L	0.0000068	0.000147	0.100	0.0985	0.0980	0.0988	0.0850 to 0.115	98.5	70.0 to 130	0.509	20.0
BD17513	Lithium, Dissolved	mg/L	-0.000209	0.0154	0.200	0.413	0.414	0.205	0.170 to 0.230	102	70.0 to 130	0.242	20.0
BD17511	Lithium, Total	mg/L	-0.000449	0.0154	0.200	0.288	0.291	0.209	0.170 to 0.230	107	70.0 to 130	1.04	20.0
BD17513	Magnesium, Dissolved	mg/L	-0.00780	0.0462	5.00	8.97	9.03	5.14	4.25 to 5.75	101	70.0 to 130	0.667	20.0
BD17511	Magnesium, Total	mg/L	-0.0162	0.0462	5.00	14.1	14.1	5.21	4.25 to 5.75	102	70.0 to 130	0.00	20.0
BD17513	Manganese, Dissolved	mg/L	0.0000089	0.00033	0.100	0.139	0.137	0.103	0.0850 to 0.115	103	70.0 to 130	1.45	20.0
BD17511	Manganese, Total	mg/L	0.0000048	0.00033	0.100	0.148	0.148	0.103	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BD17511	Mercury, Total by CVAA	mg/L	5.000E-05	0.000500	0.004	0.00406	0.00404	0.00406	0.00340 to 0.00460	102	70.0 to 130	0.494	20.0
BD17513	Molybdenum, Dissolved	mg/L	0.000202	0.0100	0.2	0.429	0.432	0.204	0.170 to 0.230	102	70.0 to 130	0.697	20.0
BD17511	Molybdenum, Total	mg/L	0.000	0.0100	0.2	0.269	0.270	0.207	0.170 to 0.230	102	70.0 to 130	0.371	20.0
BD17513	Potassium, Dissolved	mg/L	-0.0106	0.367	10.0	11.1	11.0	10.1	8.50 to 11.5	98.4	70.0 to 130	0.905	20.0
BD17511	Potassium, Total	mg/L	-0.00235	0.367	10.0	53.9	53.5	10.2	8.50 to 11.5	83.0	70.0 to 130	0.745	20.0
BD17513	Selenium, Dissolved	mg/L	-0.0000900	0.00100	0.100	0.100	0.101	0.103	0.0850 to 0.115	100	70.0 to 130	0.995	20.0
BD17511	Selenium, Total	mg/L	0.0000683	0.00100	0.100	0.0990	0.101	0.103	0.0850 to 0.115	99.0	70.0 to 130	2.00	20.0
BD17513	Silicon, Dissolved	mg/L	0.000692	0.0440	1.00	6.61	6.59	1.02	0.850 to 1.15	102	70.0 to 130	0.303	20.0
BD17511	Silicon, Total	mg/L	0.00106	0.0440	1.00	6.52	6.52	1.03	0.850 to 1.15	96.0	70.0 to 130	0.00	20.0
BD17513	Sodium, Dissolved	mg/L	0.0636	0.0880	5.00	105	103	5.10	4.25 to 5.75	0.00	70.0 to 130	1.92	20.0
BD17511	Sodium, Total	mg/L	0.00811	0.0880	5.00	483	484	5.17	4.25 to 5.75	-60.0	70.0 to 130	0.207	20.0
BD17511	Sulfate	mg/L	0.0717	2.0	640	948	925	19.0	18.0 to 22.0	97.5	80.0 to 120	2.46	20.0
BD17513	Thallium, Dissolved	mg/L	-0.0000854	0.000147	0.100	0.103	0.103	0.102	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BD17511	Thallium, Total	mg/L	0.0000056	0.000147	0.100	0.0996	0.0981	0.100	0.0850 to 0.115	99.6	70.0 to 130	1.52	20.0
BD17511	Total Organic Carbon	mg/L	0.297	1.00	10.0	12.5	12.4	9.64		102	80.0 to 120	0.803	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/12/23 10:57
Customer ID:
Delivery Date: 9/14/23 10:03

Description: Gorgas Ash Pond - MW-16D

Laboratory ID Number: BD17506

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17516	Alkalinity	mg CaCO3/L					185	52.0	45.0 to 55.0			0.00	10.0
BD17511	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.15	0.200	2.00	2.11	0.031	1.88	1.80 to 2.20	106	90.0 to 110	0.00	15.0
BD17511	Solids, Dissolved	mg/L	2.00	25.0			1500	55.0	40.0 to 60.0			0.00	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - PZ-16

Location Code: WMWGORAP
Collected: 9/12/23 11:56
Customer ID:
Submittal Date: 9/14/23 10:03

Laboratory ID Number: BD17507

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	9/15/23 06:33	9/19/23 16:47		1.015	0.0808	mg/L	0.030000	0.1015	J
* Calcium, Total	9/15/23 06:33	9/19/23 16:47		1.015	10.4	mg/L	0.070035	0.406	
* Iron, Total	9/15/23 06:33	9/19/23 16:47		1.015	0.0910	mg/L	0.008120	0.0406	
* Lithium, Total	9/15/23 06:33	9/19/23 16:47		1.015	0.0526	mg/L	0.007105	0.01999956	
* Magnesium, Total	9/15/23 06:33	9/19/23 16:47		1.015	3.09	mg/L	0.021315	0.406	
* Molybdenum, Total	9/15/23 06:33	9/19/23 16:47		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Total (calc.)	9/15/23 06:33	9/19/23 16:47		1	19.8	mg/L			
* Silicon, Total	9/15/23 06:33	9/19/23 16:47		1.015	9.27	mg/L	0.02030	0.25375	
* Sodium, Total	9/15/23 06:33	9/20/23 13:06		10.15	141	mg/L	0.4060	4.06	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	9/14/23 14:15	9/19/23 14:19		1.015	0.0795	mg/L	0.030000	0.1015	J
* Calcium, Dissolved	9/14/23 14:15	9/19/23 14:19		1.015	8.51	mg/L	0.070035	0.406	
* Iron, Dissolved	9/14/23 14:15	9/19/23 14:19		1.015	0.0242	mg/L	0.008120	0.0406	J
* Lithium, Dissolved	9/14/23 14:15	9/19/23 14:19		1.015	0.0518	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	9/14/23 14:15	9/19/23 14:19		1.015	3.00	mg/L	0.021315	0.406	
* Molybdenum, Dissolved	9/14/23 14:15	9/19/23 14:19		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Dissolved (calc.)	9/14/23 14:15	9/19/23 14:19		1	19.2	mg/L			
* Silicon, Dissolved	9/14/23 14:15	9/19/23 14:19		1.015	8.96	mg/L	0.02030	0.25375	
* Sodium, Dissolved	9/14/23 14:15	9/20/23 11:12		10.15	142	mg/L	0.4060	4.06	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	9/15/23 06:33	9/18/23 11:25		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Total	9/15/23 06:33	9/18/23 11:25		1.015	0.124	mg/L	0.009135	0.05075	
* Arsenic, Total	9/15/23 06:33	9/18/23 11:25		1.015	0.000121	mg/L	0.000112	0.000203	J
* Barium, Total	9/15/23 06:33	9/18/23 11:25		1.015	0.266	mg/L	0.000508	0.001015	
* Beryllium, Total	9/15/23 06:33	9/18/23 11:25		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	9/15/23 06:33	9/18/23 11:25		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	9/15/23 06:33	9/18/23 11:25		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	9/15/23 06:33	9/18/23 11:25		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	9/15/23 06:33	9/18/23 11:25		1.015	0.000234	mg/L	0.000068	0.000203	
* Manganese, Total	9/15/23 06:33	9/18/23 11:25		1.015	0.00666	mg/L	0.000152	0.001015	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Certificate Of Analysis

Description: Gorgas Ash Pond - PZ-16

Location Code: WMWGORAP
Collected: 9/12/23 11:56
Customer ID:
Submittal Date: 9/14/23 10:03

Laboratory ID Number: BD17507

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	9/15/23 06:33	9/18/23 11:25		1.015	0.998	mg/L	0.169505	0.5075	
* Selenium, Total	9/15/23 06:33	9/18/23 11:25		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	9/15/23 06:33	9/18/23 11:25		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	9/14/23 14:15	9/14/23 16:14		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	9/14/23 14:15	9/14/23 16:14		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Dissolved	9/14/23 14:15	9/14/23 16:14		1.015	Not Detected	mg/L	0.000112	0.000203	U
* Barium, Dissolved	9/14/23 14:15	9/14/23 16:14		1.015	0.242	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	9/14/23 14:15	9/14/23 16:14		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	9/14/23 14:15	9/14/23 16:14		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	9/14/23 14:15	9/14/23 16:14		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	9/14/23 14:15	9/14/23 16:14		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Dissolved	9/14/23 14:15	9/14/23 16:14		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	9/14/23 14:15	9/14/23 16:14		1.015	0.00433	mg/L	0.000152	0.001015	
* Potassium, Dissolved	9/14/23 14:15	9/14/23 16:14		1.015	0.856	mg/L	0.169505	0.5075	
* Selenium, Dissolved	9/14/23 14:15	9/14/23 16:14		1.015	0.00413	mg/L	0.000508	0.001015	
* Thallium, Dissolved	9/14/23 14:15	9/14/23 16:14		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	9/14/23 17:22	9/14/23 23:24		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	9/18/23 13:11	9/18/23 13:11		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: DHC***								
Alkalinity pH Endpoint	9/20/23 12:02	9/20/23 13:53		1	4.51	SU		2	
* Alkalinity	9/20/23 12:02	9/20/23 13:53		1	301	mg CaCO3/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	9/14/23 13:40	9/15/23 13:10		1	355	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: DHC***								
* Bicarbonate Alkalinity, (calc.)	9/20/23 12:02	9/20/23 13:53		1	289	mg CaCO3/L		1	
* Carbonate Alkalinity, (calc.)	9/20/23 12:02	9/20/23 13:53		1	11.9	mg CaCO3/L		0.5	
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	9/18/23 17:08	9/18/23 17:08		1	Not Detected	mg/L	1.00	2	U

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - PZ-16

Location Code: WMWGORAP
Collected: 9/12/23 11:56
Customer ID:
Submittal Date: 9/14/23 10:03

Laboratory ID Number: BD17507

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	9/18/23 11:23	9/18/23 11:23		1	6.03	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	9/18/23 14:59	9/18/23 14:59		1	0.200	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	9/26/23 15:05	9/26/23 15:05		1	8.92	mg/L	0.6	2	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	9/12/23 11:53	9/12/23 11:53			695.54	uS/cm			FA
pH	9/12/23 11:53	9/12/23 11:53			7.95	SU			FA
Temperature	9/12/23 11:53	9/12/23 11:53			19.53	C			FA
Turbidity	9/12/23 11:53	9/12/23 11:53			2.98	NTU			FA
Sulfide	9/12/23 11:53	9/12/23 11:53			0	mg/L			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/12/23 11:56
Customer ID:
Delivery Date: 9/14/23 10:03

Description: Gorgas Ash Pond - PZ-16

Laboratory ID Number: BD17507

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17513	Aluminum, Dissolved	mg/L	-0.000290	0.0198	0.100	0.108	0.106	0.105	0.0850 to 0.115	108	70.0 to 130	1.87	20.0
BD17511	Aluminum, Total	mg/L	0.000208	0.0198	0.100	0.112	0.112	0.104	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BD17513	Antimony, Dissolved	mg/L	0.000229	0.00100	0.100	0.0963	0.0944	0.0919	0.0850 to 0.115	96.3	70.0 to 130	1.99	20.0
BD17511	Antimony, Total	mg/L	0.000567	0.00100	0.100	0.104	0.105	0.0960	0.0850 to 0.115	104	70.0 to 130	0.957	20.0
BD17513	Arsenic, Dissolved	mg/L	-0.0000089	0.000200	0.100	0.332	0.336	0.0987	0.0850 to 0.115	91.0	70.0 to 130	1.20	20.0
BD17511	Arsenic, Total	mg/L	0.000105	0.000200	0.100	0.103	0.102	0.100	0.0850 to 0.115	101	70.0 to 130	0.976	20.0
BD17513	Barium, Dissolved	mg/L	-0.0000262	0.00100	0.100	0.160	0.154	0.0998	0.0850 to 0.115	103	70.0 to 130	3.82	20.0
BD17511	Barium, Total	mg/L	0.0000393	0.00100	0.100	0.276	0.278	0.0908	0.0850 to 0.115	84.0	70.0 to 130	0.722	20.0
BD17513	Beryllium, Dissolved	mg/L	0.0000283	0.000880	0.100	0.101	0.103	0.101	0.0850 to 0.115	101	70.0 to 130	1.96	20.0
BD17511	Beryllium, Total	mg/L	0.0000483	0.000880	0.100	0.0987	0.100	0.0970	0.0850 to 0.115	98.7	70.0 to 130	1.31	20.0
BD17513	Boron, Dissolved	mg/L	-0.00109	0.0650	1.00	2.72	2.72	1.00	0.850 to 1.15	102	70.0 to 130	0.00	20.0
BD17511	Boron, Total	mg/L	0.000005	0.0650	1.00	1.09	1.10	1.02	0.850 to 1.15	104	70.0 to 130	0.913	20.0
BD17513	Cadmium, Dissolved	mg/L	0.0000030	0.000147	0.100	0.0979	0.0988	0.0978	0.0850 to 0.115	97.9	70.0 to 130	0.915	20.0
BD17511	Cadmium, Total	mg/L	-0.0000075	0.000147	0.100	0.100	0.0983	0.101	0.0850 to 0.115	100	70.0 to 130	1.71	20.0
BD17513	Calcium, Dissolved	mg/L	-0.0266	0.152	5.00	16.1	16.1	5.06	4.25 to 5.75	100	70.0 to 130	0.00	20.0
BD17511	Calcium, Total	mg/L	-0.0189	0.152	5.00	29.6	29.3	5.06	4.25 to 5.75	98.0	70.0 to 130	1.02	20.0
BD17511	Chloride	mg/L	0.0415	1.00	250	582	579	10.4	9.00 to 11.0	88.8	80.0 to 120	0.517	20.0
BD17513	Chromium, Dissolved	mg/L	-0.000168	0.000440	0.100	0.100	0.0971	0.101	0.0850 to 0.115	100	70.0 to 130	2.94	20.0
BD17511	Chromium, Total	mg/L	-0.0000841	0.000440	0.100	0.102	0.0996	0.0994	0.0850 to 0.115	102	70.0 to 130	2.38	20.0
BD17513	Cobalt, Dissolved	mg/L	-0.0000695	0.000147	0.100	0.102	0.100	0.102	0.0850 to 0.115	102	70.0 to 130	1.98	20.0
BD17511	Cobalt, Total	mg/L	0.0000025	0.000147	0.100	0.104	0.103	0.103	0.0850 to 0.115	104	70.0 to 130	0.966	20.0
BD17511	Fluoride	mg/L	0.00763	0.125	2.50	2.81	2.84	2.67	2.25 to 2.75	104	80.0 to 120	1.06	20.0
BD17513	Iron, Dissolved	mg/L	0.00154	0.0176	0.2	0.414	0.417	0.202	0.170 to 0.230	100	70.0 to 130	0.722	20.0
BD17511	Iron, Total	mg/L	-0.000348	0.0176	0.2	0.207	0.210	0.204	0.170 to 0.230	99.1	70.0 to 130	1.44	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/12/23 11:56
Customer ID:
Delivery Date: 9/14/23 10:03

Description: Gorgas Ash Pond - PZ-16

Laboratory ID Number: BD17507

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17513	Lead, Dissolved	mg/L	0.0000056	0.000147	0.100	0.105	0.105	0.105	0.0850 to 0.115	105	70.0 to 130	0.00	20.0
BD17511	Lead, Total	mg/L	0.0000068	0.000147	0.100	0.0985	0.0980	0.0988	0.0850 to 0.115	98.5	70.0 to 130	0.509	20.0
BD17513	Lithium, Dissolved	mg/L	-0.000209	0.0154	0.200	0.413	0.414	0.205	0.170 to 0.230	102	70.0 to 130	0.242	20.0
BD17511	Lithium, Total	mg/L	-0.000449	0.0154	0.200	0.288	0.291	0.209	0.170 to 0.230	107	70.0 to 130	1.04	20.0
BD17513	Magnesium, Dissolved	mg/L	-0.00780	0.0462	5.00	8.97	9.03	5.14	4.25 to 5.75	101	70.0 to 130	0.667	20.0
BD17511	Magnesium, Total	mg/L	-0.0162	0.0462	5.00	14.1	14.1	5.21	4.25 to 5.75	102	70.0 to 130	0.00	20.0
BD17513	Manganese, Dissolved	mg/L	0.0000089	0.00033	0.100	0.139	0.137	0.103	0.0850 to 0.115	103	70.0 to 130	1.45	20.0
BD17511	Manganese, Total	mg/L	0.0000048	0.00033	0.100	0.148	0.148	0.103	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BD17511	Mercury, Total by CVAA	mg/L	5.000E-05	0.000500	0.004	0.00406	0.00404	0.00406	0.00340 to 0.00460	102	70.0 to 130	0.494	20.0
BD17513	Molybdenum, Dissolved	mg/L	0.000202	0.0100	0.2	0.429	0.432	0.204	0.170 to 0.230	102	70.0 to 130	0.697	20.0
BD17511	Molybdenum, Total	mg/L	0.000	0.0100	0.2	0.269	0.270	0.207	0.170 to 0.230	102	70.0 to 130	0.371	20.0
BD17513	Potassium, Dissolved	mg/L	-0.0106	0.367	10.0	11.1	11.0	10.1	8.50 to 11.5	98.4	70.0 to 130	0.905	20.0
BD17511	Potassium, Total	mg/L	-0.00235	0.367	10.0	53.9	53.5	10.2	8.50 to 11.5	83.0	70.0 to 130	0.745	20.0
BD17513	Selenium, Dissolved	mg/L	-0.0000900	0.00100	0.100	0.100	0.101	0.103	0.0850 to 0.115	100	70.0 to 130	0.995	20.0
BD17511	Selenium, Total	mg/L	0.0000683	0.00100	0.100	0.0990	0.101	0.103	0.0850 to 0.115	99.0	70.0 to 130	2.00	20.0
BD17513	Silicon, Dissolved	mg/L	0.000692	0.0440	1.00	6.61	6.59	1.02	0.850 to 1.15	102	70.0 to 130	0.303	20.0
BD17511	Silicon, Total	mg/L	0.00106	0.0440	1.00	6.52	6.52	1.03	0.850 to 1.15	96.0	70.0 to 130	0.00	20.0
BD17513	Sodium, Dissolved	mg/L	0.0636	0.0880	5.00	105	103	5.10	4.25 to 5.75	0.00	70.0 to 130	1.92	20.0
BD17511	Sodium, Total	mg/L	0.00811	0.0880	5.00	483	484	5.17	4.25 to 5.75	-60.0	70.0 to 130	0.207	20.0
BD17511	Sulfate	mg/L	0.0717	2.0	640	948	925	19.0	18.0 to 22.0	97.5	80.0 to 120	2.46	20.0
BD17513	Thallium, Dissolved	mg/L	-0.0000854	0.000147	0.100	0.103	0.103	0.102	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BD17511	Thallium, Total	mg/L	0.0000056	0.000147	0.100	0.0996	0.0981	0.100	0.0850 to 0.115	99.6	70.0 to 130	1.52	20.0
BD17511	Total Organic Carbon	mg/L	0.297	1.00	10.0	12.5	12.4	9.64		102	80.0 to 120	0.803	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/12/23 11:56
Customer ID:
Delivery Date: 9/14/23 10:03

Description: Gorgas Ash Pond - PZ-16

Laboratory ID Number: BD17507

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17516	Alkalinity	mg CaCO3/L					185	52.0	45.0 to 55.0			0.00	10.0
BD17511	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.15	0.200	2.00	2.11	0.031	1.88	1.80 to 2.20	106	90.0 to 110	0.00	15.0
BD17511	Solids, Dissolved	mg/L	2.00	25.0			1500	55.0	40.0 to 60.0			0.00	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-14R

Location Code: WMWGORAP
Collected: 9/12/23 13:31
Customer ID:
Submittal Date: 9/14/23 10:03

Laboratory ID Number: BD17508

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	9/15/23 06:33	9/19/23 16:51		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	9/15/23 06:33	9/19/23 16:51		1.015	34.5	mg/L	0.070035	0.406	
* Iron, Total	9/15/23 06:33	9/19/23 16:51		1.015	1.65	mg/L	0.008120	0.0406	
* Lithium, Total	9/15/23 06:33	9/19/23 16:51		1.015	0.0264	mg/L	0.007105	0.01999956	
* Magnesium, Total	9/15/23 06:33	9/19/23 16:51		1.015	14.3	mg/L	0.021315	0.406	
* Molybdenum, Total	9/15/23 06:33	9/19/23 16:51		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Total (calc.)	9/15/23 06:33	9/19/23 16:51		1	28.2	mg/L			
* Silicon, Total	9/15/23 06:33	9/19/23 16:51		1.015	13.2	mg/L	0.02030	0.25375	
* Sodium, Total	9/15/23 06:33	9/19/23 16:51		1.015	25.3	mg/L	0.04060	0.406	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	9/14/23 14:15	9/19/23 14:22		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Dissolved	9/14/23 14:15	9/19/23 14:22		1.015	34.5	mg/L	0.070035	0.406	
* Iron, Dissolved	9/14/23 14:15	9/19/23 14:22		1.015	0.674	mg/L	0.008120	0.0406	
* Lithium, Dissolved	9/14/23 14:15	9/19/23 14:22		1.015	0.0261	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	9/14/23 14:15	9/19/23 14:22		1.015	14.2	mg/L	0.021315	0.406	
* Molybdenum, Dissolved	9/14/23 14:15	9/19/23 14:22		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Dissolved (calc.)	9/14/23 14:15	9/19/23 14:22		1	28.0	mg/L			
* Silicon, Dissolved	9/14/23 14:15	9/19/23 14:22		1.015	13.1	mg/L	0.02030	0.25375	
* Sodium, Dissolved	9/14/23 14:15	9/19/23 14:22		1.015	24.8	mg/L	0.04060	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	9/15/23 06:33	9/18/23 11:29		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Total	9/15/23 06:33	9/18/23 11:29		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Total	9/15/23 06:33	9/18/23 11:29		1.015	0.000932	mg/L	0.000112	0.000203	
* Barium, Total	9/15/23 06:33	9/18/23 11:29		1.015	0.201	mg/L	0.000508	0.001015	
* Beryllium, Total	9/15/23 06:33	9/18/23 11:29		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	9/15/23 06:33	9/18/23 11:29		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	9/15/23 06:33	9/18/23 11:29		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	9/15/23 06:33	9/18/23 11:29		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	9/15/23 06:33	9/18/23 11:29		1.015	0.0000837	mg/L	0.000068	0.000203	J
* Manganese, Total	9/15/23 06:33	9/18/23 11:29		1.015	0.0407	mg/L	0.000152	0.001015	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-14R

Location Code: WMWGORAP
Collected: 9/12/23 13:31
Customer ID:
Submittal Date: 9/14/23 10:03

Laboratory ID Number: BD17508

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	9/15/23 06:33	9/18/23 11:29		1.015	1.71	mg/L	0.169505	0.5075	
* Selenium, Total	9/15/23 06:33	9/18/23 11:29		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	9/15/23 06:33	9/18/23 11:29		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8		***Analyst: DLJ***							
* Antimony, Dissolved	9/14/23 14:15	9/14/23 16:18		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	9/14/23 14:15	9/14/23 16:18		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Dissolved	9/14/23 14:15	9/14/23 16:18		1.015	0.000266	mg/L	0.000112	0.000203	
* Barium, Dissolved	9/14/23 14:15	9/14/23 16:18		1.015	0.213	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	9/14/23 14:15	9/14/23 16:18		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	9/14/23 14:15	9/14/23 16:18		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	9/14/23 14:15	9/14/23 16:18		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	9/14/23 14:15	9/14/23 16:18		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Dissolved	9/14/23 14:15	9/14/23 16:18		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	9/14/23 14:15	9/14/23 16:18		1.015	0.0409	mg/L	0.000152	0.001015	
* Potassium, Dissolved	9/14/23 14:15	9/14/23 16:18		1.015	1.71	mg/L	0.169505	0.5075	
* Selenium, Dissolved	9/14/23 14:15	9/14/23 16:18		1.015	0.00135	mg/L	0.000508	0.001015	
* Thallium, Dissolved	9/14/23 14:15	9/14/23 16:18		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1		***Analyst: ABB***							
* Mercury, Total by CVAA	9/14/23 17:22	9/14/23 23:28		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2		***Analyst: SC***							
* Nitrogen, Nitrate/Nitrite	9/18/23 13:12	9/18/23 13:12		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B		***Analyst: DHC***							
Alkalinity pH Endpoint	9/22/23 09:18	9/22/23 12:40		1	4.43	SU		2	
* Alkalinity	9/22/23 09:18	9/22/23 12:40		1	170	mg CaCO3/L		0.1	
Analytical Method: SM 2540C		***Analyst: CNJ***							
* Solids, Dissolved	9/14/23 13:40	9/15/23 13:10		1	226	mg/L		25	
Analytical Method: SM 4500CO2 D		***Analyst: DHC***							
* Bicarbonate Alkalinity, (calc.)	9/22/23 09:18	9/22/23 12:40		1	169	mg CaCO3/L		1	
* Carbonate Alkalinity, (calc.)	9/22/23 09:18	9/22/23 12:40		1	0.936	mg CaCO3/L		0.5	
Analytical Method: SM 5310 B		***Analyst: SC***							
* Total Organic Carbon	9/18/23 17:22	9/18/23 17:22		1	Not Detected	mg/L	1.00	2	U

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-14R

Location Code: WMWGORAP
Collected: 9/12/23 13:31
Customer ID:
Submittal Date: 9/14/23 10:03

Laboratory ID Number: BD17508

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	9/18/23 11:24	9/18/23 11:24		1	13.8	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	9/18/23 15:00	9/18/23 15:00		1	0.128	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	9/26/23 15:07	9/26/23 15:07		1	24.6	mg/L	0.6	2	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	9/12/23 13:28	9/12/23 13:28			418.54	uS/cm			FA
pH	9/12/23 13:28	9/12/23 13:28			6.63	SU			FA
Temperature	9/12/23 13:28	9/12/23 13:28			21.38	C			FA
Turbidity	9/12/23 13:28	9/12/23 13:28			4.81	NTU			FA
Sulfide	9/12/23 13:28	9/12/23 13:28			1.0	mg/L			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 10/25/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/12/23 13:31
Customer ID:
Delivery Date: 9/14/23 10:03

Description: Gorgas Ash Pond - MW-14R

Laboratory ID Number: BD17508

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17513	Aluminum, Dissolved	mg/L	-0.000290	0.0198	0.100	0.108	0.106	0.105	0.0850 to 0.115	108	70.0 to 130	1.87	20.0
BD17511	Aluminum, Total	mg/L	0.000208	0.0198	0.100	0.112	0.112	0.104	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BD17513	Antimony, Dissolved	mg/L	0.000229	0.00100	0.100	0.0963	0.0944	0.0919	0.0850 to 0.115	96.3	70.0 to 130	1.99	20.0
BD17511	Antimony, Total	mg/L	0.000567	0.00100	0.100	0.104	0.105	0.0960	0.0850 to 0.115	104	70.0 to 130	0.957	20.0
BD17513	Arsenic, Dissolved	mg/L	-0.0000089	0.000200	0.100	0.332	0.336	0.0987	0.0850 to 0.115	91.0	70.0 to 130	1.20	20.0
BD17511	Arsenic, Total	mg/L	0.000105	0.000200	0.100	0.103	0.102	0.100	0.0850 to 0.115	101	70.0 to 130	0.976	20.0
BD17513	Barium, Dissolved	mg/L	-0.0000262	0.00100	0.100	0.160	0.154	0.0998	0.0850 to 0.115	103	70.0 to 130	3.82	20.0
BD17511	Barium, Total	mg/L	0.0000393	0.00100	0.100	0.276	0.278	0.0908	0.0850 to 0.115	84.0	70.0 to 130	0.722	20.0
BD17513	Beryllium, Dissolved	mg/L	0.0000283	0.000880	0.100	0.101	0.103	0.101	0.0850 to 0.115	101	70.0 to 130	1.96	20.0
BD17511	Beryllium, Total	mg/L	0.0000483	0.000880	0.100	0.0987	0.100	0.0970	0.0850 to 0.115	98.7	70.0 to 130	1.31	20.0
BD17513	Boron, Dissolved	mg/L	-0.00109	0.0650	1.00	2.72	2.72	1.00	0.850 to 1.15	102	70.0 to 130	0.00	20.0
BD17511	Boron, Total	mg/L	0.000005	0.0650	1.00	1.09	1.10	1.02	0.850 to 1.15	104	70.0 to 130	0.913	20.0
BD17513	Cadmium, Dissolved	mg/L	0.0000030	0.000147	0.100	0.0979	0.0988	0.0978	0.0850 to 0.115	97.9	70.0 to 130	0.915	20.0
BD17511	Cadmium, Total	mg/L	-0.0000075	0.000147	0.100	0.100	0.0983	0.101	0.0850 to 0.115	100	70.0 to 130	1.71	20.0
BD17513	Calcium, Dissolved	mg/L	-0.0266	0.152	5.00	16.1	16.1	5.06	4.25 to 5.75	100	70.0 to 130	0.00	20.0
BD17511	Calcium, Total	mg/L	-0.0189	0.152	5.00	29.6	29.3	5.06	4.25 to 5.75	98.0	70.0 to 130	1.02	20.0
BD17511	Chloride	mg/L	0.0415	1.00	250	582	579	10.4	9.00 to 11.0	88.8	80.0 to 120	0.517	20.0
BD17513	Chromium, Dissolved	mg/L	-0.000168	0.000440	0.100	0.100	0.0971	0.101	0.0850 to 0.115	100	70.0 to 130	2.94	20.0
BD17511	Chromium, Total	mg/L	-0.0000841	0.000440	0.100	0.102	0.0996	0.0994	0.0850 to 0.115	102	70.0 to 130	2.38	20.0
BD17513	Cobalt, Dissolved	mg/L	-0.0000695	0.000147	0.100	0.102	0.100	0.102	0.0850 to 0.115	102	70.0 to 130	1.98	20.0
BD17511	Cobalt, Total	mg/L	0.0000025	0.000147	0.100	0.104	0.103	0.103	0.0850 to 0.115	104	70.0 to 130	0.966	20.0
BD17511	Fluoride	mg/L	0.00763	0.125	2.50	2.81	2.84	2.67	2.25 to 2.75	104	80.0 to 120	1.06	20.0
BD17513	Iron, Dissolved	mg/L	0.00154	0.0176	0.2	0.414	0.417	0.202	0.170 to 0.230	100	70.0 to 130	0.722	20.0
BD17511	Iron, Total	mg/L	-0.000348	0.0176	0.2	0.207	0.210	0.204	0.170 to 0.230	99.1	70.0 to 130	1.44	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/12/23 13:31
Customer ID:
Delivery Date: 9/14/23 10:03

Description: Gorgas Ash Pond - MW-14R

Laboratory ID Number: BD17508

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17513	Lead, Dissolved	mg/L	0.0000056	0.000147	0.100	0.105	0.105	0.105	0.0850 to 0.115	105	70.0 to 130	0.00	20.0
BD17511	Lead, Total	mg/L	0.0000068	0.000147	0.100	0.0985	0.0980	0.0988	0.0850 to 0.115	98.5	70.0 to 130	0.509	20.0
BD17513	Lithium, Dissolved	mg/L	-0.000209	0.0154	0.200	0.413	0.414	0.205	0.170 to 0.230	102	70.0 to 130	0.242	20.0
BD17511	Lithium, Total	mg/L	-0.000449	0.0154	0.200	0.288	0.291	0.209	0.170 to 0.230	107	70.0 to 130	1.04	20.0
BD17513	Magnesium, Dissolved	mg/L	-0.00780	0.0462	5.00	8.97	9.03	5.14	4.25 to 5.75	101	70.0 to 130	0.667	20.0
BD17511	Magnesium, Total	mg/L	-0.0162	0.0462	5.00	14.1	14.1	5.21	4.25 to 5.75	102	70.0 to 130	0.00	20.0
BD17513	Manganese, Dissolved	mg/L	0.0000089	0.00033	0.100	0.139	0.137	0.103	0.0850 to 0.115	103	70.0 to 130	1.45	20.0
BD17511	Manganese, Total	mg/L	0.0000048	0.00033	0.100	0.148	0.148	0.103	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BD17511	Mercury, Total by CVAA	mg/L	5.000E-05	0.000500	0.004	0.00406	0.00404	0.00406	0.00340 to 0.00460	102	70.0 to 130	0.494	20.0
BD17513	Molybdenum, Dissolved	mg/L	0.000202	0.0100	0.2	0.429	0.432	0.204	0.170 to 0.230	102	70.0 to 130	0.697	20.0
BD17511	Molybdenum, Total	mg/L	0.000	0.0100	0.2	0.269	0.270	0.207	0.170 to 0.230	102	70.0 to 130	0.371	20.0
BD17513	Potassium, Dissolved	mg/L	-0.0106	0.367	10.0	11.1	11.0	10.1	8.50 to 11.5	98.4	70.0 to 130	0.905	20.0
BD17511	Potassium, Total	mg/L	-0.00235	0.367	10.0	53.9	53.5	10.2	8.50 to 11.5	83.0	70.0 to 130	0.745	20.0
BD17513	Selenium, Dissolved	mg/L	-0.0000900	0.00100	0.100	0.100	0.101	0.103	0.0850 to 0.115	100	70.0 to 130	0.995	20.0
BD17511	Selenium, Total	mg/L	0.0000683	0.00100	0.100	0.0990	0.101	0.103	0.0850 to 0.115	99.0	70.0 to 130	2.00	20.0
BD17513	Silicon, Dissolved	mg/L	0.000692	0.0440	1.00	6.61	6.59	1.02	0.850 to 1.15	102	70.0 to 130	0.303	20.0
BD17511	Silicon, Total	mg/L	0.00106	0.0440	1.00	6.52	6.52	1.03	0.850 to 1.15	96.0	70.0 to 130	0.00	20.0
BD17513	Sodium, Dissolved	mg/L	0.0636	0.0880	5.00	105	103	5.10	4.25 to 5.75	0.00	70.0 to 130	1.92	20.0
BD17511	Sodium, Total	mg/L	0.00811	0.0880	5.00	483	484	5.17	4.25 to 5.75	-60.0	70.0 to 130	0.207	20.0
BD17511	Sulfate	mg/L	0.0717	2.0	640	948	925	19.0	18.0 to 22.0	97.5	80.0 to 120	2.46	20.0
BD17513	Thallium, Dissolved	mg/L	-0.0000854	0.000147	0.100	0.103	0.103	0.102	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BD17511	Thallium, Total	mg/L	0.0000056	0.000147	0.100	0.0996	0.0981	0.100	0.0850 to 0.115	99.6	70.0 to 130	1.52	20.0
BD17511	Total Organic Carbon	mg/L	0.297	1.00	10.0	12.5	12.4	9.64		102	80.0 to 120	0.803	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/12/23 13:31
Customer ID:
Delivery Date: 9/14/23 10:03

Description: Gorgas Ash Pond - MW-14R

Laboratory ID Number: BD17508

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17518	Alkalinity	mg CaCO3/L					242	51.6	45.0 to 55.0			0.412	10.0
BD17511	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.15	0.200	2.00	2.11	0.031	1.88	1.80 to 2.20	106	90.0 to 110	0.00	15.0
BD17511	Solids, Dissolved	mg/L	2.00	25.0			1500	55.0	40.0 to 60.0			0.00	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 10/25/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-47

Location Code: WMWGORAP
Collected: 9/12/23 14:32
Customer ID:
Submittal Date: 9/14/23 10:03

Laboratory ID Number: BD17509

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	9/15/23 06:33	9/19/23 16:54		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	9/15/23 06:33	9/19/23 16:54		1.015	37.2	mg/L	0.070035	0.406	
* Iron, Total	9/15/23 06:33	9/19/23 16:54		1.015	0.102	mg/L	0.008120	0.0406	
* Lithium, Total	9/15/23 06:33	9/19/23 16:54		1.015	0.0427	mg/L	0.007105	0.01999956	
* Magnesium, Total	9/15/23 06:33	9/19/23 16:54		1.015	12.9	mg/L	0.021315	0.406	
* Molybdenum, Total	9/15/23 06:33	9/19/23 16:54		1.015	0.0112	mg/L	0.005075	0.01015	
* Silica, Total (calc.)	9/15/23 06:33	9/19/23 16:54		1	22.5	mg/L			
* Silicon, Total	9/15/23 06:33	9/19/23 16:54		1.015	10.5	mg/L	0.02030	0.25375	
* Sodium, Total	9/15/23 06:33	9/20/23 13:09		10.15	78.4	mg/L	0.4060	4.06	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	9/14/23 14:15	9/19/23 14:25		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Dissolved	9/14/23 14:15	9/19/23 14:25		1.015	34.5	mg/L	0.070035	0.406	
* Iron, Dissolved	9/14/23 14:15	9/19/23 14:25		1.015	0.114	mg/L	0.008120	0.0406	
* Lithium, Dissolved	9/14/23 14:15	9/19/23 14:25		1.015	0.0416	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	9/14/23 14:15	9/19/23 14:25		1.015	11.8	mg/L	0.021315	0.406	
* Molybdenum, Dissolved	9/14/23 14:15	9/19/23 14:25		1.015	0.00787	mg/L	0.005075	0.01015	J
* Silica, Dissolved (calc.)	9/14/23 14:15	9/19/23 14:25		1	22.9	mg/L			
* Silicon, Dissolved	9/14/23 14:15	9/19/23 14:25		1.015	10.7	mg/L	0.02030	0.25375	
* Sodium, Dissolved	9/14/23 14:15	9/20/23 11:15		10.15	58.0	mg/L	0.4060	4.06	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	9/15/23 06:33	9/18/23 11:33		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Arsenic, Total	9/15/23 06:33	9/18/23 11:33		1.015	0.000627	mg/L	0.000112	0.000203	
* Aluminum, Total	9/15/23 06:33	9/18/23 11:33		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Barium, Total	9/15/23 06:33	9/18/23 11:33		1.015	0.317	mg/L	0.000508	0.001015	
* Beryllium, Total	9/15/23 06:33	9/18/23 11:33		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	9/15/23 06:33	9/18/23 11:33		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	9/15/23 06:33	9/18/23 11:33		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	9/15/23 06:33	9/18/23 11:33		1.015	0.000174	mg/L	0.000068	0.000203	J
* Lead, Total	9/15/23 06:33	9/18/23 11:33		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	9/15/23 06:33	9/18/23 11:33		1.015	0.0418	mg/L	0.000152	0.001015	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-47

Location Code: WMWGORAP
Collected: 9/12/23 14:32
Customer ID:
Submittal Date: 9/14/23 10:03

Laboratory ID Number: BD17509

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	9/15/23 06:33	9/18/23 11:33		1.015	13.0	mg/L	0.169505	0.5075	
* Selenium, Total	9/15/23 06:33	9/18/23 11:33		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	9/15/23 06:33	9/18/23 11:33		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	9/14/23 14:15	9/14/23 16:22		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	9/14/23 14:15	9/14/23 16:22		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Dissolved	9/14/23 14:15	9/14/23 16:22		1.015	0.000455	mg/L	0.000112	0.000203	
* Barium, Dissolved	9/14/23 14:15	9/14/23 16:22		1.015	0.365	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	9/14/23 14:15	9/14/23 16:22		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	9/14/23 14:15	9/14/23 16:22		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	9/14/23 14:15	9/14/23 16:22		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	9/14/23 14:15	9/14/23 16:22		1.015	0.0000808	mg/L	0.000068	0.000203	J
* Lead, Dissolved	9/14/23 14:15	9/14/23 16:22		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	9/14/23 14:15	9/14/23 16:22		1.015	0.0391	mg/L	0.000152	0.001015	
* Potassium, Dissolved	9/14/23 14:15	9/14/23 16:22		1.015	9.42	mg/L	0.169505	0.5075	
* Selenium, Dissolved	9/14/23 14:15	9/14/23 16:22		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	9/14/23 14:15	9/14/23 16:22		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	9/14/23 17:22	9/14/23 23:32		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	9/18/23 13:13	9/18/23 13:13		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: DHC***								
Alkalinity pH Endpoint	9/22/23 09:18	9/22/23 12:40		1	4.49	SU		2	
* Alkalinity	9/22/23 09:18	9/22/23 12:40		1	157	mg CaCO3/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	9/14/23 13:40	9/15/23 13:10		1	383	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: DHC***								
* Bicarbonate Alkalinity, (calc.)	9/22/23 09:18	9/22/23 12:40		1	156	mg CaCO3/L		1	
* Carbonate Alkalinity, (calc.)	9/22/23 09:18	9/22/23 12:40		1	1.22	mg CaCO3/L		0.5	
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	9/18/23 17:37	9/18/23 17:37		1	1.24	mg/L	1.00	2	J

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-47

Location Code: WMWGORAP
Collected: 9/12/23 14:32
Customer ID:
Submittal Date: 9/14/23 10:03

Laboratory ID Number: BD17509

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	9/18/23 11:34	9/18/23 11:34		4	60.0	mg/L	2.00	4	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	9/18/23 15:01	9/18/23 15:01		1	0.103	mg/L	0.06	0.125	J
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	9/26/23 15:16	9/26/23 15:16		3	72.9	mg/L	1.8	6	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	9/12/23 14:28	9/12/23 14:28			774.90	uS/cm			FA
pH	9/12/23 14:28	9/12/23 14:28			7.07	SU			FA
Temperature	9/12/23 14:28	9/12/23 14:28			21.50	C			FA
Turbidity	9/12/23 14:28	9/12/23 14:28			1.33	NTU			FA
Sulfide	9/12/23 14:28	9/12/23 14:28			0	mg/L			FA

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 10/25/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/12/23 14:32
Customer ID:
Delivery Date: 9/14/23 10:03

Description: Gorgas Ash Pond - MW-47

Laboratory ID Number: BD17509

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17513	Aluminum, Dissolved	mg/L	-0.000290	0.0198	0.100	0.108	0.106	0.105	0.0850 to 0.115	108	70.0 to 130	1.87	20.0
BD17511	Aluminum, Total	mg/L	0.000208	0.0198	0.100	0.112	0.112	0.104	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BD17513	Antimony, Dissolved	mg/L	0.000229	0.00100	0.100	0.0963	0.0944	0.0919	0.0850 to 0.115	96.3	70.0 to 130	1.99	20.0
BD17511	Antimony, Total	mg/L	0.000567	0.00100	0.100	0.104	0.105	0.0960	0.0850 to 0.115	104	70.0 to 130	0.957	20.0
BD17513	Arsenic, Dissolved	mg/L	-0.0000089	0.000200	0.100	0.332	0.336	0.0987	0.0850 to 0.115	91.0	70.0 to 130	1.20	20.0
BD17511	Arsenic, Total	mg/L	0.000105	0.000200	0.100	0.103	0.102	0.100	0.0850 to 0.115	101	70.0 to 130	0.976	20.0
BD17513	Barium, Dissolved	mg/L	-0.0000262	0.00100	0.100	0.160	0.154	0.0998	0.0850 to 0.115	103	70.0 to 130	3.82	20.0
BD17511	Barium, Total	mg/L	0.0000393	0.00100	0.100	0.276	0.278	0.0908	0.0850 to 0.115	84.0	70.0 to 130	0.722	20.0
BD17513	Beryllium, Dissolved	mg/L	0.0000283	0.000880	0.100	0.101	0.103	0.101	0.0850 to 0.115	101	70.0 to 130	1.96	20.0
BD17511	Beryllium, Total	mg/L	0.0000483	0.000880	0.100	0.0987	0.100	0.0970	0.0850 to 0.115	98.7	70.0 to 130	1.31	20.0
BD17513	Boron, Dissolved	mg/L	-0.00109	0.0650	1.00	2.72	2.72	1.00	0.850 to 1.15	102	70.0 to 130	0.00	20.0
BD17511	Boron, Total	mg/L	0.000005	0.0650	1.00	1.09	1.10	1.02	0.850 to 1.15	104	70.0 to 130	0.913	20.0
BD17513	Cadmium, Dissolved	mg/L	0.0000030	0.000147	0.100	0.0979	0.0988	0.0978	0.0850 to 0.115	97.9	70.0 to 130	0.915	20.0
BD17511	Cadmium, Total	mg/L	-0.0000075	0.000147	0.100	0.100	0.0983	0.101	0.0850 to 0.115	100	70.0 to 130	1.71	20.0
BD17513	Calcium, Dissolved	mg/L	-0.0266	0.152	5.00	16.1	16.1	5.06	4.25 to 5.75	100	70.0 to 130	0.00	20.0
BD17511	Calcium, Total	mg/L	-0.0189	0.152	5.00	29.6	29.3	5.06	4.25 to 5.75	98.0	70.0 to 130	1.02	20.0
BD17511	Chloride	mg/L	0.0415	1.00	250	582	579	10.4	9.00 to 11.0	88.8	80.0 to 120	0.517	20.0
BD17513	Chromium, Dissolved	mg/L	-0.000168	0.000440	0.100	0.100	0.0971	0.101	0.0850 to 0.115	100	70.0 to 130	2.94	20.0
BD17511	Chromium, Total	mg/L	-0.0000841	0.000440	0.100	0.102	0.0996	0.0994	0.0850 to 0.115	102	70.0 to 130	2.38	20.0
BD17513	Cobalt, Dissolved	mg/L	-0.0000695	0.000147	0.100	0.102	0.100	0.102	0.0850 to 0.115	102	70.0 to 130	1.98	20.0
BD17511	Cobalt, Total	mg/L	0.0000025	0.000147	0.100	0.104	0.103	0.103	0.0850 to 0.115	104	70.0 to 130	0.966	20.0
BD17511	Fluoride	mg/L	0.00763	0.125	2.50	2.81	2.84	2.67	2.25 to 2.75	104	80.0 to 120	1.06	20.0
BD17513	Iron, Dissolved	mg/L	0.00154	0.0176	0.2	0.414	0.417	0.202	0.170 to 0.230	100	70.0 to 130	0.722	20.0
BD17511	Iron, Total	mg/L	-0.000348	0.0176	0.2	0.207	0.210	0.204	0.170 to 0.230	99.1	70.0 to 130	1.44	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/12/23 14:32
Customer ID:
Delivery Date: 9/14/23 10:03

Description: Gorgas Ash Pond - MW-47

Laboratory ID Number: BD17509

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17513	Lead, Dissolved	mg/L	0.0000056	0.000147	0.100	0.105	0.105	0.105	0.0850 to 0.115	105	70.0 to 130	0.00	20.0
BD17511	Lead, Total	mg/L	0.0000068	0.000147	0.100	0.0985	0.0980	0.0988	0.0850 to 0.115	98.5	70.0 to 130	0.509	20.0
BD17513	Lithium, Dissolved	mg/L	-0.000209	0.0154	0.200	0.413	0.414	0.205	0.170 to 0.230	102	70.0 to 130	0.242	20.0
BD17511	Lithium, Total	mg/L	-0.000449	0.0154	0.200	0.288	0.291	0.209	0.170 to 0.230	107	70.0 to 130	1.04	20.0
BD17513	Magnesium, Dissolved	mg/L	-0.00780	0.0462	5.00	8.97	9.03	5.14	4.25 to 5.75	101	70.0 to 130	0.667	20.0
BD17511	Magnesium, Total	mg/L	-0.0162	0.0462	5.00	14.1	14.1	5.21	4.25 to 5.75	102	70.0 to 130	0.00	20.0
BD17513	Manganese, Dissolved	mg/L	0.0000089	0.00033	0.100	0.139	0.137	0.103	0.0850 to 0.115	103	70.0 to 130	1.45	20.0
BD17511	Manganese, Total	mg/L	0.0000048	0.00033	0.100	0.148	0.148	0.103	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BD17511	Mercury, Total by CVAA	mg/L	5.000E-05	0.000500	0.004	0.00406	0.00404	0.00406	0.00340 to 0.00460	102	70.0 to 130	0.494	20.0
BD17513	Molybdenum, Dissolved	mg/L	0.000202	0.0100	0.2	0.429	0.432	0.204	0.170 to 0.230	102	70.0 to 130	0.697	20.0
BD17511	Molybdenum, Total	mg/L	0.000	0.0100	0.2	0.269	0.270	0.207	0.170 to 0.230	102	70.0 to 130	0.371	20.0
BD17513	Potassium, Dissolved	mg/L	-0.0106	0.367	10.0	11.1	11.0	10.1	8.50 to 11.5	98.4	70.0 to 130	0.905	20.0
BD17511	Potassium, Total	mg/L	-0.00235	0.367	10.0	53.9	53.5	10.2	8.50 to 11.5	83.0	70.0 to 130	0.745	20.0
BD17513	Selenium, Dissolved	mg/L	-0.0000900	0.00100	0.100	0.100	0.101	0.103	0.0850 to 0.115	100	70.0 to 130	0.995	20.0
BD17511	Selenium, Total	mg/L	0.0000683	0.00100	0.100	0.0990	0.101	0.103	0.0850 to 0.115	99.0	70.0 to 130	2.00	20.0
BD17513	Silicon, Dissolved	mg/L	0.000692	0.0440	1.00	6.61	6.59	1.02	0.850 to 1.15	102	70.0 to 130	0.303	20.0
BD17511	Silicon, Total	mg/L	0.00106	0.0440	1.00	6.52	6.52	1.03	0.850 to 1.15	96.0	70.0 to 130	0.00	20.0
BD17513	Sodium, Dissolved	mg/L	0.0636	0.0880	5.00	105	103	5.10	4.25 to 5.75	0.00	70.0 to 130	1.92	20.0
BD17511	Sodium, Total	mg/L	0.00811	0.0880	5.00	483	484	5.17	4.25 to 5.75	-60.0	70.0 to 130	0.207	20.0
BD17511	Sulfate	mg/L	0.0717	2.0	640	948	925	19.0	18.0 to 22.0	97.5	80.0 to 120	2.46	20.0
BD17513	Thallium, Dissolved	mg/L	-0.0000854	0.000147	0.100	0.103	0.103	0.102	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BD17511	Thallium, Total	mg/L	0.0000056	0.000147	0.100	0.0996	0.0981	0.100	0.0850 to 0.115	99.6	70.0 to 130	1.52	20.0
BD17511	Total Organic Carbon	mg/L	0.297	1.00	10.0	12.5	12.4	9.64		102	80.0 to 120	0.803	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/12/23 14:32
Customer ID:
Delivery Date: 9/14/23 10:03

Description: Gorgas Ash Pond - MW-47

Laboratory ID Number: BD17509

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17518	Alkalinity	mg CaCO3/L					242	51.6	45.0 to 55.0			0.412	10.0
BD17511	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.15	0.200	2.00	2.11	0.031	1.88	1.80 to 2.20	106	90.0 to 110	0.00	15.0
BD17511	Solids, Dissolved	mg/L	2.00	25.0			1500	55.0	40.0 to 60.0			0.00	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-31H

Location Code: WMWGORAP
Collected: 9/13/23 10:22
Customer ID:
Submittal Date: 9/14/23 10:03

Laboratory ID Number: BD17510

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	9/15/23 06:33	9/19/23 16:57		1.015	0.0318	mg/L	0.030000	0.1015	J
* Calcium, Total	9/15/23 06:33	9/19/23 16:57		1.015	3.21	mg/L	0.070035	0.406	
* Iron, Total	9/15/23 06:33	9/19/23 16:57		1.015	0.0111	mg/L	0.008120	0.0406	J
* Lithium, Total	9/15/23 06:33	9/19/23 16:57		1.015	0.0476	mg/L	0.007105	0.01999956	
* Magnesium, Total	9/15/23 06:33	9/19/23 16:57		1.015	0.967	mg/L	0.021315	0.406	
* Molybdenum, Total	9/15/23 06:33	9/19/23 16:57		1.015	0.00646	mg/L	0.005075	0.01015	J
* Silica, Total (calc.)	9/15/23 06:33	9/19/23 16:57		1	16.5	mg/L			
* Silicon, Total	9/15/23 06:33	9/19/23 16:57		1.015	7.73	mg/L	0.02030	0.25375	
* Sodium, Total	9/15/23 06:33	9/20/23 13:12		10.15	186	mg/L	0.4060	4.06	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	9/14/23 14:15	9/19/23 14:28		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Dissolved	9/14/23 14:15	9/19/23 14:28		1.015	3.17	mg/L	0.070035	0.406	
* Iron, Dissolved	9/14/23 14:15	9/19/23 14:28		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Dissolved	9/14/23 14:15	9/19/23 14:28		1.015	0.0463	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	9/14/23 14:15	9/19/23 14:28		1.015	0.986	mg/L	0.021315	0.406	
* Molybdenum, Dissolved	9/14/23 14:15	9/19/23 14:28		1.015	0.00531	mg/L	0.005075	0.01015	J
* Silica, Dissolved (calc.)	9/14/23 14:15	9/19/23 14:28		1	16.4	mg/L			
* Silicon, Dissolved	9/14/23 14:15	9/19/23 14:28		1.015	7.67	mg/L	0.02030	0.25375	
* Sodium, Dissolved	9/14/23 14:15	9/20/23 11:18		10.15	172	mg/L	0.4060	4.06	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	9/15/23 06:33	9/18/23 11:36		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Arsenic, Total	9/15/23 06:33	9/18/23 11:36		1.015	0.000410	mg/L	0.000112	0.000203	
* Aluminum, Total	9/15/23 06:33	9/18/23 11:36		1.015	0.0203	mg/L	0.009135	0.05075	J
* Barium, Total	9/15/23 06:33	9/18/23 11:36		1.015	0.105	mg/L	0.000508	0.001015	
* Beryllium, Total	9/15/23 06:33	9/18/23 11:36		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	9/15/23 06:33	9/18/23 11:36		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	9/15/23 06:33	9/18/23 11:36		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	9/15/23 06:33	9/18/23 11:36		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	9/15/23 06:33	9/18/23 11:36		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	9/15/23 06:33	9/18/23 11:36		1.015	0.00662	mg/L	0.000152	0.001015	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 10/25/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-31H

Location Code: WMWGORAP
Collected: 9/13/23 10:22
Customer ID:
Submittal Date: 9/14/23 10:03

Laboratory ID Number: BD17510

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	9/15/23 06:33	9/18/23 11:36		1.015	1.84	mg/L	0.169505	0.5075	
* Selenium, Total	9/15/23 06:33	9/18/23 11:36		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	9/15/23 06:33	9/18/23 11:36		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	9/14/23 14:15	9/14/23 16:25		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	9/14/23 14:15	9/14/23 16:25		1.015	0.0157	mg/L	0.009135	0.05075	J
* Arsenic, Dissolved	9/14/23 14:15	9/14/23 16:25		1.015	0.000311	mg/L	0.000112	0.000203	
* Barium, Dissolved	9/14/23 14:15	9/14/23 16:25		1.015	0.122	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	9/14/23 14:15	9/14/23 16:25		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	9/14/23 14:15	9/14/23 16:25		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	9/14/23 14:15	9/14/23 16:25		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	9/14/23 14:15	9/14/23 16:25		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Dissolved	9/14/23 14:15	9/14/23 16:25		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	9/14/23 14:15	9/14/23 16:25		1.015	0.00658	mg/L	0.000152	0.001015	
* Potassium, Dissolved	9/14/23 14:15	9/14/23 16:25		1.015	1.63	mg/L	0.169505	0.5075	
* Selenium, Dissolved	10/12/23 23:23	10/12/23 13:06		1.015	0.000575	mg/L	0.000508	0.001015	J
* Thallium, Dissolved	9/14/23 14:15	9/14/23 16:25		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	9/14/23 17:22	9/14/23 23:36		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	9/18/23 13:13	9/18/23 13:13		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: JAG***								
Alkalinity pH Endpoint	9/26/23 10:23	9/26/23 11:17		1	4.53	SU		2	
* Alkalinity	9/26/23 10:23	9/26/23 11:17		1	304	mg CaCO3/L		1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	9/14/23 13:40	9/15/23 13:10		1	422	mg/L		50	
Analytical Method: SM 4500CO2 D	***Analyst: JAG***								
* Bicarbonate Alkalinity, (calc.)	9/26/23 10:23	9/26/23 11:17		1	292	mg CaCO3/L		1	
* Carbonate Alkalinity, (calc.)	9/26/23 10:23	9/26/23 11:17		1	11.7	mg CaCO3/L		0.5	
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	9/18/23 17:54	9/18/23 17:54		1	Not Detected	mg/L	1.00	2	U

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-31H

Location Code: WMWGORAP
Collected: 9/13/23 10:22
Customer ID:
Submittal Date: 9/14/23 10:03

Laboratory ID Number: BD17510

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	9/18/23 11:35	9/18/23 11:35		4	32.6	mg/L	2.00	4	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	9/18/23 15:02	9/18/23 15:02		1	0.159	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	9/26/23 15:09	9/26/23 15:09		1	33.8	mg/L	0.6	2	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	9/13/23 10:19	9/13/23 10:19			849.69	uS/cm			FA
pH	9/13/23 10:19	9/13/23 10:19			8.49	SU			FA
Temperature	9/13/23 10:19	9/13/23 10:19			19.18	C			FA
Turbidity	9/13/23 10:19	9/13/23 10:19			3.11	NTU			FA
Sulfide	9/13/23 10:19	9/13/23 10:19			1.0	mg/L			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 10/25/2023
Version: 3.5
COA_CCR

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/13/23 10:22
Customer ID:
Delivery Date: 9/14/23 10:03

Description: Gorgas Ash Pond - MW-31H

Laboratory ID Number: BD17510

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17513	Aluminum, Dissolved	mg/L	-0.000290	0.0198	0.100	0.108	0.106	0.105	0.0850 to 0.115	108	70.0 to 130	1.87	20.0
BD17511	Aluminum, Total	mg/L	0.000208	0.0198	0.100	0.112	0.112	0.104	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BD17513	Antimony, Dissolved	mg/L	0.000229	0.00100	0.100	0.0963	0.0944	0.0919	0.0850 to 0.115	96.3	70.0 to 130	1.99	20.0
BD17511	Antimony, Total	mg/L	0.000567	0.00100	0.100	0.104	0.105	0.0960	0.0850 to 0.115	104	70.0 to 130	0.957	20.0
BD17513	Arsenic, Dissolved	mg/L	-0.0000089	0.000200	0.100	0.332	0.336	0.0987	0.0850 to 0.115	91.0	70.0 to 130	1.20	20.0
BD17511	Arsenic, Total	mg/L	0.000105	0.000200	0.100	0.103	0.102	0.100	0.0850 to 0.115	101	70.0 to 130	0.976	20.0
BD17513	Barium, Dissolved	mg/L	-0.0000262	0.00100	0.100	0.160	0.154	0.0998	0.0850 to 0.115	103	70.0 to 130	3.82	20.0
BD17511	Barium, Total	mg/L	0.0000393	0.00100	0.100	0.276	0.278	0.0908	0.0850 to 0.115	84.0	70.0 to 130	0.722	20.0
BD17513	Beryllium, Dissolved	mg/L	0.0000283	0.000880	0.100	0.101	0.103	0.101	0.0850 to 0.115	101	70.0 to 130	1.96	20.0
BD17511	Beryllium, Total	mg/L	0.0000483	0.000880	0.100	0.0987	0.100	0.0970	0.0850 to 0.115	98.7	70.0 to 130	1.31	20.0
BD17513	Boron, Dissolved	mg/L	-0.00109	0.0650	1.00	2.72	2.72	1.00	0.850 to 1.15	102	70.0 to 130	0.00	20.0
BD17511	Boron, Total	mg/L	0.000005	0.0650	1.00	1.09	1.10	1.02	0.850 to 1.15	104	70.0 to 130	0.913	20.0
BD17513	Cadmium, Dissolved	mg/L	0.0000030	0.000147	0.100	0.0979	0.0988	0.0978	0.0850 to 0.115	97.9	70.0 to 130	0.915	20.0
BD17511	Cadmium, Total	mg/L	-0.0000075	0.000147	0.100	0.100	0.0983	0.101	0.0850 to 0.115	100	70.0 to 130	1.71	20.0
BD17513	Calcium, Dissolved	mg/L	-0.0266	0.152	5.00	16.1	16.1	5.06	4.25 to 5.75	100	70.0 to 130	0.00	20.0
BD17511	Calcium, Total	mg/L	-0.0189	0.152	5.00	29.6	29.3	5.06	4.25 to 5.75	98.0	70.0 to 130	1.02	20.0
BD17511	Chloride	mg/L	0.0415	1.00	250	582	579	10.4	9.00 to 11.0	88.8	80.0 to 120	0.517	20.0
BD17513	Chromium, Dissolved	mg/L	-0.000168	0.000440	0.100	0.100	0.0971	0.101	0.0850 to 0.115	100	70.0 to 130	2.94	20.0
BD17511	Chromium, Total	mg/L	-0.0000841	0.000440	0.100	0.102	0.0996	0.0994	0.0850 to 0.115	102	70.0 to 130	2.38	20.0
BD17513	Cobalt, Dissolved	mg/L	-0.0000695	0.000147	0.100	0.102	0.100	0.102	0.0850 to 0.115	102	70.0 to 130	1.98	20.0
BD17511	Cobalt, Total	mg/L	0.0000025	0.000147	0.100	0.104	0.103	0.103	0.0850 to 0.115	104	70.0 to 130	0.966	20.0
BD17511	Fluoride	mg/L	0.00763	0.125	2.50	2.81	2.84	2.67	2.25 to 2.75	104	80.0 to 120	1.06	20.0
BD17513	Iron, Dissolved	mg/L	0.00154	0.0176	0.2	0.414	0.417	0.202	0.170 to 0.230	100	70.0 to 130	0.722	20.0
BD17511	Iron, Total	mg/L	-0.000348	0.0176	0.2	0.207	0.210	0.204	0.170 to 0.230	99.1	70.0 to 130	1.44	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/13/23 10:22
Customer ID:
Delivery Date: 9/14/23 10:03

Description: Gorgas Ash Pond - MW-31H

Laboratory ID Number: BD17510

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17513	Lead, Dissolved	mg/L	0.0000056	0.000147	0.100	0.105	0.105	0.105	0.0850 to 0.115	105	70.0 to 130	0.00	20.0
BD17511	Lead, Total	mg/L	0.0000068	0.000147	0.100	0.0985	0.0980	0.0988	0.0850 to 0.115	98.5	70.0 to 130	0.509	20.0
BD17513	Lithium, Dissolved	mg/L	-0.000209	0.0154	0.200	0.413	0.414	0.205	0.170 to 0.230	102	70.0 to 130	0.242	20.0
BD17511	Lithium, Total	mg/L	-0.000449	0.0154	0.200	0.288	0.291	0.209	0.170 to 0.230	107	70.0 to 130	1.04	20.0
BD17513	Magnesium, Dissolved	mg/L	-0.00780	0.0462	5.00	8.97	9.03	5.14	4.25 to 5.75	101	70.0 to 130	0.667	20.0
BD17511	Magnesium, Total	mg/L	-0.0162	0.0462	5.00	14.1	14.1	5.21	4.25 to 5.75	102	70.0 to 130	0.00	20.0
BD17513	Manganese, Dissolved	mg/L	0.0000089	0.00033	0.100	0.139	0.137	0.103	0.0850 to 0.115	103	70.0 to 130	1.45	20.0
BD17511	Manganese, Total	mg/L	0.0000048	0.00033	0.100	0.148	0.148	0.103	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BD17511	Mercury, Total by CVAA	mg/L	5.000E-05	0.000500	0.004	0.00406	0.00404	0.00406	0.00340 to 0.00460	102	70.0 to 130	0.494	20.0
BD17513	Molybdenum, Dissolved	mg/L	0.000202	0.0100	0.2	0.429	0.432	0.204	0.170 to 0.230	102	70.0 to 130	0.697	20.0
BD17511	Molybdenum, Total	mg/L	0.000	0.0100	0.2	0.269	0.270	0.207	0.170 to 0.230	102	70.0 to 130	0.371	20.0
BD17513	Potassium, Dissolved	mg/L	-0.0106	0.367	10.0	11.1	11.0	10.1	8.50 to 11.5	98.4	70.0 to 130	0.905	20.0
BD17511	Potassium, Total	mg/L	-0.00235	0.367	10.0	53.9	53.5	10.2	8.50 to 11.5	83.0	70.0 to 130	0.745	20.0
BD17510	Selenium, Dissolved	mg/L	0.0000623	0.00100	0.100	0.108	0.111	0.0999	0.0850 to 0.115	107	70.0 to 130	2.74	20.0
BD17511	Selenium, Total	mg/L	0.0000683	0.00100	0.100	0.0990	0.101	0.103	0.0850 to 0.115	99.0	70.0 to 130	2.00	20.0
BD17513	Silicon, Dissolved	mg/L	0.000692	0.0440	1.00	6.61	6.59	1.02	0.850 to 1.15	102	70.0 to 130	0.303	20.0
BD17511	Silicon, Total	mg/L	0.00106	0.0440	1.00	6.52	6.52	1.03	0.850 to 1.15	96.0	70.0 to 130	0.00	20.0
BD17513	Sodium, Dissolved	mg/L	0.0636	0.0880	5.00	105	103	5.10	4.25 to 5.75	0.00	70.0 to 130	1.92	20.0
BD17511	Sodium, Total	mg/L	0.00811	0.0880	5.00	483	484	5.17	4.25 to 5.75	-60.0	70.0 to 130	0.207	20.0
BD17511	Sulfate	mg/L	0.0717	2.0	640	948	925	19.0	18.0 to 22.0	97.5	80.0 to 120	2.46	20.0
BD17513	Thallium, Dissolved	mg/L	-0.0000854	0.000147	0.100	0.103	0.103	0.102	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BD17511	Thallium, Total	mg/L	0.0000056	0.000147	0.100	0.0996	0.0981	0.100	0.0850 to 0.115	99.6	70.0 to 130	1.52	20.0
BD17511	Total Organic Carbon	mg/L	0.297	1.00	10.0	12.5	12.4	9.64		102	80.0 to 120	0.803	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/13/23 10:22
Customer ID:
Delivery Date: 9/14/23 10:03

Description: Gorgas Ash Pond - MW-31H

Laboratory ID Number: BD17510

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17523	Alkalinity	mg CaCO3/L					206	52.7	45.0 to 55.0			2.87	10.0
BD17511	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.15	0.200	2.00	2.11	0.031	1.88	1.80 to 2.20	106	90.0 to 110	0.00	15.0
BD17511	Solids, Dissolved	mg/L	2.00	25.0			1500	55.0	40.0 to 60.0			0.00	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-31V

Location Code: WMWGORAP
Collected: 9/13/23 12:10
Customer ID:
Submittal Date: 9/14/23 10:03

Laboratory ID Number: BD17511

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	9/15/23 06:33	9/19/23 17:00		1.015	0.0544	mg/L	0.030000	0.1015	J
* Calcium, Total	9/15/23 06:33	9/19/23 17:00		1.015	24.7	mg/L	0.070035	0.406	
* Iron, Total	9/15/23 06:33	9/19/23 17:00		1.015	0.00882	mg/L	0.008120	0.0406	J
* Lithium, Total	9/15/23 06:33	9/19/23 17:00		1.015	0.0732	mg/L	0.007105	0.01999956	
* Magnesium, Total	9/15/23 06:33	9/19/23 17:00		1.015	9.01	mg/L	0.021315	0.406	
* Molybdenum, Total	9/15/23 06:33	9/19/23 17:00		1.015	0.0649	mg/L	0.005075	0.01015	
* Silica, Total (calc.)	9/15/23 06:33	9/19/23 17:00		1	11.9	mg/L			
* Silicon, Total	9/15/23 06:33	9/19/23 17:00		1.015	5.56	mg/L	0.02030	0.25375	
* Sodium, Total	9/15/23 06:33	9/20/23 13:15		101.5	486	mg/L	4.060	40.6	RA
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	9/14/23 14:15	9/19/23 14:32		1.015	0.0497	mg/L	0.030000	0.1015	J
* Calcium, Dissolved	9/14/23 14:15	9/19/23 14:32		1.015	19.9	mg/L	0.070035	0.406	
* Iron, Dissolved	9/14/23 14:15	9/19/23 14:32		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Dissolved	9/14/23 14:15	9/19/23 14:32		1.015	0.0673	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	9/14/23 14:15	9/19/23 14:32		1.015	7.17	mg/L	0.021315	0.406	
* Molybdenum, Dissolved	9/14/23 14:15	9/19/23 14:32		1.015	0.0519	mg/L	0.005075	0.01015	
* Silica, Dissolved (calc.)	9/14/23 14:15	9/19/23 14:32		1	11.8	mg/L			
* Silicon, Dissolved	9/14/23 14:15	9/19/23 14:32		1.015	5.51	mg/L	0.02030	0.25375	
* Sodium, Dissolved	9/14/23 14:15	9/20/23 11:22		101.5	434	mg/L	4.060	40.6	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	9/15/23 06:33	9/18/23 11:40		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Total	9/15/23 06:33	9/18/23 11:40		1.015	0.0101	mg/L	0.009135	0.05075	J
* Arsenic, Total	9/15/23 06:33	9/18/23 11:40		1.015	0.00182	mg/L	0.000112	0.000203	
* Barium, Total	9/15/23 06:33	9/18/23 11:40		1.015	0.192	mg/L	0.000508	0.001015	
* Beryllium, Total	9/15/23 06:33	9/18/23 11:40		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	9/15/23 06:33	9/18/23 11:40		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	9/15/23 06:33	9/18/23 11:40		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	9/15/23 06:33	9/18/23 11:40		1.015	0.000118	mg/L	0.000068	0.000203	J
* Lead, Total	9/15/23 06:33	9/18/23 11:40		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	9/15/23 06:33	9/18/23 11:40		1.015	0.0467	mg/L	0.000152	0.001015	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-31V

Location Code: WMWGORAP
Collected: 9/13/23 12:10
Customer ID:
Submittal Date: 9/14/23 10:03

Laboratory ID Number: BD17511

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	9/15/23 06:33	9/18/23 11:40		1.015	45.6	mg/L	0.169505	0.5075	
* Selenium, Total	9/15/23 06:33	9/18/23 11:40		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	9/15/23 06:33	9/18/23 11:40		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	9/14/23 14:15	9/14/23 16:29		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	9/14/23 14:15	9/14/23 16:29		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Dissolved	9/14/23 14:15	9/14/23 16:29		1.015	0.00154	mg/L	0.000112	0.000203	
* Barium, Dissolved	9/14/23 14:15	9/14/23 16:29		1.015	0.155	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	9/14/23 14:15	9/14/23 16:29		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	9/14/23 14:15	9/14/23 16:29		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	9/14/23 14:15	9/14/23 16:29		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	9/14/23 14:15	9/14/23 16:29		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Dissolved	9/14/23 14:15	9/14/23 16:29		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	9/14/23 14:15	9/14/23 16:29		1.015	0.0360	mg/L	0.000152	0.001015	
* Potassium, Dissolved	9/14/23 14:15	9/14/23 16:29		1.015	34.9	mg/L	0.169505	0.5075	
* Selenium, Dissolved	9/14/23 14:15	9/14/23 16:29		1.015	0.000941	mg/L	0.000508	0.001015	J
* Thallium, Dissolved	9/14/23 14:15	9/14/23 16:29		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	9/14/23 17:22	9/14/23 23:40		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	9/18/23 13:14	9/18/23 13:14		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: JAG***								
Alkalinity pH Endpoint	9/26/23 10:23	9/26/23 11:17		1	4.50	SU		2	
* Alkalinity	9/26/23 10:23	9/26/23 11:17		1	343	mg CaCO3/L		1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	9/14/23 13:40	9/15/23 13:10		1	1500	mg/L		147.1	
Analytical Method: SM 4500CO2 D	***Analyst: JAG***								
* Bicarbonate Alkalinity, (calc.)	9/26/23 10:23	9/26/23 11:17		1	339	mg CaCO3/L		1	A
* Carbonate Alkalinity, (calc.)	9/26/23 10:23	9/26/23 11:17		1	3.50	mg CaCO3/L		0.5	A
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	9/18/23 18:10	9/18/23 18:10		1	2.30	mg/L	1.00	2	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-31V

Location Code: WMWGORAP
Collected: 9/13/23 12:10
Customer ID:
Submittal Date: 9/14/23 10:03

Laboratory ID Number: BD17511

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	9/18/23 12:10	9/18/23 12:10		25	360	mg/L	12.50	25	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	9/18/23 15:04	9/18/23 15:04		1	0.198	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	9/26/23 15:25	9/26/23 15:25		32	324	mg/L	19.2	64	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	9/13/23 12:07	9/13/23 12:07			2475.52	uS/cm			FA
pH	9/13/23 12:07	9/13/23 12:07			7.49	SU			FA
Temperature	9/13/23 12:07	9/13/23 12:07			21.02	C			FA
Turbidity	9/13/23 12:07	9/13/23 12:07			2.34	NTU			FA
Sulfide	9/13/23 12:07	9/13/23 12:07			0	mg/L			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/13/23 12:10
Customer ID:
Delivery Date: 9/14/23 10:03

Description: Gorgas Ash Pond - MW-31V

Laboratory ID Number: BD17511

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17513	Aluminum, Dissolved	mg/L	-0.000290	0.0198	0.100	0.108	0.106	0.105	0.0850 to 0.115	108	70.0 to 130	1.87	20.0
BD17511	Aluminum, Total	mg/L	0.000208	0.0198	0.100	0.112	0.112	0.104	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BD17513	Antimony, Dissolved	mg/L	0.000229	0.00100	0.100	0.0963	0.0944	0.0919	0.0850 to 0.115	96.3	70.0 to 130	1.99	20.0
BD17511	Antimony, Total	mg/L	0.000567	0.00100	0.100	0.104	0.105	0.0960	0.0850 to 0.115	104	70.0 to 130	0.957	20.0
BD17513	Arsenic, Dissolved	mg/L	-0.0000089	0.000200	0.100	0.332	0.336	0.0987	0.0850 to 0.115	91.0	70.0 to 130	1.20	20.0
BD17511	Arsenic, Total	mg/L	0.000105	0.000200	0.100	0.103	0.102	0.100	0.0850 to 0.115	101	70.0 to 130	0.976	20.0
BD17513	Barium, Dissolved	mg/L	-0.0000262	0.00100	0.100	0.160	0.154	0.0998	0.0850 to 0.115	103	70.0 to 130	3.82	20.0
BD17511	Barium, Total	mg/L	0.0000393	0.00100	0.100	0.276	0.278	0.0908	0.0850 to 0.115	84.0	70.0 to 130	0.722	20.0
BD17513	Beryllium, Dissolved	mg/L	0.0000283	0.000880	0.100	0.101	0.103	0.101	0.0850 to 0.115	101	70.0 to 130	1.96	20.0
BD17511	Beryllium, Total	mg/L	0.0000483	0.000880	0.100	0.0987	0.100	0.0970	0.0850 to 0.115	98.7	70.0 to 130	1.31	20.0
BD17513	Boron, Dissolved	mg/L	-0.00109	0.0650	1.00	2.72	2.72	1.00	0.850 to 1.15	102	70.0 to 130	0.00	20.0
BD17511	Boron, Total	mg/L	0.000005	0.0650	1.00	1.09	1.10	1.02	0.850 to 1.15	104	70.0 to 130	0.913	20.0
BD17513	Cadmium, Dissolved	mg/L	0.0000030	0.000147	0.100	0.0979	0.0988	0.0978	0.0850 to 0.115	97.9	70.0 to 130	0.915	20.0
BD17511	Cadmium, Total	mg/L	-0.0000075	0.000147	0.100	0.100	0.0983	0.101	0.0850 to 0.115	100	70.0 to 130	1.71	20.0
BD17513	Calcium, Dissolved	mg/L	-0.0266	0.152	5.00	16.1	16.1	5.06	4.25 to 5.75	100	70.0 to 130	0.00	20.0
BD17511	Calcium, Total	mg/L	-0.0189	0.152	5.00	29.6	29.3	5.06	4.25 to 5.75	98.0	70.0 to 130	1.02	20.0
BD17511	Chloride	mg/L	0.0415	1.00	250	582	579	10.4	9.00 to 11.0	88.8	80.0 to 120	0.517	20.0
BD17513	Chromium, Dissolved	mg/L	-0.000168	0.000440	0.100	0.100	0.0971	0.101	0.0850 to 0.115	100	70.0 to 130	2.94	20.0
BD17511	Chromium, Total	mg/L	-0.0000841	0.000440	0.100	0.102	0.0996	0.0994	0.0850 to 0.115	102	70.0 to 130	2.38	20.0
BD17513	Cobalt, Dissolved	mg/L	-0.0000695	0.000147	0.100	0.102	0.100	0.102	0.0850 to 0.115	102	70.0 to 130	1.98	20.0
BD17511	Cobalt, Total	mg/L	0.0000025	0.000147	0.100	0.104	0.103	0.103	0.0850 to 0.115	104	70.0 to 130	0.966	20.0
BD17511	Fluoride	mg/L	0.00763	0.125	2.50	2.81	2.84	2.67	2.25 to 2.75	104	80.0 to 120	1.06	20.0
BD17513	Iron, Dissolved	mg/L	0.00154	0.0176	0.2	0.414	0.417	0.202	0.170 to 0.230	100	70.0 to 130	0.722	20.0
BD17511	Iron, Total	mg/L	-0.000348	0.0176	0.2	0.207	0.210	0.204	0.170 to 0.230	99.1	70.0 to 130	1.44	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/13/23 12:10
Customer ID:
Delivery Date: 9/14/23 10:03

Description: Gorgas Ash Pond - MW-31V

Laboratory ID Number: BD17511

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17513	Lead, Dissolved	mg/L	0.0000056	0.000147	0.100	0.105	0.105	0.105	0.0850 to 0.115	105	70.0 to 130	0.00	20.0
BD17511	Lead, Total	mg/L	0.0000068	0.000147	0.100	0.0985	0.0980	0.0988	0.0850 to 0.115	98.5	70.0 to 130	0.509	20.0
BD17513	Lithium, Dissolved	mg/L	-0.000209	0.0154	0.200	0.413	0.414	0.205	0.170 to 0.230	102	70.0 to 130	0.242	20.0
BD17511	Lithium, Total	mg/L	-0.000449	0.0154	0.200	0.288	0.291	0.209	0.170 to 0.230	107	70.0 to 130	1.04	20.0
BD17513	Magnesium, Dissolved	mg/L	-0.00780	0.0462	5.00	8.97	9.03	5.14	4.25 to 5.75	101	70.0 to 130	0.667	20.0
BD17511	Magnesium, Total	mg/L	-0.0162	0.0462	5.00	14.1	14.1	5.21	4.25 to 5.75	102	70.0 to 130	0.00	20.0
BD17513	Manganese, Dissolved	mg/L	0.0000089	0.00033	0.100	0.139	0.137	0.103	0.0850 to 0.115	103	70.0 to 130	1.45	20.0
BD17511	Manganese, Total	mg/L	0.0000048	0.00033	0.100	0.148	0.148	0.103	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BD17511	Mercury, Total by CVAA	mg/L	5.000E-05	0.000500	0.004	0.00406	0.00404	0.00406	0.00340 to 0.00460	102	70.0 to 130	0.494	20.0
BD17513	Molybdenum, Dissolved	mg/L	0.000202	0.0100	0.2	0.429	0.432	0.204	0.170 to 0.230	102	70.0 to 130	0.697	20.0
BD17511	Molybdenum, Total	mg/L	0.000	0.0100	0.2	0.269	0.270	0.207	0.170 to 0.230	102	70.0 to 130	0.371	20.0
BD17513	Potassium, Dissolved	mg/L	-0.0106	0.367	10.0	11.1	11.0	10.1	8.50 to 11.5	98.4	70.0 to 130	0.905	20.0
BD17511	Potassium, Total	mg/L	-0.00235	0.367	10.0	53.9	53.5	10.2	8.50 to 11.5	83.0	70.0 to 130	0.745	20.0
BD17513	Selenium, Dissolved	mg/L	-0.0000900	0.00100	0.100	0.100	0.101	0.103	0.0850 to 0.115	100	70.0 to 130	0.995	20.0
BD17511	Selenium, Total	mg/L	0.0000683	0.00100	0.100	0.0990	0.101	0.103	0.0850 to 0.115	99.0	70.0 to 130	2.00	20.0
BD17513	Silicon, Dissolved	mg/L	0.000692	0.0440	1.00	6.61	6.59	1.02	0.850 to 1.15	102	70.0 to 130	0.303	20.0
BD17511	Silicon, Total	mg/L	0.00106	0.0440	1.00	6.52	6.52	1.03	0.850 to 1.15	96.0	70.0 to 130	0.00	20.0
BD17513	Sodium, Dissolved	mg/L	0.0636	0.0880	5.00	105	103	5.10	4.25 to 5.75	0.00	70.0 to 130	1.92	20.0
BD17511	Sodium, Total	mg/L	0.00811	0.0880	5.00	483	484	5.17	4.25 to 5.75	-60.0	70.0 to 130	0.207	20.0
BD17511	Sulfate	mg/L	0.0717	2.0	640	948	925	19.0	18.0 to 22.0	97.5	80.0 to 120	2.46	20.0
BD17513	Thallium, Dissolved	mg/L	-0.0000854	0.000147	0.100	0.103	0.103	0.102	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BD17511	Thallium, Total	mg/L	0.0000056	0.000147	0.100	0.0996	0.0981	0.100	0.0850 to 0.115	99.6	70.0 to 130	1.52	20.0
BD17511	Total Organic Carbon	mg/L	0.297	1.00	10.0	12.5	12.4	9.64		102	80.0 to 120	0.803	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/13/23 12:10
Customer ID:
Delivery Date: 9/14/23 10:03

Description: Gorgas Ash Pond - MW-31V

Laboratory ID Number: BD17511

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17523	Alkalinity	mg CaCO3/L					206	52.7	45.0 to 55.0			2.87	10.0
BD17511	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.15	0.200	2.00	2.11	0.031	1.88	1.80 to 2.20	106	90.0 to 110	0.00	15.0
BD17511	Solids, Dissolved	mg/L	2.00	25.0			1500	55.0	40.0 to 60.0			0.00	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 10/25/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-01R

Location Code: WMWGORAP
Collected: 9/13/23 14:26
Customer ID:
Submittal Date: 9/14/23 10:03

Laboratory ID Number: BD17512

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	9/15/23 06:33	9/19/23 17:22		1.015	0.0619	mg/L	0.030000	0.1015	J
* Calcium, Total	9/15/23 06:33	9/19/23 17:22		1.015	0.823	mg/L	0.070035	0.406	
* Iron, Total	9/15/23 06:33	9/19/23 17:22		1.015	0.0589	mg/L	0.008120	0.0406	
* Lithium, Total	9/15/23 06:33	9/19/23 17:22		1.015	0.0330	mg/L	0.007105	0.01999956	
* Magnesium, Total	9/15/23 06:33	9/19/23 17:22		1.015	0.214	mg/L	0.021315	0.406	J
* Molybdenum, Total	9/15/23 06:33	9/19/23 17:22		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Total (calc.)	9/15/23 06:33	9/19/23 17:22		1	9.67	mg/L			
* Silicon, Total	9/15/23 06:33	9/19/23 17:22		1.015	4.52	mg/L	0.02030	0.25375	
* Sodium, Total	9/15/23 06:33	9/20/23 13:25		10.15	137	mg/L	0.4060	4.06	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	9/14/23 14:15	9/19/23 14:35		1.015	0.0603	mg/L	0.030000	0.1015	J
* Calcium, Dissolved	9/14/23 14:15	9/19/23 14:35		1.015	0.849	mg/L	0.070035	0.406	
* Iron, Dissolved	9/14/23 14:15	9/19/23 14:35		1.015	0.0153	mg/L	0.008120	0.0406	J
* Lithium, Dissolved	9/14/23 14:15	9/19/23 14:35		1.015	0.0330	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	9/14/23 14:15	9/19/23 14:35		1.015	0.216	mg/L	0.021315	0.406	J
* Molybdenum, Dissolved	9/14/23 14:15	9/19/23 14:35		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Dissolved (calc.)	9/14/23 14:15	9/19/23 14:35		1	9.46	mg/L			
* Silicon, Dissolved	9/14/23 14:15	9/19/23 14:35		1.015	4.42	mg/L	0.02030	0.25375	
* Sodium, Dissolved	9/14/23 14:15	9/20/23 11:25		10.15	136	mg/L	0.4060	4.06	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	9/15/23 06:33	9/18/23 12:11		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Arsenic, Total	9/15/23 06:33	9/18/23 12:11		1.015	0.000313	mg/L	0.000112	0.000203	
* Aluminum, Total	9/15/23 06:33	9/18/23 12:11		1.015	0.0724	mg/L	0.009135	0.05075	
* Barium, Total	9/15/23 06:33	9/18/23 12:11		1.015	0.0559	mg/L	0.000508	0.001015	
* Beryllium, Total	9/15/23 06:33	9/18/23 12:11		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	9/15/23 06:33	9/18/23 12:11		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	9/15/23 06:33	9/18/23 12:11		1.015	0.000236	mg/L	0.000203	0.001015	J
* Cobalt, Total	9/15/23 06:33	9/18/23 12:11		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	9/15/23 06:33	9/18/23 12:11		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	9/15/23 06:33	9/18/23 12:11		1.015	0.00206	mg/L	0.000152	0.001015	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-01R

Location Code: WMWGORAP
Collected: 9/13/23 14:26
Customer ID:
Submittal Date: 9/14/23 10:03

Laboratory ID Number: BD17512

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	9/15/23 06:33	9/18/23 12:11		1.015	0.476	mg/L	0.169505	0.5075	J
* Selenium, Total	9/15/23 06:33	9/18/23 12:11		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	9/15/23 06:33	9/18/23 12:11		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	9/14/23 14:15	9/14/23 16:33		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	9/14/23 14:15	9/14/23 16:33		1.015	0.00974	mg/L	0.009135	0.05075	J
* Arsenic, Dissolved	9/14/23 14:15	9/14/23 16:33		1.015	0.000297	mg/L	0.000112	0.000203	
* Barium, Dissolved	9/14/23 14:15	9/14/23 16:33		1.015	0.0583	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	9/14/23 14:15	9/14/23 16:33		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	9/14/23 14:15	9/14/23 16:33		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	9/14/23 14:15	9/14/23 16:33		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	9/14/23 14:15	9/14/23 16:33		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Dissolved	9/14/23 14:15	9/14/23 16:33		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	9/14/23 14:15	9/14/23 16:33		1.015	0.00195	mg/L	0.000152	0.001015	
* Potassium, Dissolved	9/14/23 14:15	9/14/23 16:33		1.015	0.467	mg/L	0.169505	0.5075	J
* Selenium, Dissolved	9/14/23 14:15	9/14/23 16:33		1.015	0.000690	mg/L	0.000508	0.001015	J
* Thallium, Dissolved	9/14/23 14:15	9/14/23 16:33		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	9/14/23 17:22	9/15/23 00:07		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	9/18/23 14:07	9/18/23 14:07		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: JAG***								
Alkalinity pH Endpoint	9/26/23 10:23	9/26/23 11:17		1	4.48	SU		2	
* Alkalinity	9/26/23 10:23	9/26/23 11:17		1	278	mg CaCO3/L		1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	9/15/23 10:50	9/19/23 13:02		1	313	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: JAG***								
* Bicarbonate Alkalinity, (calc.)	9/26/23 10:23	9/26/23 11:17		1	260	mg CaCO3/L		1	
* Carbonate Alkalinity, (calc.)	9/26/23 10:23	9/26/23 11:17		1	17.7	mg CaCO3/L		0.5	
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	9/18/23 19:27	9/18/23 19:27		1	Not Detected	mg/L	1.00	2	U

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-01R

Location Code: WMWGORAP
Collected: 9/13/23 14:26
Customer ID:
Submittal Date: 9/14/23 10:03

Laboratory ID Number: BD17512

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	9/18/23 12:24	9/18/23 12:24		1	9.36	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	9/18/23 15:15	9/18/23 15:15		1	0.229	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	9/26/23 15:37	9/26/23 15:37		1	4.81	mg/L	0.6	2	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	9/13/23 14:22	9/13/23 14:22			643.14	uS/cm			FA
pH	9/13/23 14:22	9/13/23 14:22			8.63	SU			FA
Temperature	9/13/23 14:22	9/13/23 14:22			19.74	C			FA
Turbidity	9/13/23 14:22	9/13/23 14:22			3.58	NTU			FA
Sulfide	9/13/23 14:22	9/13/23 14:22			0	mg/L			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/13/23 14:26
Customer ID:
Delivery Date: 9/14/23 10:03

Description: Gorgas Ash Pond - MW-01R

Laboratory ID Number: BD17512

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17513	Aluminum, Dissolved	mg/L	-0.000290	0.0198	0.100	0.108	0.106	0.105	0.0850 to 0.115	108	70.0 to 130	1.87	20.0
BD17522	Aluminum, Total	mg/L	0.000468	0.0198	0.100	0.104	0.103	0.104	0.0850 to 0.115	104	70.0 to 130	0.966	20.0
BD17513	Antimony, Dissolved	mg/L	0.000229	0.00100	0.100	0.0963	0.0944	0.0919	0.0850 to 0.115	96.3	70.0 to 130	1.99	20.0
BD17522	Antimony, Total	mg/L	0.000288	0.00100	0.100	0.0977	0.0976	0.101	0.0850 to 0.115	97.7	70.0 to 130	0.102	20.0
BD17513	Arsenic, Dissolved	mg/L	-0.0000089	0.000200	0.100	0.332	0.336	0.0987	0.0850 to 0.115	91.0	70.0 to 130	1.20	20.0
BD17522	Arsenic, Total	mg/L	0.0000229	0.000200	0.100	0.103	0.104	0.100	0.0850 to 0.115	98.5	70.0 to 130	0.966	20.0
BD17513	Barium, Dissolved	mg/L	-0.0000262	0.00100	0.100	0.160	0.154	0.0998	0.0850 to 0.115	103	70.0 to 130	3.82	20.0
BD17522	Barium, Total	mg/L	0.0000085	0.00100	0.100	0.127	0.127	0.0983	0.0850 to 0.115	95.2	70.0 to 130	0.00	20.0
BD17513	Beryllium, Dissolved	mg/L	0.0000283	0.000880	0.100	0.101	0.103	0.101	0.0850 to 0.115	101	70.0 to 130	1.96	20.0
BD17522	Beryllium, Total	mg/L	0.000113	0.000880	0.100	0.0990	0.101	0.0965	0.0850 to 0.115	99.0	70.0 to 130	2.00	20.0
BD17513	Boron, Dissolved	mg/L	-0.00109	0.0650	1.00	2.72	2.72	1.00	0.850 to 1.15	102	70.0 to 130	0.00	20.0
BD17522	Boron, Total	mg/L	-0.000218	0.0650	1.00	1.25	1.24	1.04	0.850 to 1.15	106	70.0 to 130	0.803	20.0
BD17513	Cadmium, Dissolved	mg/L	0.0000030	0.000147	0.100	0.0979	0.0988	0.0978	0.0850 to 0.115	97.9	70.0 to 130	0.915	20.0
BD17522	Cadmium, Total	mg/L	0.0000072	0.000147	0.100	0.0967	0.0960	0.101	0.0850 to 0.115	96.7	70.0 to 130	0.727	20.0
BD17513	Calcium, Dissolved	mg/L	-0.0266	0.152	5.00	16.1	16.1	5.06	4.25 to 5.75	100	70.0 to 130	0.00	20.0
BD17522	Calcium, Total	mg/L	-0.0124	0.152	5.00	43.7	43.3	5.08	4.25 to 5.75	96.0	70.0 to 130	0.920	20.0
BD17521	Chloride	mg/L	-0.0466	1.00	10.0	22.5	22.5	10.3	9.00 to 11.0	88.0	80.0 to 120	0.00	20.0
BD17513	Chromium, Dissolved	mg/L	-0.000168	0.000440	0.100	0.100	0.0971	0.101	0.0850 to 0.115	100	70.0 to 130	2.94	20.0
BD17522	Chromium, Total	mg/L	-0.000104	0.000440	0.100	0.0983	0.0983	0.101	0.0850 to 0.115	98.3	70.0 to 130	0.00	20.0
BD17513	Cobalt, Dissolved	mg/L	-0.0000695	0.000147	0.100	0.102	0.100	0.102	0.0850 to 0.115	102	70.0 to 130	1.98	20.0
BD17522	Cobalt, Total	mg/L	0.0000010	0.000147	0.100	0.0995	0.0993	0.103	0.0850 to 0.115	99.5	70.0 to 130	0.201	20.0
BD17521	Fluoride	mg/L	0.0183	0.125	2.50	2.78	2.74	2.61	2.25 to 2.75	105	80.0 to 120	1.45	20.0
BD17513	Iron, Dissolved	mg/L	0.00154	0.0176	0.2	0.414	0.417	0.202	0.170 to 0.230	100	70.0 to 130	0.722	20.0
BD17522	Iron, Total	mg/L	0.00165	0.0176	0.2	1.53	1.52	0.206	0.170 to 0.230	100	70.0 to 130	0.656	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/13/23 14:26
Customer ID:
Delivery Date: 9/14/23 10:03

Description: Gorgas Ash Pond - MW-01R

Laboratory ID Number: BD17512

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17513	Lead, Dissolved	mg/L	0.0000056	0.000147	0.100	0.105	0.105	0.105	0.0850 to 0.115	105	70.0 to 130	0.00	20.0
BD17522	Lead, Total	mg/L	0.0000089	0.000147	0.100	0.0965	0.0958	0.0974	0.0850 to 0.115	96.5	70.0 to 130	0.728	20.0
BD17513	Lithium, Dissolved	mg/L	-0.000209	0.0154	0.200	0.413	0.414	0.205	0.170 to 0.230	102	70.0 to 130	0.242	20.0
BD17522	Lithium, Total	mg/L	-0.000155	0.0154	0.200	0.246	0.247	0.209	0.170 to 0.230	105	70.0 to 130	0.406	20.0
BD17513	Magnesium, Dissolved	mg/L	-0.00780	0.0462	5.00	8.97	9.03	5.14	4.25 to 5.75	101	70.0 to 130	0.667	20.0
BD17522	Magnesium, Total	mg/L	-0.0138	0.0462	5.00	22.8	22.8	5.15	4.25 to 5.75	102	70.0 to 130	0.00	20.0
BD17513	Manganese, Dissolved	mg/L	0.0000089	0.00033	0.100	0.139	0.137	0.103	0.0850 to 0.115	103	70.0 to 130	1.45	20.0
BD17522	Manganese, Total	mg/L	0.0000196	0.00033	0.100	0.253	0.250	0.105	0.0850 to 0.115	102	70.0 to 130	1.19	20.0
BD17522	Mercury, Total by CVAA	mg/L	7.000E-05	0.000500	0.004	0.00403	0.00406	0.00407	0.00340 to 0.00460	101	70.0 to 130	0.742	20.0
BD17513	Molybdenum, Dissolved	mg/L	0.000202	0.0100	0.2	0.429	0.432	0.204	0.170 to 0.230	102	70.0 to 130	0.697	20.0
BD17522	Molybdenum, Total	mg/L	0.000	0.0100	0.2	0.214	0.211	0.210	0.170 to 0.230	107	70.0 to 130	1.41	20.0
BD17513	Potassium, Dissolved	mg/L	-0.0106	0.367	10.0	11.1	11.0	10.1	8.50 to 11.5	98.4	70.0 to 130	0.905	20.0
BD17522	Potassium, Total	mg/L	0.00267	0.367	10.0	12.4	12.2	10.3	8.50 to 11.5	102	70.0 to 130	1.63	20.0
BD17513	Selenium, Dissolved	mg/L	-0.0000900	0.00100	0.100	0.100	0.101	0.103	0.0850 to 0.115	100	70.0 to 130	0.995	20.0
BD17522	Selenium, Total	mg/L	-0.0000063	0.00100	0.100	0.102	0.0988	0.102	0.0850 to 0.115	102	70.0 to 130	3.19	20.0
BD17513	Silicon, Dissolved	mg/L	0.000692	0.0440	1.00	6.61	6.59	1.02	0.850 to 1.15	102	70.0 to 130	0.303	20.0
BD17522	Silicon, Total	mg/L	0.000173	0.0440	1.00	15.7	15.7	1.05	0.850 to 1.15	110	70.0 to 130	0.00	20.0
BD17513	Sodium, Dissolved	mg/L	0.0636	0.0880	5.00	105	103	5.10	4.25 to 5.75	0.00	70.0 to 130	1.92	20.0
BD17522	Sodium, Total	mg/L	0.0205	0.0880	5.00	21.4	21.5	5.16	4.25 to 5.75	102	70.0 to 130	0.466	20.0
BD17521	Sulfate	mg/L	0.0639	2.0	80.0	135	132	18.8	18.0 to 22.0	96.9	80.0 to 120	2.25	20.0
BD17513	Thallium, Dissolved	mg/L	-0.0000854	0.000147	0.100	0.103	0.103	0.102	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BD17522	Thallium, Total	mg/L	0.0000115	0.000147	0.100	0.0979	0.0982	0.0992	0.0850 to 0.115	97.9	70.0 to 130	0.306	20.0
BD17521	Total Organic Carbon	mg/L	0.299	1.00	10.0	11.3	10.9	10.7		113	80.0 to 120	3.60	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/13/23 14:26
Customer ID:
Delivery Date: 9/14/23 10:03

Description: Gorgas Ash Pond - MW-01R

Laboratory ID Number: BD17512

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17523	Alkalinity	mg CaCO3/L					206	52.7	45.0 to 55.0			2.87	10.0
BD17521	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.02	0.200	2.00	2.01	-0.007	1.96	1.80 to 2.20	100	90.0 to 110	0.00	15.0
BD17517	Solids, Dissolved	mg/L	0.0000	25.0			1330	54.0	40.0 to 60.0			0.749	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-7

Location Code: WMWGORAP
Collected: 9/11/23 11:10
Customer ID:
Submittal Date: 9/14/23 10:03

Laboratory ID Number: BD17513

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7		***Analyst: ABB***			***Preparation Method: EPA 1638***				
* Boron, Total	9/15/23 06:33	9/19/23 17:25		1.015	1.71	mg/L	0.030000	0.1015	
* Calcium, Total	9/15/23 06:33	9/19/23 17:25		1.015	11.2	mg/L	0.070035	0.406	
* Iron, Total	9/15/23 06:33	9/19/23 17:25		1.015	0.731	mg/L	0.008120	0.0406	
* Lithium, Total	9/15/23 06:33	9/19/23 17:25		1.015	0.213	mg/L	0.007105	0.01999956	
* Magnesium, Total	9/15/23 06:33	9/19/23 17:25		1.015	4.02	mg/L	0.021315	0.406	
* Molybdenum, Total	9/15/23 06:33	9/19/23 17:25		1.015	0.228	mg/L	0.005075	0.01015	
* Silica, Total (calc.)	9/15/23 06:33	9/19/23 17:25		1	12.6	mg/L			
* Silicon, Total	9/15/23 06:33	9/19/23 17:25		1.015	5.87	mg/L	0.02030	0.25375	
* Sodium, Total	9/15/23 06:33	9/20/23 13:28		10.15	110	mg/L	0.4060	4.06	
Analytical Method: EPA 200.7		***Analyst: ABB***							
* Boron, Dissolved	9/14/23 14:15	9/19/23 14:38		1.015	1.70	mg/L	0.030000	0.1015	
* Calcium, Dissolved	9/14/23 14:15	9/19/23 14:38		1.015	11.1	mg/L	0.070035	0.406	
* Iron, Dissolved	9/14/23 14:15	9/19/23 14:38		1.015	0.214	mg/L	0.008120	0.0406	
* Lithium, Dissolved	9/14/23 14:15	9/19/23 14:38		1.015	0.209	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	9/14/23 14:15	9/19/23 14:38		1.015	3.90	mg/L	0.021315	0.406	
* Molybdenum, Dissolved	9/14/23 14:15	9/19/23 14:38		1.015	0.224	mg/L	0.005075	0.01015	
* Silica, Dissolved (calc.)	9/14/23 14:15	9/19/23 14:38		1	12.0	mg/L			
* Silicon, Dissolved	9/14/23 14:15	9/19/23 14:38		1.015	5.59	mg/L	0.02030	0.25375	
* Sodium, Dissolved	9/14/23 14:15	9/20/23 11:28		10.15	105	mg/L	0.4060	4.06	RA
Analytical Method: EPA 200.8		***Analyst: DLJ***			***Preparation Method: EPA 1638***				
* Antimony, Total	9/15/23 06:33	9/18/23 12:14		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Total	9/15/23 06:33	9/18/23 12:14		1.015	0.204	mg/L	0.009135	0.05075	
* Arsenic, Total	9/15/23 06:33	9/18/23 12:14		1.015	0.244	mg/L	0.000112	0.000203	
* Barium, Total	9/15/23 06:33	9/18/23 12:14		1.015	0.0607	mg/L	0.000508	0.001015	
* Beryllium, Total	9/15/23 06:33	9/18/23 12:14		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	9/15/23 06:33	9/18/23 12:14		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	9/15/23 06:33	9/18/23 12:14		1.015	0.000420	mg/L	0.000203	0.001015	J
* Cobalt, Total	9/15/23 06:33	9/18/23 12:14		1.015	0.000250	mg/L	0.000068	0.000203	
* Lead, Total	9/15/23 06:33	9/18/23 12:14		1.015	0.000325	mg/L	0.000068	0.000203	
* Manganese, Total	9/15/23 06:33	9/18/23 12:14		1.015	0.0425	mg/L	0.000152	0.001015	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-7

Location Code: WMWGORAP
Collected: 9/11/23 11:10
Customer ID:
Submittal Date: 9/14/23 10:03

Laboratory ID Number: BD17513

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	9/15/23 06:33	9/18/23 12:14		1.015	1.32	mg/L	0.169505	0.5075	
* Selenium, Total	9/15/23 06:33	9/18/23 12:14		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	9/15/23 06:33	9/18/23 12:14		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8		***Analyst: DLJ***							
* Antimony, Dissolved	9/14/23 14:15	9/14/23 16:37		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	9/14/23 14:15	9/14/23 16:37		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Dissolved	9/14/23 14:15	9/14/23 16:37		1.015	0.241	mg/L	0.000112	0.000203	
* Barium, Dissolved	9/14/23 14:15	9/14/23 16:37		1.015	0.0571	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	9/14/23 14:15	9/14/23 16:37		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	9/14/23 14:15	9/14/23 16:37		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	9/14/23 14:15	9/14/23 16:37		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	9/14/23 14:15	9/14/23 16:37		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Dissolved	9/14/23 14:15	9/14/23 16:37		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	9/14/23 14:15	9/14/23 16:37		1.015	0.0364	mg/L	0.000152	0.001015	
* Potassium, Dissolved	9/14/23 14:15	9/14/23 16:37		1.015	1.26	mg/L	0.169505	0.5075	
* Selenium, Dissolved	9/14/23 14:15	9/14/23 16:37		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	9/14/23 14:15	9/14/23 16:37		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1		***Analyst: ABB***							
* Mercury, Total by CVAA	9/14/23 17:22	9/15/23 00:11		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2		***Analyst: SC***							
* Nitrogen, Nitrate/Nitrite	9/18/23 14:09	9/18/23 14:09		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B		***Analyst: DHC***							
Alkalinity pH Endpoint	9/20/23 12:02	9/20/23 13:53		1	4.44	SU		2	
* Alkalinity	9/20/23 12:02	9/20/23 13:53		1	107	mg CaCO3/L		0.1	
Analytical Method: SM 2540C		***Analyst: CNJ***							
* Solids, Dissolved	9/15/23 10:50	9/19/23 13:02		1	327	mg/L		25	
Analytical Method: SM 4500CO2 D		***Analyst: DHC***							
* Bicarbonate Alkalinity, (calc.)	9/20/23 12:02	9/20/23 13:53		1	106	mg CaCO3/L		1	
* Carbonate Alkalinity, (calc.)	9/20/23 12:02	9/20/23 13:53		1	1.14	mg CaCO3/L		0.5	
Analytical Method: SM 5310 B		***Analyst: SC***							
* Total Organic Carbon	9/18/23 19:42	9/18/23 19:42		1	Not Detected	mg/L	1.00	2	U

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-7

Location Code: WMWGORAP
Collected: 9/11/23 11:10
Customer ID:
Submittal Date: 9/14/23 10:03

Laboratory ID Number: BD17513

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	9/18/23 12:26	9/18/23 12:26		1	8.17	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	9/18/23 15:16	9/18/23 15:16		1	0.0913	mg/L	0.06	0.125	J
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	9/26/23 15:52	9/26/23 15:52		8	124	mg/L	4.8	16	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	9/11/23 11:08	9/11/23 11:08			522.02	uS/cm			FA
pH	9/11/23 11:08	9/11/23 11:08			7.23	SU			FA
Temperature	9/11/23 11:08	9/11/23 11:08			19.26	C			FA
Turbidity	9/11/23 11:08	9/11/23 11:08			8.03	NTU			FA
Sulfide	9/11/23 11:07	9/11/23 11:07			0	mg/L			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/11/23 11:10
Customer ID:
Delivery Date: 9/14/23 10:03

Description: Gorgas Ash Pond - MW-7

Laboratory ID Number: BD17513

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17513	Aluminum, Dissolved	mg/L	-0.000290	0.0198	0.100	0.108	0.106	0.105	0.0850 to 0.115	108	70.0 to 130	1.87	20.0
BD17522	Aluminum, Total	mg/L	0.000468	0.0198	0.100	0.104	0.103	0.104	0.0850 to 0.115	104	70.0 to 130	0.966	20.0
BD17513	Antimony, Dissolved	mg/L	0.000229	0.00100	0.100	0.0963	0.0944	0.0919	0.0850 to 0.115	96.3	70.0 to 130	1.99	20.0
BD17522	Antimony, Total	mg/L	0.000288	0.00100	0.100	0.0977	0.0976	0.101	0.0850 to 0.115	97.7	70.0 to 130	0.102	20.0
BD17513	Arsenic, Dissolved	mg/L	-0.0000089	0.000200	0.100	0.332	0.336	0.0987	0.0850 to 0.115	91.0	70.0 to 130	1.20	20.0
BD17522	Arsenic, Total	mg/L	0.0000229	0.000200	0.100	0.103	0.104	0.100	0.0850 to 0.115	98.5	70.0 to 130	0.966	20.0
BD17513	Barium, Dissolved	mg/L	-0.0000262	0.00100	0.100	0.160	0.154	0.0998	0.0850 to 0.115	103	70.0 to 130	3.82	20.0
BD17522	Barium, Total	mg/L	0.0000085	0.00100	0.100	0.127	0.127	0.0983	0.0850 to 0.115	95.2	70.0 to 130	0.00	20.0
BD17513	Beryllium, Dissolved	mg/L	0.0000283	0.000880	0.100	0.101	0.103	0.101	0.0850 to 0.115	101	70.0 to 130	1.96	20.0
BD17522	Beryllium, Total	mg/L	0.000113	0.000880	0.100	0.0990	0.101	0.0965	0.0850 to 0.115	99.0	70.0 to 130	2.00	20.0
BD17513	Boron, Dissolved	mg/L	-0.00109	0.0650	1.00	2.72	2.72	1.00	0.850 to 1.15	102	70.0 to 130	0.00	20.0
BD17522	Boron, Total	mg/L	-0.000218	0.0650	1.00	1.25	1.24	1.04	0.850 to 1.15	106	70.0 to 130	0.803	20.0
BD17513	Cadmium, Dissolved	mg/L	0.0000030	0.000147	0.100	0.0979	0.0988	0.0978	0.0850 to 0.115	97.9	70.0 to 130	0.915	20.0
BD17522	Cadmium, Total	mg/L	0.0000072	0.000147	0.100	0.0967	0.0960	0.101	0.0850 to 0.115	96.7	70.0 to 130	0.727	20.0
BD17513	Calcium, Dissolved	mg/L	-0.0266	0.152	5.00	16.1	16.1	5.06	4.25 to 5.75	100	70.0 to 130	0.00	20.0
BD17522	Calcium, Total	mg/L	-0.0124	0.152	5.00	43.7	43.3	5.08	4.25 to 5.75	96.0	70.0 to 130	0.920	20.0
BD17521	Chloride	mg/L	-0.0466	1.00	10.0	22.5	22.5	10.3	9.00 to 11.0	88.0	80.0 to 120	0.00	20.0
BD17513	Chromium, Dissolved	mg/L	-0.000168	0.000440	0.100	0.100	0.0971	0.101	0.0850 to 0.115	100	70.0 to 130	2.94	20.0
BD17522	Chromium, Total	mg/L	-0.000104	0.000440	0.100	0.0983	0.0983	0.101	0.0850 to 0.115	98.3	70.0 to 130	0.00	20.0
BD17513	Cobalt, Dissolved	mg/L	-0.0000695	0.000147	0.100	0.102	0.100	0.102	0.0850 to 0.115	102	70.0 to 130	1.98	20.0
BD17522	Cobalt, Total	mg/L	0.0000010	0.000147	0.100	0.0995	0.0993	0.103	0.0850 to 0.115	99.5	70.0 to 130	0.201	20.0
BD17521	Fluoride	mg/L	0.0183	0.125	2.50	2.78	2.74	2.61	2.25 to 2.75	105	80.0 to 120	1.45	20.0
BD17513	Iron, Dissolved	mg/L	0.00154	0.0176	0.2	0.414	0.417	0.202	0.170 to 0.230	100	70.0 to 130	0.722	20.0
BD17522	Iron, Total	mg/L	0.00165	0.0176	0.2	1.53	1.52	0.206	0.170 to 0.230	100	70.0 to 130	0.656	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/11/23 11:10
Customer ID:
Delivery Date: 9/14/23 10:03

Description: Gorgas Ash Pond - MW-7

Laboratory ID Number: BD17513

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17513	Lead, Dissolved	mg/L	0.0000056	0.000147	0.100	0.105	0.105	0.105	0.0850 to 0.115	105	70.0 to 130	0.00	20.0
BD17522	Lead, Total	mg/L	0.0000089	0.000147	0.100	0.0965	0.0958	0.0974	0.0850 to 0.115	96.5	70.0 to 130	0.728	20.0
BD17513	Lithium, Dissolved	mg/L	-0.000209	0.0154	0.200	0.413	0.414	0.205	0.170 to 0.230	102	70.0 to 130	0.242	20.0
BD17522	Lithium, Total	mg/L	-0.000155	0.0154	0.200	0.246	0.247	0.209	0.170 to 0.230	105	70.0 to 130	0.406	20.0
BD17513	Magnesium, Dissolved	mg/L	-0.00780	0.0462	5.00	8.97	9.03	5.14	4.25 to 5.75	101	70.0 to 130	0.667	20.0
BD17522	Magnesium, Total	mg/L	-0.0138	0.0462	5.00	22.8	22.8	5.15	4.25 to 5.75	102	70.0 to 130	0.00	20.0
BD17513	Manganese, Dissolved	mg/L	0.0000089	0.00033	0.100	0.139	0.137	0.103	0.0850 to 0.115	103	70.0 to 130	1.45	20.0
BD17522	Manganese, Total	mg/L	0.0000196	0.00033	0.100	0.253	0.250	0.105	0.0850 to 0.115	102	70.0 to 130	1.19	20.0
BD17522	Mercury, Total by CVAA	mg/L	7.000E-05	0.000500	0.004	0.00403	0.00406	0.00407	0.00340 to 0.00460	101	70.0 to 130	0.742	20.0
BD17513	Molybdenum, Dissolved	mg/L	0.000202	0.0100	0.2	0.429	0.432	0.204	0.170 to 0.230	102	70.0 to 130	0.697	20.0
BD17522	Molybdenum, Total	mg/L	0.000	0.0100	0.2	0.214	0.211	0.210	0.170 to 0.230	107	70.0 to 130	1.41	20.0
BD17513	Potassium, Dissolved	mg/L	-0.0106	0.367	10.0	11.1	11.0	10.1	8.50 to 11.5	98.4	70.0 to 130	0.905	20.0
BD17522	Potassium, Total	mg/L	0.00267	0.367	10.0	12.4	12.2	10.3	8.50 to 11.5	102	70.0 to 130	1.63	20.0
BD17513	Selenium, Dissolved	mg/L	-0.0000900	0.00100	0.100	0.100	0.101	0.103	0.0850 to 0.115	100	70.0 to 130	0.995	20.0
BD17522	Selenium, Total	mg/L	-0.0000063	0.00100	0.100	0.102	0.0988	0.102	0.0850 to 0.115	102	70.0 to 130	3.19	20.0
BD17513	Silicon, Dissolved	mg/L	0.000692	0.0440	1.00	6.61	6.59	1.02	0.850 to 1.15	102	70.0 to 130	0.303	20.0
BD17522	Silicon, Total	mg/L	0.000173	0.0440	1.00	15.7	15.7	1.05	0.850 to 1.15	110	70.0 to 130	0.00	20.0
BD17513	Sodium, Dissolved	mg/L	0.0636	0.0880	5.00	105	103	5.10	4.25 to 5.75	0.00	70.0 to 130	1.92	20.0
BD17522	Sodium, Total	mg/L	0.0205	0.0880	5.00	21.4	21.5	5.16	4.25 to 5.75	102	70.0 to 130	0.466	20.0
BD17521	Sulfate	mg/L	0.0639	2.0	80.0	135	132	18.8	18.0 to 22.0	96.9	80.0 to 120	2.25	20.0
BD17513	Thallium, Dissolved	mg/L	-0.0000854	0.000147	0.100	0.103	0.103	0.102	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BD17522	Thallium, Total	mg/L	0.0000115	0.000147	0.100	0.0979	0.0982	0.0992	0.0850 to 0.115	97.9	70.0 to 130	0.306	20.0
BD17521	Total Organic Carbon	mg/L	0.299	1.00	10.0	11.3	10.9	10.7		113	80.0 to 120	3.60	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/11/23 11:10
Customer ID:
Delivery Date: 9/14/23 10:03

Description: Gorgas Ash Pond - MW-7

Laboratory ID Number: BD17513

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17516	Alkalinity	mg CaCO3/L					185	52.0	45.0 to 55.0			0.00	10.0
BD17521	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.02	0.200	2.00	2.01	-0.007	1.96	1.80 to 2.20	100	90.0 to 110	0.00	15.0
BD17517	Solids, Dissolved	mg/L	0.0000	25.0			1330	54.0	40.0 to 60.0			0.749	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 10/25/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-6V

Location Code: WMWGORAP
Collected: 9/11/23 16:22
Customer ID:
Submittal Date: 9/14/23 10:03

Laboratory ID Number: BD17514

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	9/15/23 06:33	9/19/23 17:28		1.015	0.104	mg/L	0.030000	0.1015	
* Calcium, Total	9/15/23 06:33	9/19/23 17:28		1.015	1.22	mg/L	0.070035	0.406	
* Iron, Total	9/15/23 06:33	9/19/23 17:28		1.015	0.503	mg/L	0.008120	0.0406	
* Lithium, Total	9/15/23 06:33	9/19/23 17:28		1.015	0.138	mg/L	0.007105	0.01999956	
* Magnesium, Total	9/15/23 06:33	9/19/23 17:28		1.015	0.492	mg/L	0.021315	0.406	
* Molybdenum, Total	9/15/23 06:33	9/19/23 17:28		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Total (calc.)	9/15/23 06:33	9/19/23 17:28		1	12.5	mg/L			
* Silicon, Total	9/15/23 06:33	9/19/23 17:28		1.015	5.82	mg/L	0.02030	0.25375	
* Sodium, Total	9/15/23 06:33	9/20/23 13:37		10.15	379	mg/L	0.4060	4.06	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	9/14/23 14:15	9/19/23 15:00		1.015	0.101	mg/L	0.030000	0.1015	J
* Calcium, Dissolved	9/14/23 14:15	9/19/23 15:00		1.015	1.12	mg/L	0.070035	0.406	
* Iron, Dissolved	9/14/23 14:15	9/19/23 15:00		1.015	0.0201	mg/L	0.008120	0.0406	J
* Lithium, Dissolved	9/14/23 14:15	9/19/23 15:00		1.015	0.131	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	9/14/23 14:15	9/19/23 15:00		1.015	0.387	mg/L	0.021315	0.406	J
* Molybdenum, Dissolved	9/14/23 14:15	9/19/23 15:00		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Dissolved (calc.)	9/14/23 14:15	9/19/23 15:00		1	8.97	mg/L			
* Silicon, Dissolved	9/14/23 14:15	9/19/23 15:00		1.015	4.19	mg/L	0.02030	0.25375	
* Sodium, Dissolved	9/14/23 14:15	9/20/23 13:56		101.5	354	mg/L	4.060	40.6	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	9/15/23 06:33	9/18/23 12:18		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Total	9/15/23 06:33	9/18/23 12:18		1.015	1.22	mg/L	0.009135	0.05075	
* Arsenic, Total	9/15/23 06:33	9/18/23 12:18		1.015	0.000641	mg/L	0.000112	0.000203	
* Barium, Total	9/15/23 06:33	9/18/23 12:18		1.015	0.175	mg/L	0.000508	0.001015	
* Beryllium, Total	9/15/23 06:33	9/18/23 12:18		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	9/15/23 06:33	9/18/23 12:18		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	9/15/23 06:33	9/18/23 12:18		1.015	0.00107	mg/L	0.000203	0.001015	
* Cobalt, Total	9/15/23 06:33	9/18/23 12:18		1.015	0.000263	mg/L	0.000068	0.000203	
* Lead, Total	9/15/23 06:33	9/18/23 12:18		1.015	0.000503	mg/L	0.000068	0.000203	
* Manganese, Total	9/15/23 06:33	9/18/23 12:18		1.015	0.00831	mg/L	0.000152	0.001015	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-6V

Location Code: WMWGORAP
Collected: 9/11/23 16:22
Customer ID:
Submittal Date: 9/14/23 10:03

Laboratory ID Number: BD17514

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	9/15/23 06:33	9/18/23 12:18		1.015	1.29	mg/L	0.169505	0.5075	
* Selenium, Total	9/15/23 06:33	9/18/23 12:18		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	9/15/23 06:33	9/18/23 12:18		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	9/14/23 14:15	9/14/23 17:06		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	9/14/23 14:15	9/14/23 17:06		1.015	0.0154	mg/L	0.009135	0.05075	J
* Arsenic, Dissolved	9/14/23 14:15	9/14/23 17:06		1.015	0.000400	mg/L	0.000112	0.000203	
* Barium, Dissolved	9/14/23 14:15	9/14/23 17:06		1.015	0.171	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	9/14/23 14:15	9/14/23 17:06		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	9/14/23 14:15	9/14/23 17:06		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	9/14/23 14:15	9/14/23 17:06		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	9/14/23 14:15	9/14/23 17:06		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Dissolved	9/14/23 14:15	9/14/23 17:06		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	9/14/23 14:15	9/14/23 17:06		1.015	0.00463	mg/L	0.000152	0.001015	
* Potassium, Dissolved	9/14/23 14:15	9/14/23 17:06		1.015	0.976	mg/L	0.169505	0.5075	
* Selenium, Dissolved	9/14/23 14:15	9/14/23 17:06		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	9/14/23 14:15	9/14/23 17:06		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	9/14/23 17:22	9/15/23 00:15		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	9/18/23 14:11	9/18/23 14:11		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: DHC***								
Alkalinity pH Endpoint	9/20/23 12:02	9/20/23 13:53		1	4.50	SU		2	
* Alkalinity	9/20/23 12:02	9/20/23 13:53		1	707	mg CaCO3/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	9/15/23 10:50	9/19/23 13:02		1	852	mg/L		75.8	
Analytical Method: SM 4500CO2 D	***Analyst: DHC***								
* Bicarbonate Alkalinity, (calc.)	9/20/23 12:02	9/20/23 13:53		1	654	mg CaCO3/L		1	A
* Carbonate Alkalinity, (calc.)	9/20/23 12:02	9/20/23 13:53		1	52.3	mg CaCO3/L		0.5	A
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	9/18/23 20:02	9/18/23 20:02		1	1.41	mg/L	1.00	2	J

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-6V

Location Code: WMWGORAP
Collected: 9/11/23 16:22
Customer ID:
Submittal Date: 9/14/23 10:03

Laboratory ID Number: BD17514

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	9/18/23 12:39	9/18/23 12:39		4	44.6	mg/L	2.00	4	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	9/18/23 15:17	9/18/23 15:17		1	4.36	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	9/26/23 15:40	9/26/23 15:40		1	6.84	mg/L	0.6	2	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	9/11/23 16:17	9/11/23 16:17			1343.48	uS/cm			FA
pH	9/11/23 16:17	9/11/23 16:17			8.44	SU			FA
Temperature	9/11/23 16:17	9/11/23 16:17			21.86	C			FA
Turbidity	9/11/23 16:17	9/11/23 16:17			19.9	NTU			FA
Sulfide	9/11/23 16:17	9/11/23 16:17			0	mg/L			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/11/23 16:22
Customer ID:
Delivery Date: 9/14/23 10:03

Description: Gorgas Ash Pond - MW-6V

Laboratory ID Number: BD17514

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17523	Aluminum, Dissolved	mg/L	-0.000243	0.0198	0.100	0.108	0.105	0.103	0.0850 to 0.115	108	70.0 to 130	2.82	20.0
BD17522	Aluminum, Total	mg/L	0.000468	0.0198	0.100	0.104	0.103	0.104	0.0850 to 0.115	104	70.0 to 130	0.966	20.0
BD17523	Antimony, Dissolved	mg/L	0.000225	0.00100	0.100	0.0966	0.0952	0.0924	0.0850 to 0.115	96.6	70.0 to 130	1.46	20.0
BD17522	Antimony, Total	mg/L	0.000288	0.00100	0.100	0.0977	0.0976	0.101	0.0850 to 0.115	97.7	70.0 to 130	0.102	20.0
BD17523	Arsenic, Dissolved	mg/L	-0.0000145	0.000200	0.100	0.100	0.100	0.100	0.0850 to 0.115	99.8	70.0 to 130	0.00	20.0
BD17522	Arsenic, Total	mg/L	0.0000229	0.000200	0.100	0.103	0.104	0.100	0.0850 to 0.115	98.5	70.0 to 130	0.966	20.0
BD17523	Barium, Dissolved	mg/L	-0.0000070	0.00100	0.100	0.294	0.293	0.102	0.0850 to 0.115	101	70.0 to 130	0.341	20.0
BD17522	Barium, Total	mg/L	0.0000085	0.00100	0.100	0.127	0.127	0.0983	0.0850 to 0.115	95.2	70.0 to 130	0.00	20.0
BD17523	Beryllium, Dissolved	mg/L	0.0000324	0.000880	0.100	0.0992	0.0972	0.0981	0.0850 to 0.115	99.2	70.0 to 130	2.04	20.0
BD17522	Beryllium, Total	mg/L	0.000113	0.000880	0.100	0.0990	0.101	0.0965	0.0850 to 0.115	99.0	70.0 to 130	2.00	20.0
BD17523	Boron, Dissolved	mg/L	-0.00097	0.0650	1.00	1.08	1.08	1.02	0.850 to 1.15	104	70.0 to 130	0.00	20.0
BD17522	Boron, Total	mg/L	-0.000218	0.0650	1.00	1.25	1.24	1.04	0.850 to 1.15	106	70.0 to 130	0.803	20.0
BD17523	Cadmium, Dissolved	mg/L	0.0000030	0.000147	0.100	0.100	0.0988	0.0965	0.0850 to 0.115	100	70.0 to 130	1.21	20.0
BD17522	Cadmium, Total	mg/L	0.0000072	0.000147	0.100	0.0967	0.0960	0.101	0.0850 to 0.115	96.7	70.0 to 130	0.727	20.0
BD17523	Calcium, Dissolved	mg/L	-0.0272	0.152	5.00	62.6	57.2	4.97	4.25 to 5.75	198	70.0 to 130	9.02	20.0
BD17522	Calcium, Total	mg/L	-0.0124	0.152	5.00	43.7	43.3	5.08	4.25 to 5.75	96.0	70.0 to 130	0.920	20.0
BD17521	Chloride	mg/L	-0.0466	1.00	10.0	22.5	22.5	10.3	9.00 to 11.0	88.0	80.0 to 120	0.00	20.0
BD17523	Chromium, Dissolved	mg/L	-0.000196	0.000440	0.100	0.101	0.0983	0.0975	0.0850 to 0.115	101	70.0 to 130	2.71	20.0
BD17522	Chromium, Total	mg/L	-0.000104	0.000440	0.100	0.0983	0.0983	0.101	0.0850 to 0.115	98.3	70.0 to 130	0.00	20.0
BD17523	Cobalt, Dissolved	mg/L	-0.0000687	0.000147	0.100	0.101	0.0989	0.0991	0.0850 to 0.115	101	70.0 to 130	2.10	20.0
BD17522	Cobalt, Total	mg/L	0.0000010	0.000147	0.100	0.0995	0.0993	0.103	0.0850 to 0.115	99.5	70.0 to 130	0.201	20.0
BD17521	Fluoride	mg/L	0.0183	0.125	2.50	2.78	2.74	2.61	2.25 to 2.75	105	80.0 to 120	1.45	20.0
BD17523	Iron, Dissolved	mg/L	0.00003	0.0176	0.2	0.510	0.509	0.202	0.170 to 0.230	99.0	70.0 to 130	0.196	20.0
BD17522	Iron, Total	mg/L	0.00165	0.0176	0.2	1.53	1.52	0.206	0.170 to 0.230	100	70.0 to 130	0.656	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/11/23 16:22
Customer ID:
Delivery Date: 9/14/23 10:03

Description: Gorgas Ash Pond - MW-6V

Laboratory ID Number: BD17514

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17523	Lead, Dissolved	mg/L	0.0000011	0.000147	0.100	0.107	0.107	0.106	0.0850 to 0.115	107	70.0 to 130	0.00	20.0
BD17522	Lead, Total	mg/L	0.0000089	0.000147	0.100	0.0965	0.0958	0.0974	0.0850 to 0.115	96.5	70.0 to 130	0.728	20.0
BD17523	Lithium, Dissolved	mg/L	-0.000457	0.0154	0.200	0.241	0.240	0.205	0.170 to 0.230	104	70.0 to 130	0.416	20.0
BD17522	Lithium, Total	mg/L	-0.000155	0.0154	0.200	0.246	0.247	0.209	0.170 to 0.230	105	70.0 to 130	0.406	20.0
BD17523	Magnesium, Dissolved	mg/L	-0.00451	0.0462	5.00	22.2	22.0	5.10	4.25 to 5.75	102	70.0 to 130	0.905	20.0
BD17522	Magnesium, Total	mg/L	-0.0138	0.0462	5.00	22.8	22.8	5.15	4.25 to 5.75	102	70.0 to 130	0.00	20.0
BD17523	Manganese, Dissolved	mg/L	-0.0000010	0.00033	0.100	0.139	0.136	0.101	0.0850 to 0.115	104	70.0 to 130	2.18	20.0
BD17522	Manganese, Total	mg/L	0.0000196	0.00033	0.100	0.253	0.250	0.105	0.0850 to 0.115	102	70.0 to 130	1.19	20.0
BD17522	Mercury, Total by CVAA	mg/L	7.000E-05	0.000500	0.004	0.00403	0.00406	0.00407	0.00340 to 0.00460	101	70.0 to 130	0.742	20.0
BD17523	Molybdenum, Dissolved	mg/L	0.000129	0.0100	0.2	0.211	0.210	0.205	0.170 to 0.230	106	70.0 to 130	0.475	20.0
BD17522	Molybdenum, Total	mg/L	0.000	0.0100	0.2	0.214	0.211	0.210	0.170 to 0.230	107	70.0 to 130	1.41	20.0
BD17523	Potassium, Dissolved	mg/L	-0.0168	0.367	10.0	13.6	13.3	9.90	8.50 to 11.5	102	70.0 to 130	2.23	20.0
BD17522	Potassium, Total	mg/L	0.00267	0.367	10.0	12.4	12.2	10.3	8.50 to 11.5	102	70.0 to 130	1.63	20.0
BD17523	Selenium, Dissolved	mg/L	-0.0000414	0.00100	0.100	0.101	0.100	0.101	0.0850 to 0.115	100	70.0 to 130	0.995	20.0
BD17522	Selenium, Total	mg/L	-0.0000063	0.00100	0.100	0.102	0.0988	0.102	0.0850 to 0.115	102	70.0 to 130	3.19	20.0
BD17523	Silicon, Dissolved	mg/L	-0.000062	0.0440	1.00	16.9	16.9	1.02	0.850 to 1.15	100	70.0 to 130	0.00	20.0
BD17522	Silicon, Total	mg/L	0.000173	0.0440	1.00	15.7	15.7	1.05	0.850 to 1.15	110	70.0 to 130	0.00	20.0
BD17523	Sodium, Dissolved	mg/L	0.00777	0.0880	5.00	72.0	66.4	5.07	4.25 to 5.75	196	70.0 to 130	8.09	20.0
BD17522	Sodium, Total	mg/L	0.0205	0.0880	5.00	21.4	21.5	5.16	4.25 to 5.75	102	70.0 to 130	0.466	20.0
BD17521	Sulfate	mg/L	0.0639	2.0	80.0	135	132	18.8	18.0 to 22.0	96.9	80.0 to 120	2.25	20.0
BD17523	Thallium, Dissolved	mg/L	-0.0000863	0.000147	0.100	0.106	0.108	0.103	0.0850 to 0.115	106	70.0 to 130	1.87	20.0
BD17522	Thallium, Total	mg/L	0.0000115	0.000147	0.100	0.0979	0.0982	0.0992	0.0850 to 0.115	97.9	70.0 to 130	0.306	20.0
BD17521	Total Organic Carbon	mg/L	0.299	1.00	10.0	11.3	10.9	10.7		113	80.0 to 120	3.60	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/11/23 16:22
Customer ID:
Delivery Date: 9/14/23 10:03

Description: Gorgas Ash Pond - MW-6V

Laboratory ID Number: BD17514

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17516	Alkalinity	mg CaCO3/L					185	52.0	45.0 to 55.0			0.00	10.0
BD17521	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.02	0.200	2.00	2.01	-0.007	1.96	1.80 to 2.20	100	90.0 to 110	0.00	15.0
BD17517	Solids, Dissolved	mg/L	0.0000	25.0			1330	54.0	40.0 to 60.0			0.749	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-6V Dis

Location Code: WMWGORAP
Collected: 9/11/23 16:22
Customer ID:
Submittal Date: 9/14/23 10:03

Laboratory ID Number: BD17515

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Dissolved by CVAA	9/21/23 12:12	9/21/23 16:37		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	9/18/23 14:13	9/18/23 14:13		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: DHC***								
Alkalinity pH Endpoint	9/20/23 12:02	9/20/23 13:53		1	4.51	SU		2	
* Alkalinity	9/20/23 12:02	9/20/23 13:53		1	699	mg CaCO3/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	9/15/23 10:50	9/19/23 13:02		1	845	mg/L		75.8	
Analytical Method: SM 4500CO2 D	***Analyst: DHC***								
* Bicarbonate Alkalinity, (calc.)	9/20/23 12:02	9/20/23 13:53		1	656	mg CaCO3/L		1	A
* Carbonate Alkalinity, (calc.)	9/20/23 12:02	9/20/23 13:53		1	42.7	mg CaCO3/L		0.5	A
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	9/18/23 20:19	9/18/23 20:19		1	1.22	mg/L	1.00	2	J
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	9/18/23 12:40	9/18/23 12:40		4	48.5	mg/L	2.00	4	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	9/18/23 15:19	9/18/23 15:19		1	4.33	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	9/26/23 15:41	9/26/23 15:41		1	2.59	mg/L	0.6	2	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	9/11/23 16:17	9/11/23 16:17			1343.48	uS/cm			FA
pH	9/11/23 16:17	9/11/23 16:17			8.44	SU			FA
Temperature	9/11/23 16:17	9/11/23 16:17			21.86	C			FA
Turbidity	9/11/23 16:17	9/11/23 16:17			19.9	NTU			FA
Sulfide	9/11/23 16:17	9/11/23 16:17			0	mg/L			FA

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/11/23 16:22
Customer ID:
Delivery Date: 9/14/23 10:03

Description: Gorgas Ash Pond - MW-6V Dis

Laboratory ID Number: BD17515

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17521	Chloride	mg/L	-0.0466	1.00	10.0	22.5	22.5	10.3	9.00 to 11.0	88.0	80.0 to 120	0.00	20.0
BD17521	Fluoride	mg/L	0.0183	0.125	2.50	2.78	2.74	2.61	2.25 to 2.75	105	80.0 to 120	1.45	20.0
BD17515	Mercury, Dissolved by	mg/L	3.000E-05	0.000500	0.004	0.00399	0.00406	0.004	0.00340 to 0.00460	99.8	70.0 to 130	1.74	20.0
BD17521	Sulfate	mg/L	0.0639	2.0	80.0	135	132	18.8	18.0 to 22.0	96.9	80.0 to 120	2.25	20.0
BD17521	Total Organic Carbon	mg/L	0.299	1.00	10.0	11.3	10.9	10.7		113	80.0 to 120	3.60	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 10/25/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/11/23 16:22
Customer ID:
Delivery Date: 9/14/23 10:03

Description: Gorgas Ash Pond - MW-6V Dis

Laboratory ID Number: BD17515

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17516	Alkalinity	mg CaCO3/L					185	52.0	45.0 to 55.0			0.00	10.0
BD17521	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.02	0.200	2.00	2.01	-0.007	1.96	1.80 to 2.20	100	90.0 to 110	0.00	15.0
BD17517	Solids, Dissolved	mg/L	0.0000	25.0			1330	54.0	40.0 to 60.0			0.749	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-3

Location Code: WMWGORAP
Collected: 9/12/23 10:10
Customer ID:
Submittal Date: 9/14/23 10:03

Laboratory ID Number: BD17516

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	9/15/23 06:33	9/19/23 17:32		1.015	0.192	mg/L	0.030000	0.1015	
* Calcium, Total	9/15/23 06:33	9/19/23 17:32		1.015	9.92	mg/L	0.070035	0.406	
* Iron, Total	9/15/23 06:33	9/19/23 17:32		1.015	0.511	mg/L	0.008120	0.0406	
* Lithium, Total	9/15/23 06:33	9/19/23 17:32		1.015	0.0686	mg/L	0.007105	0.01999956	
* Magnesium, Total	9/15/23 06:33	9/19/23 17:32		1.015	4.16	mg/L	0.021315	0.406	
* Molybdenum, Total	9/15/23 06:33	9/19/23 17:32		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Total (calc.)	9/15/23 06:33	9/19/23 17:32		1	11.5	mg/L			
* Silicon, Total	9/15/23 06:33	9/19/23 17:32		1.015	5.36	mg/L	0.02030	0.25375	
* Sodium, Total	9/15/23 06:33	9/20/23 15:11		10.15	103	mg/L	0.4060	4.06	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	9/14/23 14:15	9/19/23 15:03		1.015	0.254	mg/L	0.030000	0.1015	
* Calcium, Dissolved	9/14/23 14:15	9/19/23 15:03		1.015	13.9	mg/L	0.070035	0.406	
* Iron, Dissolved	9/14/23 14:15	9/19/23 15:03		1.015	0.933	mg/L	0.008120	0.0406	
* Lithium, Dissolved	9/14/23 14:15	9/19/23 15:03		1.015	0.0698	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	9/14/23 14:15	9/19/23 15:03		1.015	5.79	mg/L	0.021315	0.406	
* Molybdenum, Dissolved	9/14/23 14:15	9/19/23 15:03		1.015	0.00600	mg/L	0.005075	0.01015	J
* Silica, Dissolved (calc.)	9/14/23 14:15	9/19/23 15:03		1	11.7	mg/L			
* Silicon, Dissolved	9/14/23 14:15	9/19/23 15:03		1.015	5.45	mg/L	0.02030	0.25375	
* Sodium, Dissolved	9/14/23 14:15	9/20/23 11:41		10.15	95.2	mg/L	0.4060	4.06	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	9/15/23 06:33	9/18/23 12:22		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Total	9/15/23 06:33	9/18/23 12:22		1.015	0.0910	mg/L	0.009135	0.05075	
* Arsenic, Total	9/15/23 06:33	9/18/23 12:22		1.015	0.000177	mg/L	0.000112	0.000203	J
* Barium, Total	9/15/23 06:33	9/18/23 12:22		1.015	0.348	mg/L	0.000508	0.001015	
* Beryllium, Total	9/15/23 06:33	9/18/23 12:22		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	9/15/23 06:33	9/18/23 12:22		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	9/15/23 06:33	9/18/23 12:22		1.015	0.000254	mg/L	0.000203	0.001015	J
* Cobalt, Total	9/15/23 06:33	9/18/23 12:22		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	9/15/23 06:33	9/18/23 12:22		1.015	0.0000730	mg/L	0.000068	0.000203	J
* Manganese, Total	9/15/23 06:33	9/18/23 12:22		1.015	0.0539	mg/L	0.000152	0.001015	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-3

Location Code: WMWGORAP
Collected: 9/12/23 10:10
Customer ID:
Submittal Date: 9/14/23 10:03

Laboratory ID Number: BD17516

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	9/15/23 06:33	9/18/23 12:22		1.015	1.07	mg/L	0.169505	0.5075	
* Selenium, Total	9/15/23 06:33	9/18/23 12:22		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	9/15/23 06:33	9/18/23 12:22		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	9/14/23 14:15	9/14/23 17:10		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	9/14/23 14:15	9/14/23 17:10		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Dissolved	9/14/23 14:15	9/14/23 17:10		1.015	Not Detected	mg/L	0.000112	0.000203	U
* Barium, Dissolved	9/14/23 14:15	9/14/23 17:10		1.015	0.441	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	9/14/23 14:15	9/14/23 17:10		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	9/14/23 14:15	9/14/23 17:10		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	9/14/23 14:15	9/14/23 17:10		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	9/14/23 14:15	9/14/23 17:10		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Dissolved	9/14/23 14:15	9/14/23 17:10		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	9/14/23 14:15	9/14/23 17:10		1.015	0.0722	mg/L	0.000152	0.001015	
* Potassium, Dissolved	9/14/23 14:15	9/14/23 17:10		1.015	1.15	mg/L	0.169505	0.5075	
* Selenium, Dissolved	9/14/23 14:15	9/14/23 17:10		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	9/14/23 14:15	9/14/23 17:10		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	9/14/23 17:22	9/15/23 00:19		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	9/18/23 14:15	9/18/23 14:15		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: DHC***								
Alkalinity pH Endpoint	9/20/23 12:02	9/20/23 13:53		1	4.45	SU		2	
* Alkalinity	9/20/23 12:02	9/20/23 13:53		1	185	mg CaCO3/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	9/15/23 10:50	9/19/23 13:02		1	280	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: DHC***								
* Bicarbonate Alkalinity, (calc.)	9/20/23 12:02	9/20/23 13:53		1	181	mg CaCO3/L		1	
* Carbonate Alkalinity, (calc.)	9/20/23 12:02	9/20/23 13:53		1	3.40	mg CaCO3/L		0.5	
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	9/18/23 20:34	9/18/23 20:34		1	Not Detected	mg/L	1.00	2	U

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-3

Location Code: WMWGORAP
Collected: 9/12/23 10:10
Customer ID:
Submittal Date: 9/14/23 10:03

Laboratory ID Number: BD17516

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	9/18/23 12:29	9/18/23 12:29		1	12.5	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	9/18/23 15:20	9/18/23 15:20		1	0.0808	mg/L	0.06	0.125	J
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	9/26/23 15:53	9/26/23 15:53		2	47.9	mg/L	1.2	4	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	9/12/23 10:07	9/12/23 10:07			439.27	uS/cm			FA
pH	9/12/23 10:07	9/12/23 10:07			7.86	SU			FA
Temperature	9/12/23 10:07	9/12/23 10:07			18.64	C			FA
Turbidity	9/12/23 10:07	9/12/23 10:07			2.59	NTU			FA
Sulfide	9/12/23 10:07	9/12/23 10:07			0	mg/L			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 10/25/2023
Version: 3.5
COA_CCR

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/12/23 10:10
Customer ID:
Delivery Date: 9/14/23 10:03

Description: Gorgas Ash Pond - MW-3

Laboratory ID Number: BD17516

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17523	Aluminum, Dissolved	mg/L	-0.000243	0.0198	0.100	0.108	0.105	0.103	0.0850 to 0.115	108	70.0 to 130	2.82	20.0
BD17522	Aluminum, Total	mg/L	0.000468	0.0198	0.100	0.104	0.103	0.104	0.0850 to 0.115	104	70.0 to 130	0.966	20.0
BD17523	Antimony, Dissolved	mg/L	0.000225	0.00100	0.100	0.0966	0.0952	0.0924	0.0850 to 0.115	96.6	70.0 to 130	1.46	20.0
BD17522	Antimony, Total	mg/L	0.000288	0.00100	0.100	0.0977	0.0976	0.101	0.0850 to 0.115	97.7	70.0 to 130	0.102	20.0
BD17523	Arsenic, Dissolved	mg/L	-0.0000145	0.000200	0.100	0.100	0.100	0.100	0.0850 to 0.115	99.8	70.0 to 130	0.00	20.0
BD17522	Arsenic, Total	mg/L	0.0000229	0.000200	0.100	0.103	0.104	0.100	0.0850 to 0.115	98.5	70.0 to 130	0.966	20.0
BD17523	Barium, Dissolved	mg/L	-0.0000070	0.00100	0.100	0.294	0.293	0.102	0.0850 to 0.115	101	70.0 to 130	0.341	20.0
BD17522	Barium, Total	mg/L	0.0000085	0.00100	0.100	0.127	0.127	0.0983	0.0850 to 0.115	95.2	70.0 to 130	0.00	20.0
BD17523	Beryllium, Dissolved	mg/L	0.0000324	0.000880	0.100	0.0992	0.0972	0.0981	0.0850 to 0.115	99.2	70.0 to 130	2.04	20.0
BD17522	Beryllium, Total	mg/L	0.000113	0.000880	0.100	0.0990	0.101	0.0965	0.0850 to 0.115	99.0	70.0 to 130	2.00	20.0
BD17523	Boron, Dissolved	mg/L	-0.00097	0.0650	1.00	1.08	1.08	1.02	0.850 to 1.15	104	70.0 to 130	0.00	20.0
BD17522	Boron, Total	mg/L	-0.000218	0.0650	1.00	1.25	1.24	1.04	0.850 to 1.15	106	70.0 to 130	0.803	20.0
BD17523	Cadmium, Dissolved	mg/L	0.0000030	0.000147	0.100	0.100	0.0988	0.0965	0.0850 to 0.115	100	70.0 to 130	1.21	20.0
BD17522	Cadmium, Total	mg/L	0.0000072	0.000147	0.100	0.0967	0.0960	0.101	0.0850 to 0.115	96.7	70.0 to 130	0.727	20.0
BD17523	Calcium, Dissolved	mg/L	-0.0272	0.152	5.00	62.6	57.2	4.97	4.25 to 5.75	198	70.0 to 130	9.02	20.0
BD17522	Calcium, Total	mg/L	-0.0124	0.152	5.00	43.7	43.3	5.08	4.25 to 5.75	96.0	70.0 to 130	0.920	20.0
BD17521	Chloride	mg/L	-0.0466	1.00	10.0	22.5	22.5	10.3	9.00 to 11.0	88.0	80.0 to 120	0.00	20.0
BD17523	Chromium, Dissolved	mg/L	-0.000196	0.000440	0.100	0.101	0.0983	0.0975	0.0850 to 0.115	101	70.0 to 130	2.71	20.0
BD17522	Chromium, Total	mg/L	-0.000104	0.000440	0.100	0.0983	0.0983	0.101	0.0850 to 0.115	98.3	70.0 to 130	0.00	20.0
BD17523	Cobalt, Dissolved	mg/L	-0.0000687	0.000147	0.100	0.101	0.0989	0.0991	0.0850 to 0.115	101	70.0 to 130	2.10	20.0
BD17522	Cobalt, Total	mg/L	0.0000010	0.000147	0.100	0.0995	0.0993	0.103	0.0850 to 0.115	99.5	70.0 to 130	0.201	20.0
BD17521	Fluoride	mg/L	0.0183	0.125	2.50	2.78	2.74	2.61	2.25 to 2.75	105	80.0 to 120	1.45	20.0
BD17523	Iron, Dissolved	mg/L	0.00003	0.0176	0.2	0.510	0.509	0.202	0.170 to 0.230	99.0	70.0 to 130	0.196	20.0
BD17522	Iron, Total	mg/L	0.00165	0.0176	0.2	1.53	1.52	0.206	0.170 to 0.230	100	70.0 to 130	0.656	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/12/23 10:10
Customer ID:
Delivery Date: 9/14/23 10:03

Description: Gorgas Ash Pond - MW-3

Laboratory ID Number: BD17516

				MB					Standard		Rec		Prec
Sample	Analysis	Units	MB	Limit	Spike	MS	MSD	Standard	Limit	Rec	Limit	Prec	Limit
BD17523	Lead, Dissolved	mg/L	0.0000011	0.000147	0.100	0.107	0.107	0.106	0.0850 to 0.115	107	70.0 to 130	0.00	20.0
BD17522	Lead, Total	mg/L	0.0000089	0.000147	0.100	0.0965	0.0958	0.0974	0.0850 to 0.115	96.5	70.0 to 130	0.728	20.0
BD17523	Lithium, Dissolved	mg/L	-0.000457	0.0154	0.200	0.241	0.240	0.205	0.170 to 0.230	104	70.0 to 130	0.416	20.0
BD17522	Lithium, Total	mg/L	-0.000155	0.0154	0.200	0.246	0.247	0.209	0.170 to 0.230	105	70.0 to 130	0.406	20.0
BD17523	Magnesium, Dissolved	mg/L	-0.00451	0.0462	5.00	22.2	22.0	5.10	4.25 to 5.75	102	70.0 to 130	0.905	20.0
BD17522	Magnesium, Total	mg/L	-0.0138	0.0462	5.00	22.8	22.8	5.15	4.25 to 5.75	102	70.0 to 130	0.00	20.0
BD17523	Manganese, Dissolved	mg/L	-0.0000010	0.00033	0.100	0.139	0.136	0.101	0.0850 to 0.115	104	70.0 to 130	2.18	20.0
BD17522	Manganese, Total	mg/L	0.0000196	0.00033	0.100	0.253	0.250	0.105	0.0850 to 0.115	102	70.0 to 130	1.19	20.0
BD17522	Mercury, Total by CVAA	mg/L	7.000E-05	0.000500	0.004	0.00403	0.00406	0.00407	0.00340 to 0.00460	101	70.0 to 130	0.742	20.0
BD17523	Molybdenum, Dissolved	mg/L	0.000129	0.0100	0.2	0.211	0.210	0.205	0.170 to 0.230	106	70.0 to 130	0.475	20.0
BD17522	Molybdenum, Total	mg/L	0.000	0.0100	0.2	0.214	0.211	0.210	0.170 to 0.230	107	70.0 to 130	1.41	20.0
BD17523	Potassium, Dissolved	mg/L	-0.0168	0.367	10.0	13.6	13.3	9.90	8.50 to 11.5	102	70.0 to 130	2.23	20.0
BD17522	Potassium, Total	mg/L	0.00267	0.367	10.0	12.4	12.2	10.3	8.50 to 11.5	102	70.0 to 130	1.63	20.0
BD17523	Selenium, Dissolved	mg/L	-0.0000414	0.00100	0.100	0.101	0.100	0.101	0.0850 to 0.115	100	70.0 to 130	0.995	20.0
BD17522	Selenium, Total	mg/L	-0.0000063	0.00100	0.100	0.102	0.0988	0.102	0.0850 to 0.115	102	70.0 to 130	3.19	20.0
BD17523	Silicon, Dissolved	mg/L	-0.000062	0.0440	1.00	16.9	16.9	1.02	0.850 to 1.15	100	70.0 to 130	0.00	20.0
BD17522	Silicon, Total	mg/L	0.000173	0.0440	1.00	15.7	15.7	1.05	0.850 to 1.15	110	70.0 to 130	0.00	20.0
BD17523	Sodium, Dissolved	mg/L	0.00777	0.0880	5.00	72.0	66.4	5.07	4.25 to 5.75	196	70.0 to 130	8.09	20.0
BD17522	Sodium, Total	mg/L	0.0205	0.0880	5.00	21.4	21.5	5.16	4.25 to 5.75	102	70.0 to 130	0.466	20.0
BD17521	Sulfate	mg/L	0.0639	2.0	80.0	135	132	18.8	18.0 to 22.0	96.9	80.0 to 120	2.25	20.0
BD17523	Thallium, Dissolved	mg/L	-0.0000863	0.000147	0.100	0.106	0.108	0.103	0.0850 to 0.115	106	70.0 to 130	1.87	20.0
BD17522	Thallium, Total	mg/L	0.0000115	0.000147	0.100	0.0979	0.0982	0.0992	0.0850 to 0.115	97.9	70.0 to 130	0.306	20.0
BD17521	Total Organic Carbon	mg/L	0.299	1.00	10.0	11.3	10.9	10.7		113	80.0 to 120	3.60	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/12/23 10:10
Customer ID:
Delivery Date: 9/14/23 10:03

Description: Gorgas Ash Pond - MW-3

Laboratory ID Number: BD17516

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17516	Alkalinity	mg CaCO3/L					185	52.0	45.0 to 55.0			0.00	10.0
BD17521	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.02	0.200	2.00	2.01	-0.007	1.96	1.80 to 2.20	100	90.0 to 110	0.00	15.0
BD17517	Solids, Dissolved	mg/L	0.0000	25.0			1330	54.0	40.0 to 60.0			0.749	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-03V

Location Code: WMWGORAP
Collected: 9/12/23 12:10
Customer ID:
Submittal Date: 9/14/23 10:03

Laboratory ID Number: BD17517

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	9/15/23 06:33	9/19/23 17:35		1.015	0.0692	mg/L	0.030000	0.1015	J
* Calcium, Total	9/15/23 06:33	9/19/23 17:35		1.015	20.0	mg/L	0.070035	0.406	
* Iron, Total	9/15/23 06:33	9/19/23 17:35		1.015	0.461	mg/L	0.008120	0.0406	
* Lithium, Total	9/15/23 06:33	9/19/23 17:35		1.015	0.103	mg/L	0.007105	0.01999956	
* Magnesium, Total	9/15/23 06:33	9/19/23 17:35		1.015	7.41	mg/L	0.021315	0.406	
* Molybdenum, Total	9/15/23 06:33	9/19/23 17:35		1.015	0.0449	mg/L	0.005075	0.01015	
* Silica, Total (calc.)	9/15/23 06:33	9/19/23 17:35		1	15.3	mg/L			
* Silicon, Total	9/15/23 06:33	9/19/23 17:35		1.015	7.13	mg/L	0.02030	0.25375	
* Sodium, Total	9/15/23 06:33	9/20/23 13:44		101.5	433	mg/L	4.060	40.6	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	9/14/23 14:15	9/19/23 15:06		1.015	0.0625	mg/L	0.030000	0.1015	J
* Calcium, Dissolved	9/14/23 14:15	9/19/23 15:06		1.015	17.4	mg/L	0.070035	0.406	
* Iron, Dissolved	9/14/23 14:15	9/19/23 15:06		1.015	0.149	mg/L	0.008120	0.0406	
* Lithium, Dissolved	9/14/23 14:15	9/19/23 15:06		1.015	0.0959	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	9/14/23 14:15	9/19/23 15:06		1.015	6.35	mg/L	0.021315	0.406	
* Molybdenum, Dissolved	9/14/23 14:15	9/19/23 15:06		1.015	0.0384	mg/L	0.005075	0.01015	
* Silica, Dissolved (calc.)	9/14/23 14:15	9/19/23 15:06		1	15.2	mg/L			
* Silicon, Dissolved	9/14/23 14:15	9/19/23 15:06		1.015	7.12	mg/L	0.02030	0.25375	
* Sodium, Dissolved	9/14/23 14:15	9/20/23 11:50		101.5	401	mg/L	4.060	40.6	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	9/15/23 06:33	9/18/23 12:26		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Total	9/15/23 06:33	9/18/23 12:26		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Total	9/15/23 06:33	9/18/23 12:26		1.015	0.00104	mg/L	0.000112	0.000203	
* Barium, Total	9/15/23 06:33	9/18/23 12:26		1.015	0.0269	mg/L	0.000508	0.001015	
* Beryllium, Total	9/15/23 06:33	9/18/23 12:26		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	9/15/23 06:33	9/18/23 12:26		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	9/15/23 06:33	9/18/23 12:26		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	9/15/23 06:33	9/18/23 12:26		1.015	0.0000877	mg/L	0.000068	0.000203	J
* Lead, Total	9/15/23 06:33	9/18/23 12:26		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	9/15/23 06:33	9/18/23 12:26		1.015	0.0277	mg/L	0.000152	0.001015	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-03V

Location Code: WMWGORAP
Collected: 9/12/23 12:10
Customer ID:
Submittal Date: 9/14/23 10:03

Laboratory ID Number: BD17517

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	9/15/23 06:33	9/18/23 12:26		1.015	34.9	mg/L	0.169505	0.5075	
* Selenium, Total	9/15/23 06:33	9/18/23 12:26		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	9/15/23 06:33	9/18/23 12:26		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	9/14/23 14:15	9/14/23 17:14		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	9/14/23 14:15	9/14/23 17:14		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Dissolved	9/14/23 14:15	9/14/23 17:14		1.015	0.000535	mg/L	0.000112	0.000203	
* Barium, Dissolved	9/14/23 14:15	9/14/23 17:14		1.015	0.0246	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	9/14/23 14:15	9/14/23 17:14		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	9/14/23 14:15	9/14/23 17:14		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	9/14/23 14:15	9/14/23 17:14		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	9/14/23 14:15	9/14/23 17:14		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Dissolved	9/14/23 14:15	9/14/23 17:14		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	9/14/23 14:15	9/14/23 17:14		1.015	0.0248	mg/L	0.000152	0.001015	
* Potassium, Dissolved	9/14/23 14:15	9/14/23 17:14		1.015	32.9	mg/L	0.169505	0.5075	
* Selenium, Dissolved	9/14/23 14:15	9/14/23 17:14		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	9/14/23 14:15	9/14/23 17:14		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	9/14/23 17:22	9/15/23 00:23		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	9/18/23 14:17	9/18/23 14:17		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: DHC***								
Alkalinity pH Endpoint	9/22/23 09:18	9/22/23 12:40		1	4.48	SU		2	
* Alkalinity	9/22/23 09:18	9/22/23 12:40		1	202	mg CaCO3/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	9/15/23 10:50	9/19/23 13:02		1	1340	mg/L		147.1	
Analytical Method: SM 4500CO2 D	***Analyst: DHC***								
* Bicarbonate Alkalinity, (calc.)	9/22/23 09:18	9/22/23 12:40		1	201	mg CaCO3/L		1	A
* Carbonate Alkalinity, (calc.)	9/22/23 09:18	9/22/23 12:40		1	1.01	mg CaCO3/L		0.5	A
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	9/18/23 20:50	9/18/23 20:50		1	3.32	mg/L	1.00	2	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-03V

Location Code: WMWGORAP
Collected: 9/12/23 12:10
Customer ID:
Submittal Date: 9/14/23 10:03

Laboratory ID Number: BD17517

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	9/18/23 12:41	9/18/23 12:41		25	294	mg/L	12.50	25	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	9/18/23 15:21	9/18/23 15:21		1	0.187	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	9/26/23 15:54	9/26/23 15:54		25	396	mg/L	15.0	50	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	9/12/23 12:06	9/12/23 12:06			2709.70	uS/cm			FA
pH	9/12/23 12:06	9/12/23 12:06			7.49	SU			FA
Temperature	9/12/23 12:06	9/12/23 12:06			21.19	C			FA
Turbidity	9/12/23 12:06	9/12/23 12:06			6.34	NTU			FA
Sulfide	9/12/23 12:06	9/12/23 12:06			0	mg/L			FA

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/12/23 12:10
Customer ID:
Delivery Date: 9/14/23 10:03

Description: Gorgas Ash Pond - MW-03V

Laboratory ID Number: BD17517

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17523	Aluminum, Dissolved	mg/L	-0.000243	0.0198	0.100	0.108	0.105	0.103	0.0850 to 0.115	108	70.0 to 130	2.82	20.0
BD17522	Aluminum, Total	mg/L	0.000468	0.0198	0.100	0.104	0.103	0.104	0.0850 to 0.115	104	70.0 to 130	0.966	20.0
BD17523	Antimony, Dissolved	mg/L	0.000225	0.00100	0.100	0.0966	0.0952	0.0924	0.0850 to 0.115	96.6	70.0 to 130	1.46	20.0
BD17522	Antimony, Total	mg/L	0.000288	0.00100	0.100	0.0977	0.0976	0.101	0.0850 to 0.115	97.7	70.0 to 130	0.102	20.0
BD17523	Arsenic, Dissolved	mg/L	-0.0000145	0.000200	0.100	0.100	0.100	0.100	0.0850 to 0.115	99.8	70.0 to 130	0.00	20.0
BD17522	Arsenic, Total	mg/L	0.0000229	0.000200	0.100	0.103	0.104	0.100	0.0850 to 0.115	98.5	70.0 to 130	0.966	20.0
BD17523	Barium, Dissolved	mg/L	-0.0000070	0.00100	0.100	0.294	0.293	0.102	0.0850 to 0.115	101	70.0 to 130	0.341	20.0
BD17522	Barium, Total	mg/L	0.0000085	0.00100	0.100	0.127	0.127	0.0983	0.0850 to 0.115	95.2	70.0 to 130	0.00	20.0
BD17523	Beryllium, Dissolved	mg/L	0.0000324	0.000880	0.100	0.0992	0.0972	0.0981	0.0850 to 0.115	99.2	70.0 to 130	2.04	20.0
BD17522	Beryllium, Total	mg/L	0.000113	0.000880	0.100	0.0990	0.101	0.0965	0.0850 to 0.115	99.0	70.0 to 130	2.00	20.0
BD17523	Boron, Dissolved	mg/L	-0.00097	0.0650	1.00	1.08	1.08	1.02	0.850 to 1.15	104	70.0 to 130	0.00	20.0
BD17522	Boron, Total	mg/L	-0.000218	0.0650	1.00	1.25	1.24	1.04	0.850 to 1.15	106	70.0 to 130	0.803	20.0
BD17523	Cadmium, Dissolved	mg/L	0.0000030	0.000147	0.100	0.100	0.0988	0.0965	0.0850 to 0.115	100	70.0 to 130	1.21	20.0
BD17522	Cadmium, Total	mg/L	0.0000072	0.000147	0.100	0.0967	0.0960	0.101	0.0850 to 0.115	96.7	70.0 to 130	0.727	20.0
BD17523	Calcium, Dissolved	mg/L	-0.0272	0.152	5.00	62.6	57.2	4.97	4.25 to 5.75	198	70.0 to 130	9.02	20.0
BD17522	Calcium, Total	mg/L	-0.0124	0.152	5.00	43.7	43.3	5.08	4.25 to 5.75	96.0	70.0 to 130	0.920	20.0
BD17521	Chloride	mg/L	-0.0466	1.00	10.0	22.5	22.5	10.3	9.00 to 11.0	88.0	80.0 to 120	0.00	20.0
BD17523	Chromium, Dissolved	mg/L	-0.000196	0.000440	0.100	0.101	0.0983	0.0975	0.0850 to 0.115	101	70.0 to 130	2.71	20.0
BD17522	Chromium, Total	mg/L	-0.000104	0.000440	0.100	0.0983	0.0983	0.101	0.0850 to 0.115	98.3	70.0 to 130	0.00	20.0
BD17523	Cobalt, Dissolved	mg/L	-0.0000687	0.000147	0.100	0.101	0.0989	0.0991	0.0850 to 0.115	101	70.0 to 130	2.10	20.0
BD17522	Cobalt, Total	mg/L	0.0000010	0.000147	0.100	0.0995	0.0993	0.103	0.0850 to 0.115	99.5	70.0 to 130	0.201	20.0
BD17521	Fluoride	mg/L	0.0183	0.125	2.50	2.78	2.74	2.61	2.25 to 2.75	105	80.0 to 120	1.45	20.0
BD17523	Iron, Dissolved	mg/L	0.00003	0.0176	0.2	0.510	0.509	0.202	0.170 to 0.230	99.0	70.0 to 130	0.196	20.0
BD17522	Iron, Total	mg/L	0.00165	0.0176	0.2	1.53	1.52	0.206	0.170 to 0.230	100	70.0 to 130	0.656	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/12/23 12:10
Customer ID:
Delivery Date: 9/14/23 10:03

Description: Gorgas Ash Pond - MW-03V

Laboratory ID Number: BD17517

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17523	Lead, Dissolved	mg/L	0.0000011	0.000147	0.100	0.107	0.107	0.106	0.0850 to 0.115	107	70.0 to 130	0.00	20.0
BD17522	Lead, Total	mg/L	0.0000089	0.000147	0.100	0.0965	0.0958	0.0974	0.0850 to 0.115	96.5	70.0 to 130	0.728	20.0
BD17523	Lithium, Dissolved	mg/L	-0.000457	0.0154	0.200	0.241	0.240	0.205	0.170 to 0.230	104	70.0 to 130	0.416	20.0
BD17522	Lithium, Total	mg/L	-0.000155	0.0154	0.200	0.246	0.247	0.209	0.170 to 0.230	105	70.0 to 130	0.406	20.0
BD17523	Magnesium, Dissolved	mg/L	-0.00451	0.0462	5.00	22.2	22.0	5.10	4.25 to 5.75	102	70.0 to 130	0.905	20.0
BD17522	Magnesium, Total	mg/L	-0.0138	0.0462	5.00	22.8	22.8	5.15	4.25 to 5.75	102	70.0 to 130	0.00	20.0
BD17523	Manganese, Dissolved	mg/L	-0.0000010	0.00033	0.100	0.139	0.136	0.101	0.0850 to 0.115	104	70.0 to 130	2.18	20.0
BD17522	Manganese, Total	mg/L	0.0000196	0.00033	0.100	0.253	0.250	0.105	0.0850 to 0.115	102	70.0 to 130	1.19	20.0
BD17522	Mercury, Total by CVAA	mg/L	7.000E-05	0.000500	0.004	0.00403	0.00406	0.00407	0.00340 to 0.00460	101	70.0 to 130	0.742	20.0
BD17523	Molybdenum, Dissolved	mg/L	0.000129	0.0100	0.2	0.211	0.210	0.205	0.170 to 0.230	106	70.0 to 130	0.475	20.0
BD17522	Molybdenum, Total	mg/L	0.000	0.0100	0.2	0.214	0.211	0.210	0.170 to 0.230	107	70.0 to 130	1.41	20.0
BD17523	Potassium, Dissolved	mg/L	-0.0168	0.367	10.0	13.6	13.3	9.90	8.50 to 11.5	102	70.0 to 130	2.23	20.0
BD17522	Potassium, Total	mg/L	0.00267	0.367	10.0	12.4	12.2	10.3	8.50 to 11.5	102	70.0 to 130	1.63	20.0
BD17523	Selenium, Dissolved	mg/L	-0.0000414	0.00100	0.100	0.101	0.100	0.101	0.0850 to 0.115	100	70.0 to 130	0.995	20.0
BD17522	Selenium, Total	mg/L	-0.0000063	0.00100	0.100	0.102	0.0988	0.102	0.0850 to 0.115	102	70.0 to 130	3.19	20.0
BD17523	Silicon, Dissolved	mg/L	-0.000062	0.0440	1.00	16.9	16.9	1.02	0.850 to 1.15	100	70.0 to 130	0.00	20.0
BD17522	Silicon, Total	mg/L	0.000173	0.0440	1.00	15.7	15.7	1.05	0.850 to 1.15	110	70.0 to 130	0.00	20.0
BD17523	Sodium, Dissolved	mg/L	0.00777	0.0880	5.00	72.0	66.4	5.07	4.25 to 5.75	196	70.0 to 130	8.09	20.0
BD17522	Sodium, Total	mg/L	0.0205	0.0880	5.00	21.4	21.5	5.16	4.25 to 5.75	102	70.0 to 130	0.466	20.0
BD17521	Sulfate	mg/L	0.0639	2.0	80.0	135	132	18.8	18.0 to 22.0	96.9	80.0 to 120	2.25	20.0
BD17523	Thallium, Dissolved	mg/L	-0.0000863	0.000147	0.100	0.106	0.108	0.103	0.0850 to 0.115	106	70.0 to 130	1.87	20.0
BD17522	Thallium, Total	mg/L	0.0000115	0.000147	0.100	0.0979	0.0982	0.0992	0.0850 to 0.115	97.9	70.0 to 130	0.306	20.0
BD17521	Total Organic Carbon	mg/L	0.299	1.00	10.0	11.3	10.9	10.7		113	80.0 to 120	3.60	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/12/23 12:10
Customer ID:
Delivery Date: 9/14/23 10:03

Description: Gorgas Ash Pond - MW-03V

Laboratory ID Number: BD17517

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17518	Alkalinity	mg CaCO3/L					242	51.6	45.0 to 55.0			0.412	10.0
BD17521	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.02	0.200	2.00	2.01	-0.007	1.96	1.80 to 2.20	100	90.0 to 110	0.00	15.0
BD17517	Solids, Dissolved	mg/L	0.0000	25.0			1330	54.0	40.0 to 60.0			0.749	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-05R

Location Code: WMWGORAP
Collected: 9/12/23 14:30
Customer ID:
Submittal Date: 9/14/23 10:03

Laboratory ID Number: BD17518

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	9/15/23 06:33	9/19/23 17:38		1.015	0.0374	mg/L	0.030000	0.1015	J
* Calcium, Total	9/15/23 06:33	9/20/23 13:47		10.15	109	mg/L	0.70035	4.06	
* Iron, Total	9/15/23 06:33	9/19/23 17:38		1.015	1.27	mg/L	0.008120	0.0406	
* Lithium, Total	9/15/23 06:33	9/19/23 17:38		1.015	0.0717	mg/L	0.007105	0.01999956	
* Magnesium, Total	9/15/23 06:33	9/19/23 17:38		1.015	38.8	mg/L	0.021315	0.406	
* Molybdenum, Total	9/15/23 06:33	9/19/23 17:38		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Total (calc.)	9/15/23 06:33	9/19/23 17:38		1	25.5	mg/L			
* Silicon, Total	9/15/23 06:33	9/19/23 17:38		1.015	11.9	mg/L	0.02030	0.25375	
* Sodium, Total	9/15/23 06:33	9/20/23 13:47		10.15	103	mg/L	0.4060	4.06	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	9/14/23 14:15	9/19/23 15:10		1.015	0.0360	mg/L	0.030000	0.1015	J
* Calcium, Dissolved	9/14/23 14:15	9/20/23 11:53		10.15	104	mg/L	0.70035	4.06	
* Iron, Dissolved	9/14/23 14:15	9/19/23 15:10		1.015	1.18	mg/L	0.008120	0.0406	
* Lithium, Dissolved	9/14/23 14:15	9/19/23 15:10		1.015	0.0725	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	9/14/23 14:15	9/19/23 15:10		1.015	39.4	mg/L	0.021315	0.406	
* Molybdenum, Dissolved	9/14/23 14:15	9/19/23 15:10		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Dissolved (calc.)	9/14/23 14:15	9/19/23 15:10		1	25.7	mg/L			
* Silicon, Dissolved	9/14/23 14:15	9/19/23 15:10		1.015	12.0	mg/L	0.02030	0.25375	
* Sodium, Dissolved	9/14/23 14:15	9/20/23 11:53		10.15	98.1	mg/L	0.4060	4.06	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	9/15/23 06:33	9/18/23 12:29		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Arsenic, Total	9/15/23 06:33	9/18/23 12:29		1.015	0.000161	mg/L	0.000112	0.000203	J
* Aluminum, Total	9/15/23 06:33	9/18/23 12:29		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Barium, Total	9/15/23 06:33	9/18/23 12:29		1.015	0.0454	mg/L	0.000508	0.001015	
* Beryllium, Total	9/15/23 06:33	9/18/23 12:29		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	9/15/23 06:33	9/18/23 12:29		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	9/15/23 06:33	9/18/23 12:29		1.015	0.000209	mg/L	0.000203	0.001015	J
* Cobalt, Total	9/15/23 06:33	9/18/23 12:29		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	9/15/23 06:33	9/18/23 12:29		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	9/15/23 06:33	9/18/23 12:29		1.015	0.127	mg/L	0.000152	0.001015	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-05R

Location Code: WMWGORAP
Collected: 9/12/23 14:30
Customer ID:
Submittal Date: 9/14/23 10:03

Laboratory ID Number: BD17518

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	9/15/23 06:33	9/18/23 12:29		1.015	6.72	mg/L	0.169505	0.5075	
* Selenium, Total	9/15/23 06:33	9/18/23 12:29		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	9/15/23 06:33	9/18/23 12:29		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	9/14/23 14:15	9/14/23 17:17		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	9/14/23 14:15	9/14/23 17:17		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Dissolved	9/14/23 14:15	9/14/23 17:17		1.015	Not Detected	mg/L	0.000112	0.000203	U
* Barium, Dissolved	9/14/23 14:15	9/14/23 17:17		1.015	0.0480	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	9/14/23 14:15	9/14/23 17:17		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	9/14/23 14:15	9/14/23 17:17		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	9/14/23 14:15	9/14/23 17:17		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	9/14/23 14:15	9/14/23 17:17		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Dissolved	9/14/23 14:15	9/14/23 17:17		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	9/14/23 14:15	9/14/23 17:17		1.015	0.123	mg/L	0.000152	0.001015	
* Potassium, Dissolved	9/14/23 14:15	9/14/23 17:17		1.015	6.36	mg/L	0.169505	0.5075	
* Selenium, Dissolved	9/14/23 14:15	9/14/23 17:17		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	9/14/23 14:15	9/14/23 17:17		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	9/14/23 17:22	9/15/23 00:27		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	9/18/23 14:19	9/18/23 14:19		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: DHC***								
Alkalinity pH Endpoint	9/22/23 09:18	9/22/23 12:40		1	4.55	SU		2	
* Alkalinity	9/22/23 09:18	9/22/23 12:40		1	243	mg CaCO3/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	9/15/23 10:50	9/19/23 13:02		1	730	mg/L		75.8	
Analytical Method: SM 4500CO2 D	***Analyst: DHC***								
* Bicarbonate Alkalinity, (calc.)	9/22/23 09:18	9/22/23 12:40		1	243	mg CaCO3/L		1	A
* Carbonate Alkalinity, (calc.)	9/22/23 09:18	9/22/23 12:40		1	Not Detected	mg CaCO3/L		0.5	A
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	9/18/23 21:08	9/18/23 21:08		1	1.74	mg/L	1.00	2	J

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-05R

Location Code: WMWGORAP
Collected: 9/12/23 14:30
Customer ID:
Submittal Date: 9/14/23 10:03

Laboratory ID Number: BD17518

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	9/18/23 12:42	9/18/23 12:42		4	57.9	mg/L	2.00	4	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	9/18/23 15:22	9/18/23 15:22		1	0.118	mg/L	0.06	0.125	J
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	9/26/23 15:55	9/26/23 15:55		16	271	mg/L	9.6	32	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	9/12/23 14:27	9/12/23 14:27			1216.78	uS/cm			FA
pH	9/12/23 14:27	9/12/23 14:27			6.84	SU			FA
Temperature	9/12/23 14:27	9/12/23 14:27			19.81	C			FA
Turbidity	9/12/23 14:27	9/12/23 14:27			0.92	NTU			FA
Sulfide	9/12/23 14:27	9/12/23 14:27			0	mg/L			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/12/23 14:30
Customer ID:
Delivery Date: 9/14/23 10:03

Description: Gorgas Ash Pond - MW-05R

Laboratory ID Number: BD17518

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17523	Aluminum, Dissolved	mg/L	-0.000243	0.0198	0.100	0.108	0.105	0.103	0.0850 to 0.115	108	70.0 to 130	2.82	20.0
BD17522	Aluminum, Total	mg/L	0.000468	0.0198	0.100	0.104	0.103	0.104	0.0850 to 0.115	104	70.0 to 130	0.966	20.0
BD17523	Antimony, Dissolved	mg/L	0.000225	0.00100	0.100	0.0966	0.0952	0.0924	0.0850 to 0.115	96.6	70.0 to 130	1.46	20.0
BD17522	Antimony, Total	mg/L	0.000288	0.00100	0.100	0.0977	0.0976	0.101	0.0850 to 0.115	97.7	70.0 to 130	0.102	20.0
BD17523	Arsenic, Dissolved	mg/L	-0.0000145	0.000200	0.100	0.100	0.100	0.100	0.0850 to 0.115	99.8	70.0 to 130	0.00	20.0
BD17522	Arsenic, Total	mg/L	0.0000229	0.000200	0.100	0.103	0.104	0.100	0.0850 to 0.115	98.5	70.0 to 130	0.966	20.0
BD17523	Barium, Dissolved	mg/L	-0.0000070	0.00100	0.100	0.294	0.293	0.102	0.0850 to 0.115	101	70.0 to 130	0.341	20.0
BD17522	Barium, Total	mg/L	0.0000085	0.00100	0.100	0.127	0.127	0.0983	0.0850 to 0.115	95.2	70.0 to 130	0.00	20.0
BD17523	Beryllium, Dissolved	mg/L	0.0000324	0.000880	0.100	0.0992	0.0972	0.0981	0.0850 to 0.115	99.2	70.0 to 130	2.04	20.0
BD17522	Beryllium, Total	mg/L	0.000113	0.000880	0.100	0.0990	0.101	0.0965	0.0850 to 0.115	99.0	70.0 to 130	2.00	20.0
BD17523	Boron, Dissolved	mg/L	-0.00097	0.0650	1.00	1.08	1.08	1.02	0.850 to 1.15	104	70.0 to 130	0.00	20.0
BD17522	Boron, Total	mg/L	-0.000218	0.0650	1.00	1.25	1.24	1.04	0.850 to 1.15	106	70.0 to 130	0.803	20.0
BD17523	Cadmium, Dissolved	mg/L	0.0000030	0.000147	0.100	0.100	0.0988	0.0965	0.0850 to 0.115	100	70.0 to 130	1.21	20.0
BD17522	Cadmium, Total	mg/L	0.0000072	0.000147	0.100	0.0967	0.0960	0.101	0.0850 to 0.115	96.7	70.0 to 130	0.727	20.0
BD17523	Calcium, Dissolved	mg/L	-0.0272	0.152	5.00	62.6	57.2	4.97	4.25 to 5.75	198	70.0 to 130	9.02	20.0
BD17522	Calcium, Total	mg/L	-0.0124	0.152	5.00	43.7	43.3	5.08	4.25 to 5.75	96.0	70.0 to 130	0.920	20.0
BD17521	Chloride	mg/L	-0.0466	1.00	10.0	22.5	22.5	10.3	9.00 to 11.0	88.0	80.0 to 120	0.00	20.0
BD17523	Chromium, Dissolved	mg/L	-0.000196	0.000440	0.100	0.101	0.0983	0.0975	0.0850 to 0.115	101	70.0 to 130	2.71	20.0
BD17522	Chromium, Total	mg/L	-0.000104	0.000440	0.100	0.0983	0.0983	0.101	0.0850 to 0.115	98.3	70.0 to 130	0.00	20.0
BD17523	Cobalt, Dissolved	mg/L	-0.0000687	0.000147	0.100	0.101	0.0989	0.0991	0.0850 to 0.115	101	70.0 to 130	2.10	20.0
BD17522	Cobalt, Total	mg/L	0.0000010	0.000147	0.100	0.0995	0.0993	0.103	0.0850 to 0.115	99.5	70.0 to 130	0.201	20.0
BD17521	Fluoride	mg/L	0.0183	0.125	2.50	2.78	2.74	2.61	2.25 to 2.75	105	80.0 to 120	1.45	20.0
BD17523	Iron, Dissolved	mg/L	0.00003	0.0176	0.2	0.510	0.509	0.202	0.170 to 0.230	99.0	70.0 to 130	0.196	20.0
BD17522	Iron, Total	mg/L	0.00165	0.0176	0.2	1.53	1.52	0.206	0.170 to 0.230	100	70.0 to 130	0.656	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/12/23 14:30
Customer ID:
Delivery Date: 9/14/23 10:03

Description: Gorgas Ash Pond - MW-05R

Laboratory ID Number: BD17518

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17523	Lead, Dissolved	mg/L	0.0000011	0.000147	0.100	0.107	0.107	0.106	0.0850 to 0.115	107	70.0 to 130	0.00	20.0
BD17522	Lead, Total	mg/L	0.0000089	0.000147	0.100	0.0965	0.0958	0.0974	0.0850 to 0.115	96.5	70.0 to 130	0.728	20.0
BD17523	Lithium, Dissolved	mg/L	-0.000457	0.0154	0.200	0.241	0.240	0.205	0.170 to 0.230	104	70.0 to 130	0.416	20.0
BD17522	Lithium, Total	mg/L	-0.000155	0.0154	0.200	0.246	0.247	0.209	0.170 to 0.230	105	70.0 to 130	0.406	20.0
BD17523	Magnesium, Dissolved	mg/L	-0.00451	0.0462	5.00	22.2	22.0	5.10	4.25 to 5.75	102	70.0 to 130	0.905	20.0
BD17522	Magnesium, Total	mg/L	-0.0138	0.0462	5.00	22.8	22.8	5.15	4.25 to 5.75	102	70.0 to 130	0.00	20.0
BD17523	Manganese, Dissolved	mg/L	-0.0000010	0.00033	0.100	0.139	0.136	0.101	0.0850 to 0.115	104	70.0 to 130	2.18	20.0
BD17522	Manganese, Total	mg/L	0.0000196	0.00033	0.100	0.253	0.250	0.105	0.0850 to 0.115	102	70.0 to 130	1.19	20.0
BD17522	Mercury, Total by CVAA	mg/L	7.000E-05	0.000500	0.004	0.00403	0.00406	0.00407	0.00340 to 0.00460	101	70.0 to 130	0.742	20.0
BD17523	Molybdenum, Dissolved	mg/L	0.000129	0.0100	0.2	0.211	0.210	0.205	0.170 to 0.230	106	70.0 to 130	0.475	20.0
BD17522	Molybdenum, Total	mg/L	0.000	0.0100	0.2	0.214	0.211	0.210	0.170 to 0.230	107	70.0 to 130	1.41	20.0
BD17523	Potassium, Dissolved	mg/L	-0.0168	0.367	10.0	13.6	13.3	9.90	8.50 to 11.5	102	70.0 to 130	2.23	20.0
BD17522	Potassium, Total	mg/L	0.00267	0.367	10.0	12.4	12.2	10.3	8.50 to 11.5	102	70.0 to 130	1.63	20.0
BD17523	Selenium, Dissolved	mg/L	-0.0000414	0.00100	0.100	0.101	0.100	0.101	0.0850 to 0.115	100	70.0 to 130	0.995	20.0
BD17522	Selenium, Total	mg/L	-0.0000063	0.00100	0.100	0.102	0.0988	0.102	0.0850 to 0.115	102	70.0 to 130	3.19	20.0
BD17523	Silicon, Dissolved	mg/L	-0.000062	0.0440	1.00	16.9	16.9	1.02	0.850 to 1.15	100	70.0 to 130	0.00	20.0
BD17522	Silicon, Total	mg/L	0.000173	0.0440	1.00	15.7	15.7	1.05	0.850 to 1.15	110	70.0 to 130	0.00	20.0
BD17523	Sodium, Dissolved	mg/L	0.00777	0.0880	5.00	72.0	66.4	5.07	4.25 to 5.75	196	70.0 to 130	8.09	20.0
BD17522	Sodium, Total	mg/L	0.0205	0.0880	5.00	21.4	21.5	5.16	4.25 to 5.75	102	70.0 to 130	0.466	20.0
BD17521	Sulfate	mg/L	0.0639	2.0	80.0	135	132	18.8	18.0 to 22.0	96.9	80.0 to 120	2.25	20.0
BD17523	Thallium, Dissolved	mg/L	-0.0000863	0.000147	0.100	0.106	0.108	0.103	0.0850 to 0.115	106	70.0 to 130	1.87	20.0
BD17522	Thallium, Total	mg/L	0.0000115	0.000147	0.100	0.0979	0.0982	0.0992	0.0850 to 0.115	97.9	70.0 to 130	0.306	20.0
BD17521	Total Organic Carbon	mg/L	0.299	1.00	10.0	11.3	10.9	10.7		113	80.0 to 120	3.60	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/12/23 14:30
Customer ID:
Delivery Date: 9/14/23 10:03

Description: Gorgas Ash Pond - MW-05R

Laboratory ID Number: BD17518

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17518	Alkalinity	mg CaCO3/L					242	51.6	45.0 to 55.0			0.412	10.0
BD17521	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.02	0.200	2.00	2.01	-0.007	1.96	1.80 to 2.20	100	90.0 to 110	0.00	15.0
BD17523	Solids, Dissolved	mg/L	0.0000	25.0			395	54.0	40.0 to 60.0			0.00	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-12V

Location Code: WMWGORAP
Collected: 9/13/23 11:27
Customer ID:
Submittal Date: 9/14/23 10:03

Laboratory ID Number: BD17519

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	9/15/23 06:33	9/19/23 17:41		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	9/15/23 06:33	9/19/23 17:41		1.015	39.2	mg/L	0.070035	0.406	
* Iron, Total	9/15/23 06:33	9/19/23 17:41		1.015	0.355	mg/L	0.008120	0.0406	
* Lithium, Total	9/15/23 06:33	9/19/23 17:41		1.015	0.0306	mg/L	0.007105	0.01999956	
* Magnesium, Total	9/15/23 06:33	9/19/23 17:41		1.015	9.55	mg/L	0.021315	0.406	
* Molybdenum, Total	9/15/23 06:33	9/19/23 17:41		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Total (calc.)	9/15/23 06:33	9/19/23 17:41		1	25.7	mg/L			
* Silicon, Total	9/15/23 06:33	9/19/23 17:41		1.015	12.0	mg/L	0.02030	0.25375	
* Sodium, Total	9/15/23 06:33	9/19/23 17:41		1.015	17.2	mg/L	0.04060	0.406	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	9/14/23 14:15	9/19/23 15:13		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Dissolved	9/14/23 14:15	9/19/23 15:13		1.015	37.9	mg/L	0.070035	0.406	
* Iron, Dissolved	9/14/23 14:15	9/19/23 15:13		1.015	0.0931	mg/L	0.008120	0.0406	
* Lithium, Dissolved	9/14/23 14:15	9/19/23 15:13		1.015	0.0298	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	9/14/23 14:15	9/19/23 15:13		1.015	9.58	mg/L	0.021315	0.406	
* Molybdenum, Dissolved	9/14/23 14:15	9/19/23 15:13		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Dissolved (calc.)	9/14/23 14:15	9/19/23 15:13		1	25.9	mg/L			
* Silicon, Dissolved	9/14/23 14:15	9/19/23 15:13		1.015	12.1	mg/L	0.02030	0.25375	
* Sodium, Dissolved	9/14/23 14:15	9/19/23 15:13		1.015	17.2	mg/L	0.04060	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	9/15/23 06:33	9/18/23 12:33		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Arsenic, Total	9/15/23 06:33	9/18/23 12:33		1.015	0.000958	mg/L	0.000112	0.000203	
* Aluminum, Total	9/15/23 06:33	9/18/23 12:33		1.015	0.0488	mg/L	0.009135	0.05075	J
* Barium, Total	9/15/23 06:33	9/18/23 12:33		1.015	1.05	mg/L	0.000508	0.001015	
* Beryllium, Total	9/15/23 06:33	9/18/23 12:33		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	9/15/23 06:33	9/18/23 12:33		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	9/15/23 06:33	9/18/23 12:33		1.015	0.000230	mg/L	0.000203	0.001015	J
* Cobalt, Total	9/15/23 06:33	9/18/23 12:33		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	9/15/23 06:33	9/18/23 12:33		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	9/15/23 06:33	9/18/23 12:33		1.015	0.0181	mg/L	0.000152	0.001015	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-12V

Location Code: WMWGORAP
Collected: 9/13/23 11:27
Customer ID:
Submittal Date: 9/14/23 10:03

Laboratory ID Number: BD17519

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	9/15/23 06:33	9/18/23 12:33		1.015	2.32	mg/L	0.169505	0.5075	
* Selenium, Total	9/15/23 06:33	9/18/23 12:33		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	9/15/23 06:33	9/18/23 12:33		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	9/14/23 14:15	9/14/23 17:21		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	9/14/23 14:15	9/14/23 17:21		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Dissolved	9/14/23 14:15	9/14/23 17:21		1.015	0.000933	mg/L	0.000112	0.000203	
* Barium, Dissolved	9/14/23 14:15	9/14/23 17:21		1.015	1.13	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	9/14/23 14:15	9/14/23 17:21		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	9/14/23 14:15	9/14/23 17:21		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	9/14/23 14:15	9/14/23 17:21		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	9/14/23 14:15	9/14/23 17:21		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Dissolved	9/14/23 14:15	9/14/23 17:21		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	9/14/23 14:15	9/14/23 17:21		1.015	0.0177	mg/L	0.000152	0.001015	
* Potassium, Dissolved	9/14/23 14:15	9/14/23 17:21		1.015	2.15	mg/L	0.169505	0.5075	
* Selenium, Dissolved	9/14/23 14:15	9/14/23 17:21		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	9/14/23 14:15	9/14/23 17:21		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	9/14/23 17:22	9/15/23 00:31		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	9/18/23 14:20	9/18/23 14:20		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: JAG***								
Alkalinity pH Endpoint	9/26/23 10:23	9/26/23 11:17		1	4.49	SU		2	
* Alkalinity	9/26/23 10:23	9/26/23 11:17		1	161	mg CaCO3/L		1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	9/15/23 10:50	9/19/23 13:02		1	180	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: JAG***								
* Bicarbonate Alkalinity, (calc.)	9/26/23 10:23	9/26/23 11:17		1	156	mg CaCO3/L		1	
* Carbonate Alkalinity, (calc.)	9/26/23 10:23	9/26/23 11:17		1	5.08	mg CaCO3/L		0.5	
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	9/18/23 21:24	9/18/23 21:24		1	1.86	mg/L	1.00	2	J

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-12V

Location Code: WMWGORAP
Collected: 9/13/23 11:27
Customer ID:
Submittal Date: 9/14/23 10:03

Laboratory ID Number: BD17519

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	9/18/23 12:33	9/18/23 12:33		1	4.38	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	9/18/23 15:23	9/18/23 15:23		1	0.129	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	9/26/23 15:46	9/26/23 15:46		1	1.61	mg/L	0.6	2	J
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	9/13/23 11:24	9/13/23 11:24			237.64	uS/cm			FA
pH	9/13/23 11:24	9/13/23 11:24			8.95	SU			FA
Temperature	9/13/23 11:24	9/13/23 11:24			19.87	C			FA
Turbidity	9/13/23 11:24	9/13/23 11:24			2.95	NTU			FA
Sulfide	9/13/23 11:24	9/13/23 11:24			0	mg/L			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/13/23 11:27
Customer ID:
Delivery Date: 9/14/23 10:03

Description: Gorgas Ash Pond - MW-12V

Laboratory ID Number: BD17519

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17523	Aluminum, Dissolved	mg/L	-0.000243	0.0198	0.100	0.108	0.105	0.103	0.0850 to 0.115	108	70.0 to 130	2.82	20.0
BD17522	Aluminum, Total	mg/L	0.000468	0.0198	0.100	0.104	0.103	0.104	0.0850 to 0.115	104	70.0 to 130	0.966	20.0
BD17523	Antimony, Dissolved	mg/L	0.000225	0.00100	0.100	0.0966	0.0952	0.0924	0.0850 to 0.115	96.6	70.0 to 130	1.46	20.0
BD17522	Antimony, Total	mg/L	0.000288	0.00100	0.100	0.0977	0.0976	0.101	0.0850 to 0.115	97.7	70.0 to 130	0.102	20.0
BD17523	Arsenic, Dissolved	mg/L	-0.0000145	0.000200	0.100	0.100	0.100	0.100	0.0850 to 0.115	99.8	70.0 to 130	0.00	20.0
BD17522	Arsenic, Total	mg/L	0.0000229	0.000200	0.100	0.103	0.104	0.100	0.0850 to 0.115	98.5	70.0 to 130	0.966	20.0
BD17523	Barium, Dissolved	mg/L	-0.0000070	0.00100	0.100	0.294	0.293	0.102	0.0850 to 0.115	101	70.0 to 130	0.341	20.0
BD17522	Barium, Total	mg/L	0.0000085	0.00100	0.100	0.127	0.127	0.0983	0.0850 to 0.115	95.2	70.0 to 130	0.00	20.0
BD17523	Beryllium, Dissolved	mg/L	0.0000324	0.000880	0.100	0.0992	0.0972	0.0981	0.0850 to 0.115	99.2	70.0 to 130	2.04	20.0
BD17522	Beryllium, Total	mg/L	0.000113	0.000880	0.100	0.0990	0.101	0.0965	0.0850 to 0.115	99.0	70.0 to 130	2.00	20.0
BD17523	Boron, Dissolved	mg/L	-0.00097	0.0650	1.00	1.08	1.08	1.02	0.850 to 1.15	104	70.0 to 130	0.00	20.0
BD17522	Boron, Total	mg/L	-0.000218	0.0650	1.00	1.25	1.24	1.04	0.850 to 1.15	106	70.0 to 130	0.803	20.0
BD17523	Cadmium, Dissolved	mg/L	0.0000030	0.000147	0.100	0.100	0.0988	0.0965	0.0850 to 0.115	100	70.0 to 130	1.21	20.0
BD17522	Cadmium, Total	mg/L	0.0000072	0.000147	0.100	0.0967	0.0960	0.101	0.0850 to 0.115	96.7	70.0 to 130	0.727	20.0
BD17523	Calcium, Dissolved	mg/L	-0.0272	0.152	5.00	62.6	57.2	4.97	4.25 to 5.75	198	70.0 to 130	9.02	20.0
BD17522	Calcium, Total	mg/L	-0.0124	0.152	5.00	43.7	43.3	5.08	4.25 to 5.75	96.0	70.0 to 130	0.920	20.0
BD17521	Chloride	mg/L	-0.0466	1.00	10.0	22.5	22.5	10.3	9.00 to 11.0	88.0	80.0 to 120	0.00	20.0
BD17523	Chromium, Dissolved	mg/L	-0.000196	0.000440	0.100	0.101	0.0983	0.0975	0.0850 to 0.115	101	70.0 to 130	2.71	20.0
BD17522	Chromium, Total	mg/L	-0.000104	0.000440	0.100	0.0983	0.0983	0.101	0.0850 to 0.115	98.3	70.0 to 130	0.00	20.0
BD17523	Cobalt, Dissolved	mg/L	-0.0000687	0.000147	0.100	0.101	0.0989	0.0991	0.0850 to 0.115	101	70.0 to 130	2.10	20.0
BD17522	Cobalt, Total	mg/L	0.0000010	0.000147	0.100	0.0995	0.0993	0.103	0.0850 to 0.115	99.5	70.0 to 130	0.201	20.0
BD17521	Fluoride	mg/L	0.0183	0.125	2.50	2.78	2.74	2.61	2.25 to 2.75	105	80.0 to 120	1.45	20.0
BD17523	Iron, Dissolved	mg/L	0.00003	0.0176	0.2	0.510	0.509	0.202	0.170 to 0.230	99.0	70.0 to 130	0.196	20.0
BD17522	Iron, Total	mg/L	0.00165	0.0176	0.2	1.53	1.52	0.206	0.170 to 0.230	100	70.0 to 130	0.656	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/13/23 11:27
Customer ID:
Delivery Date: 9/14/23 10:03

Description: Gorgas Ash Pond - MW-12V

Laboratory ID Number: BD17519

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17523	Lead, Dissolved	mg/L	0.0000011	0.000147	0.100	0.107	0.107	0.106	0.0850 to 0.115	107	70.0 to 130	0.00	20.0
BD17522	Lead, Total	mg/L	0.0000089	0.000147	0.100	0.0965	0.0958	0.0974	0.0850 to 0.115	96.5	70.0 to 130	0.728	20.0
BD17523	Lithium, Dissolved	mg/L	-0.000457	0.0154	0.200	0.241	0.240	0.205	0.170 to 0.230	104	70.0 to 130	0.416	20.0
BD17522	Lithium, Total	mg/L	-0.000155	0.0154	0.200	0.246	0.247	0.209	0.170 to 0.230	105	70.0 to 130	0.406	20.0
BD17523	Magnesium, Dissolved	mg/L	-0.00451	0.0462	5.00	22.2	22.0	5.10	4.25 to 5.75	102	70.0 to 130	0.905	20.0
BD17522	Magnesium, Total	mg/L	-0.0138	0.0462	5.00	22.8	22.8	5.15	4.25 to 5.75	102	70.0 to 130	0.00	20.0
BD17523	Manganese, Dissolved	mg/L	-0.0000010	0.00033	0.100	0.139	0.136	0.101	0.0850 to 0.115	104	70.0 to 130	2.18	20.0
BD17522	Manganese, Total	mg/L	0.0000196	0.00033	0.100	0.253	0.250	0.105	0.0850 to 0.115	102	70.0 to 130	1.19	20.0
BD17522	Mercury, Total by CVAA	mg/L	7.000E-05	0.000500	0.004	0.00403	0.00406	0.00407	0.00340 to 0.00460	101	70.0 to 130	0.742	20.0
BD17523	Molybdenum, Dissolved	mg/L	0.000129	0.0100	0.2	0.211	0.210	0.205	0.170 to 0.230	106	70.0 to 130	0.475	20.0
BD17522	Molybdenum, Total	mg/L	0.000	0.0100	0.2	0.214	0.211	0.210	0.170 to 0.230	107	70.0 to 130	1.41	20.0
BD17523	Potassium, Dissolved	mg/L	-0.0168	0.367	10.0	13.6	13.3	9.90	8.50 to 11.5	102	70.0 to 130	2.23	20.0
BD17522	Potassium, Total	mg/L	0.00267	0.367	10.0	12.4	12.2	10.3	8.50 to 11.5	102	70.0 to 130	1.63	20.0
BD17523	Selenium, Dissolved	mg/L	-0.0000414	0.00100	0.100	0.101	0.100	0.101	0.0850 to 0.115	100	70.0 to 130	0.995	20.0
BD17522	Selenium, Total	mg/L	-0.0000063	0.00100	0.100	0.102	0.0988	0.102	0.0850 to 0.115	102	70.0 to 130	3.19	20.0
BD17523	Silicon, Dissolved	mg/L	-0.000062	0.0440	1.00	16.9	16.9	1.02	0.850 to 1.15	100	70.0 to 130	0.00	20.0
BD17522	Silicon, Total	mg/L	0.000173	0.0440	1.00	15.7	15.7	1.05	0.850 to 1.15	110	70.0 to 130	0.00	20.0
BD17523	Sodium, Dissolved	mg/L	0.00777	0.0880	5.00	72.0	66.4	5.07	4.25 to 5.75	196	70.0 to 130	8.09	20.0
BD17522	Sodium, Total	mg/L	0.0205	0.0880	5.00	21.4	21.5	5.16	4.25 to 5.75	102	70.0 to 130	0.466	20.0
BD17521	Sulfate	mg/L	0.0639	2.0	80.0	135	132	18.8	18.0 to 22.0	96.9	80.0 to 120	2.25	20.0
BD17523	Thallium, Dissolved	mg/L	-0.0000863	0.000147	0.100	0.106	0.108	0.103	0.0850 to 0.115	106	70.0 to 130	1.87	20.0
BD17522	Thallium, Total	mg/L	0.0000115	0.000147	0.100	0.0979	0.0982	0.0992	0.0850 to 0.115	97.9	70.0 to 130	0.306	20.0
BD17521	Total Organic Carbon	mg/L	0.299	1.00	10.0	11.3	10.9	10.7		113	80.0 to 120	3.60	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/13/23 11:27
Customer ID:
Delivery Date: 9/14/23 10:03

Description: Gorgas Ash Pond - MW-12V

Laboratory ID Number: BD17519

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17523	Alkalinity	mg CaCO3/L					206	52.7	45.0 to 55.0			2.87	10.0
BD17521	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.02	0.200	2.00	2.01	-0.007	1.96	1.80 to 2.20	100	90.0 to 110	0.00	15.0
BD17523	Solids, Dissolved	mg/L	0.0000	25.0			395	54.0	40.0 to 60.0			0.00	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 10/25/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-12

Laboratory ID Number: BD17520

Location Code: WMWGORAP
Collected: 9/13/23 13:30
Customer ID:
Submittal Date: 9/14/23 10:03

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	9/15/23 06:33	9/19/23 17:44		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	9/15/23 06:33	9/20/23 13:50		10.15	41.8	mg/L	0.70035	4.06	
* Iron, Total	9/15/23 06:33	9/19/23 17:44		1.015	0.215	mg/L	0.008120	0.0406	
* Lithium, Total	9/15/23 06:33	9/19/23 17:44		1.015	0.0481	mg/L	0.007105	0.01999956	
* Magnesium, Total	9/15/23 06:33	9/19/23 17:44		1.015	11.5	mg/L	0.021315	0.406	
* Molybdenum, Total	9/15/23 06:33	9/19/23 17:44		1.015	0.00555	mg/L	0.005075	0.01015	J
* Silica, Total (calc.)	9/15/23 06:33	9/19/23 17:44		1	20.3	mg/L			
* Silicon, Total	9/15/23 06:33	9/19/23 17:44		1.015	9.47	mg/L	0.02030	0.25375	
* Sodium, Total	9/15/23 06:33	9/19/23 17:44		1.015	19.3	mg/L	0.04060	0.406	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	9/14/23 14:15	9/19/23 15:16		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Dissolved	9/14/23 14:15	9/19/23 15:16		1.015	39.5	mg/L	0.070035	0.406	
* Iron, Dissolved	9/14/23 14:15	9/19/23 15:16		1.015	0.111	mg/L	0.008120	0.0406	
* Lithium, Dissolved	9/14/23 14:15	9/19/23 15:16		1.015	0.0529	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	9/14/23 14:15	9/19/23 15:16		1.015	11.2	mg/L	0.021315	0.406	
* Molybdenum, Dissolved	9/14/23 14:15	9/19/23 15:16		1.015	0.00572	mg/L	0.005075	0.01015	J
* Silica, Dissolved (calc.)	9/14/23 14:15	9/19/23 15:16		1	20.0	mg/L			
* Silicon, Dissolved	9/14/23 14:15	9/19/23 15:16		1.015	9.34	mg/L	0.02030	0.25375	
* Sodium, Dissolved	9/14/23 14:15	9/19/23 15:16		1.015	20.0	mg/L	0.04060	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	9/15/23 06:33	9/18/23 12:37		1.015	0.00236	mg/L	0.000710	0.001015	
* Aluminum, Total	9/15/23 06:33	9/18/23 12:37		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Total	9/15/23 06:33	9/18/23 12:37		1.015	0.000710	mg/L	0.000112	0.000203	
* Barium, Total	9/15/23 06:33	9/18/23 12:37		1.015	0.182	mg/L	0.000508	0.001015	
* Beryllium, Total	9/15/23 06:33	9/18/23 12:37		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	9/15/23 06:33	9/18/23 12:37		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	9/15/23 06:33	9/18/23 12:37		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	9/15/23 06:33	9/18/23 12:37		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	9/15/23 06:33	9/18/23 12:37		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	9/15/23 06:33	9/18/23 12:37		1.015	0.0285	mg/L	0.000152	0.001015	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-12

Location Code: WMWGORAP
Collected: 9/13/23 13:30
Customer ID:
Submittal Date: 9/14/23 10:03

Laboratory ID Number: BD17520

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	9/15/23 06:33	9/18/23 12:37		1.015	1.53	mg/L	0.169505	0.5075	
* Selenium, Total	9/15/23 06:33	9/18/23 12:37		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	9/15/23 06:33	9/18/23 12:37		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	9/14/23 14:15	9/14/23 17:25		1.015	0.00249	mg/L	0.000710	0.001015	
* Aluminum, Dissolved	9/14/23 14:15	9/14/23 17:25		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Dissolved	9/14/23 14:15	9/14/23 17:25		1.015	0.000786	mg/L	0.000112	0.000203	
* Barium, Dissolved	9/14/23 14:15	9/14/23 17:25		1.015	0.188	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	9/14/23 14:15	9/14/23 17:25		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	9/14/23 14:15	9/14/23 17:25		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	9/14/23 14:15	9/14/23 17:25		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	9/14/23 14:15	9/14/23 17:25		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Dissolved	9/14/23 14:15	9/14/23 17:25		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	9/14/23 14:15	9/14/23 17:25		1.015	0.0257	mg/L	0.000152	0.001015	
* Potassium, Dissolved	9/14/23 14:15	9/14/23 17:25		1.015	1.66	mg/L	0.169505	0.5075	
* Selenium, Dissolved	9/14/23 14:15	9/14/23 17:25		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	9/14/23 14:15	9/14/23 17:25		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	9/14/23 17:22	9/15/23 00:34		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	9/18/23 14:22	9/18/23 14:22		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: JAG***								
Alkalinity pH Endpoint	9/26/23 10:23	9/26/23 11:17		1	4.55	SU		2	
* Alkalinity	9/26/23 10:23	9/26/23 11:17		1	163	mg CaCO3/L		1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	9/15/23 10:50	9/19/23 13:02		1	208	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: JAG***								
* Bicarbonate Alkalinity, (calc.)	9/26/23 10:23	9/26/23 11:17		1	156	mg CaCO3/L		1	
* Carbonate Alkalinity, (calc.)	9/26/23 10:23	9/26/23 11:17		1	6.42	mg CaCO3/L		0.5	
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	9/18/23 21:41	9/18/23 21:41		1	Not Detected	mg/L	1.00	2	U

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 10/25/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-12

Location Code: WMWGORAP
Collected: 9/13/23 13:30
Customer ID:
Submittal Date: 9/14/23 10:03

Laboratory ID Number: BD17520

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	9/18/23 12:34	9/18/23 12:34		1	3.19	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	9/18/23 15:25	9/18/23 15:25		1	0.0944	mg/L	0.06	0.125	J
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	9/26/23 15:47	9/26/23 15:47		1	18.9	mg/L	0.6	2	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	9/13/23 13:27	9/13/23 13:27			316.93	uS/cm			FA
pH	9/13/23 13:27	9/13/23 13:27			8.96	SU			FA
Temperature	9/13/23 13:27	9/13/23 13:27			21.17	C			FA
Turbidity	9/13/23 13:27	9/13/23 13:27			0.83	NTU			FA
Sulfide	9/13/23 13:27	9/13/23 13:27			0	mg/L			FA

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 10/25/2023
Version: 3.5
COA_CCR

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/13/23 13:30
Customer ID:
Delivery Date: 9/14/23 10:03

Description: Gorgas Ash Pond - MW-12

Laboratory ID Number: BD17520

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17523	Aluminum, Dissolved	mg/L	-0.000243	0.0198	0.100	0.108	0.105	0.103	0.0850 to 0.115	108	70.0 to 130	2.82	20.0
BD17522	Aluminum, Total	mg/L	0.000468	0.0198	0.100	0.104	0.103	0.104	0.0850 to 0.115	104	70.0 to 130	0.966	20.0
BD17523	Antimony, Dissolved	mg/L	0.000225	0.00100	0.100	0.0966	0.0952	0.0924	0.0850 to 0.115	96.6	70.0 to 130	1.46	20.0
BD17522	Antimony, Total	mg/L	0.000288	0.00100	0.100	0.0977	0.0976	0.101	0.0850 to 0.115	97.7	70.0 to 130	0.102	20.0
BD17523	Arsenic, Dissolved	mg/L	-0.0000145	0.000200	0.100	0.100	0.100	0.100	0.0850 to 0.115	99.8	70.0 to 130	0.00	20.0
BD17522	Arsenic, Total	mg/L	0.0000229	0.000200	0.100	0.103	0.104	0.100	0.0850 to 0.115	98.5	70.0 to 130	0.966	20.0
BD17523	Barium, Dissolved	mg/L	-0.0000070	0.00100	0.100	0.294	0.293	0.102	0.0850 to 0.115	101	70.0 to 130	0.341	20.0
BD17522	Barium, Total	mg/L	0.0000085	0.00100	0.100	0.127	0.127	0.0983	0.0850 to 0.115	95.2	70.0 to 130	0.00	20.0
BD17523	Beryllium, Dissolved	mg/L	0.0000324	0.000880	0.100	0.0992	0.0972	0.0981	0.0850 to 0.115	99.2	70.0 to 130	2.04	20.0
BD17522	Beryllium, Total	mg/L	0.000113	0.000880	0.100	0.0990	0.101	0.0965	0.0850 to 0.115	99.0	70.0 to 130	2.00	20.0
BD17523	Boron, Dissolved	mg/L	-0.00097	0.0650	1.00	1.08	1.08	1.02	0.850 to 1.15	104	70.0 to 130	0.00	20.0
BD17522	Boron, Total	mg/L	-0.000218	0.0650	1.00	1.25	1.24	1.04	0.850 to 1.15	106	70.0 to 130	0.803	20.0
BD17523	Cadmium, Dissolved	mg/L	0.0000030	0.000147	0.100	0.100	0.0988	0.0965	0.0850 to 0.115	100	70.0 to 130	1.21	20.0
BD17522	Cadmium, Total	mg/L	0.0000072	0.000147	0.100	0.0967	0.0960	0.101	0.0850 to 0.115	96.7	70.0 to 130	0.727	20.0
BD17523	Calcium, Dissolved	mg/L	-0.0272	0.152	5.00	62.6	57.2	4.97	4.25 to 5.75	198	70.0 to 130	9.02	20.0
BD17522	Calcium, Total	mg/L	-0.0124	0.152	5.00	43.7	43.3	5.08	4.25 to 5.75	96.0	70.0 to 130	0.920	20.0
BD17521	Chloride	mg/L	-0.0466	1.00	10.0	22.5	22.5	10.3	9.00 to 11.0	88.0	80.0 to 120	0.00	20.0
BD17523	Chromium, Dissolved	mg/L	-0.000196	0.000440	0.100	0.101	0.0983	0.0975	0.0850 to 0.115	101	70.0 to 130	2.71	20.0
BD17522	Chromium, Total	mg/L	-0.000104	0.000440	0.100	0.0983	0.0983	0.101	0.0850 to 0.115	98.3	70.0 to 130	0.00	20.0
BD17523	Cobalt, Dissolved	mg/L	-0.0000687	0.000147	0.100	0.101	0.0989	0.0991	0.0850 to 0.115	101	70.0 to 130	2.10	20.0
BD17522	Cobalt, Total	mg/L	0.0000010	0.000147	0.100	0.0995	0.0993	0.103	0.0850 to 0.115	99.5	70.0 to 130	0.201	20.0
BD17521	Fluoride	mg/L	0.0183	0.125	2.50	2.78	2.74	2.61	2.25 to 2.75	105	80.0 to 120	1.45	20.0
BD17523	Iron, Dissolved	mg/L	0.00003	0.0176	0.2	0.510	0.509	0.202	0.170 to 0.230	99.0	70.0 to 130	0.196	20.0
BD17522	Iron, Total	mg/L	0.00165	0.0176	0.2	1.53	1.52	0.206	0.170 to 0.230	100	70.0 to 130	0.656	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/13/23 13:30
Customer ID:
Delivery Date: 9/14/23 10:03

Description: Gorgas Ash Pond - MW-12

Laboratory ID Number: BD17520

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17523	Lead, Dissolved	mg/L	0.0000011	0.000147	0.100	0.107	0.107	0.106	0.0850 to 0.115	107	70.0 to 130	0.00	20.0
BD17522	Lead, Total	mg/L	0.0000089	0.000147	0.100	0.0965	0.0958	0.0974	0.0850 to 0.115	96.5	70.0 to 130	0.728	20.0
BD17523	Lithium, Dissolved	mg/L	-0.000457	0.0154	0.200	0.241	0.240	0.205	0.170 to 0.230	104	70.0 to 130	0.416	20.0
BD17522	Lithium, Total	mg/L	-0.000155	0.0154	0.200	0.246	0.247	0.209	0.170 to 0.230	105	70.0 to 130	0.406	20.0
BD17523	Magnesium, Dissolved	mg/L	-0.00451	0.0462	5.00	22.2	22.0	5.10	4.25 to 5.75	102	70.0 to 130	0.905	20.0
BD17522	Magnesium, Total	mg/L	-0.0138	0.0462	5.00	22.8	22.8	5.15	4.25 to 5.75	102	70.0 to 130	0.00	20.0
BD17523	Manganese, Dissolved	mg/L	-0.0000010	0.00033	0.100	0.139	0.136	0.101	0.0850 to 0.115	104	70.0 to 130	2.18	20.0
BD17522	Manganese, Total	mg/L	0.0000196	0.00033	0.100	0.253	0.250	0.105	0.0850 to 0.115	102	70.0 to 130	1.19	20.0
BD17522	Mercury, Total by CVAA	mg/L	7.000E-05	0.000500	0.004	0.00403	0.00406	0.00407	0.00340 to 0.00460	101	70.0 to 130	0.742	20.0
BD17523	Molybdenum, Dissolved	mg/L	0.000129	0.0100	0.2	0.211	0.210	0.205	0.170 to 0.230	106	70.0 to 130	0.475	20.0
BD17522	Molybdenum, Total	mg/L	0.000	0.0100	0.2	0.214	0.211	0.210	0.170 to 0.230	107	70.0 to 130	1.41	20.0
BD17523	Potassium, Dissolved	mg/L	-0.0168	0.367	10.0	13.6	13.3	9.90	8.50 to 11.5	102	70.0 to 130	2.23	20.0
BD17522	Potassium, Total	mg/L	0.00267	0.367	10.0	12.4	12.2	10.3	8.50 to 11.5	102	70.0 to 130	1.63	20.0
BD17523	Selenium, Dissolved	mg/L	-0.0000414	0.00100	0.100	0.101	0.100	0.101	0.0850 to 0.115	100	70.0 to 130	0.995	20.0
BD17522	Selenium, Total	mg/L	-0.0000063	0.00100	0.100	0.102	0.0988	0.102	0.0850 to 0.115	102	70.0 to 130	3.19	20.0
BD17523	Silicon, Dissolved	mg/L	-0.000062	0.0440	1.00	16.9	16.9	1.02	0.850 to 1.15	100	70.0 to 130	0.00	20.0
BD17522	Silicon, Total	mg/L	0.000173	0.0440	1.00	15.7	15.7	1.05	0.850 to 1.15	110	70.0 to 130	0.00	20.0
BD17523	Sodium, Dissolved	mg/L	0.00777	0.0880	5.00	72.0	66.4	5.07	4.25 to 5.75	196	70.0 to 130	8.09	20.0
BD17522	Sodium, Total	mg/L	0.0205	0.0880	5.00	21.4	21.5	5.16	4.25 to 5.75	102	70.0 to 130	0.466	20.0
BD17521	Sulfate	mg/L	0.0639	2.0	80.0	135	132	18.8	18.0 to 22.0	96.9	80.0 to 120	2.25	20.0
BD17523	Thallium, Dissolved	mg/L	-0.0000863	0.000147	0.100	0.106	0.108	0.103	0.0850 to 0.115	106	70.0 to 130	1.87	20.0
BD17522	Thallium, Total	mg/L	0.0000115	0.000147	0.100	0.0979	0.0982	0.0992	0.0850 to 0.115	97.9	70.0 to 130	0.306	20.0
BD17521	Total Organic Carbon	mg/L	0.299	1.00	10.0	11.3	10.9	10.7		113	80.0 to 120	3.60	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/13/23 13:30
Customer ID:
Delivery Date: 9/14/23 10:03

Description: Gorgas Ash Pond - MW-12

Laboratory ID Number: BD17520

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17523	Alkalinity	mg CaCO3/L					206	52.7	45.0 to 55.0			2.87	10.0
BD17521	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.02	0.200	2.00	2.01	-0.007	1.96	1.80 to 2.20	100	90.0 to 110	0.00	15.0
BD17523	Solids, Dissolved	mg/L	0.0000	25.0			395	54.0	40.0 to 60.0			0.00	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-09R

Location Code: WMWGORAP
Collected: 9/13/23 15:25
Customer ID:
Submittal Date: 9/14/23 10:03

Laboratory ID Number: BD17521

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	9/15/23 06:33	9/19/23 17:47		1.015	0.193	mg/L	0.030000	0.1015	
* Calcium, Total	9/15/23 06:33	9/19/23 17:47		1.015	38.9	mg/L	0.070035	0.406	
* Iron, Total	9/15/23 06:33	9/19/23 17:47		1.015	1.34	mg/L	0.008120	0.0406	
* Lithium, Total	9/15/23 06:33	9/19/23 17:47		1.015	0.0352	mg/L	0.007105	0.01999956	
* Magnesium, Total	9/15/23 06:33	9/19/23 17:47		1.015	17.6	mg/L	0.021315	0.406	
* Molybdenum, Total	9/15/23 06:33	9/19/23 17:47		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Total (calc.)	9/15/23 06:33	9/19/23 17:47		1	31.7	mg/L			
* Silicon, Total	9/15/23 06:33	9/19/23 17:47		1.015	14.8	mg/L	0.02030	0.25375	
* Sodium, Total	9/15/23 06:33	9/19/23 17:47		1.015	16.3	mg/L	0.04060	0.406	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	9/14/23 14:15	9/19/23 15:19		1.015	0.190	mg/L	0.030000	0.1015	
* Calcium, Dissolved	9/14/23 14:15	9/19/23 15:19		1.015	38.8	mg/L	0.070035	0.406	
* Iron, Dissolved	9/14/23 14:15	9/19/23 15:19		1.015	1.27	mg/L	0.008120	0.0406	
* Lithium, Dissolved	9/14/23 14:15	9/19/23 15:19		1.015	0.0347	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	9/14/23 14:15	9/19/23 15:19		1.015	17.6	mg/L	0.021315	0.406	
* Molybdenum, Dissolved	9/14/23 14:15	9/19/23 15:19		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Dissolved (calc.)	9/14/23 14:15	9/19/23 15:19		1	31.2	mg/L			
* Silicon, Dissolved	9/14/23 14:15	9/19/23 15:19		1.015	14.6	mg/L	0.02030	0.25375	
* Sodium, Dissolved	9/14/23 14:15	9/19/23 15:19		1.015	16.1	mg/L	0.04060	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	9/15/23 06:33	9/18/23 12:41		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Total	9/15/23 06:33	9/18/23 12:41		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Total	9/15/23 06:33	9/18/23 12:41		1.015	0.00449	mg/L	0.000112	0.000203	
* Barium, Total	9/15/23 06:33	9/18/23 12:41		1.015	0.0315	mg/L	0.000508	0.001015	
* Beryllium, Total	9/15/23 06:33	9/18/23 12:41		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	9/15/23 06:33	9/18/23 12:41		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	9/15/23 06:33	9/18/23 12:41		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	9/15/23 06:33	9/18/23 12:41		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	9/15/23 06:33	9/18/23 12:41		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	9/15/23 06:33	9/18/23 12:41		1.015	0.150	mg/L	0.000152	0.001015	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-09R

Location Code: WMWGORAP
Collected: 9/13/23 15:25
Customer ID:
Submittal Date: 9/14/23 10:03

Laboratory ID Number: BD17521

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	9/15/23 06:33	9/18/23 12:41		1.015	2.33	mg/L	0.169505	0.5075	
* Selenium, Total	9/15/23 06:33	9/18/23 12:41		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	9/15/23 06:33	9/18/23 12:41		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	9/14/23 14:15	9/14/23 17:29		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	9/14/23 14:15	9/14/23 17:29		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Dissolved	9/14/23 14:15	9/14/23 17:29		1.015	0.00421	mg/L	0.000112	0.000203	
* Barium, Dissolved	9/14/23 14:15	9/14/23 17:29		1.015	0.0349	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	9/14/23 14:15	9/14/23 17:29		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	9/14/23 14:15	9/14/23 17:29		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	9/14/23 14:15	9/14/23 17:29		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	9/14/23 14:15	9/14/23 17:29		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Dissolved	9/14/23 14:15	9/14/23 17:29		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	9/14/23 14:15	9/14/23 17:29		1.015	0.151	mg/L	0.000152	0.001015	
* Potassium, Dissolved	9/14/23 14:15	9/14/23 17:29		1.015	2.16	mg/L	0.169505	0.5075	
* Selenium, Dissolved	9/14/23 14:15	9/14/23 17:29		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	9/14/23 14:15	9/14/23 17:29		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	9/14/23 17:22	9/15/23 00:38		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	9/18/23 14:24	9/18/23 14:24		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: JAG***								
Alkalinity pH Endpoint	9/26/23 10:23	9/26/23 11:17		1	4.52	SU		2	
* Alkalinity	9/26/23 10:23	9/26/23 11:17		1	121	mg CaCO3/L		1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	9/15/23 10:50	9/19/23 13:02		1	246	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: JAG***								
* Bicarbonate Alkalinity, (calc.)	9/26/23 10:23	9/26/23 11:17		1	121	mg CaCO3/L		1	
* Carbonate Alkalinity, (calc.)	9/26/23 10:23	9/26/23 11:17		1	Not Detected	mg CaCO3/L		0.5	
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	9/18/23 21:58	9/18/23 21:58		1	Not Detected	mg/L	1.00	2	U

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 10/25/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-09R

Location Code: WMWGORAP
Collected: 9/13/23 15:25
Customer ID:
Submittal Date: 9/14/23 10:03

Laboratory ID Number: BD17521

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	9/18/23 12:35	9/18/23 12:35		1	13.7	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	9/18/23 15:26	9/18/23 15:26		1	0.158	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	9/26/23 16:04	9/26/23 16:04		4	57.5	mg/L	2.4	8	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	9/13/23 15:23	9/13/23 15:23			403.85	uS/cm			FA
pH	9/13/23 15:23	9/13/23 15:23			6.25	SU			FA
Temperature	9/13/23 15:23	9/13/23 15:23			18.07	C			FA
Turbidity	9/13/23 15:23	9/13/23 15:23			1.61	NTU			FA
Sulfide	9/13/23 15:23	9/13/23 15:23			0	mg/L			FA

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/13/23 15:25
Customer ID:
Delivery Date: 9/14/23 10:03

Description: Gorgas Ash Pond - MW-09R

Laboratory ID Number: BD17521

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17523	Aluminum, Dissolved	mg/L	-0.000243	0.0198	0.100	0.108	0.105	0.103	0.0850 to 0.115	108	70.0 to 130	2.82	20.0
BD17522	Aluminum, Total	mg/L	0.000468	0.0198	0.100	0.104	0.103	0.104	0.0850 to 0.115	104	70.0 to 130	0.966	20.0
BD17523	Antimony, Dissolved	mg/L	0.000225	0.00100	0.100	0.0966	0.0952	0.0924	0.0850 to 0.115	96.6	70.0 to 130	1.46	20.0
BD17522	Antimony, Total	mg/L	0.000288	0.00100	0.100	0.0977	0.0976	0.101	0.0850 to 0.115	97.7	70.0 to 130	0.102	20.0
BD17523	Arsenic, Dissolved	mg/L	-0.0000145	0.000200	0.100	0.100	0.100	0.100	0.0850 to 0.115	99.8	70.0 to 130	0.00	20.0
BD17522	Arsenic, Total	mg/L	0.0000229	0.000200	0.100	0.103	0.104	0.100	0.0850 to 0.115	98.5	70.0 to 130	0.966	20.0
BD17523	Barium, Dissolved	mg/L	-0.0000070	0.00100	0.100	0.294	0.293	0.102	0.0850 to 0.115	101	70.0 to 130	0.341	20.0
BD17522	Barium, Total	mg/L	0.0000085	0.00100	0.100	0.127	0.127	0.0983	0.0850 to 0.115	95.2	70.0 to 130	0.00	20.0
BD17523	Beryllium, Dissolved	mg/L	0.0000324	0.000880	0.100	0.0992	0.0972	0.0981	0.0850 to 0.115	99.2	70.0 to 130	2.04	20.0
BD17522	Beryllium, Total	mg/L	0.000113	0.000880	0.100	0.0990	0.101	0.0965	0.0850 to 0.115	99.0	70.0 to 130	2.00	20.0
BD17523	Boron, Dissolved	mg/L	-0.00097	0.0650	1.00	1.08	1.08	1.02	0.850 to 1.15	104	70.0 to 130	0.00	20.0
BD17522	Boron, Total	mg/L	-0.000218	0.0650	1.00	1.25	1.24	1.04	0.850 to 1.15	106	70.0 to 130	0.803	20.0
BD17523	Cadmium, Dissolved	mg/L	0.0000030	0.000147	0.100	0.100	0.0988	0.0965	0.0850 to 0.115	100	70.0 to 130	1.21	20.0
BD17522	Cadmium, Total	mg/L	0.0000072	0.000147	0.100	0.0967	0.0960	0.101	0.0850 to 0.115	96.7	70.0 to 130	0.727	20.0
BD17523	Calcium, Dissolved	mg/L	-0.0272	0.152	5.00	62.6	57.2	4.97	4.25 to 5.75	198	70.0 to 130	9.02	20.0
BD17522	Calcium, Total	mg/L	-0.0124	0.152	5.00	43.7	43.3	5.08	4.25 to 5.75	96.0	70.0 to 130	0.920	20.0
BD17521	Chloride	mg/L	-0.0466	1.00	10.0	22.5	22.5	10.3	9.00 to 11.0	88.0	80.0 to 120	0.00	20.0
BD17523	Chromium, Dissolved	mg/L	-0.000196	0.000440	0.100	0.101	0.0983	0.0975	0.0850 to 0.115	101	70.0 to 130	2.71	20.0
BD17522	Chromium, Total	mg/L	-0.000104	0.000440	0.100	0.0983	0.0983	0.101	0.0850 to 0.115	98.3	70.0 to 130	0.00	20.0
BD17523	Cobalt, Dissolved	mg/L	-0.0000687	0.000147	0.100	0.101	0.0989	0.0991	0.0850 to 0.115	101	70.0 to 130	2.10	20.0
BD17522	Cobalt, Total	mg/L	0.0000010	0.000147	0.100	0.0995	0.0993	0.103	0.0850 to 0.115	99.5	70.0 to 130	0.201	20.0
BD17521	Fluoride	mg/L	0.0183	0.125	2.50	2.78	2.74	2.61	2.25 to 2.75	105	80.0 to 120	1.45	20.0
BD17523	Iron, Dissolved	mg/L	0.00003	0.0176	0.2	0.510	0.509	0.202	0.170 to 0.230	99.0	70.0 to 130	0.196	20.0
BD17522	Iron, Total	mg/L	0.00165	0.0176	0.2	1.53	1.52	0.206	0.170 to 0.230	100	70.0 to 130	0.656	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/13/23 15:25
Customer ID:
Delivery Date: 9/14/23 10:03

Description: Gorgas Ash Pond - MW-09R

Laboratory ID Number: BD17521

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17523	Lead, Dissolved	mg/L	0.0000011	0.000147	0.100	0.107	0.107	0.106	0.0850 to 0.115	107	70.0 to 130	0.00	20.0
BD17522	Lead, Total	mg/L	0.0000089	0.000147	0.100	0.0965	0.0958	0.0974	0.0850 to 0.115	96.5	70.0 to 130	0.728	20.0
BD17523	Lithium, Dissolved	mg/L	-0.000457	0.0154	0.200	0.241	0.240	0.205	0.170 to 0.230	104	70.0 to 130	0.416	20.0
BD17522	Lithium, Total	mg/L	-0.000155	0.0154	0.200	0.246	0.247	0.209	0.170 to 0.230	105	70.0 to 130	0.406	20.0
BD17523	Magnesium, Dissolved	mg/L	-0.00451	0.0462	5.00	22.2	22.0	5.10	4.25 to 5.75	102	70.0 to 130	0.905	20.0
BD17522	Magnesium, Total	mg/L	-0.0138	0.0462	5.00	22.8	22.8	5.15	4.25 to 5.75	102	70.0 to 130	0.00	20.0
BD17523	Manganese, Dissolved	mg/L	-0.0000010	0.00033	0.100	0.139	0.136	0.101	0.0850 to 0.115	104	70.0 to 130	2.18	20.0
BD17522	Manganese, Total	mg/L	0.0000196	0.00033	0.100	0.253	0.250	0.105	0.0850 to 0.115	102	70.0 to 130	1.19	20.0
BD17522	Mercury, Total by CVAA	mg/L	7.000E-05	0.000500	0.004	0.00403	0.00406	0.00407	0.00340 to 0.00460	101	70.0 to 130	0.742	20.0
BD17523	Molybdenum, Dissolved	mg/L	0.000129	0.0100	0.2	0.211	0.210	0.205	0.170 to 0.230	106	70.0 to 130	0.475	20.0
BD17522	Molybdenum, Total	mg/L	0.000	0.0100	0.2	0.214	0.211	0.210	0.170 to 0.230	107	70.0 to 130	1.41	20.0
BD17523	Potassium, Dissolved	mg/L	-0.0168	0.367	10.0	13.6	13.3	9.90	8.50 to 11.5	102	70.0 to 130	2.23	20.0
BD17522	Potassium, Total	mg/L	0.00267	0.367	10.0	12.4	12.2	10.3	8.50 to 11.5	102	70.0 to 130	1.63	20.0
BD17523	Selenium, Dissolved	mg/L	-0.0000414	0.00100	0.100	0.101	0.100	0.101	0.0850 to 0.115	100	70.0 to 130	0.995	20.0
BD17522	Selenium, Total	mg/L	-0.0000063	0.00100	0.100	0.102	0.0988	0.102	0.0850 to 0.115	102	70.0 to 130	3.19	20.0
BD17523	Silicon, Dissolved	mg/L	-0.000062	0.0440	1.00	16.9	16.9	1.02	0.850 to 1.15	100	70.0 to 130	0.00	20.0
BD17522	Silicon, Total	mg/L	0.000173	0.0440	1.00	15.7	15.7	1.05	0.850 to 1.15	110	70.0 to 130	0.00	20.0
BD17523	Sodium, Dissolved	mg/L	0.00777	0.0880	5.00	72.0	66.4	5.07	4.25 to 5.75	196	70.0 to 130	8.09	20.0
BD17522	Sodium, Total	mg/L	0.0205	0.0880	5.00	21.4	21.5	5.16	4.25 to 5.75	102	70.0 to 130	0.466	20.0
BD17521	Sulfate	mg/L	0.0639	2.0	80.0	135	132	18.8	18.0 to 22.0	96.9	80.0 to 120	2.25	20.0
BD17523	Thallium, Dissolved	mg/L	-0.0000863	0.000147	0.100	0.106	0.108	0.103	0.0850 to 0.115	106	70.0 to 130	1.87	20.0
BD17522	Thallium, Total	mg/L	0.0000115	0.000147	0.100	0.0979	0.0982	0.0992	0.0850 to 0.115	97.9	70.0 to 130	0.306	20.0
BD17521	Total Organic Carbon	mg/L	0.299	1.00	10.0	11.3	10.9	10.7		113	80.0 to 120	3.60	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/13/23 15:25
Customer ID:
Delivery Date: 9/14/23 10:03

Description: Gorgas Ash Pond - MW-09R

Laboratory ID Number: BD17521

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17523	Alkalinity	mg CaCO3/L					206	52.7	45.0 to 55.0			2.87	10.0
BD17521	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.02	0.200	2.00	2.01	-0.007	1.96	1.80 to 2.20	100	90.0 to 110	0.00	15.0
BD17523	Solids, Dissolved	mg/L	0.0000	25.0			395	54.0	40.0 to 60.0			0.00	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 10/25/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-09R Dup

Location Code: WMWGORAP
Collected: 9/13/23 15:25
Customer ID:
Submittal Date: 9/14/23 10:03

Laboratory ID Number: BD17522

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	9/15/23 06:33	9/19/23 17:50		1.015	0.192	mg/L	0.030000	0.1015	
* Calcium, Total	9/15/23 06:33	9/19/23 17:50		1.015	38.9	mg/L	0.070035	0.406	
* Iron, Total	9/15/23 06:33	9/19/23 17:50		1.015	1.33	mg/L	0.008120	0.0406	
* Lithium, Total	9/15/23 06:33	9/19/23 17:50		1.015	0.0355	mg/L	0.007105	0.01999956	
* Magnesium, Total	9/15/23 06:33	9/19/23 17:50		1.015	17.7	mg/L	0.021315	0.406	
* Molybdenum, Total	9/15/23 06:33	9/19/23 17:50		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Total (calc.)	9/15/23 06:33	9/19/23 17:50		1	31.2	mg/L			
* Silicon, Total	9/15/23 06:33	9/19/23 17:50		1.015	14.6	mg/L	0.02030	0.25375	
* Sodium, Total	9/15/23 06:33	9/19/23 17:50		1.015	16.3	mg/L	0.04060	0.406	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	9/14/23 14:15	9/19/23 15:22		1.015	0.191	mg/L	0.030000	0.1015	
* Calcium, Dissolved	9/14/23 14:15	9/19/23 15:22		1.015	38.5	mg/L	0.070035	0.406	
* Iron, Dissolved	9/14/23 14:15	9/19/23 15:22		1.015	1.27	mg/L	0.008120	0.0406	
* Lithium, Dissolved	9/14/23 14:15	9/19/23 15:22		1.015	0.0353	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	9/14/23 14:15	9/19/23 15:22		1.015	17.5	mg/L	0.021315	0.406	
* Molybdenum, Dissolved	9/14/23 14:15	9/19/23 15:22		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Dissolved (calc.)	9/14/23 14:15	9/19/23 15:22		1	31.5	mg/L			
* Silicon, Dissolved	9/14/23 14:15	9/19/23 15:22		1.015	14.7	mg/L	0.02030	0.25375	
* Sodium, Dissolved	9/14/23 14:15	9/19/23 15:22		1.015	16.0	mg/L	0.04060	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	9/15/23 06:33	9/18/23 12:44		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Arsenic, Total	9/15/23 06:33	9/18/23 12:44		1.015	0.00450	mg/L	0.000112	0.000203	
* Aluminum, Total	9/15/23 06:33	9/18/23 12:44		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Barium, Total	9/15/23 06:33	9/18/23 12:44		1.015	0.0318	mg/L	0.000508	0.001015	
* Beryllium, Total	9/15/23 06:33	9/18/23 12:44		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	9/15/23 06:33	9/18/23 12:44		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	9/15/23 06:33	9/18/23 12:44		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	9/15/23 06:33	9/18/23 12:44		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	9/15/23 06:33	9/18/23 12:44		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	9/15/23 06:33	9/18/23 12:44		1.015	0.151	mg/L	0.000152	0.001015	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-09R Dup

Location Code: WMWGORAP
Collected: 9/13/23 15:25
Customer ID:
Submittal Date: 9/14/23 10:03

Laboratory ID Number: BD17522

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	9/15/23 06:33	9/18/23 12:44		1.015	2.25	mg/L	0.169505	0.5075	
* Selenium, Total	9/15/23 06:33	9/18/23 12:44		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	9/15/23 06:33	9/18/23 12:44		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	9/14/23 14:15	9/14/23 17:32		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	9/14/23 14:15	9/14/23 17:32		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Dissolved	9/14/23 14:15	9/14/23 17:32		1.015	0.00418	mg/L	0.000112	0.000203	
* Barium, Dissolved	9/14/23 14:15	9/14/23 17:32		1.015	0.0365	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	9/14/23 14:15	9/14/23 17:32		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	9/14/23 14:15	9/14/23 17:32		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	9/14/23 14:15	9/14/23 17:32		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	9/14/23 14:15	9/14/23 17:32		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Dissolved	9/14/23 14:15	9/14/23 17:32		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	9/14/23 14:15	9/14/23 17:32		1.015	0.154	mg/L	0.000152	0.001015	
* Potassium, Dissolved	9/14/23 14:15	9/14/23 17:32		1.015	2.15	mg/L	0.169505	0.5075	
* Selenium, Dissolved	9/14/23 14:15	9/14/23 17:32		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	9/14/23 14:15	9/14/23 17:32		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	9/14/23 17:22	9/15/23 00:42		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	9/18/23 14:31	9/18/23 14:31		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: JAG***								
Alkalinity pH Endpoint	9/26/23 10:23	9/26/23 11:17		1	4.53	SU		2	
* Alkalinity	9/26/23 10:23	9/26/23 11:17		1	120	mg CaCO3/L		1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	9/15/23 10:50	9/19/23 13:02		1	247	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: JAG***								
* Bicarbonate Alkalinity, (calc.)	9/26/23 10:23	9/26/23 11:17		1	120	mg CaCO3/L		1	
* Carbonate Alkalinity, (calc.)	9/26/23 10:23	9/26/23 11:17		1	Not Detected	mg CaCO3/L		0.5	
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	9/18/23 23:16	9/18/23 23:16		1	Not Detected	mg/L	1.00	2	U

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-09R Dup

Location Code: WMWGORAP
Collected: 9/13/23 15:25
Customer ID:
Submittal Date: 9/14/23 10:03

Laboratory ID Number: BD17522

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	9/18/23 13:00	9/18/23 13:00		1	13.7	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	9/18/23 15:38	9/18/23 15:38		1	0.186	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	9/26/23 16:32	9/26/23 16:32		3	57.3	mg/L	1.8	6	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	9/13/23 15:23	9/13/23 15:23			403.85	uS/cm			FA
pH	9/13/23 15:23	9/13/23 15:23			6.25	SU			FA
Temperature	9/13/23 15:23	9/13/23 15:23			18.07	C			FA
Turbidity	9/13/23 15:23	9/13/23 15:23			1.61	NTU			FA
Sulfide	9/13/23 15:23	9/13/23 15:23			0	mg/L			FA

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/13/23 15:25
Customer ID:
Delivery Date: 9/14/23 10:03

Description: Gorgas Ash Pond - MW-09R Dup

Laboratory ID Number: BD17522

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17523	Aluminum, Dissolved	mg/L	-0.000243	0.0198	0.100	0.108	0.105	0.103	0.0850 to 0.115	108	70.0 to 130	2.82	20.0
BD17522	Aluminum, Total	mg/L	0.000468	0.0198	0.100	0.104	0.103	0.104	0.0850 to 0.115	104	70.0 to 130	0.966	20.0
BD17523	Antimony, Dissolved	mg/L	0.000225	0.00100	0.100	0.0966	0.0952	0.0924	0.0850 to 0.115	96.6	70.0 to 130	1.46	20.0
BD17522	Antimony, Total	mg/L	0.000288	0.00100	0.100	0.0977	0.0976	0.101	0.0850 to 0.115	97.7	70.0 to 130	0.102	20.0
BD17523	Arsenic, Dissolved	mg/L	-0.0000145	0.000200	0.100	0.100	0.100	0.100	0.0850 to 0.115	99.8	70.0 to 130	0.00	20.0
BD17522	Arsenic, Total	mg/L	0.0000229	0.000200	0.100	0.103	0.104	0.100	0.0850 to 0.115	98.5	70.0 to 130	0.966	20.0
BD17523	Barium, Dissolved	mg/L	-0.0000070	0.00100	0.100	0.294	0.293	0.102	0.0850 to 0.115	101	70.0 to 130	0.341	20.0
BD17522	Barium, Total	mg/L	0.0000085	0.00100	0.100	0.127	0.127	0.0983	0.0850 to 0.115	95.2	70.0 to 130	0.00	20.0
BD17523	Beryllium, Dissolved	mg/L	0.0000324	0.000880	0.100	0.0992	0.0972	0.0981	0.0850 to 0.115	99.2	70.0 to 130	2.04	20.0
BD17522	Beryllium, Total	mg/L	0.000113	0.000880	0.100	0.0990	0.101	0.0965	0.0850 to 0.115	99.0	70.0 to 130	2.00	20.0
BD17523	Boron, Dissolved	mg/L	-0.00097	0.0650	1.00	1.08	1.08	1.02	0.850 to 1.15	104	70.0 to 130	0.00	20.0
BD17522	Boron, Total	mg/L	-0.000218	0.0650	1.00	1.25	1.24	1.04	0.850 to 1.15	106	70.0 to 130	0.803	20.0
BD17523	Cadmium, Dissolved	mg/L	0.0000030	0.000147	0.100	0.100	0.0988	0.0965	0.0850 to 0.115	100	70.0 to 130	1.21	20.0
BD17522	Cadmium, Total	mg/L	0.0000072	0.000147	0.100	0.0967	0.0960	0.101	0.0850 to 0.115	96.7	70.0 to 130	0.727	20.0
BD17523	Calcium, Dissolved	mg/L	-0.0272	0.152	5.00	62.6	57.2	4.97	4.25 to 5.75	198	70.0 to 130	9.02	20.0
BD17522	Calcium, Total	mg/L	-0.0124	0.152	5.00	43.7	43.3	5.08	4.25 to 5.75	96.0	70.0 to 130	0.920	20.0
BD17524	Chloride	mg/L	0.0563	1.00	10.0	9.86	9.64	10.2	9.00 to 11.0	98.6	80.0 to 120	2.26	20.0
BD17523	Chromium, Dissolved	mg/L	-0.000196	0.000440	0.100	0.101	0.0983	0.0975	0.0850 to 0.115	101	70.0 to 130	2.71	20.0
BD17522	Chromium, Total	mg/L	-0.000104	0.000440	0.100	0.0983	0.0983	0.101	0.0850 to 0.115	98.3	70.0 to 130	0.00	20.0
BD17523	Cobalt, Dissolved	mg/L	-0.0000687	0.000147	0.100	0.101	0.0989	0.0991	0.0850 to 0.115	101	70.0 to 130	2.10	20.0
BD17522	Cobalt, Total	mg/L	0.0000010	0.000147	0.100	0.0995	0.0993	0.103	0.0850 to 0.115	99.5	70.0 to 130	0.201	20.0
BD17524	Fluoride	mg/L	-0.00107	0.125	2.50	2.61	2.59	2.61	2.25 to 2.75	104	80.0 to 120	0.769	20.0
BD17523	Iron, Dissolved	mg/L	0.00003	0.0176	0.2	0.510	0.509	0.202	0.170 to 0.230	99.0	70.0 to 130	0.196	20.0
BD17522	Iron, Total	mg/L	0.00165	0.0176	0.2	1.53	1.52	0.206	0.170 to 0.230	100	70.0 to 130	0.656	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/13/23 15:25
Customer ID:
Delivery Date: 9/14/23 10:03

Description: Gorgas Ash Pond - MW-09R Dup

Laboratory ID Number: BD17522

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17523	Lead, Dissolved	mg/L	0.0000011	0.000147	0.100	0.107	0.107	0.106	0.0850 to 0.115	107	70.0 to 130	0.00	20.0
BD17522	Lead, Total	mg/L	0.0000089	0.000147	0.100	0.0965	0.0958	0.0974	0.0850 to 0.115	96.5	70.0 to 130	0.728	20.0
BD17523	Lithium, Dissolved	mg/L	-0.000457	0.0154	0.200	0.241	0.240	0.205	0.170 to 0.230	104	70.0 to 130	0.416	20.0
BD17522	Lithium, Total	mg/L	-0.000155	0.0154	0.200	0.246	0.247	0.209	0.170 to 0.230	105	70.0 to 130	0.406	20.0
BD17523	Magnesium, Dissolved	mg/L	-0.00451	0.0462	5.00	22.2	22.0	5.10	4.25 to 5.75	102	70.0 to 130	0.905	20.0
BD17522	Magnesium, Total	mg/L	-0.0138	0.0462	5.00	22.8	22.8	5.15	4.25 to 5.75	102	70.0 to 130	0.00	20.0
BD17523	Manganese, Dissolved	mg/L	-0.0000010	0.00033	0.100	0.139	0.136	0.101	0.0850 to 0.115	104	70.0 to 130	2.18	20.0
BD17522	Manganese, Total	mg/L	0.0000196	0.00033	0.100	0.253	0.250	0.105	0.0850 to 0.115	102	70.0 to 130	1.19	20.0
BD17522	Mercury, Total by CVAA	mg/L	7.000E-05	0.000500	0.004	0.00403	0.00406	0.00407	0.00340 to 0.00460	101	70.0 to 130	0.742	20.0
BD17523	Molybdenum, Dissolved	mg/L	0.000129	0.0100	0.2	0.211	0.210	0.205	0.170 to 0.230	106	70.0 to 130	0.475	20.0
BD17522	Molybdenum, Total	mg/L	0.000	0.0100	0.2	0.214	0.211	0.210	0.170 to 0.230	107	70.0 to 130	1.41	20.0
BD17523	Potassium, Dissolved	mg/L	-0.0168	0.367	10.0	13.6	13.3	9.90	8.50 to 11.5	102	70.0 to 130	2.23	20.0
BD17522	Potassium, Total	mg/L	0.00267	0.367	10.0	12.4	12.2	10.3	8.50 to 11.5	102	70.0 to 130	1.63	20.0
BD17523	Selenium, Dissolved	mg/L	-0.0000414	0.00100	0.100	0.101	0.100	0.101	0.0850 to 0.115	100	70.0 to 130	0.995	20.0
BD17522	Selenium, Total	mg/L	-0.0000063	0.00100	0.100	0.102	0.0988	0.102	0.0850 to 0.115	102	70.0 to 130	3.19	20.0
BD17523	Silicon, Dissolved	mg/L	-0.000062	0.0440	1.00	16.9	16.9	1.02	0.850 to 1.15	100	70.0 to 130	0.00	20.0
BD17522	Silicon, Total	mg/L	0.000173	0.0440	1.00	15.7	15.7	1.05	0.850 to 1.15	110	70.0 to 130	0.00	20.0
BD17523	Sodium, Dissolved	mg/L	0.00777	0.0880	5.00	72.0	66.4	5.07	4.25 to 5.75	196	70.0 to 130	8.09	20.0
BD17522	Sodium, Total	mg/L	0.0205	0.0880	5.00	21.4	21.5	5.16	4.25 to 5.75	102	70.0 to 130	0.466	20.0
BD17823	Sulfate	mg/L	0.0186	2.0	20.0	42.3	41.8	18.7	18.0 to 22.0	93.5	80.0 to 120	1.19	20.0
BD17523	Thallium, Dissolved	mg/L	-0.0000863	0.000147	0.100	0.106	0.108	0.103	0.0850 to 0.115	106	70.0 to 130	1.87	20.0
BD17522	Thallium, Total	mg/L	0.0000115	0.000147	0.100	0.0979	0.0982	0.0992	0.0850 to 0.115	97.9	70.0 to 130	0.306	20.0
BD17524	Total Organic Carbon	mg/L	0.324	1.00	10.0	10.3	11.2	10.5		103	80.0 to 120	8.37	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/13/23 15:25
Customer ID:
Delivery Date: 9/14/23 10:03

Description: Gorgas Ash Pond - MW-09R Dup

Laboratory ID Number: BD17522

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17523	Alkalinity	mg CaCO3/L					206	52.7	45.0 to 55.0			2.87	10.0
BD17524	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.02	0.200	2.00	2.00	0.015	1.97	1.80 to 2.20	100	90.0 to 110	0.00	15.0
BD17523	Solids, Dissolved	mg/L	0.0000	25.0			395	54.0	40.0 to 60.0			0.00	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-9V

Location Code: WMWGORAP
Collected: 9/13/23 17:55
Customer ID:
Submittal Date: 9/14/23 10:03

Laboratory ID Number: BD17523

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	9/15/23 06:33	9/19/23 18:06		1.015	0.0414	mg/L	0.030000	0.1015	J
* Calcium, Total	9/15/23 06:33	9/20/23 13:53		10.15	56.0	mg/L	0.70035	4.06	
* Iron, Total	9/15/23 06:33	9/19/23 18:06		1.015	0.316	mg/L	0.008120	0.0406	
* Lithium, Total	9/15/23 06:33	9/19/23 18:06		1.015	0.0326	mg/L	0.007105	0.01999956	
* Magnesium, Total	9/15/23 06:33	9/19/23 18:06		1.015	17.6	mg/L	0.021315	0.406	
* Molybdenum, Total	9/15/23 06:33	9/19/23 18:06		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Total (calc.)	9/15/23 06:33	9/19/23 18:06		1	34.0	mg/L			
* Silicon, Total	9/15/23 06:33	9/19/23 18:06		1.015	15.9	mg/L	0.02030	0.25375	
* Sodium, Total	9/15/23 06:33	9/20/23 13:53		10.15	67.6	mg/L	0.4060	4.06	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	9/14/23 14:15	9/19/23 15:25		1.015	0.0395	mg/L	0.030000	0.1015	J
* Calcium, Dissolved	9/14/23 14:15	9/20/23 11:56		10.15	52.7	mg/L	0.70035	4.06	RA
* Iron, Dissolved	9/14/23 14:15	9/19/23 15:25		1.015	0.312	mg/L	0.008120	0.0406	
* Lithium, Dissolved	9/14/23 14:15	9/19/23 15:25		1.015	0.0324	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	9/14/23 14:15	9/19/23 15:25		1.015	17.1	mg/L	0.021315	0.406	
* Molybdenum, Dissolved	9/14/23 14:15	9/19/23 15:25		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Dissolved (calc.)	9/14/23 14:15	9/19/23 15:25		1	34.0	mg/L			
* Silicon, Dissolved	9/14/23 14:15	9/19/23 15:25		1.015	15.9	mg/L	0.02030	0.25375	
* Sodium, Dissolved	9/14/23 14:15	9/20/23 11:56		10.15	62.2	mg/L	0.4060	4.06	RA
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	9/15/23 06:33	9/18/23 13:12		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Total	9/15/23 06:33	9/18/23 13:12		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Total	9/15/23 06:33	9/18/23 13:12		1.015	0.000133	mg/L	0.000112	0.000203	J
* Barium, Total	9/15/23 06:33	9/18/23 13:12		1.015	0.153	mg/L	0.000508	0.001015	
* Beryllium, Total	9/15/23 06:33	9/18/23 13:12		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	9/15/23 06:33	9/18/23 13:12		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	9/15/23 06:33	9/18/23 13:12		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	9/15/23 06:33	9/18/23 13:12		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	9/15/23 06:33	9/18/23 13:12		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	9/15/23 06:33	9/18/23 13:12		1.015	0.0385	mg/L	0.000152	0.001015	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-9V

Location Code: WMWGORAP
Collected: 9/13/23 17:55
Customer ID:
Submittal Date: 9/14/23 10:03

Laboratory ID Number: BD17523

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	10/12/23 15:17	10/12/23 19:02		1.015	2.13	mg/L	0.169505	0.5075	C
* Selenium, Total	9/15/23 06:33	9/18/23 13:12		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	9/15/23 06:33	9/18/23 13:12		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	9/14/23 14:15	9/14/23 17:36		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	9/14/23 14:15	9/14/23 17:36		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Dissolved	9/14/23 14:15	9/14/23 17:36		1.015	0.000191	mg/L	0.000112	0.000203	J
* Barium, Dissolved	9/14/23 14:15	9/14/23 17:36		1.015	0.193	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	9/14/23 14:15	9/14/23 17:36		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	9/14/23 14:15	9/14/23 17:36		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	9/14/23 14:15	9/14/23 17:36		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	9/14/23 14:15	9/14/23 17:36		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Dissolved	9/14/23 14:15	9/14/23 17:36		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	9/14/23 14:15	9/14/23 17:36		1.015	0.0355	mg/L	0.000152	0.001015	
* Potassium, Dissolved	9/14/23 14:15	9/14/23 17:36		1.015	3.42	mg/L	0.169505	0.5075	
* Selenium, Dissolved	9/14/23 14:15	9/14/23 17:36		1.015	0.000859	mg/L	0.000508	0.001015	J
* Thallium, Dissolved	9/14/23 14:15	9/14/23 17:36		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	9/14/23 17:22	9/15/23 01:02		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	9/18/23 14:32	9/18/23 14:32		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: JAG***								
Alkalinity pH Endpoint	9/26/23 10:23	9/26/23 11:17		1	4.51	SU		2	
* Alkalinity	9/26/23 10:23	9/26/23 11:17		1	212	mg CaCO3/L		1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	9/15/23 10:50	9/19/23 13:02		1	395	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: JAG***								
* Bicarbonate Alkalinity, (calc.)	9/26/23 10:23	9/26/23 11:17		1	212	mg CaCO3/L		1	
* Carbonate Alkalinity, (calc.)	9/26/23 10:23	9/26/23 11:17		1	Not Detected	mg CaCO3/L		0.5	
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	9/18/23 23:34	9/18/23 23:34		1	1.76	mg/L	1.00	2	J

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-9V

Location Code: WMWGORAP
Collected: 9/13/23 17:55
Customer ID:
Submittal Date: 9/14/23 10:03

Laboratory ID Number: BD17523

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	9/18/23 13:01	9/18/23 13:01		4	45.8	mg/L	2.00	4	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	9/18/23 15:39	9/18/23 15:39		1	0.145	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	9/26/23 16:33	9/26/23 16:33		4	85.2	mg/L	2.4	8	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	9/13/23 17:52	9/13/23 17:52			650.50	uS/cm			FA
pH	9/13/23 17:52	9/13/23 17:52			6.97	SU			FA
Temperature	9/13/23 17:52	9/13/23 17:52			19.45	C			FA
Turbidity	9/13/23 17:52	9/13/23 17:52			0.54	NTU			FA
Sulfide	9/13/23 17:52	9/13/23 17:52			2	mg/L			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/13/23 17:55
Customer ID:
Delivery Date: 9/14/23 10:03

Description: Gorgas Ash Pond - MW-9V

Laboratory ID Number: BD17523

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17523	Aluminum, Dissolved	mg/L	-0.000243	0.0198	0.100	0.108	0.105	0.103	0.0850 to 0.115	108	70.0 to 130	2.82	20.0
BD17524	Aluminum, Total	mg/L	0.000468	0.0198	0.100	0.0988	0.105	0.104	0.0850 to 0.115	98.8	70.0 to 130	6.08	20.0
BD17523	Antimony, Dissolved	mg/L	0.000225	0.00100	0.100	0.0966	0.0952	0.0924	0.0850 to 0.115	96.6	70.0 to 130	1.46	20.0
BD17524	Antimony, Total	mg/L	0.000288	0.00100	0.100	0.0948	0.0978	0.101	0.0850 to 0.115	94.8	70.0 to 130	3.12	20.0
BD17523	Arsenic, Dissolved	mg/L	-0.0000145	0.000200	0.100	0.100	0.100	0.100	0.0850 to 0.115	99.8	70.0 to 130	0.00	20.0
BD17524	Arsenic, Total	mg/L	0.0000229	0.000200	0.100	0.0980	0.102	0.100	0.0850 to 0.115	98.0	70.0 to 130	4.00	20.0
BD17523	Barium, Dissolved	mg/L	-0.0000070	0.00100	0.100	0.294	0.293	0.102	0.0850 to 0.115	101	70.0 to 130	0.341	20.0
BD17524	Barium, Total	mg/L	0.0000085	0.00100	0.100	0.0941	0.0952	0.0983	0.0850 to 0.115	94.1	70.0 to 130	1.16	20.0
BD17523	Beryllium, Dissolved	mg/L	0.0000324	0.000880	0.100	0.0992	0.0972	0.0981	0.0850 to 0.115	99.2	70.0 to 130	2.04	20.0
BD17524	Beryllium, Total	mg/L	0.000113	0.000880	0.100	0.0966	0.103	0.0965	0.0850 to 0.115	96.6	70.0 to 130	6.41	20.0
BD17523	Boron, Dissolved	mg/L	-0.00097	0.0650	1.00	1.08	1.08	1.02	0.850 to 1.15	104	70.0 to 130	0.00	20.0
BD17524	Boron, Total	mg/L	-0.000218	0.0650	1.00	1.03	1.02	1.04	0.850 to 1.15	103	70.0 to 130	0.976	20.0
BD17523	Cadmium, Dissolved	mg/L	0.0000030	0.000147	0.100	0.100	0.0988	0.0965	0.0850 to 0.115	100	70.0 to 130	1.21	20.0
BD17524	Cadmium, Total	mg/L	0.0000072	0.000147	0.100	0.0975	0.102	0.101	0.0850 to 0.115	97.5	70.0 to 130	4.51	20.0
BD17523	Calcium, Dissolved	mg/L	-0.0272	0.152	5.00	62.6	57.2	4.97	4.25 to 5.75	198	70.0 to 130	9.02	20.0
BD17524	Calcium, Total	mg/L	-0.0124	0.152	5.00	5.02	4.99	5.08	4.25 to 5.75	100	70.0 to 130	0.599	20.0
BD17524	Chloride	mg/L	0.0563	1.00	10.0	9.86	9.64	10.2	9.00 to 11.0	98.6	80.0 to 120	2.26	20.0
BD17523	Chromium, Dissolved	mg/L	-0.000196	0.000440	0.100	0.101	0.0983	0.0975	0.0850 to 0.115	101	70.0 to 130	2.71	20.0
BD17524	Chromium, Total	mg/L	-0.000104	0.000440	0.100	0.0972	0.103	0.101	0.0850 to 0.115	97.2	70.0 to 130	5.79	20.0
BD17523	Cobalt, Dissolved	mg/L	-0.0000687	0.000147	0.100	0.101	0.0989	0.0991	0.0850 to 0.115	101	70.0 to 130	2.10	20.0
BD17524	Cobalt, Total	mg/L	0.0000010	0.000147	0.100	0.100	0.106	0.103	0.0850 to 0.115	100	70.0 to 130	5.83	20.0
BD17524	Fluoride	mg/L	-0.00107	0.125	2.50	2.61	2.59	2.61	2.25 to 2.75	104	80.0 to 120	0.769	20.0
BD17523	Iron, Dissolved	mg/L	0.00003	0.0176	0.2	0.510	0.509	0.202	0.170 to 0.230	99.0	70.0 to 130	0.196	20.0
BD17524	Iron, Total	mg/L	0.00165	0.0176	0.2	0.204	0.202	0.206	0.170 to 0.230	102	70.0 to 130	0.985	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/13/23 17:55
Customer ID:
Delivery Date: 9/14/23 10:03

Description: Gorgas Ash Pond - MW-9V

Laboratory ID Number: BD17523

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17523	Lead, Dissolved	mg/L	0.0000011	0.000147	0.100	0.107	0.107	0.106	0.0850 to 0.115	107	70.0 to 130	0.00	20.0
BD17524	Lead, Total	mg/L	0.0000089	0.000147	0.100	0.0955	0.0977	0.0974	0.0850 to 0.115	95.5	70.0 to 130	2.28	20.0
BD17523	Lithium, Dissolved	mg/L	-0.000457	0.0154	0.200	0.241	0.240	0.205	0.170 to 0.230	104	70.0 to 130	0.416	20.0
BD17524	Lithium, Total	mg/L	-0.000155	0.0154	0.200	0.207	0.207	0.209	0.170 to 0.230	104	70.0 to 130	0.00	20.0
BD17523	Magnesium, Dissolved	mg/L	-0.00451	0.0462	5.00	22.2	22.0	5.10	4.25 to 5.75	102	70.0 to 130	0.905	20.0
BD17524	Magnesium, Total	mg/L	-0.0138	0.0462	5.00	5.13	5.09	5.15	4.25 to 5.75	103	70.0 to 130	0.783	20.0
BD17523	Manganese, Dissolved	mg/L	-0.0000010	0.00033	0.100	0.139	0.136	0.101	0.0850 to 0.115	104	70.0 to 130	2.18	20.0
BD17524	Manganese, Total	mg/L	0.0000196	0.00033	0.100	0.102	0.107	0.105	0.0850 to 0.115	102	70.0 to 130	4.78	20.0
BD17524	Mercury, Total by CVAA	mg/L	7.000E-05	0.000500	0.004	0.00396	0.00395	0.00407	0.00340 to 0.00460	99.0	70.0 to 130	0.253	20.0
BD17523	Molybdenum, Dissolved	mg/L	0.000129	0.0100	0.2	0.211	0.210	0.205	0.170 to 0.230	106	70.0 to 130	0.475	20.0
BD17524	Molybdenum, Total	mg/L	0.000	0.0100	0.2	0.208	0.207	0.210	0.170 to 0.230	104	70.0 to 130	0.482	20.0
BD17523	Potassium, Dissolved	mg/L	-0.0168	0.367	10.0	13.6	13.3	9.90	8.50 to 11.5	102	70.0 to 130	2.23	20.0
BD17828	Potassium, Total	mg/L	0.0106	0.367	10.0	15.8	15.6	10.2	8.50 to 11.5	104	70.0 to 130	1.27	20.0
BD17523	Selenium, Dissolved	mg/L	-0.0000414	0.00100	0.100	0.101	0.100	0.101	0.0850 to 0.115	100	70.0 to 130	0.995	20.0
BD17524	Selenium, Total	mg/L	-0.0000063	0.00100	0.100	0.101	0.102	0.102	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BD17523	Silicon, Dissolved	mg/L	-0.000062	0.0440	1.00	16.9	16.9	1.02	0.850 to 1.15	100	70.0 to 130	0.00	20.0
BD17524	Silicon, Total	mg/L	0.000173	0.0440	1.00	1.03	1.03	1.05	0.850 to 1.15	103	70.0 to 130	0.00	20.0
BD17523	Sodium, Dissolved	mg/L	0.00777	0.0880	5.00	72.0	66.4	5.07	4.25 to 5.75	196	70.0 to 130	8.09	20.0
BD17524	Sodium, Total	mg/L	0.0205	0.0880	5.00	5.12	5.09	5.16	4.25 to 5.75	102	70.0 to 130	0.588	20.0
BD17823	Sulfate	mg/L	0.0186	2.0	20.0	42.3	41.8	18.7	18.0 to 22.0	93.5	80.0 to 120	1.19	20.0
BD17523	Thallium, Dissolved	mg/L	-0.0000863	0.000147	0.100	0.106	0.108	0.103	0.0850 to 0.115	106	70.0 to 130	1.87	20.0
BD17524	Thallium, Total	mg/L	0.0000115	0.000147	0.100	0.0964	0.0993	0.0992	0.0850 to 0.115	96.4	70.0 to 130	2.96	20.0
BD17524	Total Organic Carbon	mg/L	0.324	1.00	10.0	10.3	11.2	10.5		103	80.0 to 120	8.37	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/13/23 17:55
Customer ID:
Delivery Date: 9/14/23 10:03

Description: Gorgas Ash Pond - MW-9V

Laboratory ID Number: BD17523

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17523	Alkalinity	mg CaCO3/L					206	52.7	45.0 to 55.0			2.87	10.0
BD17524	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.02	0.200	2.00	2.00	0.015	1.97	1.80 to 2.20	100	90.0 to 110	0.00	15.0
BD17523	Solids, Dissolved	mg/L	0.0000	25.0			395	54.0	40.0 to 60.0			0.00	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond Field Blank-4

Location Code: WMWGORAPFB
Collected: 9/13/23 18:30
Customer ID:
Submittal Date: 9/14/23 10:04

Laboratory ID Number: BD17524

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	9/15/23 06:33	9/19/23 18:09		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	9/15/23 06:33	9/19/23 18:09		1.015	Not Detected	mg/L	0.070035	0.406	U
* Iron, Total	9/15/23 06:33	9/19/23 18:09		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Total	9/15/23 06:33	9/19/23 18:09		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	9/15/23 06:33	9/19/23 18:09		1.015	Not Detected	mg/L	0.021315	0.406	U
* Molybdenum, Total	9/15/23 06:33	9/19/23 18:09		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Total (calc.)	9/15/23 06:33	9/19/23 18:09		1	Not Detected	mg/L			
* Silicon, Total	9/15/23 06:33	9/19/23 18:09		1.015	Not Detected	mg/L	0.02030	0.25375	U
* Sodium, Total	9/15/23 06:33	9/19/23 18:09		1.015	Not Detected	mg/L	0.04060	0.406	U
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	9/15/23 06:33	9/18/23 13:15		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Total	9/15/23 06:33	9/18/23 13:15		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Total	9/15/23 06:33	9/18/23 13:15		1.015	Not Detected	mg/L	0.000112	0.000203	U
* Barium, Total	9/15/23 06:33	9/18/23 13:15		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Beryllium, Total	9/15/23 06:33	9/18/23 13:15		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	9/15/23 06:33	9/18/23 13:15		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	9/15/23 06:33	9/18/23 13:15		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	9/15/23 06:33	9/18/23 13:15		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	9/15/23 06:33	9/18/23 13:15		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	9/15/23 06:33	9/18/23 13:15		1.015	Not Detected	mg/L	0.000152	0.001015	U
* Potassium, Total	9/15/23 06:33	9/18/23 13:15		1.015	Not Detected	mg/L	0.169505	0.5075	U
* Selenium, Total	9/15/23 06:33	9/18/23 13:15		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	9/15/23 06:33	9/18/23 13:15		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	9/14/23 17:22	9/15/23 01:06		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	9/18/23 14:33	9/18/23 14:33		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	9/15/23 10:50	9/19/23 13:02		1	Not Detected	mg/L		25	U

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments:

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond Field Blank-4

Location Code: WMWGORAPFB
Collected: 9/13/23 18:30
Customer ID:
Submittal Date: 9/14/23 10:04

Laboratory ID Number: BD17524

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	9/18/23 23:48	9/18/23 23:48		1	Not Detected	mg/L	1.00	2	U
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	9/18/23 13:02	9/18/23 13:02		1	Not Detected	mg/L	0.50	1	U
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	9/18/23 15:40	9/18/23 15:40		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	9/26/23 16:20	9/26/23 16:20		1	Not Detected	mg/L	0.6	2	U

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments:

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAPFB
Sample Date: 9/13/23 18:30
Customer ID:
Delivery Date: 9/14/23 10:04

Description: Gorgas Ash Pond Field Blank-4

Laboratory ID Number: BD17524

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17524	Aluminum, Total	mg/L	0.000468	0.0198	0.100	0.0988	0.105	0.104	0.0850 to 0.115	98.8	70.0 to 130	6.08	20.0
BD17524	Antimony, Total	mg/L	0.000288	0.00100	0.100	0.0948	0.0978	0.101	0.0850 to 0.115	94.8	70.0 to 130	3.12	20.0
BD17524	Arsenic, Total	mg/L	0.0000229	0.000200	0.100	0.0980	0.102	0.100	0.0850 to 0.115	98.0	70.0 to 130	4.00	20.0
BD17524	Barium, Total	mg/L	0.0000085	0.00100	0.100	0.0941	0.0952	0.0983	0.0850 to 0.115	94.1	70.0 to 130	1.16	20.0
BD17524	Beryllium, Total	mg/L	0.000113	0.000880	0.100	0.0966	0.103	0.0965	0.0850 to 0.115	96.6	70.0 to 130	6.41	20.0
BD17524	Boron, Total	mg/L	-0.000218	0.0650	1.00	1.03	1.02	1.04	0.850 to 1.15	103	70.0 to 130	0.976	20.0
BD17524	Cadmium, Total	mg/L	0.0000072	0.000147	0.100	0.0975	0.102	0.101	0.0850 to 0.115	97.5	70.0 to 130	4.51	20.0
BD17524	Calcium, Total	mg/L	-0.0124	0.152	5.00	5.02	4.99	5.08	4.25 to 5.75	100	70.0 to 130	0.599	20.0
BD17524	Chloride	mg/L	0.0563	1.00	10.0	9.86	9.64	10.2	9.00 to 11.0	98.6	80.0 to 120	2.26	20.0
BD17524	Chromium, Total	mg/L	-0.000104	0.000440	0.100	0.0972	0.103	0.101	0.0850 to 0.115	97.2	70.0 to 130	5.79	20.0
BD17524	Cobalt, Total	mg/L	0.0000010	0.000147	0.100	0.100	0.106	0.103	0.0850 to 0.115	100	70.0 to 130	5.83	20.0
BD17524	Fluoride	mg/L	-0.00107	0.125	2.50	2.61	2.59	2.61	2.25 to 2.75	104	80.0 to 120	0.769	20.0
BD17524	Iron, Total	mg/L	0.00165	0.0176	0.2	0.204	0.202	0.206	0.170 to 0.230	102	70.0 to 130	0.985	20.0
BD17524	Lead, Total	mg/L	0.0000089	0.000147	0.100	0.0955	0.0977	0.0974	0.0850 to 0.115	95.5	70.0 to 130	2.28	20.0
BD17524	Lithium, Total	mg/L	-0.000155	0.0154	0.200	0.207	0.207	0.209	0.170 to 0.230	104	70.0 to 130	0.00	20.0
BD17524	Magnesium, Total	mg/L	-0.0138	0.0462	5.00	5.13	5.09	5.15	4.25 to 5.75	103	70.0 to 130	0.783	20.0
BD17524	Manganese, Total	mg/L	0.0000196	0.00033	0.100	0.102	0.107	0.105	0.0850 to 0.115	102	70.0 to 130	4.78	20.0
BD17524	Mercury, Total by CVAA	mg/L	7.000E-05	0.000500	0.004	0.00396	0.00395	0.00407	0.00340 to 0.00460	99.0	70.0 to 130	0.253	20.0
BD17524	Molybdenum, Total	mg/L	0.000	0.0100	0.2	0.208	0.207	0.210	0.170 to 0.230	104	70.0 to 130	0.482	20.0
BD17524	Potassium, Total	mg/L	0.00267	0.367	10.0	10.1	10.7	10.3	8.50 to 11.5	101	70.0 to 130	5.77	20.0
BD17524	Selenium, Total	mg/L	-0.0000063	0.00100	0.100	0.101	0.102	0.102	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BD17524	Silicon, Total	mg/L	0.000173	0.0440	1.00	1.03	1.03	1.05	0.850 to 1.15	103	70.0 to 130	0.00	20.0
BD17524	Sodium, Total	mg/L	0.0205	0.0880	5.00	5.12	5.09	5.16	4.25 to 5.75	102	70.0 to 130	0.588	20.0
BD17823	Sulfate	mg/L	0.0186	2.0	20.0	42.3	41.8	18.7	18.0 to 22.0	93.5	80.0 to 120	1.19	20.0

Comments:

Batch QC Summary

Customer Account: WMWGORAPFB
Sample Date: 9/13/23 18:30
Customer ID:
Delivery Date: 9/14/23 10:04

Description: Gorgas Ash Pond Field Blank-4

Laboratory ID Number: BD17524

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17524	Thallium, Total	mg/L	0.0000115	0.000147	0.100	0.0964	0.0993	0.0992	0.0850 to 0.115	96.4	70.0 to 130	2.96	20.0
BD17524	Total Organic Carbon	mg/L	0.324	1.00	10.0	10.3	11.2	10.5		103	80.0 to 120	8.37	20.0

Comments:

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAPFB
Sample Date: 9/13/23 18:30
Customer ID:
Delivery Date: 9/14/23 10:04

Description: Gorgas Ash Pond Field Blank-4

Laboratory ID Number: BD17524

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17524	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.02	0.200	2.00	2.00	0.015	1.97	1.80 to 2.20	100	90.0 to 110	0.00	15.0
BD17523	Solids, Dissolved	mg/L	0.0000	25.0			395	54.0	40.0 to 60.0			0.00	10.0

Comments:

Reported: 10/25/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-46

Location Code: WMWGORAP
Collected: 9/18/23 15:58
Customer ID:
Submittal Date: 9/20/23 11:15

Laboratory ID Number: BD17817

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	9/21/23 06:53	9/21/23 16:02		1.015	0.919	mg/L	0.030000	0.1015	
* Calcium, Total	9/21/23 06:53	9/21/23 16:02		1.015	0.866	mg/L	0.070035	0.406	
* Iron, Total	9/21/23 06:53	9/21/23 16:02		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Total	9/21/23 06:53	9/21/23 16:02		1.015	0.0568	mg/L	0.007105	0.01999956	
* Magnesium, Total	9/21/23 06:53	9/21/23 16:02		1.015	0.259	mg/L	0.021315	0.406	J
* Molybdenum, Total	9/21/23 06:53	9/21/23 16:02		1.015	0.0168	mg/L	0.005075	0.01015	
* Silica, Total (calc.)	9/21/23 06:53	9/21/23 16:02		1	10.3	mg/L			
* Silicon, Total	9/21/23 06:53	9/21/23 16:02		1.015	4.81	mg/L	0.02030	0.25375	
* Sodium, Total	9/21/23 06:53	9/21/23 18:51		10.15	188	mg/L	0.4060	4.06	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	9/20/23 15:27	9/21/23 14:33		1.015	0.906	mg/L	0.030000	0.1015	
* Calcium, Dissolved	9/20/23 15:27	9/21/23 14:33		1.015	0.845	mg/L	0.070035	0.406	
* Iron, Dissolved	9/20/23 15:27	9/21/23 14:33		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Dissolved	9/20/23 15:27	9/21/23 14:33		1.015	0.0580	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	9/20/23 15:27	9/21/23 14:33		1.015	0.274	mg/L	0.021315	0.406	J
* Molybdenum, Dissolved	9/20/23 15:27	9/21/23 14:33		1.015	0.0156	mg/L	0.005075	0.01015	
* Silica, Dissolved (calc.)	9/20/23 15:27	9/21/23 14:33		1	10.3	mg/L			
* Silicon, Dissolved	9/20/23 15:27	9/21/23 14:33		1.015	4.79	mg/L	0.02030	0.25375	
* Sodium, Dissolved	9/20/23 15:27	9/21/23 17:47		10.15	196	mg/L	0.4060	4.06	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	9/21/23 06:53	9/21/23 13:23		1.015	0.000764	mg/L	0.000710	0.001015	J
* Arsenic, Total	9/21/23 06:53	9/25/23 10:48		1.015	0.179	mg/L	0.000112	0.000203	
* Aluminum, Total	9/21/23 06:53	9/21/23 13:23		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Barium, Total	9/21/23 06:53	9/21/23 13:23		1.015	0.0535	mg/L	0.000508	0.001015	
* Beryllium, Total	9/21/23 06:53	9/21/23 13:23		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	9/21/23 06:53	9/21/23 13:23		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	9/21/23 06:53	9/21/23 13:23		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	9/21/23 06:53	9/21/23 13:23		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	9/21/23 06:53	9/21/23 13:23		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	9/21/23 06:53	9/21/23 13:23		1.015	0.000654	mg/L	0.000152	0.001015	J

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-46

Location Code: WMWGORAP
Collected: 9/18/23 15:58
Customer ID:
Submittal Date: 9/20/23 11:15

Laboratory ID Number: BD17817

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	9/21/23 06:53	9/21/23 13:23		1.015	0.513	mg/L	0.169505	0.5075	
* Selenium, Total	9/21/23 06:53	9/21/23 13:23		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	9/21/23 06:53	9/21/23 13:23		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	9/20/23 15:27	9/21/23 11:30		1.015	0.000830	mg/L	0.000710	0.001015	J
* Aluminum, Dissolved	9/20/23 15:27	9/21/23 11:30		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Dissolved	9/20/23 15:27	9/21/23 11:30		1.015	0.132	mg/L	0.000112	0.000203	
* Barium, Dissolved	9/20/23 15:27	9/21/23 11:30		1.015	0.0560	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	9/20/23 15:27	9/21/23 11:30		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	9/20/23 15:27	9/21/23 11:30		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	9/20/23 15:27	9/21/23 11:30		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	9/20/23 15:27	9/21/23 11:30		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Dissolved	9/20/23 15:27	9/21/23 11:30		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	9/20/23 15:27	9/21/23 11:30		1.015	0.000783	mg/L	0.000152	0.001015	J
* Potassium, Dissolved	9/20/23 15:27	9/21/23 11:30		1.015	0.537	mg/L	0.169505	0.5075	
* Selenium, Dissolved	9/20/23 15:27	9/21/23 11:30		1.015	0.00185	mg/L	0.000508	0.001015	
* Thallium, Dissolved	9/20/23 15:27	9/21/23 11:30		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	9/21/23 12:12	9/21/23 17:04		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	9/22/23 12:24	9/22/23 12:24		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: JAG***								
Alkalinity pH Endpoint	9/28/23 11:28	9/28/23 12:44		1	4.48	SU		2	
* Alkalinity	9/28/23 11:28	9/28/23 12:44		1	252	mg CaCO3/L		1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	9/20/23 14:45	9/22/23 11:15		1	529	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: JAG***								
* Bicarbonate Alkalinity, (calc.)	9/28/23 11:28	9/28/23 12:44		1	246	mg CaCO3/L		1	A
* Carbonate Alkalinity, (calc.)	9/28/23 11:28	9/28/23 12:44		1	5.81	mg CaCO3/L		0.5	A
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	9/25/23 11:11	9/25/23 11:11		1	1.30	mg/L	1.00	2	J

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-46

Location Code: WMWGORAP
Collected: 9/18/23 15:58
Customer ID:
Submittal Date: 9/20/23 11:15

Laboratory ID Number: BD17817

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	9/25/23 09:44	9/25/23 09:44		2	31.1	mg/L	1.00	2	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	9/25/23 11:24	9/25/23 11:24		1	0.334	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	9/26/23 16:34	9/26/23 16:34		8	130	mg/L	4.8	16	
Analytical Method: Field Measurements	***Analyst: AWG***								
Conductivity	9/18/23 15:54	9/18/23 15:54			780.84	uS/cm			FA
pH	9/18/23 15:54	9/18/23 15:54			8.63	SU			FA
Temperature	9/18/23 15:54	9/18/23 15:54			18.77	C			FA
Turbidity	9/18/23 15:54	9/18/23 15:54			1.01	NTU			FA
Sulfide	9/18/23 15:54	9/18/23 15:54			6	mg/L			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/18/23 15:58
Customer ID:
Delivery Date: 9/20/23 11:15

Description: Gorgas Ash Pond - MW-46

Laboratory ID Number: BD17817

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17826	Aluminum, Dissolved	mg/L	0.000195	0.0198	0.100	0.0957	0.0946	0.0999	0.0850 to 0.115	95.7	70.0 to 130	1.16	20.0
BD17826	Aluminum, Total	mg/L	0.000928	0.0198	0.100	0.0968	0.0962	0.0960	0.0850 to 0.115	96.8	70.0 to 130	0.622	20.0
BD17826	Antimony, Dissolved	mg/L	0.000811	0.00100	0.100	0.0945	0.0944	0.0934	0.0850 to 0.115	94.5	70.0 to 130	0.106	20.0
BD17826	Antimony, Total	mg/L	0.000299	0.00100	0.100	0.105	0.105	0.104	0.0850 to 0.115	105	70.0 to 130	0.00	20.0
BD17826	Arsenic, Dissolved	mg/L	0.0000311	0.000200	0.100	0.114	0.112	0.108	0.0850 to 0.115	103	70.0 to 130	1.77	20.0
BD17826	Arsenic, Total	mg/L	0.0000684	0.000200	0.100	0.130	0.132	0.110	0.0850 to 0.115	109	70.0 to 130	1.53	20.0
BD17826	Barium, Dissolved	mg/L	-0.0000095	0.00100	0.100	0.163	0.162	0.0956	0.0850 to 0.115	95.2	70.0 to 130	0.615	20.0
BD17826	Barium, Total	mg/L	0.0000055	0.00100	0.100	0.165	0.169	0.0992	0.0850 to 0.115	95.4	70.0 to 130	2.40	20.0
BD17826	Beryllium, Dissolved	mg/L	0.0000442	0.000880	0.100	0.104	0.103	0.0959	0.0850 to 0.115	104	70.0 to 130	0.966	20.0
BD17826	Beryllium, Total	mg/L	0.0000828	0.000880	0.100	0.110	0.110	0.103	0.0850 to 0.115	110	70.0 to 130	0.00	20.0
BD17826	Boron, Dissolved	mg/L	-0.000123	0.0650	1.00	1.06	1.06	1.03	0.850 to 1.15	106	70.0 to 130	0.00	20.0
BD17826	Boron, Total	mg/L	0.000491	0.0650	1.00	1.04	1.07	1.04	0.850 to 1.15	104	70.0 to 130	2.84	20.0
BD17826	Cadmium, Dissolved	mg/L	0.0000000	0.000147	0.100	0.101	0.0989	0.101	0.0850 to 0.115	101	70.0 to 130	2.10	20.0
BD17826	Cadmium, Total	mg/L	0.0000063	0.000147	0.100	0.102	0.102	0.106	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BD17826	Calcium, Dissolved	mg/L	-0.00424	0.152	5.00	40.3	39.9	5.03	4.25 to 5.75	120	70.0 to 130	0.998	20.0
BD17826	Calcium, Total	mg/L	-0.00686	0.152	5.00	37.7	38.7	4.91	4.25 to 5.75	74.0	70.0 to 130	2.62	20.0
BD17826	Chloride	mg/L	0.051	1.00	10.0	25.3	25.4	10.6	9.00 to 11.0	85.0	80.0 to 120	0.394	20.0
BD17826	Chromium, Dissolved	mg/L	-0.0000134	0.000440	0.100	0.0984	0.0964	0.101	0.0850 to 0.115	98.1	70.0 to 130	2.05	20.0
BD17826	Chromium, Total	mg/L	0.0000913	0.000440	0.100	0.0989	0.0980	0.100	0.0850 to 0.115	98.6	70.0 to 130	0.914	20.0
BD17826	Cobalt, Dissolved	mg/L	-0.0000014	0.000147	0.100	0.0995	0.0975	0.104	0.0850 to 0.115	99.5	70.0 to 130	2.03	20.0
BD17826	Cobalt, Total	mg/L	-0.0000009	0.000147	0.100	0.101	0.0989	0.104	0.0850 to 0.115	101	70.0 to 130	2.10	20.0
BD17826	Fluoride	mg/L	0.0601	0.125	2.50	2.71	2.69	2.68	2.25 to 2.75	103	80.0 to 120	0.741	20.0
BD17826	Iron, Dissolved	mg/L	-0.00120	0.0176	0.2	1.32	1.32	0.203	0.170 to 0.230	100	70.0 to 130	0.00	20.0
BD17826	Iron, Total	mg/L	-0.000954	0.0176	0.2	2.23	2.25	0.202	0.170 to 0.230	80.0	70.0 to 130	0.893	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/18/23 15:58
Customer ID:
Delivery Date: 9/20/23 11:15

Description: Gorgas Ash Pond - MW-46

Laboratory ID Number: BD17817

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17826	Lead, Dissolved	mg/L	0.0000047	0.000147	0.100	0.101	0.0991	0.101	0.0850 to 0.115	101	70.0 to 130	1.90	20.0
BD17826	Lead, Total	mg/L	0.0000048	0.000147	0.100	0.102	0.103	0.0999	0.0850 to 0.115	102	70.0 to 130	0.976	20.0
BD17826	Lithium, Dissolved	mg/L	0.000731	0.0154	0.200	0.230	0.229	0.207	0.170 to 0.230	101	70.0 to 130	0.436	20.0
BD17826	Lithium, Total	mg/L	0.000155	0.0154	0.200	0.225	0.231	0.204	0.170 to 0.230	98.6	70.0 to 130	2.63	20.0
BD17826	Magnesium, Dissolved	mg/L	-0.0283	0.0462	5.00	19.8	19.7	5.26	4.25 to 5.75	108	70.0 to 130	0.506	20.0
BD17826	Magnesium, Total	mg/L	-0.00443	0.0462	5.00	19.1	19.4	5.14	4.25 to 5.75	92.0	70.0 to 130	1.56	20.0
BD17826	Manganese, Dissolved	mg/L	0.0000088	0.00033	0.100	0.152	0.150	0.102	0.0850 to 0.115	96.8	70.0 to 130	1.32	20.0
BD17826	Manganese, Total	mg/L	0.0000062	0.00033	0.100	0.151	0.148	0.100	0.0850 to 0.115	98.8	70.0 to 130	2.01	20.0
BD17826	Mercury, Total by CVAA	mg/L	3.000E-05	0.000500	0.004	0.00396	0.00402	0.00403	0.00340 to 0.00460	99.0	70.0 to 130	1.50	20.0
BD17826	Molybdenum, Dissolved	mg/L	0.00116	0.0100	0.2	0.201	0.203	0.202	0.170 to 0.230	100	70.0 to 130	0.990	20.0
BD17826	Molybdenum, Total	mg/L	0.002	0.0100	0.2	0.198	0.203	0.203	0.170 to 0.230	99.0	70.0 to 130	2.49	20.0
BD17826	Potassium, Dissolved	mg/L	0.00592	0.367	10.0	11.0	10.8	10.1	8.50 to 11.5	96.3	70.0 to 130	1.83	20.0
BD17826	Potassium, Total	mg/L	0.0118	0.367	10.0	10.9	10.9	9.82	8.50 to 11.5	95.8	70.0 to 130	0.00	20.0
BD17826	Selenium, Dissolved	mg/L	0.0000140	0.00100	0.100	0.104	0.101	0.107	0.0850 to 0.115	104	70.0 to 130	2.93	20.0
BD17826	Selenium, Total	mg/L	0.0000754	0.00100	0.100	0.105	0.106	0.105	0.0850 to 0.115	105	70.0 to 130	0.948	20.0
BD17826	Silicon, Dissolved	mg/L	0.00203	0.0440	1.00	13.2	13.1	1.04	0.850 to 1.15	120	70.0 to 130	0.760	20.0
BD17826	Silicon, Total	mg/L	0.00143	0.0440	1.00	13.1	13.2	1.03	0.850 to 1.15	90.0	70.0 to 130	0.760	20.0
BD17826	Sodium, Dissolved	mg/L	0.00446	0.0880	5.00	24.7	24.5	5.26	4.25 to 5.75	106	70.0 to 130	0.813	20.0
BD17826	Sodium, Total	mg/L	0.00438	0.0880	5.00	22.6	22.9	5.16	4.25 to 5.75	92.0	70.0 to 130	1.32	20.0
BD17823	Sulfate	mg/L	0.0186	2.0	20.0	42.3	41.8	18.7	18.0 to 22.0	93.5	80.0 to 120	1.19	20.0
BD17826	Thallium, Dissolved	mg/L	-0.0000003	0.000147	0.100	0.103	0.101	0.102	0.0850 to 0.115	103	70.0 to 130	1.96	20.0
BD17826	Thallium, Total	mg/L	0.0000121	0.000147	0.100	0.105	0.105	0.103	0.0850 to 0.115	105	70.0 to 130	0.00	20.0
BD17826	Total Organic Carbon	mg/L	0.215	1.00	10.0	10.5	10.6	9.79		105	80.0 to 120	0.948	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/18/23 15:58
Customer ID:
Delivery Date: 9/20/23 11:15

Description: Gorgas Ash Pond - MW-46

Laboratory ID Number: BD17817

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17836	Alkalinity	mg CaCO3/L					222	52.9	45.0 to 55.0			1.82	10.0
BD17826	Nitrogen, Nitrate/Nitrite	mg/L as N	0.03	0.200	2.00	1.94	0.058	1.89	1.80 to 2.20	97.0	90.0 to 110	0.00	15.0
BD17824	Solids, Dissolved	mg/L	0.0000	25.0			2200	51.0	40.0 to 60.0			0.913	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 10/25/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-46 Dup

Location Code: WMWGORAP
Collected: 9/18/23 15:58
Customer ID:
Submittal Date: 9/20/23 11:16

Laboratory ID Number: BD17818

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	9/21/23 06:53	9/21/23 16:05		1.015	0.913	mg/L	0.030000	0.1015	
* Calcium, Total	9/21/23 06:53	9/21/23 16:05		1.015	0.873	mg/L	0.070035	0.406	
* Iron, Total	9/21/23 06:53	9/21/23 16:05		1.015	0.00826	mg/L	0.008120	0.0406	J
* Lithium, Total	9/21/23 06:53	9/21/23 16:05		1.015	0.0583	mg/L	0.007105	0.01999956	
* Magnesium, Total	9/21/23 06:53	9/21/23 16:05		1.015	0.425	mg/L	0.021315	0.406	
* Molybdenum, Total	9/21/23 06:53	9/21/23 16:05		1.015	0.0161	mg/L	0.005075	0.01015	
* Silica, Total (calc.)	9/21/23 06:53	9/21/23 16:05		1	10.3	mg/L			
* Silicon, Total	9/21/23 06:53	9/21/23 16:05		1.015	4.80	mg/L	0.02030	0.25375	
* Sodium, Total	9/21/23 06:53	9/21/23 18:54		10.15	196	mg/L	0.4060	4.06	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	9/20/23 15:27	9/21/23 14:37		1.015	0.909	mg/L	0.030000	0.1015	
* Calcium, Dissolved	9/20/23 15:27	9/21/23 14:37		1.015	0.776	mg/L	0.070035	0.406	
* Iron, Dissolved	9/20/23 15:27	9/21/23 14:37		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Dissolved	9/20/23 15:27	9/21/23 14:37		1.015	0.0574	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	9/20/23 15:27	9/21/23 14:37		1.015	0.230	mg/L	0.021315	0.406	J
* Molybdenum, Dissolved	9/20/23 15:27	9/21/23 14:37		1.015	0.0154	mg/L	0.005075	0.01015	
* Silica, Dissolved (calc.)	9/20/23 15:27	9/21/23 14:37		1	10.3	mg/L			
* Silicon, Dissolved	9/20/23 15:27	9/21/23 14:37		1.015	4.79	mg/L	0.02030	0.25375	
* Sodium, Dissolved	9/20/23 15:27	9/21/23 17:50		10.15	219	mg/L	0.4060	4.06	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	9/21/23 06:53	9/21/23 13:27		1.015	0.000748	mg/L	0.000710	0.001015	J
* Aluminum, Total	9/21/23 06:53	9/21/23 13:27		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Total	9/21/23 06:53	9/25/23 10:52		1.015	0.158	mg/L	0.000112	0.000203	
* Barium, Total	9/21/23 06:53	9/21/23 13:27		1.015	0.0535	mg/L	0.000508	0.001015	
* Beryllium, Total	9/21/23 06:53	9/21/23 13:27		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	9/21/23 06:53	9/21/23 13:27		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	9/21/23 06:53	9/21/23 13:27		1.015	0.000206	mg/L	0.000203	0.001015	J
* Cobalt, Total	9/21/23 06:53	9/21/23 13:27		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	9/21/23 06:53	9/21/23 13:27		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	9/21/23 06:53	9/21/23 13:27		1.015	0.00495	mg/L	0.000152	0.001015	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-46 Dup

Location Code: WMWGORAP
Collected: 9/18/23 15:58
Customer ID:
Submittal Date: 9/20/23 11:16

Laboratory ID Number: BD17818

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	9/21/23 06:53	9/21/23 13:27		1.015	0.786	mg/L	0.169505	0.5075	
* Selenium, Total	9/21/23 06:53	9/21/23 13:27		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	9/21/23 06:53	9/21/23 13:27		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	9/20/23 15:27	9/21/23 11:34		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	9/20/23 15:27	9/21/23 11:34		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Dissolved	9/20/23 15:27	9/21/23 11:34		1.015	0.123	mg/L	0.000112	0.000203	
* Barium, Dissolved	9/20/23 15:27	9/21/23 11:34		1.015	0.0505	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	9/20/23 15:27	9/21/23 11:34		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	9/20/23 15:27	9/21/23 11:34		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	9/20/23 15:27	9/21/23 11:34		1.015	0.000260	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	9/20/23 15:27	9/21/23 11:34		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Dissolved	9/20/23 15:27	9/21/23 11:34		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	9/20/23 15:27	9/21/23 11:34		1.015	0.000629	mg/L	0.000152	0.001015	J
* Potassium, Dissolved	9/20/23 15:27	9/21/23 11:34		1.015	0.542	mg/L	0.169505	0.5075	
* Selenium, Dissolved	9/20/23 15:27	9/21/23 11:34		1.015	0.00140	mg/L	0.000508	0.001015	
* Thallium, Dissolved	9/20/23 15:27	9/21/23 11:34		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	9/21/23 12:12	9/21/23 17:08		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	9/22/23 12:26	9/22/23 12:26		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: JAG***								
Alkalinity pH Endpoint	9/28/23 11:28	9/28/23 12:44		1	4.46	SU		2	
* Alkalinity	9/28/23 11:28	9/28/23 12:44		1	234	mg CaCO3/L		1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	9/20/23 14:45	9/22/23 11:15		1	532	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: JAG***								
* Bicarbonate Alkalinity, (calc.)	9/28/23 11:28	9/28/23 12:44		1	228	mg CaCO3/L		1	A
* Carbonate Alkalinity, (calc.)	9/28/23 11:28	9/28/23 12:44		1	6.17	mg CaCO3/L		0.5	A
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	9/25/23 11:28	9/25/23 11:28		1	1.40	mg/L	1.00	2	J

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-46 Dup

Location Code: WMWGORAP
Collected: 9/18/23 15:58
Customer ID:
Submittal Date: 9/20/23 11:16

Laboratory ID Number: BD17818

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	9/25/23 09:45	9/25/23 09:45		2	30.8	mg/L	1.00	2	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	9/25/23 11:25	9/25/23 11:25		1	0.293	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	9/26/23 16:35	9/26/23 16:35		8	130	mg/L	4.8	16	
Analytical Method: Field Measurements	***Analyst: AWG***								
Conductivity	9/18/23 15:54	9/18/23 15:54			780.84	uS/cm			FA
pH	9/18/23 15:54	9/18/23 15:54			8.63	SU			FA
Temperature	9/18/23 15:54	9/18/23 15:54			18.77	C			FA
Turbidity	9/18/23 15:54	9/18/23 15:54			1.01	NTU			FA
Sulfide	9/18/23 15:54	9/18/23 15:54			6	mg/L			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 10/25/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/18/23 15:58
Customer ID:
Delivery Date: 9/20/23 11:16

Description: Gorgas Ash Pond - MW-46 Dup

Laboratory ID Number: BD17818

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17826	Aluminum, Dissolved	mg/L	0.000195	0.0198	0.100	0.0957	0.0946	0.0999	0.0850 to 0.115	95.7	70.0 to 130	1.16	20.0
BD17826	Aluminum, Total	mg/L	0.000928	0.0198	0.100	0.0968	0.0962	0.0960	0.0850 to 0.115	96.8	70.0 to 130	0.622	20.0
BD17826	Antimony, Dissolved	mg/L	0.000811	0.00100	0.100	0.0945	0.0944	0.0934	0.0850 to 0.115	94.5	70.0 to 130	0.106	20.0
BD17826	Antimony, Total	mg/L	0.000299	0.00100	0.100	0.105	0.105	0.104	0.0850 to 0.115	105	70.0 to 130	0.00	20.0
BD17826	Arsenic, Dissolved	mg/L	0.0000311	0.000200	0.100	0.114	0.112	0.108	0.0850 to 0.115	103	70.0 to 130	1.77	20.0
BD17826	Arsenic, Total	mg/L	0.0000684	0.000200	0.100	0.130	0.132	0.110	0.0850 to 0.115	109	70.0 to 130	1.53	20.0
BD17826	Barium, Dissolved	mg/L	-0.0000095	0.00100	0.100	0.163	0.162	0.0956	0.0850 to 0.115	95.2	70.0 to 130	0.615	20.0
BD17826	Barium, Total	mg/L	0.0000055	0.00100	0.100	0.165	0.169	0.0992	0.0850 to 0.115	95.4	70.0 to 130	2.40	20.0
BD17826	Beryllium, Dissolved	mg/L	0.0000442	0.000880	0.100	0.104	0.103	0.0959	0.0850 to 0.115	104	70.0 to 130	0.966	20.0
BD17826	Beryllium, Total	mg/L	0.0000828	0.000880	0.100	0.110	0.110	0.103	0.0850 to 0.115	110	70.0 to 130	0.00	20.0
BD17826	Boron, Dissolved	mg/L	-0.000123	0.0650	1.00	1.06	1.06	1.03	0.850 to 1.15	106	70.0 to 130	0.00	20.0
BD17826	Boron, Total	mg/L	0.000491	0.0650	1.00	1.04	1.07	1.04	0.850 to 1.15	104	70.0 to 130	2.84	20.0
BD17826	Cadmium, Dissolved	mg/L	0.0000000	0.000147	0.100	0.101	0.0989	0.101	0.0850 to 0.115	101	70.0 to 130	2.10	20.0
BD17826	Cadmium, Total	mg/L	0.0000063	0.000147	0.100	0.102	0.102	0.106	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BD17826	Calcium, Dissolved	mg/L	-0.00424	0.152	5.00	40.3	39.9	5.03	4.25 to 5.75	120	70.0 to 130	0.998	20.0
BD17826	Calcium, Total	mg/L	-0.00686	0.152	5.00	37.7	38.7	4.91	4.25 to 5.75	74.0	70.0 to 130	2.62	20.0
BD17826	Chloride	mg/L	0.051	1.00	10.0	25.3	25.4	10.6	9.00 to 11.0	85.0	80.0 to 120	0.394	20.0
BD17826	Chromium, Dissolved	mg/L	-0.0000134	0.000440	0.100	0.0984	0.0964	0.101	0.0850 to 0.115	98.1	70.0 to 130	2.05	20.0
BD17826	Chromium, Total	mg/L	0.0000913	0.000440	0.100	0.0989	0.0980	0.100	0.0850 to 0.115	98.6	70.0 to 130	0.914	20.0
BD17826	Cobalt, Dissolved	mg/L	-0.0000014	0.000147	0.100	0.0995	0.0975	0.104	0.0850 to 0.115	99.5	70.0 to 130	2.03	20.0
BD17826	Cobalt, Total	mg/L	-0.0000009	0.000147	0.100	0.101	0.0989	0.104	0.0850 to 0.115	101	70.0 to 130	2.10	20.0
BD17826	Fluoride	mg/L	0.0601	0.125	2.50	2.71	2.69	2.68	2.25 to 2.75	103	80.0 to 120	0.741	20.0
BD17826	Iron, Dissolved	mg/L	-0.00120	0.0176	0.2	1.32	1.32	0.203	0.170 to 0.230	100	70.0 to 130	0.00	20.0
BD17826	Iron, Total	mg/L	-0.000954	0.0176	0.2	2.23	2.25	0.202	0.170 to 0.230	80.0	70.0 to 130	0.893	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/18/23 15:58
Customer ID:
Delivery Date: 9/20/23 11:16

Description: Gorgas Ash Pond - MW-46 Dup

Laboratory ID Number: BD17818

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17826	Lead, Dissolved	mg/L	0.0000047	0.000147	0.100	0.101	0.0991	0.101	0.0850 to 0.115	101	70.0 to 130	1.90	20.0
BD17826	Lead, Total	mg/L	0.0000048	0.000147	0.100	0.102	0.103	0.0999	0.0850 to 0.115	102	70.0 to 130	0.976	20.0
BD17826	Lithium, Dissolved	mg/L	0.000731	0.0154	0.200	0.230	0.229	0.207	0.170 to 0.230	101	70.0 to 130	0.436	20.0
BD17826	Lithium, Total	mg/L	0.000155	0.0154	0.200	0.225	0.231	0.204	0.170 to 0.230	98.6	70.0 to 130	2.63	20.0
BD17826	Magnesium, Dissolved	mg/L	-0.0283	0.0462	5.00	19.8	19.7	5.26	4.25 to 5.75	108	70.0 to 130	0.506	20.0
BD17826	Magnesium, Total	mg/L	-0.00443	0.0462	5.00	19.1	19.4	5.14	4.25 to 5.75	92.0	70.0 to 130	1.56	20.0
BD17826	Manganese, Dissolved	mg/L	0.0000088	0.00033	0.100	0.152	0.150	0.102	0.0850 to 0.115	96.8	70.0 to 130	1.32	20.0
BD17826	Manganese, Total	mg/L	0.0000062	0.00033	0.100	0.151	0.148	0.100	0.0850 to 0.115	98.8	70.0 to 130	2.01	20.0
BD17826	Mercury, Total by CVAA	mg/L	3.000E-05	0.000500	0.004	0.00396	0.00402	0.00403	0.00340 to 0.00460	99.0	70.0 to 130	1.50	20.0
BD17826	Molybdenum, Dissolved	mg/L	0.00116	0.0100	0.2	0.201	0.203	0.202	0.170 to 0.230	100	70.0 to 130	0.990	20.0
BD17826	Molybdenum, Total	mg/L	0.002	0.0100	0.2	0.198	0.203	0.203	0.170 to 0.230	99.0	70.0 to 130	2.49	20.0
BD17826	Potassium, Dissolved	mg/L	0.00592	0.367	10.0	11.0	10.8	10.1	8.50 to 11.5	96.3	70.0 to 130	1.83	20.0
BD17826	Potassium, Total	mg/L	0.0118	0.367	10.0	10.9	10.9	9.82	8.50 to 11.5	95.8	70.0 to 130	0.00	20.0
BD17826	Selenium, Dissolved	mg/L	0.0000140	0.00100	0.100	0.104	0.101	0.107	0.0850 to 0.115	104	70.0 to 130	2.93	20.0
BD17826	Selenium, Total	mg/L	0.0000754	0.00100	0.100	0.105	0.106	0.105	0.0850 to 0.115	105	70.0 to 130	0.948	20.0
BD17826	Silicon, Dissolved	mg/L	0.00203	0.0440	1.00	13.2	13.1	1.04	0.850 to 1.15	120	70.0 to 130	0.760	20.0
BD17826	Silicon, Total	mg/L	0.00143	0.0440	1.00	13.1	13.2	1.03	0.850 to 1.15	90.0	70.0 to 130	0.760	20.0
BD17826	Sodium, Dissolved	mg/L	0.00446	0.0880	5.00	24.7	24.5	5.26	4.25 to 5.75	106	70.0 to 130	0.813	20.0
BD17826	Sodium, Total	mg/L	0.00438	0.0880	5.00	22.6	22.9	5.16	4.25 to 5.75	92.0	70.0 to 130	1.32	20.0
BD17823	Sulfate	mg/L	0.0186	2.0	20.0	42.3	41.8	18.7	18.0 to 22.0	93.5	80.0 to 120	1.19	20.0
BD17826	Thallium, Dissolved	mg/L	-0.0000003	0.000147	0.100	0.103	0.101	0.102	0.0850 to 0.115	103	70.0 to 130	1.96	20.0
BD17826	Thallium, Total	mg/L	0.0000121	0.000147	0.100	0.105	0.105	0.103	0.0850 to 0.115	105	70.0 to 130	0.00	20.0
BD17826	Total Organic Carbon	mg/L	0.215	1.00	10.0	10.5	10.6	9.79		105	80.0 to 120	0.948	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/18/23 15:58
Customer ID:
Delivery Date: 9/20/23 11:16

Description: Gorgas Ash Pond - MW-46 Dup

Laboratory ID Number: BD17818

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17836	Alkalinity	mg CaCO3/L					222	52.9	45.0 to 55.0			1.82	10.0
BD17826	Nitrogen, Nitrate/Nitrite	mg/L as N	0.03	0.200	2.00	1.94	0.058	1.89	1.80 to 2.20	97.0	90.0 to 110	0.00	15.0
BD17824	Solids, Dissolved	mg/L	0.0000	25.0			2200	51.0	40.0 to 60.0			0.913	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 10/25/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-2

Location Code: WMWGORAP
Collected: 9/18/23 17:10
Customer ID:
Submittal Date: 9/20/23 11:16

Laboratory ID Number: BD17819

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	9/21/23 06:53	9/21/23 16:08		1.015	0.0952	mg/L	0.030000	0.1015	J
* Calcium, Total	9/21/23 06:53	9/21/23 16:08		1.015	0.668	mg/L	0.070035	0.406	
* Iron, Total	9/21/23 06:53	9/21/23 16:08		1.015	0.0239	mg/L	0.008120	0.0406	J
* Lithium, Total	9/21/23 06:53	9/21/23 16:08		1.015	0.0452	mg/L	0.007105	0.01999956	
* Magnesium, Total	9/21/23 06:53	9/21/23 16:08		1.015	0.183	mg/L	0.021315	0.406	J
* Molybdenum, Total	9/21/23 06:53	9/21/23 16:08		1.015	0.00520	mg/L	0.005075	0.01015	J
* Silica, Total (calc.)	9/21/23 06:53	9/21/23 16:08		1	11.2	mg/L			
* Silicon, Total	9/21/23 06:53	9/21/23 16:08		1.015	5.25	mg/L	0.02030	0.25375	
* Sodium, Total	9/21/23 06:53	9/21/23 18:57		10.15	158	mg/L	0.4060	4.06	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	9/20/23 15:27	9/21/23 14:40		1.015	0.0924	mg/L	0.030000	0.1015	J
* Calcium, Dissolved	9/20/23 15:27	9/21/23 14:40		1.015	0.475	mg/L	0.070035	0.406	
* Iron, Dissolved	9/20/23 15:27	9/21/23 14:40		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Dissolved	9/20/23 15:27	9/21/23 14:40		1.015	0.0438	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	9/20/23 15:27	9/21/23 14:40		1.015	0.116	mg/L	0.021315	0.406	J
* Molybdenum, Dissolved	9/20/23 15:27	9/21/23 14:40		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Dissolved (calc.)	9/20/23 15:27	9/21/23 14:40		1	11.3	mg/L			
* Silicon, Dissolved	9/20/23 15:27	9/21/23 14:40		1.015	5.29	mg/L	0.02030	0.25375	
* Sodium, Dissolved	9/20/23 15:27	9/21/23 17:53		10.15	160	mg/L	0.4060	4.06	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	9/21/23 06:53	9/21/23 13:31		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Arsenic, Total	9/21/23 06:53	9/21/23 13:31		1.015	0.000122	mg/L	0.000112	0.000203	J
* Aluminum, Total	9/21/23 06:53	9/21/23 13:31		1.015	0.0472	mg/L	0.009135	0.05075	J
* Barium, Total	9/21/23 06:53	9/21/23 13:31		1.015	0.0732	mg/L	0.000508	0.001015	
* Beryllium, Total	9/21/23 06:53	9/21/23 13:31		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	9/21/23 06:53	9/21/23 13:31		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	9/21/23 06:53	9/21/23 13:31		1.015	0.000325	mg/L	0.000203	0.001015	J
* Cobalt, Total	9/21/23 06:53	9/21/23 13:31		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	9/21/23 06:53	9/21/23 13:31		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	9/21/23 06:53	9/21/23 13:31		1.015	0.00102	mg/L	0.000152	0.001015	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-2

Location Code: WMWGORAP
Collected: 9/18/23 17:10
Customer ID:
Submittal Date: 9/20/23 11:16

Laboratory ID Number: BD17819

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	9/21/23 06:53	9/21/23 13:31		1.015	0.458	mg/L	0.169505	0.5075	J
* Selenium, Total	9/21/23 06:53	9/21/23 13:31		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	9/21/23 06:53	9/21/23 13:31		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	9/20/23 15:27	9/21/23 11:38		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	9/20/23 15:27	9/21/23 11:38		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Dissolved	9/20/23 15:27	9/21/23 11:38		1.015	0.000225	mg/L	0.000112	0.000203	
* Barium, Dissolved	9/20/23 15:27	9/21/23 11:38		1.015	0.0444	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	9/20/23 15:27	9/21/23 11:38		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	9/20/23 15:27	9/21/23 11:38		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	9/20/23 15:27	9/21/23 11:38		1.015	0.000249	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	9/20/23 15:27	9/21/23 11:38		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Dissolved	9/20/23 15:27	9/21/23 11:38		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	9/20/23 15:27	9/21/23 11:38		1.015	0.000723	mg/L	0.000152	0.001015	J
* Potassium, Dissolved	9/20/23 15:27	9/21/23 11:38		1.015	0.422	mg/L	0.169505	0.5075	J
* Selenium, Dissolved	9/20/23 15:27	9/21/23 11:38		1.015	0.000620	mg/L	0.000508	0.001015	J
* Thallium, Dissolved	9/20/23 15:27	9/21/23 11:38		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	9/21/23 12:12	9/21/23 17:12		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	9/22/23 12:27	9/22/23 12:27		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: JAG***								
Alkalinity pH Endpoint	9/28/23 11:28	9/28/23 12:44		1	4.55	SU		2	
* Alkalinity	9/28/23 11:28	9/28/23 12:44		1	321	mg CaCO3/L		1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	9/20/23 14:45	9/22/23 11:15		1	405	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: JAG***								
* Bicarbonate Alkalinity, (calc.)	9/28/23 11:28	9/28/23 12:44		1	261	mg CaCO3/L		1	
* Carbonate Alkalinity, (calc.)	9/28/23 11:28	9/28/23 12:44		1	58.8	mg CaCO3/L		0.5	
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	9/25/23 11:45	9/25/23 11:45		1	Not Detected	mg/L	1.00	2	U

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-2

Location Code: WMWGORAP
Collected: 9/18/23 17:10
Customer ID:
Submittal Date: 9/20/23 11:16

Laboratory ID Number: BD17819

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	9/25/23 09:32	9/25/23 09:32		1	6.28	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	9/25/23 11:26	9/25/23 11:26		1	0.822	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	9/26/23 16:23	9/26/23 16:23		1	2.96	mg/L	0.6	2	
Analytical Method: Field Measurements	***Analyst: AWG***								
Conductivity	9/18/23 17:07	9/18/23 17:07			588.28	uS/cm			FA
pH	9/18/23 17:07	9/18/23 17:07			9.00	SU			FA
Temperature	9/18/23 17:07	9/18/23 17:07			18.34	C			FA
Turbidity	9/18/23 17:07	9/18/23 17:07			1.44	NTU			FA
Sulfide	9/18/23 17:07	9/18/23 17:07			1	mg/L			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 10/25/2023
Version: 3.5
COA_CCR

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/18/23 17:10
Customer ID:
Delivery Date: 9/20/23 11:16

Description: Gorgas Ash Pond - MW-2

Laboratory ID Number: BD17819

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17826	Aluminum, Dissolved	mg/L	0.000195	0.0198	0.100	0.0957	0.0946	0.0999	0.0850 to 0.115	95.7	70.0 to 130	1.16	20.0
BD17826	Aluminum, Total	mg/L	0.000928	0.0198	0.100	0.0968	0.0962	0.0960	0.0850 to 0.115	96.8	70.0 to 130	0.622	20.0
BD17826	Antimony, Dissolved	mg/L	0.000811	0.00100	0.100	0.0945	0.0944	0.0934	0.0850 to 0.115	94.5	70.0 to 130	0.106	20.0
BD17826	Antimony, Total	mg/L	0.000299	0.00100	0.100	0.105	0.105	0.104	0.0850 to 0.115	105	70.0 to 130	0.00	20.0
BD17826	Arsenic, Dissolved	mg/L	0.0000311	0.000200	0.100	0.114	0.112	0.108	0.0850 to 0.115	103	70.0 to 130	1.77	20.0
BD17826	Arsenic, Total	mg/L	0.0000684	0.000200	0.100	0.130	0.132	0.110	0.0850 to 0.115	109	70.0 to 130	1.53	20.0
BD17826	Barium, Dissolved	mg/L	-0.0000095	0.00100	0.100	0.163	0.162	0.0956	0.0850 to 0.115	95.2	70.0 to 130	0.615	20.0
BD17826	Barium, Total	mg/L	0.0000055	0.00100	0.100	0.165	0.169	0.0992	0.0850 to 0.115	95.4	70.0 to 130	2.40	20.0
BD17826	Beryllium, Dissolved	mg/L	0.0000442	0.000880	0.100	0.104	0.103	0.0959	0.0850 to 0.115	104	70.0 to 130	0.966	20.0
BD17826	Beryllium, Total	mg/L	0.0000828	0.000880	0.100	0.110	0.110	0.103	0.0850 to 0.115	110	70.0 to 130	0.00	20.0
BD17826	Boron, Dissolved	mg/L	-0.000123	0.0650	1.00	1.06	1.06	1.03	0.850 to 1.15	106	70.0 to 130	0.00	20.0
BD17826	Boron, Total	mg/L	0.000491	0.0650	1.00	1.04	1.07	1.04	0.850 to 1.15	104	70.0 to 130	2.84	20.0
BD17826	Cadmium, Dissolved	mg/L	0.0000000	0.000147	0.100	0.101	0.0989	0.101	0.0850 to 0.115	101	70.0 to 130	2.10	20.0
BD17826	Cadmium, Total	mg/L	0.0000063	0.000147	0.100	0.102	0.102	0.106	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BD17826	Calcium, Dissolved	mg/L	-0.00424	0.152	5.00	40.3	39.9	5.03	4.25 to 5.75	120	70.0 to 130	0.998	20.0
BD17826	Calcium, Total	mg/L	-0.00686	0.152	5.00	37.7	38.7	4.91	4.25 to 5.75	74.0	70.0 to 130	2.62	20.0
BD17826	Chloride	mg/L	0.051	1.00	10.0	25.3	25.4	10.6	9.00 to 11.0	85.0	80.0 to 120	0.394	20.0
BD17826	Chromium, Dissolved	mg/L	-0.0000134	0.000440	0.100	0.0984	0.0964	0.101	0.0850 to 0.115	98.1	70.0 to 130	2.05	20.0
BD17826	Chromium, Total	mg/L	0.0000913	0.000440	0.100	0.0989	0.0980	0.100	0.0850 to 0.115	98.6	70.0 to 130	0.914	20.0
BD17826	Cobalt, Dissolved	mg/L	-0.0000014	0.000147	0.100	0.0995	0.0975	0.104	0.0850 to 0.115	99.5	70.0 to 130	2.03	20.0
BD17826	Cobalt, Total	mg/L	-0.0000009	0.000147	0.100	0.101	0.0989	0.104	0.0850 to 0.115	101	70.0 to 130	2.10	20.0
BD17826	Fluoride	mg/L	0.0601	0.125	2.50	2.71	2.69	2.68	2.25 to 2.75	103	80.0 to 120	0.741	20.0
BD17826	Iron, Dissolved	mg/L	-0.00120	0.0176	0.2	1.32	1.32	0.203	0.170 to 0.230	100	70.0 to 130	0.00	20.0
BD17826	Iron, Total	mg/L	-0.000954	0.0176	0.2	2.23	2.25	0.202	0.170 to 0.230	80.0	70.0 to 130	0.893	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/18/23 17:10
Customer ID:
Delivery Date: 9/20/23 11:16

Description: Gorgas Ash Pond - MW-2

Laboratory ID Number: BD17819

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17826	Lead, Dissolved	mg/L	0.0000047	0.000147	0.100	0.101	0.0991	0.101	0.0850 to 0.115	101	70.0 to 130	1.90	20.0
BD17826	Lead, Total	mg/L	0.0000048	0.000147	0.100	0.102	0.103	0.0999	0.0850 to 0.115	102	70.0 to 130	0.976	20.0
BD17826	Lithium, Dissolved	mg/L	0.000731	0.0154	0.200	0.230	0.229	0.207	0.170 to 0.230	101	70.0 to 130	0.436	20.0
BD17826	Lithium, Total	mg/L	0.000155	0.0154	0.200	0.225	0.231	0.204	0.170 to 0.230	98.6	70.0 to 130	2.63	20.0
BD17826	Magnesium, Dissolved	mg/L	-0.0283	0.0462	5.00	19.8	19.7	5.26	4.25 to 5.75	108	70.0 to 130	0.506	20.0
BD17826	Magnesium, Total	mg/L	-0.00443	0.0462	5.00	19.1	19.4	5.14	4.25 to 5.75	92.0	70.0 to 130	1.56	20.0
BD17826	Manganese, Dissolved	mg/L	0.0000088	0.00033	0.100	0.152	0.150	0.102	0.0850 to 0.115	96.8	70.0 to 130	1.32	20.0
BD17826	Manganese, Total	mg/L	0.0000062	0.00033	0.100	0.151	0.148	0.100	0.0850 to 0.115	98.8	70.0 to 130	2.01	20.0
BD17826	Mercury, Total by CVAA	mg/L	3.000E-05	0.000500	0.004	0.00396	0.00402	0.00403	0.00340 to 0.00460	99.0	70.0 to 130	1.50	20.0
BD17826	Molybdenum, Dissolved	mg/L	0.00116	0.0100	0.2	0.201	0.203	0.202	0.170 to 0.230	100	70.0 to 130	0.990	20.0
BD17826	Molybdenum, Total	mg/L	0.002	0.0100	0.2	0.198	0.203	0.203	0.170 to 0.230	99.0	70.0 to 130	2.49	20.0
BD17826	Potassium, Dissolved	mg/L	0.00592	0.367	10.0	11.0	10.8	10.1	8.50 to 11.5	96.3	70.0 to 130	1.83	20.0
BD17826	Potassium, Total	mg/L	0.0118	0.367	10.0	10.9	10.9	9.82	8.50 to 11.5	95.8	70.0 to 130	0.00	20.0
BD17826	Selenium, Dissolved	mg/L	0.0000140	0.00100	0.100	0.104	0.101	0.107	0.0850 to 0.115	104	70.0 to 130	2.93	20.0
BD17826	Selenium, Total	mg/L	0.0000754	0.00100	0.100	0.105	0.106	0.105	0.0850 to 0.115	105	70.0 to 130	0.948	20.0
BD17826	Silicon, Dissolved	mg/L	0.00203	0.0440	1.00	13.2	13.1	1.04	0.850 to 1.15	120	70.0 to 130	0.760	20.0
BD17826	Silicon, Total	mg/L	0.00143	0.0440	1.00	13.1	13.2	1.03	0.850 to 1.15	90.0	70.0 to 130	0.760	20.0
BD17826	Sodium, Dissolved	mg/L	0.00446	0.0880	5.00	24.7	24.5	5.26	4.25 to 5.75	106	70.0 to 130	0.813	20.0
BD17826	Sodium, Total	mg/L	0.00438	0.0880	5.00	22.6	22.9	5.16	4.25 to 5.75	92.0	70.0 to 130	1.32	20.0
BD17823	Sulfate	mg/L	0.0186	2.0	20.0	42.3	41.8	18.7	18.0 to 22.0	93.5	80.0 to 120	1.19	20.0
BD17826	Thallium, Dissolved	mg/L	-0.0000003	0.000147	0.100	0.103	0.101	0.102	0.0850 to 0.115	103	70.0 to 130	1.96	20.0
BD17826	Thallium, Total	mg/L	0.0000121	0.000147	0.100	0.105	0.105	0.103	0.0850 to 0.115	105	70.0 to 130	0.00	20.0
BD17826	Total Organic Carbon	mg/L	0.215	1.00	10.0	10.5	10.6	9.79		105	80.0 to 120	0.948	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

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Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/18/23 17:10
Customer ID:
Delivery Date: 9/20/23 11:16

Description: Gorgas Ash Pond - MW-2

Laboratory ID Number: BD17819

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17836	Alkalinity	mg CaCO3/L					222	52.9	45.0 to 55.0			1.82	10.0
BD17826	Nitrogen, Nitrate/Nitrite	mg/L as N	0.03	0.200	2.00	1.94	0.058	1.89	1.80 to 2.20	97.0	90.0 to 110	0.00	15.0
BD17824	Solids, Dissolved	mg/L	0.0000	25.0			2200	51.0	40.0 to 60.0			0.913	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

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General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-19

Location Code: WMWGORAP
Collected: 9/19/23 07:53
Customer ID:
Submittal Date: 9/20/23 11:16

Laboratory ID Number: BD17820

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	9/21/23 06:53	9/21/23 16:11		1.015	0.0314	mg/L	0.030000	0.1015	J
* Calcium, Total	9/21/23 06:53	9/21/23 19:01		10.15	53.5	mg/L	0.70035	4.06	
* Iron, Total	9/21/23 06:53	9/21/23 16:11		1.015	0.511	mg/L	0.008120	0.0406	
* Lithium, Total	9/21/23 06:53	9/21/23 16:11		1.015	0.0336	mg/L	0.007105	0.01999956	
* Magnesium, Total	9/21/23 06:53	9/21/23 16:11		1.015	16.6	mg/L	0.021315	0.406	
* Molybdenum, Total	9/21/23 06:53	9/21/23 16:11		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Total (calc.)	9/21/23 06:53	9/21/23 16:11		1	21.6	mg/L			
* Silicon, Total	9/21/23 06:53	9/21/23 16:11		1.015	10.1	mg/L	0.02030	0.25375	
* Sodium, Total	9/21/23 06:53	9/21/23 19:01		10.15	44.8	mg/L	0.4060	4.06	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	9/20/23 15:27	9/21/23 14:43		1.015	0.0303	mg/L	0.030000	0.1015	J
* Calcium, Dissolved	9/20/23 15:27	9/21/23 17:57		10.15	51.7	mg/L	0.70035	4.06	
* Iron, Dissolved	9/20/23 15:27	9/21/23 14:43		1.015	0.403	mg/L	0.008120	0.0406	
* Lithium, Dissolved	9/20/23 15:27	9/21/23 14:43		1.015	0.0336	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	9/20/23 15:27	9/21/23 14:43		1.015	16.3	mg/L	0.021315	0.406	
* Molybdenum, Dissolved	9/20/23 15:27	9/21/23 14:43		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Dissolved (calc.)	9/20/23 15:27	9/21/23 14:43		1	21.8	mg/L			
* Silicon, Dissolved	9/20/23 15:27	9/21/23 14:43		1.015	10.2	mg/L	0.02030	0.25375	
* Sodium, Dissolved	9/20/23 15:27	9/21/23 17:57		10.15	45.1	mg/L	0.4060	4.06	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	9/21/23 06:53	9/21/23 13:35		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Total	9/21/23 06:53	9/21/23 13:35		1.015	0.0618	mg/L	0.009135	0.05075	
* Arsenic, Total	9/21/23 06:53	9/21/23 13:35		1.015	0.00120	mg/L	0.000112	0.000203	
* Barium, Total	9/21/23 06:53	9/21/23 13:35		1.015	0.325	mg/L	0.000508	0.001015	
* Beryllium, Total	9/21/23 06:53	9/21/23 13:35		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	9/21/23 06:53	9/21/23 13:35		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	9/21/23 06:53	9/21/23 13:35		1.015	0.000417	mg/L	0.000203	0.001015	J
* Cobalt, Total	9/21/23 06:53	9/21/23 13:35		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	9/21/23 06:53	9/21/23 13:35		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	9/21/23 06:53	9/21/23 13:35		1.015	0.0243	mg/L	0.000152	0.001015	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

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Certificate Of Analysis

Description: Gorgas Ash Pond - MW-19

Location Code: WMWGORAP
Collected: 9/19/23 07:53
Customer ID:
Submittal Date: 9/20/23 11:16

Laboratory ID Number: BD17820

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	9/21/23 06:53	9/21/23 13:35		1.015	1.90	mg/L	0.169505	0.5075	
* Selenium, Total	9/21/23 06:53	9/21/23 13:35		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	9/21/23 06:53	9/21/23 13:35		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	9/20/23 15:27	9/21/23 11:41		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	9/20/23 15:27	9/21/23 11:41		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Dissolved	9/20/23 15:27	9/21/23 11:41		1.015	0.00131	mg/L	0.000112	0.000203	
* Barium, Dissolved	9/20/23 15:27	9/21/23 11:41		1.015	0.298	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	9/20/23 15:27	9/21/23 11:41		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	9/20/23 15:27	9/21/23 11:41		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	9/20/23 15:27	9/21/23 11:41		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	9/20/23 15:27	9/21/23 11:41		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Dissolved	9/20/23 15:27	9/21/23 11:41		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	9/20/23 15:27	9/21/23 11:41		1.015	0.0235	mg/L	0.000152	0.001015	
* Potassium, Dissolved	9/20/23 15:27	9/21/23 11:41		1.015	1.96	mg/L	0.169505	0.5075	
* Selenium, Dissolved	9/20/23 15:27	9/21/23 11:41		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	9/20/23 15:27	9/21/23 11:41		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	9/21/23 12:12	9/21/23 17:16		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	9/22/23 12:29	9/22/23 12:29		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: JAG***								
Alkalinity pH Endpoint	9/28/23 11:28	9/28/23 12:44		1	4.50	SU		2	
* Alkalinity	9/28/23 11:28	9/28/23 12:44		1	274	mg CaCO3/L		1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	9/20/23 14:45	9/22/23 11:15		1	335	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: JAG***								
* Bicarbonate Alkalinity, (calc.)	9/28/23 11:28	9/28/23 12:44		1	272	mg CaCO3/L		1	
* Carbonate Alkalinity, (calc.)	9/28/23 11:28	9/28/23 12:44		1	2.28	mg CaCO3/L		0.5	
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	9/25/23 11:59	9/25/23 11:59		1	Not Detected	mg/L	1.00	2	U

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-19

Location Code: WMWGORAP
Collected: 9/19/23 07:53
Customer ID:
Submittal Date: 9/20/23 11:16

Laboratory ID Number: BD17820

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	9/25/23 09:33	9/25/23 09:33		1	4.82	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	9/25/23 11:28	9/25/23 11:28		1	0.211	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	9/26/23 16:24	9/26/23 16:24		1	13.5	mg/L	0.6	2	
Analytical Method: Field Measurements	***Analyst: AWG***								
Conductivity	9/19/23 07:51	9/19/23 07:51			481.23	uS/cm			FA
pH	9/19/23 07:51	9/19/23 07:51			7.30	SU			FA
Temperature	9/19/23 07:51	9/19/23 07:51			17.09	C			FA
Turbidity	9/19/23 07:51	9/19/23 07:51			2.49	NTU			FA
Sulfide	9/19/23 07:51	9/19/23 07:51			0	mg/L			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 10/25/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/19/23 07:53
Customer ID:
Delivery Date: 9/20/23 11:16

Description: Gorgas Ash Pond - MW-19

Laboratory ID Number: BD17820

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17826	Aluminum, Dissolved	mg/L	0.000195	0.0198	0.100	0.0957	0.0946	0.0999	0.0850 to 0.115	95.7	70.0 to 130	1.16	20.0
BD17826	Aluminum, Total	mg/L	0.000928	0.0198	0.100	0.0968	0.0962	0.0960	0.0850 to 0.115	96.8	70.0 to 130	0.622	20.0
BD17826	Antimony, Dissolved	mg/L	0.000811	0.00100	0.100	0.0945	0.0944	0.0934	0.0850 to 0.115	94.5	70.0 to 130	0.106	20.0
BD17826	Antimony, Total	mg/L	0.000299	0.00100	0.100	0.105	0.105	0.104	0.0850 to 0.115	105	70.0 to 130	0.00	20.0
BD17826	Arsenic, Dissolved	mg/L	0.0000311	0.000200	0.100	0.114	0.112	0.108	0.0850 to 0.115	103	70.0 to 130	1.77	20.0
BD17826	Arsenic, Total	mg/L	0.0000684	0.000200	0.100	0.130	0.132	0.110	0.0850 to 0.115	109	70.0 to 130	1.53	20.0
BD17826	Barium, Dissolved	mg/L	-0.0000095	0.00100	0.100	0.163	0.162	0.0956	0.0850 to 0.115	95.2	70.0 to 130	0.615	20.0
BD17826	Barium, Total	mg/L	0.0000055	0.00100	0.100	0.165	0.169	0.0992	0.0850 to 0.115	95.4	70.0 to 130	2.40	20.0
BD17826	Beryllium, Dissolved	mg/L	0.0000442	0.000880	0.100	0.104	0.103	0.0959	0.0850 to 0.115	104	70.0 to 130	0.966	20.0
BD17826	Beryllium, Total	mg/L	0.0000828	0.000880	0.100	0.110	0.110	0.103	0.0850 to 0.115	110	70.0 to 130	0.00	20.0
BD17826	Boron, Dissolved	mg/L	-0.000123	0.0650	1.00	1.06	1.06	1.03	0.850 to 1.15	106	70.0 to 130	0.00	20.0
BD17826	Boron, Total	mg/L	0.000491	0.0650	1.00	1.04	1.07	1.04	0.850 to 1.15	104	70.0 to 130	2.84	20.0
BD17826	Cadmium, Dissolved	mg/L	0.0000000	0.000147	0.100	0.101	0.0989	0.101	0.0850 to 0.115	101	70.0 to 130	2.10	20.0
BD17826	Cadmium, Total	mg/L	0.0000063	0.000147	0.100	0.102	0.102	0.106	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BD17826	Calcium, Dissolved	mg/L	-0.00424	0.152	5.00	40.3	39.9	5.03	4.25 to 5.75	120	70.0 to 130	0.998	20.0
BD17826	Calcium, Total	mg/L	-0.00686	0.152	5.00	37.7	38.7	4.91	4.25 to 5.75	74.0	70.0 to 130	2.62	20.0
BD17826	Chloride	mg/L	0.051	1.00	10.0	25.3	25.4	10.6	9.00 to 11.0	85.0	80.0 to 120	0.394	20.0
BD17826	Chromium, Dissolved	mg/L	-0.0000134	0.000440	0.100	0.0984	0.0964	0.101	0.0850 to 0.115	98.1	70.0 to 130	2.05	20.0
BD17826	Chromium, Total	mg/L	0.0000913	0.000440	0.100	0.0989	0.0980	0.100	0.0850 to 0.115	98.6	70.0 to 130	0.914	20.0
BD17826	Cobalt, Dissolved	mg/L	-0.0000014	0.000147	0.100	0.0995	0.0975	0.104	0.0850 to 0.115	99.5	70.0 to 130	2.03	20.0
BD17826	Cobalt, Total	mg/L	-0.0000009	0.000147	0.100	0.101	0.0989	0.104	0.0850 to 0.115	101	70.0 to 130	2.10	20.0
BD17826	Fluoride	mg/L	0.0601	0.125	2.50	2.71	2.69	2.68	2.25 to 2.75	103	80.0 to 120	0.741	20.0
BD17826	Iron, Dissolved	mg/L	-0.00120	0.0176	0.2	1.32	1.32	0.203	0.170 to 0.230	100	70.0 to 130	0.00	20.0
BD17826	Iron, Total	mg/L	-0.000954	0.0176	0.2	2.23	2.25	0.202	0.170 to 0.230	80.0	70.0 to 130	0.893	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/19/23 07:53
Customer ID:
Delivery Date: 9/20/23 11:16

Description: Gorgas Ash Pond - MW-19

Laboratory ID Number: BD17820

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17826	Lead, Dissolved	mg/L	0.0000047	0.000147	0.100	0.101	0.0991	0.101	0.0850 to 0.115	101	70.0 to 130	1.90	20.0
BD17826	Lead, Total	mg/L	0.0000048	0.000147	0.100	0.102	0.103	0.0999	0.0850 to 0.115	102	70.0 to 130	0.976	20.0
BD17826	Lithium, Dissolved	mg/L	0.000731	0.0154	0.200	0.230	0.229	0.207	0.170 to 0.230	101	70.0 to 130	0.436	20.0
BD17826	Lithium, Total	mg/L	0.000155	0.0154	0.200	0.225	0.231	0.204	0.170 to 0.230	98.6	70.0 to 130	2.63	20.0
BD17826	Magnesium, Dissolved	mg/L	-0.0283	0.0462	5.00	19.8	19.7	5.26	4.25 to 5.75	108	70.0 to 130	0.506	20.0
BD17826	Magnesium, Total	mg/L	-0.00443	0.0462	5.00	19.1	19.4	5.14	4.25 to 5.75	92.0	70.0 to 130	1.56	20.0
BD17826	Manganese, Dissolved	mg/L	0.0000088	0.00033	0.100	0.152	0.150	0.102	0.0850 to 0.115	96.8	70.0 to 130	1.32	20.0
BD17826	Manganese, Total	mg/L	0.0000062	0.00033	0.100	0.151	0.148	0.100	0.0850 to 0.115	98.8	70.0 to 130	2.01	20.0
BD17826	Mercury, Total by CVAA	mg/L	3.000E-05	0.000500	0.004	0.00396	0.00402	0.00403	0.00340 to 0.00460	99.0	70.0 to 130	1.50	20.0
BD17826	Molybdenum, Dissolved	mg/L	0.00116	0.0100	0.2	0.201	0.203	0.202	0.170 to 0.230	100	70.0 to 130	0.990	20.0
BD17826	Molybdenum, Total	mg/L	0.002	0.0100	0.2	0.198	0.203	0.203	0.170 to 0.230	99.0	70.0 to 130	2.49	20.0
BD17826	Potassium, Dissolved	mg/L	0.00592	0.367	10.0	11.0	10.8	10.1	8.50 to 11.5	96.3	70.0 to 130	1.83	20.0
BD17826	Potassium, Total	mg/L	0.0118	0.367	10.0	10.9	10.9	9.82	8.50 to 11.5	95.8	70.0 to 130	0.00	20.0
BD17826	Selenium, Dissolved	mg/L	0.0000140	0.00100	0.100	0.104	0.101	0.107	0.0850 to 0.115	104	70.0 to 130	2.93	20.0
BD17826	Selenium, Total	mg/L	0.0000754	0.00100	0.100	0.105	0.106	0.105	0.0850 to 0.115	105	70.0 to 130	0.948	20.0
BD17826	Silicon, Dissolved	mg/L	0.00203	0.0440	1.00	13.2	13.1	1.04	0.850 to 1.15	120	70.0 to 130	0.760	20.0
BD17826	Silicon, Total	mg/L	0.00143	0.0440	1.00	13.1	13.2	1.03	0.850 to 1.15	90.0	70.0 to 130	0.760	20.0
BD17826	Sodium, Dissolved	mg/L	0.00446	0.0880	5.00	24.7	24.5	5.26	4.25 to 5.75	106	70.0 to 130	0.813	20.0
BD17826	Sodium, Total	mg/L	0.00438	0.0880	5.00	22.6	22.9	5.16	4.25 to 5.75	92.0	70.0 to 130	1.32	20.0
BD17823	Sulfate	mg/L	0.0186	2.0	20.0	42.3	41.8	18.7	18.0 to 22.0	93.5	80.0 to 120	1.19	20.0
BD17826	Thallium, Dissolved	mg/L	-0.0000003	0.000147	0.100	0.103	0.101	0.102	0.0850 to 0.115	103	70.0 to 130	1.96	20.0
BD17826	Thallium, Total	mg/L	0.0000121	0.000147	0.100	0.105	0.105	0.103	0.0850 to 0.115	105	70.0 to 130	0.00	20.0
BD17826	Total Organic Carbon	mg/L	0.215	1.00	10.0	10.5	10.6	9.79		105	80.0 to 120	0.948	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/19/23 07:53
Customer ID:
Delivery Date: 9/20/23 11:16

Description: Gorgas Ash Pond - MW-19

Laboratory ID Number: BD17820

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17836	Alkalinity	mg CaCO3/L					222	52.9	45.0 to 55.0			1.82	10.0
BD17826	Nitrogen, Nitrate/Nitrite	mg/L as N	0.03	0.200	2.00	1.94	0.058	1.89	1.80 to 2.20	97.0	90.0 to 110	0.00	15.0
BD17824	Solids, Dissolved	mg/L	0.0000	25.0			2200	51.0	40.0 to 60.0			0.913	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-18VR

Location Code: WMWGORAP
Collected: 9/19/23 09:00
Customer ID:
Submittal Date: 9/20/23 11:16

Laboratory ID Number: BD17821

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	9/21/23 06:53	9/21/23 16:15		1.015	0.0488	mg/L	0.030000	0.1015	J
* Calcium, Total	9/21/23 06:53	9/21/23 16:15		1.015	2.49	mg/L	0.070035	0.406	
* Iron, Total	9/21/23 06:53	9/21/23 16:15		1.015	0.0923	mg/L	0.008120	0.0406	
* Lithium, Total	9/21/23 06:53	9/21/23 16:15		1.015	0.0539	mg/L	0.007105	0.01999956	
* Magnesium, Total	9/21/23 06:53	9/21/23 16:15		1.015	0.880	mg/L	0.021315	0.406	
* Molybdenum, Total	9/21/23 06:53	9/21/23 16:15		1.015	0.0516	mg/L	0.005075	0.01015	
* Silica, Total (calc.)	9/21/23 06:53	9/21/23 16:15		1	11.7	mg/L			
* Silicon, Total	9/21/23 06:53	9/21/23 16:15		1.015	5.46	mg/L	0.02030	0.25375	
* Sodium, Total	9/21/23 06:53	9/21/23 19:04		10.15	106	mg/L	0.4060	4.06	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	9/20/23 15:27	9/21/23 14:46		1.015	0.0477	mg/L	0.030000	0.1015	J
* Calcium, Dissolved	9/20/23 15:27	9/21/23 14:46		1.015	2.18	mg/L	0.070035	0.406	
* Iron, Dissolved	9/20/23 15:27	9/21/23 14:46		1.015	0.0603	mg/L	0.008120	0.0406	
* Lithium, Dissolved	9/20/23 15:27	9/21/23 14:46		1.015	0.0542	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	9/20/23 15:27	9/21/23 14:46		1.015	0.750	mg/L	0.021315	0.406	
* Molybdenum, Dissolved	9/20/23 15:27	9/21/23 14:46		1.015	0.0511	mg/L	0.005075	0.01015	
* Silica, Dissolved (calc.)	9/20/23 15:27	9/21/23 14:46		1	11.6	mg/L			
* Silicon, Dissolved	9/20/23 15:27	9/21/23 14:46		1.015	5.41	mg/L	0.02030	0.25375	
* Sodium, Dissolved	9/20/23 15:27	9/21/23 18:00		10.15	119	mg/L	0.4060	4.06	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	9/21/23 06:53	9/21/23 13:39		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Total	9/21/23 06:53	9/21/23 13:39		1.015	0.0271	mg/L	0.009135	0.05075	J
* Arsenic, Total	9/21/23 06:53	9/21/23 13:39		1.015	0.000661	mg/L	0.000112	0.000203	
* Barium, Total	9/21/23 06:53	9/21/23 13:39		1.015	0.110	mg/L	0.000508	0.001015	
* Beryllium, Total	9/21/23 06:53	9/21/23 13:39		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	9/21/23 06:53	9/21/23 13:39		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	9/21/23 06:53	9/21/23 13:39		1.015	0.000225	mg/L	0.000203	0.001015	J
* Cobalt, Total	9/21/23 06:53	9/21/23 13:39		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	9/21/23 06:53	9/21/23 13:39		1.015	0.0000694	mg/L	0.000068	0.000203	J
* Manganese, Total	9/21/23 06:53	9/21/23 13:39		1.015	0.00359	mg/L	0.000152	0.001015	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-18VR

Location Code: WMWGORAP
Collected: 9/19/23 09:00
Customer ID:
Submittal Date: 9/20/23 11:16

Laboratory ID Number: BD17821

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	9/21/23 06:53	9/21/23 13:39		1.015	1.41	mg/L	0.169505	0.5075	
* Selenium, Total	9/21/23 06:53	9/21/23 13:39		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	9/21/23 06:53	9/21/23 13:39		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	9/20/23 15:27	9/21/23 11:45		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	9/20/23 15:27	9/21/23 11:45		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Dissolved	9/20/23 15:27	9/21/23 11:45		1.015	0.000758	mg/L	0.000112	0.000203	
* Barium, Dissolved	9/20/23 15:27	9/21/23 11:45		1.015	0.0928	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	9/20/23 15:27	9/21/23 11:45		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	9/20/23 15:27	9/21/23 11:45		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	9/20/23 15:27	9/21/23 11:45		1.015	0.000228	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	9/20/23 15:27	9/21/23 11:45		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Dissolved	9/20/23 15:27	9/21/23 11:45		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	9/20/23 15:27	9/21/23 11:45		1.015	0.00308	mg/L	0.000152	0.001015	
* Potassium, Dissolved	9/20/23 15:27	9/21/23 11:45		1.015	1.35	mg/L	0.169505	0.5075	
* Selenium, Dissolved	9/20/23 15:27	9/21/23 11:45		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	9/20/23 15:27	9/21/23 11:45		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	9/21/23 12:12	9/21/23 17:20		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	9/22/23 12:31	9/22/23 12:31		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: JAG***								
Alkalinity pH Endpoint	9/28/23 11:28	9/28/23 12:44		1	4.51	SU		2	
* Alkalinity	9/28/23 11:28	9/28/23 12:44		1	228	mg CaCO3/L		1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	9/20/23 14:45	9/22/23 11:15		1	275	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: JAG***								
* Bicarbonate Alkalinity, (calc.)	9/28/23 11:28	9/28/23 12:44		1	221	mg CaCO3/L		1	
* Carbonate Alkalinity, (calc.)	9/28/23 11:28	9/28/23 12:44		1	6.88	mg CaCO3/L		0.5	
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	9/25/23 12:17	9/25/23 12:17		1	Not Detected	mg/L	1.00	2	U

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-18VR

Location Code: WMWGORAP
Collected: 9/19/23 09:00
Customer ID:
Submittal Date: 9/20/23 11:16

Laboratory ID Number: BD17821

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	9/25/23 09:35	9/25/23 09:35		1	5.31	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	9/25/23 11:29	9/25/23 11:29		1	0.146	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	9/26/23 16:26	9/26/23 16:26		1	2.85	mg/L	0.6	2	
Analytical Method: Field Measurements	***Analyst: AWG***								
Conductivity	9/19/23 08:57	9/19/23 08:57			388.40	uS/cm			FA
pH	9/19/23 08:57	9/19/23 08:57			8.15	SU			FA
Temperature	9/19/23 08:57	9/19/23 08:57			17.48	C			FA
Turbidity	9/19/23 08:57	9/19/23 08:57			1.38	NTU			FA
Sulfide	9/19/23 08:57	9/19/23 08:57			0	mg/L			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/19/23 09:00
Customer ID:
Delivery Date: 9/20/23 11:16

Description: Gorgas Ash Pond - MW-18VR

Laboratory ID Number: BD17821

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17826	Aluminum, Dissolved	mg/L	0.000195	0.0198	0.100	0.0957	0.0946	0.0999	0.0850 to 0.115	95.7	70.0 to 130	1.16	20.0
BD17826	Aluminum, Total	mg/L	0.000928	0.0198	0.100	0.0968	0.0962	0.0960	0.0850 to 0.115	96.8	70.0 to 130	0.622	20.0
BD17826	Antimony, Dissolved	mg/L	0.000811	0.00100	0.100	0.0945	0.0944	0.0934	0.0850 to 0.115	94.5	70.0 to 130	0.106	20.0
BD17826	Antimony, Total	mg/L	0.000299	0.00100	0.100	0.105	0.105	0.104	0.0850 to 0.115	105	70.0 to 130	0.00	20.0
BD17826	Arsenic, Dissolved	mg/L	0.0000311	0.000200	0.100	0.114	0.112	0.108	0.0850 to 0.115	103	70.0 to 130	1.77	20.0
BD17826	Arsenic, Total	mg/L	0.0000684	0.000200	0.100	0.130	0.132	0.110	0.0850 to 0.115	109	70.0 to 130	1.53	20.0
BD17826	Barium, Dissolved	mg/L	-0.0000095	0.00100	0.100	0.163	0.162	0.0956	0.0850 to 0.115	95.2	70.0 to 130	0.615	20.0
BD17826	Barium, Total	mg/L	0.0000055	0.00100	0.100	0.165	0.169	0.0992	0.0850 to 0.115	95.4	70.0 to 130	2.40	20.0
BD17826	Beryllium, Dissolved	mg/L	0.0000442	0.000880	0.100	0.104	0.103	0.0959	0.0850 to 0.115	104	70.0 to 130	0.966	20.0
BD17826	Beryllium, Total	mg/L	0.0000828	0.000880	0.100	0.110	0.110	0.103	0.0850 to 0.115	110	70.0 to 130	0.00	20.0
BD17826	Boron, Dissolved	mg/L	-0.000123	0.0650	1.00	1.06	1.06	1.03	0.850 to 1.15	106	70.0 to 130	0.00	20.0
BD17826	Boron, Total	mg/L	0.000491	0.0650	1.00	1.04	1.07	1.04	0.850 to 1.15	104	70.0 to 130	2.84	20.0
BD17826	Cadmium, Dissolved	mg/L	0.0000000	0.000147	0.100	0.101	0.0989	0.101	0.0850 to 0.115	101	70.0 to 130	2.10	20.0
BD17826	Cadmium, Total	mg/L	0.0000063	0.000147	0.100	0.102	0.102	0.106	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BD17826	Calcium, Dissolved	mg/L	-0.00424	0.152	5.00	40.3	39.9	5.03	4.25 to 5.75	120	70.0 to 130	0.998	20.0
BD17826	Calcium, Total	mg/L	-0.00686	0.152	5.00	37.7	38.7	4.91	4.25 to 5.75	74.0	70.0 to 130	2.62	20.0
BD17826	Chloride	mg/L	0.051	1.00	10.0	25.3	25.4	10.6	9.00 to 11.0	85.0	80.0 to 120	0.394	20.0
BD17826	Chromium, Dissolved	mg/L	-0.0000134	0.000440	0.100	0.0984	0.0964	0.101	0.0850 to 0.115	98.1	70.0 to 130	2.05	20.0
BD17826	Chromium, Total	mg/L	0.0000913	0.000440	0.100	0.0989	0.0980	0.100	0.0850 to 0.115	98.6	70.0 to 130	0.914	20.0
BD17826	Cobalt, Dissolved	mg/L	-0.0000014	0.000147	0.100	0.0995	0.0975	0.104	0.0850 to 0.115	99.5	70.0 to 130	2.03	20.0
BD17826	Cobalt, Total	mg/L	-0.0000009	0.000147	0.100	0.101	0.0989	0.104	0.0850 to 0.115	101	70.0 to 130	2.10	20.0
BD17826	Fluoride	mg/L	0.0601	0.125	2.50	2.71	2.69	2.68	2.25 to 2.75	103	80.0 to 120	0.741	20.0
BD17826	Iron, Dissolved	mg/L	-0.00120	0.0176	0.2	1.32	1.32	0.203	0.170 to 0.230	100	70.0 to 130	0.00	20.0
BD17826	Iron, Total	mg/L	-0.000954	0.0176	0.2	2.23	2.25	0.202	0.170 to 0.230	80.0	70.0 to 130	0.893	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/19/23 09:00
Customer ID:
Delivery Date: 9/20/23 11:16

Description: Gorgas Ash Pond - MW-18VR

Laboratory ID Number: BD17821

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17826	Lead, Dissolved	mg/L	0.0000047	0.000147	0.100	0.101	0.0991	0.101	0.0850 to 0.115	101	70.0 to 130	1.90	20.0
BD17826	Lead, Total	mg/L	0.0000048	0.000147	0.100	0.102	0.103	0.0999	0.0850 to 0.115	102	70.0 to 130	0.976	20.0
BD17826	Lithium, Dissolved	mg/L	0.000731	0.0154	0.200	0.230	0.229	0.207	0.170 to 0.230	101	70.0 to 130	0.436	20.0
BD17826	Lithium, Total	mg/L	0.000155	0.0154	0.200	0.225	0.231	0.204	0.170 to 0.230	98.6	70.0 to 130	2.63	20.0
BD17826	Magnesium, Dissolved	mg/L	-0.0283	0.0462	5.00	19.8	19.7	5.26	4.25 to 5.75	108	70.0 to 130	0.506	20.0
BD17826	Magnesium, Total	mg/L	-0.00443	0.0462	5.00	19.1	19.4	5.14	4.25 to 5.75	92.0	70.0 to 130	1.56	20.0
BD17826	Manganese, Dissolved	mg/L	0.0000088	0.00033	0.100	0.152	0.150	0.102	0.0850 to 0.115	96.8	70.0 to 130	1.32	20.0
BD17826	Manganese, Total	mg/L	0.0000062	0.00033	0.100	0.151	0.148	0.100	0.0850 to 0.115	98.8	70.0 to 130	2.01	20.0
BD17826	Mercury, Total by CVAA	mg/L	3.000E-05	0.000500	0.004	0.00396	0.00402	0.00403	0.00340 to 0.00460	99.0	70.0 to 130	1.50	20.0
BD17826	Molybdenum, Dissolved	mg/L	0.00116	0.0100	0.2	0.201	0.203	0.202	0.170 to 0.230	100	70.0 to 130	0.990	20.0
BD17826	Molybdenum, Total	mg/L	0.002	0.0100	0.2	0.198	0.203	0.203	0.170 to 0.230	99.0	70.0 to 130	2.49	20.0
BD17826	Potassium, Dissolved	mg/L	0.00592	0.367	10.0	11.0	10.8	10.1	8.50 to 11.5	96.3	70.0 to 130	1.83	20.0
BD17826	Potassium, Total	mg/L	0.0118	0.367	10.0	10.9	10.9	9.82	8.50 to 11.5	95.8	70.0 to 130	0.00	20.0
BD17826	Selenium, Dissolved	mg/L	0.0000140	0.00100	0.100	0.104	0.101	0.107	0.0850 to 0.115	104	70.0 to 130	2.93	20.0
BD17826	Selenium, Total	mg/L	0.0000754	0.00100	0.100	0.105	0.106	0.105	0.0850 to 0.115	105	70.0 to 130	0.948	20.0
BD17826	Silicon, Dissolved	mg/L	0.00203	0.0440	1.00	13.2	13.1	1.04	0.850 to 1.15	120	70.0 to 130	0.760	20.0
BD17826	Silicon, Total	mg/L	0.00143	0.0440	1.00	13.1	13.2	1.03	0.850 to 1.15	90.0	70.0 to 130	0.760	20.0
BD17826	Sodium, Dissolved	mg/L	0.00446	0.0880	5.00	24.7	24.5	5.26	4.25 to 5.75	106	70.0 to 130	0.813	20.0
BD17826	Sodium, Total	mg/L	0.00438	0.0880	5.00	22.6	22.9	5.16	4.25 to 5.75	92.0	70.0 to 130	1.32	20.0
BD17823	Sulfate	mg/L	0.0186	2.0	20.0	42.3	41.8	18.7	18.0 to 22.0	93.5	80.0 to 120	1.19	20.0
BD17826	Thallium, Dissolved	mg/L	-0.0000003	0.000147	0.100	0.103	0.101	0.102	0.0850 to 0.115	103	70.0 to 130	1.96	20.0
BD17826	Thallium, Total	mg/L	0.0000121	0.000147	0.100	0.105	0.105	0.103	0.0850 to 0.115	105	70.0 to 130	0.00	20.0
BD17826	Total Organic Carbon	mg/L	0.215	1.00	10.0	10.5	10.6	9.79		105	80.0 to 120	0.948	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/19/23 09:00
Customer ID:
Delivery Date: 9/20/23 11:16

Description: Gorgas Ash Pond - MW-18VR

Laboratory ID Number: BD17821

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17836	Alkalinity	mg CaCO3/L					222	52.9	45.0 to 55.0			1.82	10.0
BD17826	Nitrogen, Nitrate/Nitrite	mg/L as N	0.03	0.200	2.00	1.94	0.058	1.89	1.80 to 2.20	97.0	90.0 to 110	0.00	15.0
BD17824	Solids, Dissolved	mg/L	0.0000	25.0			2200	51.0	40.0 to 60.0			0.913	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 10/25/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-43H

Location Code: WMWGORAP
Collected: 9/19/23 10:39
Customer ID:
Submittal Date: 9/20/23 11:16

Laboratory ID Number: BD17822

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	9/21/23 06:53	9/21/23 16:18		1.015	0.158	mg/L	0.030000	0.1015	
* Calcium, Total	9/21/23 06:53	9/21/23 16:18		1.015	6.70	mg/L	0.070035	0.406	
* Iron, Total	9/21/23 06:53	9/21/23 16:18		1.015	0.0133	mg/L	0.008120	0.0406	J
* Lithium, Total	9/21/23 06:53	9/21/23 16:18		1.015	0.0686	mg/L	0.007105	0.01999956	
* Magnesium, Total	9/21/23 06:53	9/21/23 16:18		1.015	2.01	mg/L	0.021315	0.406	
* Molybdenum, Total	9/21/23 06:53	9/21/23 16:18		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Total (calc.)	9/21/23 06:53	9/21/23 16:18		1	12.5	mg/L			
* Silicon, Total	9/21/23 06:53	9/21/23 16:18		1.015	5.83	mg/L	0.02030	0.25375	
* Sodium, Total	9/21/23 06:53	9/21/23 19:07		10.15	361	mg/L	0.4060	4.06	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	9/20/23 15:27	9/21/23 14:49		1.015	0.156	mg/L	0.030000	0.1015	
* Calcium, Dissolved	9/20/23 15:27	9/21/23 14:49		1.015	6.18	mg/L	0.070035	0.406	
* Iron, Dissolved	9/20/23 15:27	9/21/23 14:49		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Dissolved	9/20/23 15:27	9/21/23 14:49		1.015	0.0660	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	9/20/23 15:27	9/21/23 14:49		1.015	1.85	mg/L	0.021315	0.406	
* Molybdenum, Dissolved	9/20/23 15:27	9/21/23 14:49		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Dissolved (calc.)	9/20/23 15:27	9/21/23 14:49		1	12.4	mg/L			
* Silicon, Dissolved	9/20/23 15:27	9/21/23 14:49		1.015	5.78	mg/L	0.02030	0.25375	
* Sodium, Dissolved	9/20/23 15:27	9/21/23 18:03		10.15	344	mg/L	0.4060	4.06	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	9/21/23 06:53	9/21/23 13:42		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Arsenic, Total	9/21/23 06:53	9/21/23 13:42		1.015	0.000738	mg/L	0.000112	0.000203	
* Aluminum, Total	9/21/23 06:53	9/21/23 13:42		1.015	0.0429	mg/L	0.009135	0.05075	J
* Barium, Total	9/21/23 06:53	9/21/23 13:42		1.015	0.0906	mg/L	0.000508	0.001015	
* Beryllium, Total	9/21/23 06:53	9/21/23 13:42		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	9/21/23 06:53	9/21/23 13:42		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	9/21/23 06:53	9/21/23 13:42		1.015	0.000266	mg/L	0.000203	0.001015	J
* Cobalt, Total	9/21/23 06:53	9/21/23 13:42		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	9/21/23 06:53	9/21/23 13:42		1.015	0.000197	mg/L	0.000068	0.000203	J
* Manganese, Total	9/21/23 06:53	9/21/23 13:42		1.015	0.0117	mg/L	0.000152	0.001015	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-43H

Location Code: WMWGORAP
Collected: 9/19/23 10:39
Customer ID:
Submittal Date: 9/20/23 11:16

Laboratory ID Number: BD17822

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	9/21/23 06:53	9/21/23 13:42		1.015	5.65	mg/L	0.169505	0.5075	
* Selenium, Total	9/21/23 06:53	9/21/23 13:42		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	9/21/23 06:53	9/21/23 13:42		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	9/20/23 15:27	9/21/23 11:49		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	9/20/23 15:27	9/21/23 11:49		1.015	0.0180	mg/L	0.009135	0.05075	J
* Arsenic, Dissolved	9/20/23 15:27	9/21/23 11:49		1.015	0.000600	mg/L	0.000112	0.000203	
* Barium, Dissolved	9/20/23 15:27	9/21/23 11:49		1.015	0.0885	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	9/20/23 15:27	9/21/23 11:49		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	9/20/23 15:27	9/21/23 11:49		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	9/20/23 15:27	9/21/23 11:49		1.015	0.000233	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	9/20/23 15:27	9/21/23 11:49		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Dissolved	9/20/23 15:27	9/21/23 11:49		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	9/20/23 15:27	9/21/23 11:49		1.015	0.0105	mg/L	0.000152	0.001015	
* Potassium, Dissolved	9/20/23 15:27	9/21/23 11:49		1.015	5.67	mg/L	0.169505	0.5075	
* Selenium, Dissolved	9/20/23 15:27	9/21/23 11:49		1.015	0.00121	mg/L	0.000508	0.001015	
* Thallium, Dissolved	9/20/23 15:27	9/21/23 11:49		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	9/21/23 12:12	9/21/23 17:24		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	9/22/23 12:33	9/22/23 12:33		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: JAG***								
Alkalinity pH Endpoint	9/28/23 11:28	9/28/23 12:44		1	4.51	SU		2	
* Alkalinity	9/28/23 11:28	9/28/23 12:44		1	325	mg CaCO3/L		1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	9/20/23 14:45	9/22/23 11:15		1	991	mg/L		75.8	
Analytical Method: SM 4500CO2 D	***Analyst: JAG***								
* Bicarbonate Alkalinity, (calc.)	9/28/23 11:28	9/28/23 12:44		1	322	mg CaCO3/L		1	A
* Carbonate Alkalinity, (calc.)	9/28/23 11:28	9/28/23 12:44		1	3.17	mg CaCO3/L		0.5	A
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	9/25/23 12:33	9/25/23 12:33		1	4.08	mg/L	1.00	2	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-43H

Location Code: WMWGORAP
Collected: 9/19/23 10:39
Customer ID:
Submittal Date: 9/20/23 11:16

Laboratory ID Number: BD17822

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	9/25/23 09:53	9/25/23 09:53		8	134	mg/L	4.00	8	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	9/25/23 11:30	9/25/23 11:30		1	0.162	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	9/26/23 16:36	9/26/23 16:36		16	237	mg/L	9.6	32	
Analytical Method: Field Measurements	***Analyst: AWG***								
Conductivity	9/19/23 10:37	9/19/23 10:37			1478.94	uS/cm			FA
pH	9/19/23 10:37	9/19/23 10:37			8.25	SU			FA
Temperature	9/19/23 10:37	9/19/23 10:37			19.27	C			FA
Turbidity	9/19/23 10:37	9/19/23 10:37			3.92	NTU			FA
Sulfide	9/19/23 10:37	9/19/23 10:37			7	mg/L			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/19/23 10:39
Customer ID:
Delivery Date: 9/20/23 11:16

Description: Gorgas Ash Pond - MW-43H

Laboratory ID Number: BD17822

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17826	Aluminum, Dissolved	mg/L	0.000195	0.0198	0.100	0.0957	0.0946	0.0999	0.0850 to 0.115	95.7	70.0 to 130	1.16	20.0
BD17826	Aluminum, Total	mg/L	0.000928	0.0198	0.100	0.0968	0.0962	0.0960	0.0850 to 0.115	96.8	70.0 to 130	0.622	20.0
BD17826	Antimony, Dissolved	mg/L	0.000811	0.00100	0.100	0.0945	0.0944	0.0934	0.0850 to 0.115	94.5	70.0 to 130	0.106	20.0
BD17826	Antimony, Total	mg/L	0.000299	0.00100	0.100	0.105	0.105	0.104	0.0850 to 0.115	105	70.0 to 130	0.00	20.0
BD17826	Arsenic, Dissolved	mg/L	0.0000311	0.000200	0.100	0.114	0.112	0.108	0.0850 to 0.115	103	70.0 to 130	1.77	20.0
BD17826	Arsenic, Total	mg/L	0.0000684	0.000200	0.100	0.130	0.132	0.110	0.0850 to 0.115	109	70.0 to 130	1.53	20.0
BD17826	Barium, Dissolved	mg/L	-0.0000095	0.00100	0.100	0.163	0.162	0.0956	0.0850 to 0.115	95.2	70.0 to 130	0.615	20.0
BD17826	Barium, Total	mg/L	0.0000055	0.00100	0.100	0.165	0.169	0.0992	0.0850 to 0.115	95.4	70.0 to 130	2.40	20.0
BD17826	Beryllium, Dissolved	mg/L	0.0000442	0.000880	0.100	0.104	0.103	0.0959	0.0850 to 0.115	104	70.0 to 130	0.966	20.0
BD17826	Beryllium, Total	mg/L	0.0000828	0.000880	0.100	0.110	0.110	0.103	0.0850 to 0.115	110	70.0 to 130	0.00	20.0
BD17826	Boron, Dissolved	mg/L	-0.000123	0.0650	1.00	1.06	1.06	1.03	0.850 to 1.15	106	70.0 to 130	0.00	20.0
BD17826	Boron, Total	mg/L	0.000491	0.0650	1.00	1.04	1.07	1.04	0.850 to 1.15	104	70.0 to 130	2.84	20.0
BD17826	Cadmium, Dissolved	mg/L	0.0000000	0.000147	0.100	0.101	0.0989	0.101	0.0850 to 0.115	101	70.0 to 130	2.10	20.0
BD17826	Cadmium, Total	mg/L	0.0000063	0.000147	0.100	0.102	0.102	0.106	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BD17826	Calcium, Dissolved	mg/L	-0.00424	0.152	5.00	40.3	39.9	5.03	4.25 to 5.75	120	70.0 to 130	0.998	20.0
BD17826	Calcium, Total	mg/L	-0.00686	0.152	5.00	37.7	38.7	4.91	4.25 to 5.75	74.0	70.0 to 130	2.62	20.0
BD17826	Chloride	mg/L	0.051	1.00	10.0	25.3	25.4	10.6	9.00 to 11.0	85.0	80.0 to 120	0.394	20.0
BD17826	Chromium, Dissolved	mg/L	-0.0000134	0.000440	0.100	0.0984	0.0964	0.101	0.0850 to 0.115	98.1	70.0 to 130	2.05	20.0
BD17826	Chromium, Total	mg/L	0.0000913	0.000440	0.100	0.0989	0.0980	0.100	0.0850 to 0.115	98.6	70.0 to 130	0.914	20.0
BD17826	Cobalt, Dissolved	mg/L	-0.0000014	0.000147	0.100	0.0995	0.0975	0.104	0.0850 to 0.115	99.5	70.0 to 130	2.03	20.0
BD17826	Cobalt, Total	mg/L	-0.0000009	0.000147	0.100	0.101	0.0989	0.104	0.0850 to 0.115	101	70.0 to 130	2.10	20.0
BD17826	Fluoride	mg/L	0.0601	0.125	2.50	2.71	2.69	2.68	2.25 to 2.75	103	80.0 to 120	0.741	20.0
BD17826	Iron, Dissolved	mg/L	-0.00120	0.0176	0.2	1.32	1.32	0.203	0.170 to 0.230	100	70.0 to 130	0.00	20.0
BD17826	Iron, Total	mg/L	-0.000954	0.0176	0.2	2.23	2.25	0.202	0.170 to 0.230	80.0	70.0 to 130	0.893	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/19/23 10:39
Customer ID:
Delivery Date: 9/20/23 11:16

Description: Gorgas Ash Pond - MW-43H

Laboratory ID Number: BD17822

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17826	Lead, Dissolved	mg/L	0.0000047	0.000147	0.100	0.101	0.0991	0.101	0.0850 to 0.115	101	70.0 to 130	1.90	20.0
BD17826	Lead, Total	mg/L	0.0000048	0.000147	0.100	0.102	0.103	0.0999	0.0850 to 0.115	102	70.0 to 130	0.976	20.0
BD17826	Lithium, Dissolved	mg/L	0.000731	0.0154	0.200	0.230	0.229	0.207	0.170 to 0.230	101	70.0 to 130	0.436	20.0
BD17826	Lithium, Total	mg/L	0.000155	0.0154	0.200	0.225	0.231	0.204	0.170 to 0.230	98.6	70.0 to 130	2.63	20.0
BD17826	Magnesium, Dissolved	mg/L	-0.0283	0.0462	5.00	19.8	19.7	5.26	4.25 to 5.75	108	70.0 to 130	0.506	20.0
BD17826	Magnesium, Total	mg/L	-0.00443	0.0462	5.00	19.1	19.4	5.14	4.25 to 5.75	92.0	70.0 to 130	1.56	20.0
BD17826	Manganese, Dissolved	mg/L	0.0000088	0.00033	0.100	0.152	0.150	0.102	0.0850 to 0.115	96.8	70.0 to 130	1.32	20.0
BD17826	Manganese, Total	mg/L	0.0000062	0.00033	0.100	0.151	0.148	0.100	0.0850 to 0.115	98.8	70.0 to 130	2.01	20.0
BD17826	Mercury, Total by CVAA	mg/L	3.000E-05	0.000500	0.004	0.00396	0.00402	0.00403	0.00340 to 0.00460	99.0	70.0 to 130	1.50	20.0
BD17826	Molybdenum, Dissolved	mg/L	0.00116	0.0100	0.2	0.201	0.203	0.202	0.170 to 0.230	100	70.0 to 130	0.990	20.0
BD17826	Molybdenum, Total	mg/L	0.002	0.0100	0.2	0.198	0.203	0.203	0.170 to 0.230	99.0	70.0 to 130	2.49	20.0
BD17826	Potassium, Dissolved	mg/L	0.00592	0.367	10.0	11.0	10.8	10.1	8.50 to 11.5	96.3	70.0 to 130	1.83	20.0
BD17826	Potassium, Total	mg/L	0.0118	0.367	10.0	10.9	10.9	9.82	8.50 to 11.5	95.8	70.0 to 130	0.00	20.0
BD17826	Selenium, Dissolved	mg/L	0.0000140	0.00100	0.100	0.104	0.101	0.107	0.0850 to 0.115	104	70.0 to 130	2.93	20.0
BD17826	Selenium, Total	mg/L	0.0000754	0.00100	0.100	0.105	0.106	0.105	0.0850 to 0.115	105	70.0 to 130	0.948	20.0
BD17826	Silicon, Dissolved	mg/L	0.00203	0.0440	1.00	13.2	13.1	1.04	0.850 to 1.15	120	70.0 to 130	0.760	20.0
BD17826	Silicon, Total	mg/L	0.00143	0.0440	1.00	13.1	13.2	1.03	0.850 to 1.15	90.0	70.0 to 130	0.760	20.0
BD17826	Sodium, Dissolved	mg/L	0.00446	0.0880	5.00	24.7	24.5	5.26	4.25 to 5.75	106	70.0 to 130	0.813	20.0
BD17826	Sodium, Total	mg/L	0.00438	0.0880	5.00	22.6	22.9	5.16	4.25 to 5.75	92.0	70.0 to 130	1.32	20.0
BD17823	Sulfate	mg/L	0.0186	2.0	20.0	42.3	41.8	18.7	18.0 to 22.0	93.5	80.0 to 120	1.19	20.0
BD17826	Thallium, Dissolved	mg/L	-0.0000003	0.000147	0.100	0.103	0.101	0.102	0.0850 to 0.115	103	70.0 to 130	1.96	20.0
BD17826	Thallium, Total	mg/L	0.0000121	0.000147	0.100	0.105	0.105	0.103	0.0850 to 0.115	105	70.0 to 130	0.00	20.0
BD17826	Total Organic Carbon	mg/L	0.215	1.00	10.0	10.5	10.6	9.79		105	80.0 to 120	0.948	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/19/23 10:39
Customer ID:
Delivery Date: 9/20/23 11:16

Description: Gorgas Ash Pond - MW-43H

Laboratory ID Number: BD17822

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17836	Alkalinity	mg CaCO3/L					222	52.9	45.0 to 55.0			1.82	10.0
BD17826	Nitrogen, Nitrate/Nitrite	mg/L as N	0.03	0.200	2.00	1.94	0.058	1.89	1.80 to 2.20	97.0	90.0 to 110	0.00	15.0
BD17824	Solids, Dissolved	mg/L	0.0000	25.0			2200	51.0	40.0 to 60.0			0.913	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 10/25/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-25HA

Location Code: WMWGORAP
Collected: 9/18/23 13:52
Customer ID:
Submittal Date: 9/20/23 11:17

Laboratory ID Number: BD17823

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	9/21/23 06:53	9/21/23 16:21		1.015	0.156	mg/L	0.030000	0.1015	
* Calcium, Total	9/21/23 06:53	9/21/23 16:21		1.015	2.05	mg/L	0.070035	0.406	
* Iron, Total	9/21/23 06:53	9/21/23 16:21		1.015	0.0657	mg/L	0.008120	0.0406	
* Lithium, Total	9/21/23 06:53	9/21/23 16:21		1.015	0.0574	mg/L	0.007105	0.01999956	
* Magnesium, Total	9/21/23 06:53	9/21/23 16:21		1.015	0.576	mg/L	0.021315	0.406	
* Molybdenum, Total	9/21/23 06:53	9/21/23 16:21		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Total (calc.)	9/21/23 06:53	9/21/23 16:21		1	10.7	mg/L			
* Silicon, Total	9/21/23 06:53	9/21/23 16:21		1.015	5.01	mg/L	0.02030	0.25375	
* Sodium, Total	9/21/23 06:53	9/21/23 19:10		10.15	341	mg/L	0.4060	4.06	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	9/20/23 15:27	9/21/23 14:52		1.015	0.154	mg/L	0.030000	0.1015	
* Calcium, Dissolved	9/20/23 15:27	9/21/23 14:52		1.015	2.62	mg/L	0.070035	0.406	
* Iron, Dissolved	9/20/23 15:27	9/21/23 14:52		1.015	0.0192	mg/L	0.008120	0.0406	J
* Lithium, Dissolved	9/20/23 15:27	9/21/23 14:52		1.015	0.0578	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	9/20/23 15:27	9/21/23 14:52		1.015	0.657	mg/L	0.021315	0.406	
* Molybdenum, Dissolved	9/20/23 15:27	9/21/23 14:52		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Dissolved (calc.)	9/20/23 15:27	9/21/23 14:52		1	10.4	mg/L			
* Silicon, Dissolved	9/20/23 15:27	9/21/23 14:52		1.015	4.84	mg/L	0.02030	0.25375	
* Sodium, Dissolved	9/20/23 15:27	9/21/23 18:06		10.15	372	mg/L	0.4060	4.06	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	9/21/23 06:53	9/21/23 13:46		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Total	9/21/23 06:53	9/21/23 13:46		1.015	0.118	mg/L	0.009135	0.05075	
* Arsenic, Total	9/21/23 06:53	9/21/23 13:46		1.015	0.00944	mg/L	0.000112	0.000203	
* Barium, Total	9/21/23 06:53	9/21/23 13:46		1.015	0.181	mg/L	0.000508	0.001015	
* Beryllium, Total	9/21/23 06:53	9/21/23 13:46		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	9/21/23 06:53	9/21/23 13:46		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	9/21/23 06:53	9/21/23 13:46		1.015	0.000337	mg/L	0.000203	0.001015	J
* Cobalt, Total	9/21/23 06:53	9/21/23 13:46		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	9/21/23 06:53	9/21/23 13:46		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	9/21/23 06:53	9/21/23 13:46		1.015	0.00451	mg/L	0.000152	0.001015	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-25HA

Location Code: WMWGORAP
Collected: 9/18/23 13:52
Customer ID:
Submittal Date: 9/20/23 11:17

Laboratory ID Number: BD17823

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	9/21/23 06:53	9/21/23 13:46		1.015	1.62	mg/L	0.169505	0.5075	
* Selenium, Total	9/21/23 06:53	9/21/23 13:46		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	9/21/23 06:53	9/21/23 13:46		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	9/20/23 15:27	9/21/23 11:53		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	9/20/23 15:27	9/21/23 11:53		1.015	0.0420	mg/L	0.009135	0.05075	J
* Arsenic, Dissolved	9/20/23 15:27	9/21/23 11:53		1.015	0.00885	mg/L	0.000112	0.000203	
* Barium, Dissolved	9/20/23 15:27	9/21/23 11:53		1.015	0.175	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	9/20/23 15:27	9/21/23 11:53		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	9/20/23 15:27	9/21/23 11:53		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	9/20/23 15:27	9/21/23 11:53		1.015	0.000236	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	9/20/23 15:27	9/21/23 11:53		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Dissolved	9/20/23 15:27	9/21/23 11:53		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	9/20/23 15:27	9/21/23 11:53		1.015	0.00492	mg/L	0.000152	0.001015	
* Potassium, Dissolved	9/20/23 15:27	9/21/23 11:53		1.015	2.14	mg/L	0.169505	0.5075	
* Selenium, Dissolved	9/20/23 15:27	9/21/23 11:53		1.015	0.000697	mg/L	0.000508	0.001015	J
* Thallium, Dissolved	9/20/23 15:27	9/21/23 11:53		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	9/21/23 12:12	9/21/23 17:28		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	9/22/23 12:35	9/22/23 12:35		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: JAG***								
Alkalinity pH Endpoint	9/28/23 11:28	9/28/23 12:44		1	4.52	SU		2	
* Alkalinity	9/28/23 11:28	9/28/23 12:44		1	661	mg CaCO3/L		1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	9/20/23 14:45	9/22/23 11:15		1	902	mg/L		50	
Analytical Method: SM 4500CO2 D	***Analyst: JAG***								
* Bicarbonate Alkalinity, (calc.)	9/28/23 11:28	9/28/23 12:44		1	605	mg CaCO3/L		1	A
* Carbonate Alkalinity, (calc.)	9/28/23 11:28	9/28/23 12:44		1	55.6	mg CaCO3/L		0.5	A
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	9/25/23 12:50	9/25/23 12:50		1	9.52	mg/L	1.00	2	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-25HA

Location Code: WMWGORAP
Collected: 9/18/23 13:52
Customer ID:
Submittal Date: 9/20/23 11:17

Laboratory ID Number: BD17823

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	9/25/23 09:48	9/25/23 09:48		2	27.8	mg/L	1.00	2	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	9/25/23 11:31	9/25/23 11:31		1	2.04	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	9/26/23 16:28	9/26/23 16:28		1	23.6	mg/L	0.6	2	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	9/18/23 13:49	9/18/23 13:49			1103.73	uS/cm			FA
pH	9/18/23 13:49	9/18/23 13:49			8.88	SU			FA
Temperature	9/18/23 13:49	9/18/23 13:49			21.09	C			FA
Turbidity	9/18/23 13:49	9/18/23 13:49			4.76	NTU			FA
Sulfide	9/18/23 13:49	9/18/23 13:49			2.0	mg/L			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 10/25/2023
Version: 3.5
COA_CCR

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/18/23 13:52
Customer ID:
Delivery Date: 9/20/23 11:17

Description: Gorgas Ash Pond - MW-25HA

Laboratory ID Number: BD17823

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17826	Aluminum, Dissolved	mg/L	0.000195	0.0198	0.100	0.0957	0.0946	0.0999	0.0850 to 0.115	95.7	70.0 to 130	1.16	20.0
BD17826	Aluminum, Total	mg/L	0.000928	0.0198	0.100	0.0968	0.0962	0.0960	0.0850 to 0.115	96.8	70.0 to 130	0.622	20.0
BD17826	Antimony, Dissolved	mg/L	0.000811	0.00100	0.100	0.0945	0.0944	0.0934	0.0850 to 0.115	94.5	70.0 to 130	0.106	20.0
BD17826	Antimony, Total	mg/L	0.000299	0.00100	0.100	0.105	0.105	0.104	0.0850 to 0.115	105	70.0 to 130	0.00	20.0
BD17826	Arsenic, Dissolved	mg/L	0.0000311	0.000200	0.100	0.114	0.112	0.108	0.0850 to 0.115	103	70.0 to 130	1.77	20.0
BD17826	Arsenic, Total	mg/L	0.0000684	0.000200	0.100	0.130	0.132	0.110	0.0850 to 0.115	109	70.0 to 130	1.53	20.0
BD17826	Barium, Dissolved	mg/L	-0.0000095	0.00100	0.100	0.163	0.162	0.0956	0.0850 to 0.115	95.2	70.0 to 130	0.615	20.0
BD17826	Barium, Total	mg/L	0.0000055	0.00100	0.100	0.165	0.169	0.0992	0.0850 to 0.115	95.4	70.0 to 130	2.40	20.0
BD17826	Beryllium, Dissolved	mg/L	0.0000442	0.000880	0.100	0.104	0.103	0.0959	0.0850 to 0.115	104	70.0 to 130	0.966	20.0
BD17826	Beryllium, Total	mg/L	0.0000828	0.000880	0.100	0.110	0.110	0.103	0.0850 to 0.115	110	70.0 to 130	0.00	20.0
BD17826	Boron, Dissolved	mg/L	-0.000123	0.0650	1.00	1.06	1.06	1.03	0.850 to 1.15	106	70.0 to 130	0.00	20.0
BD17826	Boron, Total	mg/L	0.000491	0.0650	1.00	1.04	1.07	1.04	0.850 to 1.15	104	70.0 to 130	2.84	20.0
BD17826	Cadmium, Dissolved	mg/L	0.0000000	0.000147	0.100	0.101	0.0989	0.101	0.0850 to 0.115	101	70.0 to 130	2.10	20.0
BD17826	Cadmium, Total	mg/L	0.0000063	0.000147	0.100	0.102	0.102	0.106	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BD17826	Calcium, Dissolved	mg/L	-0.00424	0.152	5.00	40.3	39.9	5.03	4.25 to 5.75	120	70.0 to 130	0.998	20.0
BD17826	Calcium, Total	mg/L	-0.00686	0.152	5.00	37.7	38.7	4.91	4.25 to 5.75	74.0	70.0 to 130	2.62	20.0
BD17826	Chloride	mg/L	0.051	1.00	10.0	25.3	25.4	10.6	9.00 to 11.0	85.0	80.0 to 120	0.394	20.0
BD17826	Chromium, Dissolved	mg/L	-0.0000134	0.000440	0.100	0.0984	0.0964	0.101	0.0850 to 0.115	98.1	70.0 to 130	2.05	20.0
BD17826	Chromium, Total	mg/L	0.0000913	0.000440	0.100	0.0989	0.0980	0.100	0.0850 to 0.115	98.6	70.0 to 130	0.914	20.0
BD17826	Cobalt, Dissolved	mg/L	-0.0000014	0.000147	0.100	0.0995	0.0975	0.104	0.0850 to 0.115	99.5	70.0 to 130	2.03	20.0
BD17826	Cobalt, Total	mg/L	-0.0000009	0.000147	0.100	0.101	0.0989	0.104	0.0850 to 0.115	101	70.0 to 130	2.10	20.0
BD17826	Fluoride	mg/L	0.0601	0.125	2.50	2.71	2.69	2.68	2.25 to 2.75	103	80.0 to 120	0.741	20.0
BD17826	Iron, Dissolved	mg/L	-0.00120	0.0176	0.2	1.32	1.32	0.203	0.170 to 0.230	100	70.0 to 130	0.00	20.0
BD17826	Iron, Total	mg/L	-0.000954	0.0176	0.2	2.23	2.25	0.202	0.170 to 0.230	80.0	70.0 to 130	0.893	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/18/23 13:52
Customer ID:
Delivery Date: 9/20/23 11:17

Description: Gorgas Ash Pond - MW-25HA

Laboratory ID Number: BD17823

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17826	Lead, Dissolved	mg/L	0.0000047	0.000147	0.100	0.101	0.0991	0.101	0.0850 to 0.115	101	70.0 to 130	1.90	20.0
BD17826	Lead, Total	mg/L	0.0000048	0.000147	0.100	0.102	0.103	0.0999	0.0850 to 0.115	102	70.0 to 130	0.976	20.0
BD17826	Lithium, Dissolved	mg/L	0.000731	0.0154	0.200	0.230	0.229	0.207	0.170 to 0.230	101	70.0 to 130	0.436	20.0
BD17826	Lithium, Total	mg/L	0.000155	0.0154	0.200	0.225	0.231	0.204	0.170 to 0.230	98.6	70.0 to 130	2.63	20.0
BD17826	Magnesium, Dissolved	mg/L	-0.0283	0.0462	5.00	19.8	19.7	5.26	4.25 to 5.75	108	70.0 to 130	0.506	20.0
BD17826	Magnesium, Total	mg/L	-0.00443	0.0462	5.00	19.1	19.4	5.14	4.25 to 5.75	92.0	70.0 to 130	1.56	20.0
BD17826	Manganese, Dissolved	mg/L	0.0000088	0.00033	0.100	0.152	0.150	0.102	0.0850 to 0.115	96.8	70.0 to 130	1.32	20.0
BD17826	Manganese, Total	mg/L	0.0000062	0.00033	0.100	0.151	0.148	0.100	0.0850 to 0.115	98.8	70.0 to 130	2.01	20.0
BD17826	Mercury, Total by CVAA	mg/L	3.000E-05	0.000500	0.004	0.00396	0.00402	0.00403	0.00340 to 0.00460	99.0	70.0 to 130	1.50	20.0
BD17826	Molybdenum, Dissolved	mg/L	0.00116	0.0100	0.2	0.201	0.203	0.202	0.170 to 0.230	100	70.0 to 130	0.990	20.0
BD17826	Molybdenum, Total	mg/L	0.002	0.0100	0.2	0.198	0.203	0.203	0.170 to 0.230	99.0	70.0 to 130	2.49	20.0
BD17826	Potassium, Dissolved	mg/L	0.00592	0.367	10.0	11.0	10.8	10.1	8.50 to 11.5	96.3	70.0 to 130	1.83	20.0
BD17826	Potassium, Total	mg/L	0.0118	0.367	10.0	10.9	10.9	9.82	8.50 to 11.5	95.8	70.0 to 130	0.00	20.0
BD17826	Selenium, Dissolved	mg/L	0.0000140	0.00100	0.100	0.104	0.101	0.107	0.0850 to 0.115	104	70.0 to 130	2.93	20.0
BD17826	Selenium, Total	mg/L	0.0000754	0.00100	0.100	0.105	0.106	0.105	0.0850 to 0.115	105	70.0 to 130	0.948	20.0
BD17826	Silicon, Dissolved	mg/L	0.00203	0.0440	1.00	13.2	13.1	1.04	0.850 to 1.15	120	70.0 to 130	0.760	20.0
BD17826	Silicon, Total	mg/L	0.00143	0.0440	1.00	13.1	13.2	1.03	0.850 to 1.15	90.0	70.0 to 130	0.760	20.0
BD17826	Sodium, Dissolved	mg/L	0.00446	0.0880	5.00	24.7	24.5	5.26	4.25 to 5.75	106	70.0 to 130	0.813	20.0
BD17826	Sodium, Total	mg/L	0.00438	0.0880	5.00	22.6	22.9	5.16	4.25 to 5.75	92.0	70.0 to 130	1.32	20.0
BD17823	Sulfate	mg/L	0.0186	2.0	20.0	42.3	41.8	18.7	18.0 to 22.0	93.5	80.0 to 120	1.19	20.0
BD17826	Thallium, Dissolved	mg/L	-0.0000003	0.000147	0.100	0.103	0.101	0.102	0.0850 to 0.115	103	70.0 to 130	1.96	20.0
BD17826	Thallium, Total	mg/L	0.0000121	0.000147	0.100	0.105	0.105	0.103	0.0850 to 0.115	105	70.0 to 130	0.00	20.0
BD17826	Total Organic Carbon	mg/L	0.215	1.00	10.0	10.5	10.6	9.79		105	80.0 to 120	0.948	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/18/23 13:52
Customer ID:
Delivery Date: 9/20/23 11:17

Description: Gorgas Ash Pond - MW-25HA

Laboratory ID Number: BD17823

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17836	Alkalinity	mg CaCO3/L					222	52.9	45.0 to 55.0			1.82	10.0
BD17826	Nitrogen, Nitrate/Nitrite	mg/L as N	0.03	0.200	2.00	1.94	0.058	1.89	1.80 to 2.20	97.0	90.0 to 110	0.00	15.0
BD17824	Solids, Dissolved	mg/L	0.0000	25.0			2200	51.0	40.0 to 60.0			0.913	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-45V

Location Code: WMWGORAP
Collected: 9/18/23 15:50
Customer ID:
Submittal Date: 9/20/23 11:17

Laboratory ID Number: BD17824

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	9/21/23 06:53	9/21/23 16:24		1.015	0.0954	mg/L	0.030000	0.1015	J
* Calcium, Total	9/21/23 06:53	9/21/23 19:13		10.15	43.3	mg/L	0.70035	4.06	
* Iron, Total	9/21/23 06:53	9/21/23 16:24		1.015	0.722	mg/L	0.008120	0.0406	
* Lithium, Total	9/21/23 06:53	9/21/23 16:24		1.015	0.0931	mg/L	0.007105	0.01999956	
* Magnesium, Total	9/21/23 06:53	9/21/23 16:24		1.015	14.1	mg/L	0.021315	0.406	
* Molybdenum, Total	9/21/23 06:53	9/21/23 16:24		1.015	0.0326	mg/L	0.005075	0.01015	
* Silica, Total (calc.)	9/21/23 06:53	9/21/23 16:24		1	13.0	mg/L			
* Silicon, Total	9/21/23 06:53	9/21/23 16:24		1.015	6.08	mg/L	0.02030	0.25375	
* Sodium, Total	9/21/23 06:53	9/21/23 19:17		101.5	618	mg/L	4.060	40.6	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	9/20/23 15:27	9/21/23 14:56		1.015	0.0845	mg/L	0.030000	0.1015	J
* Calcium, Dissolved	9/20/23 15:27	9/21/23 14:56		1.015	35.9	mg/L	0.070035	0.406	
* Iron, Dissolved	9/20/23 15:27	9/21/23 14:56		1.015	0.416	mg/L	0.008120	0.0406	
* Lithium, Dissolved	9/20/23 15:27	9/21/23 14:56		1.015	0.0892	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	9/20/23 15:27	9/21/23 14:56		1.015	12.2	mg/L	0.021315	0.406	
* Molybdenum, Dissolved	9/20/23 15:27	9/21/23 14:56		1.015	0.0266	mg/L	0.005075	0.01015	
* Silica, Dissolved (calc.)	9/20/23 15:27	9/21/23 14:56		1	12.7	mg/L			
* Silicon, Dissolved	9/20/23 15:27	9/21/23 14:56		1.015	5.94	mg/L	0.02030	0.25375	
* Sodium, Dissolved	9/20/23 15:27	9/21/23 18:09		101.5	570	mg/L	4.060	40.6	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	9/21/23 06:53	9/21/23 13:50		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Arsenic, Total	9/21/23 06:53	9/21/23 13:50		1.015	0.00200	mg/L	0.000112	0.000203	
* Aluminum, Total	9/21/23 06:53	9/21/23 13:50		1.015	0.00925	mg/L	0.009135	0.05075	J
* Barium, Total	9/21/23 06:53	9/21/23 13:50		1.015	0.0851	mg/L	0.000508	0.001015	
* Beryllium, Total	9/21/23 06:53	9/21/23 13:50		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	9/21/23 06:53	9/21/23 13:50		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	9/21/23 06:53	9/21/23 13:50		1.015	0.000372	mg/L	0.000203	0.001015	J
* Cobalt, Total	9/21/23 06:53	9/21/23 13:50		1.015	0.000125	mg/L	0.000068	0.000203	J
* Lead, Total	9/21/23 06:53	9/21/23 13:50		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	9/21/23 06:53	9/21/23 13:50		1.015	0.0779	mg/L	0.000152	0.001015	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-45V

Location Code: WMWGORAP
Collected: 9/18/23 15:50
Customer ID:
Submittal Date: 9/20/23 11:17

Laboratory ID Number: BD17824

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	9/21/23 06:53	9/21/23 13:50		1.015	57.1	mg/L	0.169505	0.5075	
* Selenium, Total	9/21/23 06:53	9/21/23 13:50		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	9/21/23 06:53	9/21/23 13:50		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	9/20/23 15:27	9/21/23 11:56		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	9/20/23 15:27	9/21/23 11:56		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Dissolved	9/20/23 15:27	9/21/23 11:56		1.015	0.00132	mg/L	0.000112	0.000203	
* Barium, Dissolved	9/20/23 15:27	9/21/23 11:56		1.015	0.0727	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	9/20/23 15:27	9/21/23 11:56		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	9/20/23 15:27	9/21/23 11:56		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	9/20/23 15:27	9/21/23 11:56		1.015	0.000225	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	9/20/23 15:27	9/21/23 11:56		1.015	0.0000722	mg/L	0.000068	0.000203	J
* Lead, Dissolved	9/20/23 15:27	9/21/23 11:56		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	9/20/23 15:27	9/21/23 11:56		1.015	0.0715	mg/L	0.000152	0.001015	
* Potassium, Dissolved	9/20/23 15:27	9/21/23 11:56		1.015	48.4	mg/L	0.169505	0.5075	
* Selenium, Dissolved	9/20/23 15:27	9/21/23 11:56		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	9/20/23 15:27	9/21/23 11:56		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	9/21/23 12:12	9/21/23 17:32		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	9/22/23 12:37	9/22/23 12:37		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: JAG***								
Alkalinity pH Endpoint	9/28/23 11:28	9/28/23 12:44		1	4.55	SU		2	
* Alkalinity	9/28/23 11:28	9/28/23 12:44		1	295	mg CaCO3/L		1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	9/20/23 14:45	9/22/23 11:15		1	2180	mg/L		147.1	
Analytical Method: SM 4500CO2 D	***Analyst: JAG***								
* Bicarbonate Alkalinity, (calc.)	9/28/23 11:28	9/28/23 12:44		1	293	mg CaCO3/L		1	A
* Carbonate Alkalinity, (calc.)	9/28/23 11:28	9/28/23 12:44		1	1.74	mg CaCO3/L		0.5	A
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	9/25/23 13:04	9/25/23 13:04		1	12.9	mg/L	1.00	2	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-45V

Location Code: WMWGORAP
Collected: 9/18/23 15:50
Customer ID:
Submittal Date: 9/20/23 11:17

Laboratory ID Number: BD17824

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	9/25/23 09:49	9/25/23 09:49		25	425	mg/L	12.50	25	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	9/25/23 11:32	9/25/23 11:32		1	0.302	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	9/27/23 10:36	9/27/23 10:36		40	746	mg/L	24.0	80	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	9/18/23 15:47	9/18/23 15:47			2406.40	uS/cm			FA
pH	9/18/23 15:47	9/18/23 15:47			7.44	SU			FA
Temperature	9/18/23 15:47	9/18/23 15:47			19.78	C			FA
Turbidity	9/18/23 15:47	9/18/23 15:47			1.65	NTU			FA
Sulfide	9/18/23 15:47	9/18/23 15:47			4.0	mg/L			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/18/23 15:50
Customer ID:
Delivery Date: 9/20/23 11:17

Description: Gorgas Ash Pond - MW-45V

Laboratory ID Number: BD17824

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17826	Aluminum, Dissolved	mg/L	0.000195	0.0198	0.100	0.0957	0.0946	0.0999	0.0850 to 0.115	95.7	70.0 to 130	1.16	20.0
BD17826	Aluminum, Total	mg/L	0.000928	0.0198	0.100	0.0968	0.0962	0.0960	0.0850 to 0.115	96.8	70.0 to 130	0.622	20.0
BD17826	Antimony, Dissolved	mg/L	0.000811	0.00100	0.100	0.0945	0.0944	0.0934	0.0850 to 0.115	94.5	70.0 to 130	0.106	20.0
BD17826	Antimony, Total	mg/L	0.000299	0.00100	0.100	0.105	0.105	0.104	0.0850 to 0.115	105	70.0 to 130	0.00	20.0
BD17826	Arsenic, Dissolved	mg/L	0.0000311	0.000200	0.100	0.114	0.112	0.108	0.0850 to 0.115	103	70.0 to 130	1.77	20.0
BD17826	Arsenic, Total	mg/L	0.0000684	0.000200	0.100	0.130	0.132	0.110	0.0850 to 0.115	109	70.0 to 130	1.53	20.0
BD17826	Barium, Dissolved	mg/L	-0.0000095	0.00100	0.100	0.163	0.162	0.0956	0.0850 to 0.115	95.2	70.0 to 130	0.615	20.0
BD17826	Barium, Total	mg/L	0.0000055	0.00100	0.100	0.165	0.169	0.0992	0.0850 to 0.115	95.4	70.0 to 130	2.40	20.0
BD17826	Beryllium, Dissolved	mg/L	0.0000442	0.000880	0.100	0.104	0.103	0.0959	0.0850 to 0.115	104	70.0 to 130	0.966	20.0
BD17826	Beryllium, Total	mg/L	0.0000828	0.000880	0.100	0.110	0.110	0.103	0.0850 to 0.115	110	70.0 to 130	0.00	20.0
BD17826	Boron, Dissolved	mg/L	-0.000123	0.0650	1.00	1.06	1.06	1.03	0.850 to 1.15	106	70.0 to 130	0.00	20.0
BD17826	Boron, Total	mg/L	0.000491	0.0650	1.00	1.04	1.07	1.04	0.850 to 1.15	104	70.0 to 130	2.84	20.0
BD17826	Cadmium, Dissolved	mg/L	0.0000000	0.000147	0.100	0.101	0.0989	0.101	0.0850 to 0.115	101	70.0 to 130	2.10	20.0
BD17826	Cadmium, Total	mg/L	0.0000063	0.000147	0.100	0.102	0.102	0.106	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BD17826	Calcium, Dissolved	mg/L	-0.00424	0.152	5.00	40.3	39.9	5.03	4.25 to 5.75	120	70.0 to 130	0.998	20.0
BD17826	Calcium, Total	mg/L	-0.00686	0.152	5.00	37.7	38.7	4.91	4.25 to 5.75	74.0	70.0 to 130	2.62	20.0
BD17826	Chloride	mg/L	0.051	1.00	10.0	25.3	25.4	10.6	9.00 to 11.0	85.0	80.0 to 120	0.394	20.0
BD17826	Chromium, Dissolved	mg/L	-0.0000134	0.000440	0.100	0.0984	0.0964	0.101	0.0850 to 0.115	98.1	70.0 to 130	2.05	20.0
BD17826	Chromium, Total	mg/L	0.0000913	0.000440	0.100	0.0989	0.0980	0.100	0.0850 to 0.115	98.6	70.0 to 130	0.914	20.0
BD17826	Cobalt, Dissolved	mg/L	-0.0000014	0.000147	0.100	0.0995	0.0975	0.104	0.0850 to 0.115	99.5	70.0 to 130	2.03	20.0
BD17826	Cobalt, Total	mg/L	-0.0000009	0.000147	0.100	0.101	0.0989	0.104	0.0850 to 0.115	101	70.0 to 130	2.10	20.0
BD17826	Fluoride	mg/L	0.0601	0.125	2.50	2.71	2.69	2.68	2.25 to 2.75	103	80.0 to 120	0.741	20.0
BD17826	Iron, Dissolved	mg/L	-0.00120	0.0176	0.2	1.32	1.32	0.203	0.170 to 0.230	100	70.0 to 130	0.00	20.0
BD17826	Iron, Total	mg/L	-0.000954	0.0176	0.2	2.23	2.25	0.202	0.170 to 0.230	80.0	70.0 to 130	0.893	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/18/23 15:50
Customer ID:
Delivery Date: 9/20/23 11:17

Description: Gorgas Ash Pond - MW-45V

Laboratory ID Number: BD17824

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17826	Lead, Dissolved	mg/L	0.0000047	0.000147	0.100	0.101	0.0991	0.101	0.0850 to 0.115	101	70.0 to 130	1.90	20.0
BD17826	Lead, Total	mg/L	0.0000048	0.000147	0.100	0.102	0.103	0.0999	0.0850 to 0.115	102	70.0 to 130	0.976	20.0
BD17826	Lithium, Dissolved	mg/L	0.000731	0.0154	0.200	0.230	0.229	0.207	0.170 to 0.230	101	70.0 to 130	0.436	20.0
BD17826	Lithium, Total	mg/L	0.000155	0.0154	0.200	0.225	0.231	0.204	0.170 to 0.230	98.6	70.0 to 130	2.63	20.0
BD17826	Magnesium, Dissolved	mg/L	-0.0283	0.0462	5.00	19.8	19.7	5.26	4.25 to 5.75	108	70.0 to 130	0.506	20.0
BD17826	Magnesium, Total	mg/L	-0.00443	0.0462	5.00	19.1	19.4	5.14	4.25 to 5.75	92.0	70.0 to 130	1.56	20.0
BD17826	Manganese, Dissolved	mg/L	0.0000088	0.00033	0.100	0.152	0.150	0.102	0.0850 to 0.115	96.8	70.0 to 130	1.32	20.0
BD17826	Manganese, Total	mg/L	0.0000062	0.00033	0.100	0.151	0.148	0.100	0.0850 to 0.115	98.8	70.0 to 130	2.01	20.0
BD17826	Mercury, Total by CVAA	mg/L	3.000E-05	0.000500	0.004	0.00396	0.00402	0.00403	0.00340 to 0.00460	99.0	70.0 to 130	1.50	20.0
BD17826	Molybdenum, Dissolved	mg/L	0.00116	0.0100	0.2	0.201	0.203	0.202	0.170 to 0.230	100	70.0 to 130	0.990	20.0
BD17826	Molybdenum, Total	mg/L	0.002	0.0100	0.2	0.198	0.203	0.203	0.170 to 0.230	99.0	70.0 to 130	2.49	20.0
BD17826	Potassium, Dissolved	mg/L	0.00592	0.367	10.0	11.0	10.8	10.1	8.50 to 11.5	96.3	70.0 to 130	1.83	20.0
BD17826	Potassium, Total	mg/L	0.0118	0.367	10.0	10.9	10.9	9.82	8.50 to 11.5	95.8	70.0 to 130	0.00	20.0
BD17826	Selenium, Dissolved	mg/L	0.0000140	0.00100	0.100	0.104	0.101	0.107	0.0850 to 0.115	104	70.0 to 130	2.93	20.0
BD17826	Selenium, Total	mg/L	0.0000754	0.00100	0.100	0.105	0.106	0.105	0.0850 to 0.115	105	70.0 to 130	0.948	20.0
BD17826	Silicon, Dissolved	mg/L	0.00203	0.0440	1.00	13.2	13.1	1.04	0.850 to 1.15	120	70.0 to 130	0.760	20.0
BD17826	Silicon, Total	mg/L	0.00143	0.0440	1.00	13.1	13.2	1.03	0.850 to 1.15	90.0	70.0 to 130	0.760	20.0
BD17826	Sodium, Dissolved	mg/L	0.00446	0.0880	5.00	24.7	24.5	5.26	4.25 to 5.75	106	70.0 to 130	0.813	20.0
BD17826	Sodium, Total	mg/L	0.00438	0.0880	5.00	22.6	22.9	5.16	4.25 to 5.75	92.0	70.0 to 130	1.32	20.0
BD17833	Sulfate	mg/L	-0.0276	2.0	640	1050	1010	20.0	18.0 to 22.0	111	80.0 to 120	3.88	20.0
BD17826	Thallium, Dissolved	mg/L	-0.0000003	0.000147	0.100	0.103	0.101	0.102	0.0850 to 0.115	103	70.0 to 130	1.96	20.0
BD17826	Thallium, Total	mg/L	0.0000121	0.000147	0.100	0.105	0.105	0.103	0.0850 to 0.115	105	70.0 to 130	0.00	20.0
BD17826	Total Organic Carbon	mg/L	0.215	1.00	10.0	10.5	10.6	9.79		105	80.0 to 120	0.948	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/18/23 15:50
Customer ID:
Delivery Date: 9/20/23 11:17

Description: Gorgas Ash Pond - MW-45V

Laboratory ID Number: BD17824

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17836	Alkalinity	mg CaCO3/L					222	52.9	45.0 to 55.0			1.82	10.0
BD17826	Nitrogen, Nitrate/Nitrite	mg/L as N	0.03	0.200	2.00	1.94	0.058	1.89	1.80 to 2.20	97.0	90.0 to 110	0.00	15.0
BD17824	Solids, Dissolved	mg/L	0.0000	25.0			2200	51.0	40.0 to 60.0			0.913	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-10R

Location Code: WMWGORAP
Collected: 9/19/23 09:51
Customer ID:
Submittal Date: 9/20/23 11:17

Laboratory ID Number: BD17825

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	9/21/23 06:53	9/21/23 16:27		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	9/21/23 06:53	9/21/23 16:27		1.015	39.6	mg/L	0.070035	0.406	
* Iron, Total	9/21/23 06:53	9/21/23 16:27		1.015	0.430	mg/L	0.008120	0.0406	
* Lithium, Total	9/21/23 06:53	9/21/23 16:27		1.015	0.0393	mg/L	0.007105	0.01999956	
* Magnesium, Total	9/21/23 06:53	9/21/23 16:27		1.015	16.2	mg/L	0.021315	0.406	
* Molybdenum, Total	9/21/23 06:53	9/21/23 16:27		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Total (calc.)	9/21/23 06:53	9/21/23 16:27		1	26.5	mg/L			
* Silicon, Total	9/21/23 06:53	9/21/23 16:27		1.015	12.4	mg/L	0.02030	0.25375	
* Sodium, Total	9/21/23 06:53	9/21/23 16:27		1.015	31.3	mg/L	0.04060	0.406	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	9/20/23 15:27	9/21/23 14:59		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Dissolved	9/20/23 15:27	9/21/23 14:59		1.015	39.2	mg/L	0.070035	0.406	
* Iron, Dissolved	9/20/23 15:27	9/21/23 14:59		1.015	0.338	mg/L	0.008120	0.0406	
* Lithium, Dissolved	9/20/23 15:27	9/21/23 14:59		1.015	0.0385	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	9/20/23 15:27	9/21/23 14:59		1.015	16.0	mg/L	0.021315	0.406	
* Molybdenum, Dissolved	9/20/23 15:27	9/21/23 14:59		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Dissolved (calc.)	9/20/23 15:27	9/21/23 14:59		1	26.3	mg/L			
* Silicon, Dissolved	9/20/23 15:27	9/21/23 14:59		1.015	12.3	mg/L	0.02030	0.25375	
* Sodium, Dissolved	9/20/23 15:27	9/21/23 14:59		1.015	31.2	mg/L	0.04060	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	9/21/23 06:53	9/21/23 13:54		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Total	9/21/23 06:53	9/21/23 13:54		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Total	9/21/23 06:53	9/21/23 13:54		1.015	0.000470	mg/L	0.000112	0.000203	
* Barium, Total	9/21/23 06:53	9/21/23 13:54		1.015	0.608	mg/L	0.000508	0.001015	
* Beryllium, Total	9/21/23 06:53	9/21/23 13:54		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	9/21/23 06:53	9/21/23 13:54		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	9/21/23 06:53	9/21/23 13:54		1.015	0.000306	mg/L	0.000203	0.001015	J
* Cobalt, Total	9/21/23 06:53	9/21/23 13:54		1.015	0.0000950	mg/L	0.000068	0.000203	J
* Lead, Total	9/21/23 06:53	9/21/23 13:54		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	9/21/23 06:53	9/21/23 13:54		1.015	0.0416	mg/L	0.000152	0.001015	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-10R

Location Code: WMWGORAP
Collected: 9/19/23 09:51
Customer ID:
Submittal Date: 9/20/23 11:17

Laboratory ID Number: BD17825

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	9/21/23 06:53	9/21/23 13:54		1.015	4.75	mg/L	0.169505	0.5075	
* Selenium, Total	9/21/23 06:53	9/21/23 13:54		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	9/21/23 06:53	9/21/23 13:54		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	9/20/23 15:27	9/21/23 12:00		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	9/20/23 15:27	9/21/23 12:00		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Dissolved	9/20/23 15:27	9/21/23 12:00		1.015	0.000247	mg/L	0.000112	0.000203	
* Barium, Dissolved	9/20/23 15:27	9/21/23 12:00		1.015	0.535	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	9/20/23 15:27	9/21/23 12:00		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	9/20/23 15:27	9/21/23 12:00		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	9/20/23 15:27	9/21/23 12:00		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	9/20/23 15:27	9/21/23 12:00		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Dissolved	9/20/23 15:27	9/21/23 12:00		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	9/20/23 15:27	9/21/23 12:00		1.015	0.0357	mg/L	0.000152	0.001015	
* Potassium, Dissolved	9/20/23 15:27	9/21/23 12:00		1.015	4.67	mg/L	0.169505	0.5075	
* Selenium, Dissolved	9/20/23 15:27	9/21/23 12:00		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	9/20/23 15:27	9/21/23 12:00		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	9/21/23 12:12	9/21/23 17:36		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	9/22/23 12:39	9/22/23 12:39		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: JAG***								
Alkalinity pH Endpoint	9/28/23 11:28	9/28/23 12:44		1	4.48	SU		2	
* Alkalinity	9/28/23 11:28	9/28/23 12:44		1	203	mg CaCO3/L		1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	9/20/23 14:45	9/22/23 11:15		1	289	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: JAG***								
* Bicarbonate Alkalinity, (calc.)	9/28/23 11:28	9/28/23 12:44		1	203	mg CaCO3/L		1	
* Carbonate Alkalinity, (calc.)	9/28/23 11:28	9/28/23 12:44		1	Not Detected	mg CaCO3/L		0.5	
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	9/25/23 13:19	9/25/23 13:19		1	Not Detected	mg/L	1.00	2	U

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-10R

Location Code: WMWGORAP
Collected: 9/19/23 09:51
Customer ID:
Submittal Date: 9/20/23 11:17

Laboratory ID Number: BD17825

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	9/25/23 09:39	9/25/23 09:39		1	18.6	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	9/25/23 11:34	9/25/23 11:34		1	0.263	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	9/27/23 10:38	9/27/23 10:38		1	17.0	mg/L	0.6	2	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	9/19/23 09:48	9/19/23 09:48			362.75	uS/cm			FA
pH	9/19/23 09:48	9/19/23 09:48			6.87	SU			FA
Temperature	9/19/23 09:48	9/19/23 09:48			19.03	C			FA
Turbidity	9/19/23 09:48	9/19/23 09:48			0.98	NTU			FA
Sulfide	9/19/23 09:48	9/19/23 09:48			0	mg/L			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 10/25/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/19/23 09:51
Customer ID:
Delivery Date: 9/20/23 11:17

Description: Gorgas Ash Pond - MW-10R

Laboratory ID Number: BD17825

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17826	Aluminum, Dissolved	mg/L	0.000195	0.0198	0.100	0.0957	0.0946	0.0999	0.0850 to 0.115	95.7	70.0 to 130	1.16	20.0
BD17826	Aluminum, Total	mg/L	0.000928	0.0198	0.100	0.0968	0.0962	0.0960	0.0850 to 0.115	96.8	70.0 to 130	0.622	20.0
BD17826	Antimony, Dissolved	mg/L	0.000811	0.00100	0.100	0.0945	0.0944	0.0934	0.0850 to 0.115	94.5	70.0 to 130	0.106	20.0
BD17826	Antimony, Total	mg/L	0.000299	0.00100	0.100	0.105	0.105	0.104	0.0850 to 0.115	105	70.0 to 130	0.00	20.0
BD17826	Arsenic, Dissolved	mg/L	0.0000311	0.000200	0.100	0.114	0.112	0.108	0.0850 to 0.115	103	70.0 to 130	1.77	20.0
BD17826	Arsenic, Total	mg/L	0.0000684	0.000200	0.100	0.130	0.132	0.110	0.0850 to 0.115	109	70.0 to 130	1.53	20.0
BD17826	Barium, Dissolved	mg/L	-0.0000095	0.00100	0.100	0.163	0.162	0.0956	0.0850 to 0.115	95.2	70.0 to 130	0.615	20.0
BD17826	Barium, Total	mg/L	0.0000055	0.00100	0.100	0.165	0.169	0.0992	0.0850 to 0.115	95.4	70.0 to 130	2.40	20.0
BD17826	Beryllium, Dissolved	mg/L	0.0000442	0.000880	0.100	0.104	0.103	0.0959	0.0850 to 0.115	104	70.0 to 130	0.966	20.0
BD17826	Beryllium, Total	mg/L	0.0000828	0.000880	0.100	0.110	0.110	0.103	0.0850 to 0.115	110	70.0 to 130	0.00	20.0
BD17826	Boron, Dissolved	mg/L	-0.000123	0.0650	1.00	1.06	1.06	1.03	0.850 to 1.15	106	70.0 to 130	0.00	20.0
BD17826	Boron, Total	mg/L	0.000491	0.0650	1.00	1.04	1.07	1.04	0.850 to 1.15	104	70.0 to 130	2.84	20.0
BD17826	Cadmium, Dissolved	mg/L	0.0000000	0.000147	0.100	0.101	0.0989	0.101	0.0850 to 0.115	101	70.0 to 130	2.10	20.0
BD17826	Cadmium, Total	mg/L	0.0000063	0.000147	0.100	0.102	0.102	0.106	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BD17826	Calcium, Dissolved	mg/L	-0.00424	0.152	5.00	40.3	39.9	5.03	4.25 to 5.75	120	70.0 to 130	0.998	20.0
BD17826	Calcium, Total	mg/L	-0.00686	0.152	5.00	37.7	38.7	4.91	4.25 to 5.75	74.0	70.0 to 130	2.62	20.0
BD17826	Chloride	mg/L	0.051	1.00	10.0	25.3	25.4	10.6	9.00 to 11.0	85.0	80.0 to 120	0.394	20.0
BD17826	Chromium, Dissolved	mg/L	-0.0000134	0.000440	0.100	0.0984	0.0964	0.101	0.0850 to 0.115	98.1	70.0 to 130	2.05	20.0
BD17826	Chromium, Total	mg/L	0.0000913	0.000440	0.100	0.0989	0.0980	0.100	0.0850 to 0.115	98.6	70.0 to 130	0.914	20.0
BD17826	Cobalt, Dissolved	mg/L	-0.0000014	0.000147	0.100	0.0995	0.0975	0.104	0.0850 to 0.115	99.5	70.0 to 130	2.03	20.0
BD17826	Cobalt, Total	mg/L	-0.0000009	0.000147	0.100	0.101	0.0989	0.104	0.0850 to 0.115	101	70.0 to 130	2.10	20.0
BD17826	Fluoride	mg/L	0.0601	0.125	2.50	2.71	2.69	2.68	2.25 to 2.75	103	80.0 to 120	0.741	20.0
BD17826	Iron, Dissolved	mg/L	-0.00120	0.0176	0.2	1.32	1.32	0.203	0.170 to 0.230	100	70.0 to 130	0.00	20.0
BD17826	Iron, Total	mg/L	-0.000954	0.0176	0.2	2.23	2.25	0.202	0.170 to 0.230	80.0	70.0 to 130	0.893	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/19/23 09:51
Customer ID:
Delivery Date: 9/20/23 11:17

Description: Gorgas Ash Pond - MW-10R

Laboratory ID Number: BD17825

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17826	Lead, Dissolved	mg/L	0.0000047	0.000147	0.100	0.101	0.0991	0.101	0.0850 to 0.115	101	70.0 to 130	1.90	20.0
BD17826	Lead, Total	mg/L	0.0000048	0.000147	0.100	0.102	0.103	0.0999	0.0850 to 0.115	102	70.0 to 130	0.976	20.0
BD17826	Lithium, Dissolved	mg/L	0.000731	0.0154	0.200	0.230	0.229	0.207	0.170 to 0.230	101	70.0 to 130	0.436	20.0
BD17826	Lithium, Total	mg/L	0.000155	0.0154	0.200	0.225	0.231	0.204	0.170 to 0.230	98.6	70.0 to 130	2.63	20.0
BD17826	Magnesium, Dissolved	mg/L	-0.0283	0.0462	5.00	19.8	19.7	5.26	4.25 to 5.75	108	70.0 to 130	0.506	20.0
BD17826	Magnesium, Total	mg/L	-0.00443	0.0462	5.00	19.1	19.4	5.14	4.25 to 5.75	92.0	70.0 to 130	1.56	20.0
BD17826	Manganese, Dissolved	mg/L	0.0000088	0.00033	0.100	0.152	0.150	0.102	0.0850 to 0.115	96.8	70.0 to 130	1.32	20.0
BD17826	Manganese, Total	mg/L	0.0000062	0.00033	0.100	0.151	0.148	0.100	0.0850 to 0.115	98.8	70.0 to 130	2.01	20.0
BD17826	Mercury, Total by CVAA	mg/L	3.000E-05	0.000500	0.004	0.00396	0.00402	0.00403	0.00340 to 0.00460	99.0	70.0 to 130	1.50	20.0
BD17826	Molybdenum, Dissolved	mg/L	0.00116	0.0100	0.2	0.201	0.203	0.202	0.170 to 0.230	100	70.0 to 130	0.990	20.0
BD17826	Molybdenum, Total	mg/L	0.002	0.0100	0.2	0.198	0.203	0.203	0.170 to 0.230	99.0	70.0 to 130	2.49	20.0
BD17826	Potassium, Dissolved	mg/L	0.00592	0.367	10.0	11.0	10.8	10.1	8.50 to 11.5	96.3	70.0 to 130	1.83	20.0
BD17826	Potassium, Total	mg/L	0.0118	0.367	10.0	10.9	10.9	9.82	8.50 to 11.5	95.8	70.0 to 130	0.00	20.0
BD17826	Selenium, Dissolved	mg/L	0.0000140	0.00100	0.100	0.104	0.101	0.107	0.0850 to 0.115	104	70.0 to 130	2.93	20.0
BD17826	Selenium, Total	mg/L	0.0000754	0.00100	0.100	0.105	0.106	0.105	0.0850 to 0.115	105	70.0 to 130	0.948	20.0
BD17826	Silicon, Dissolved	mg/L	0.00203	0.0440	1.00	13.2	13.1	1.04	0.850 to 1.15	120	70.0 to 130	0.760	20.0
BD17826	Silicon, Total	mg/L	0.00143	0.0440	1.00	13.1	13.2	1.03	0.850 to 1.15	90.0	70.0 to 130	0.760	20.0
BD17826	Sodium, Dissolved	mg/L	0.00446	0.0880	5.00	24.7	24.5	5.26	4.25 to 5.75	106	70.0 to 130	0.813	20.0
BD17826	Sodium, Total	mg/L	0.00438	0.0880	5.00	22.6	22.9	5.16	4.25 to 5.75	92.0	70.0 to 130	1.32	20.0
BD17833	Sulfate	mg/L	-0.0276	2.0	640	1050	1010	20.0	18.0 to 22.0	111	80.0 to 120	3.88	20.0
BD17826	Thallium, Dissolved	mg/L	-0.0000003	0.000147	0.100	0.103	0.101	0.102	0.0850 to 0.115	103	70.0 to 130	1.96	20.0
BD17826	Thallium, Total	mg/L	0.0000121	0.000147	0.100	0.105	0.105	0.103	0.0850 to 0.115	105	70.0 to 130	0.00	20.0
BD17826	Total Organic Carbon	mg/L	0.215	1.00	10.0	10.5	10.6	9.79		105	80.0 to 120	0.948	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/19/23 09:51
Customer ID:
Delivery Date: 9/20/23 11:17

Description: Gorgas Ash Pond - MW-10R

Laboratory ID Number: BD17825

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17836	Alkalinity	mg CaCO3/L					222	52.9	45.0 to 55.0			1.82	10.0
BD17826	Nitrogen, Nitrate/Nitrite	mg/L as N	0.03	0.200	2.00	1.94	0.058	1.89	1.80 to 2.20	97.0	90.0 to 110	0.00	15.0
BD17834	Solids, Dissolved	mg/L	0.0000	25.0			177	51.0	40.0 to 60.0			4.42	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-13R

Location Code: WMWGORAP
Collected: 9/19/23 11:02
Customer ID:
Submittal Date: 9/20/23 11:17

Laboratory ID Number: BD17826

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	9/21/23 06:53	9/21/23 16:31		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	9/21/23 06:53	9/21/23 16:31		1.015	34.0	mg/L	0.070035	0.406	
* Iron, Total	9/21/23 06:53	9/21/23 16:31		1.015	2.07	mg/L	0.008120	0.0406	
* Lithium, Total	9/21/23 06:53	9/21/23 16:31		1.015	0.0279	mg/L	0.007105	0.01999956	
* Magnesium, Total	9/21/23 06:53	9/21/23 16:31		1.015	14.5	mg/L	0.021315	0.406	
* Molybdenum, Total	9/21/23 06:53	9/21/23 16:31		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Total (calc.)	9/21/23 06:53	9/21/23 16:31		1	26.1	mg/L			
* Silicon, Total	9/21/23 06:53	9/21/23 16:31		1.015	12.2	mg/L	0.02030	0.25375	
* Sodium, Total	9/21/23 06:53	9/21/23 16:31		1.015	18.0	mg/L	0.04060	0.406	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	9/20/23 15:27	9/21/23 15:02		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Dissolved	9/20/23 15:27	9/21/23 15:02		1.015	34.3	mg/L	0.070035	0.406	
* Iron, Dissolved	9/20/23 15:27	9/21/23 15:02		1.015	1.12	mg/L	0.008120	0.0406	
* Lithium, Dissolved	9/20/23 15:27	9/21/23 15:02		1.015	0.0273	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	9/20/23 15:27	9/21/23 15:02		1.015	14.4	mg/L	0.021315	0.406	
* Molybdenum, Dissolved	9/20/23 15:27	9/21/23 15:02		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Dissolved (calc.)	9/20/23 15:27	9/21/23 15:02		1	25.7	mg/L			
* Silicon, Dissolved	9/20/23 15:27	9/21/23 15:02		1.015	12.0	mg/L	0.02030	0.25375	
* Sodium, Dissolved	9/20/23 15:27	9/21/23 15:02		1.015	19.4	mg/L	0.04060	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	9/21/23 06:53	9/21/23 13:57		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Total	9/21/23 06:53	9/21/23 13:57		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Total	9/21/23 06:53	9/21/23 13:57		1.015	0.0213	mg/L	0.000112	0.000203	
* Barium, Total	9/21/23 06:53	9/21/23 13:57		1.015	0.0696	mg/L	0.000508	0.001015	
* Beryllium, Total	9/21/23 06:53	9/21/23 13:57		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	9/21/23 06:53	9/21/23 13:57		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	9/21/23 06:53	9/21/23 13:57		1.015	0.000350	mg/L	0.000203	0.001015	J
* Cobalt, Total	9/21/23 06:53	9/21/23 13:57		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	9/21/23 06:53	9/21/23 13:57		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	9/21/23 06:53	9/21/23 13:57		1.015	0.0522	mg/L	0.000152	0.001015	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-13R

Location Code: WMWGORAP
Collected: 9/19/23 11:02
Customer ID:
Submittal Date: 9/20/23 11:17

Laboratory ID Number: BD17826

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	9/21/23 06:53	9/21/23 13:57		1.015	1.32	mg/L	0.169505	0.5075	
* Selenium, Total	9/21/23 06:53	9/21/23 13:57		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	9/21/23 06:53	9/21/23 13:57		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	9/20/23 15:27	9/21/23 12:04		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	9/20/23 15:27	9/21/23 12:04		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Dissolved	9/20/23 15:27	9/21/23 12:04		1.015	0.0110	mg/L	0.000112	0.000203	
* Barium, Dissolved	9/20/23 15:27	9/21/23 12:04		1.015	0.0678	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	9/20/23 15:27	9/21/23 12:04		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	9/20/23 15:27	9/21/23 12:04		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	9/20/23 15:27	9/21/23 12:04		1.015	0.000254	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	9/20/23 15:27	9/21/23 12:04		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Dissolved	9/20/23 15:27	9/21/23 12:04		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	9/20/23 15:27	9/21/23 12:04		1.015	0.0552	mg/L	0.000152	0.001015	
* Potassium, Dissolved	9/20/23 15:27	9/21/23 12:04		1.015	1.37	mg/L	0.169505	0.5075	
* Selenium, Dissolved	9/20/23 15:27	9/21/23 12:04		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	9/20/23 15:27	9/21/23 12:04		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	9/21/23 12:12	9/21/23 17:40		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	9/22/23 12:40	9/22/23 12:40		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: JAG***								
Alkalinity pH Endpoint	9/28/23 11:28	9/28/23 12:44		1	4.48	SU		2	
* Alkalinity	9/28/23 11:28	9/28/23 12:44		1	125	mg CaCO3/L		1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	9/20/23 14:45	9/22/23 11:15		1	244	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: JAG***								
* Bicarbonate Alkalinity, (calc.)	9/28/23 11:28	9/28/23 12:44		1	125	mg CaCO3/L		1	
* Carbonate Alkalinity, (calc.)	9/28/23 11:28	9/28/23 12:44		1	Not Detected	mg CaCO3/L		0.5	
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	9/25/23 13:34	9/25/23 13:34		1	Not Detected	mg/L	1.00	2	U

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-13R

Location Code: WMWGORAP
Collected: 9/19/23 11:02
Customer ID:
Submittal Date: 9/20/23 11:17

Laboratory ID Number: BD17826

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	9/25/23 09:41	9/25/23 09:41		1	16.8	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	9/25/23 11:35	9/25/23 11:35		1	0.147	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	9/27/23 10:39	9/27/23 10:39		1	39.9	mg/L	0.6	2	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	9/19/23 10:59	9/19/23 10:59			275.43	uS/cm			FA
pH	9/19/23 10:59	9/19/23 10:59			6.17	SU			FA
Temperature	9/19/23 10:59	9/19/23 10:59			20.87	C			FA
Turbidity	9/19/23 10:59	9/19/23 10:59			1.85	NTU			FA
Sulfide	9/19/23 10:59	9/19/23 10:59			0	mg/L			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/19/23 11:02
Customer ID:
Delivery Date: 9/20/23 11:17

Description: Gorgas Ash Pond - MW-13R

Laboratory ID Number: BD17826

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17826	Aluminum, Dissolved	mg/L	0.000195	0.0198	0.100	0.0957	0.0946	0.0999	0.0850 to 0.115	95.7	70.0 to 130	1.16	20.0
BD17826	Aluminum, Total	mg/L	0.000928	0.0198	0.100	0.0968	0.0962	0.0960	0.0850 to 0.115	96.8	70.0 to 130	0.622	20.0
BD17826	Antimony, Dissolved	mg/L	0.000811	0.00100	0.100	0.0945	0.0944	0.0934	0.0850 to 0.115	94.5	70.0 to 130	0.106	20.0
BD17826	Antimony, Total	mg/L	0.000299	0.00100	0.100	0.105	0.105	0.104	0.0850 to 0.115	105	70.0 to 130	0.00	20.0
BD17826	Arsenic, Dissolved	mg/L	0.0000311	0.000200	0.100	0.114	0.112	0.108	0.0850 to 0.115	103	70.0 to 130	1.77	20.0
BD17826	Arsenic, Total	mg/L	0.0000684	0.000200	0.100	0.130	0.132	0.110	0.0850 to 0.115	109	70.0 to 130	1.53	20.0
BD17826	Barium, Dissolved	mg/L	-0.0000095	0.00100	0.100	0.163	0.162	0.0956	0.0850 to 0.115	95.2	70.0 to 130	0.615	20.0
BD17826	Barium, Total	mg/L	0.0000055	0.00100	0.100	0.165	0.169	0.0992	0.0850 to 0.115	95.4	70.0 to 130	2.40	20.0
BD17826	Beryllium, Dissolved	mg/L	0.0000442	0.000880	0.100	0.104	0.103	0.0959	0.0850 to 0.115	104	70.0 to 130	0.966	20.0
BD17826	Beryllium, Total	mg/L	0.0000828	0.000880	0.100	0.110	0.110	0.103	0.0850 to 0.115	110	70.0 to 130	0.00	20.0
BD17826	Boron, Dissolved	mg/L	-0.000123	0.0650	1.00	1.06	1.06	1.03	0.850 to 1.15	106	70.0 to 130	0.00	20.0
BD17826	Boron, Total	mg/L	0.000491	0.0650	1.00	1.04	1.07	1.04	0.850 to 1.15	104	70.0 to 130	2.84	20.0
BD17826	Cadmium, Dissolved	mg/L	0.0000000	0.000147	0.100	0.101	0.0989	0.101	0.0850 to 0.115	101	70.0 to 130	2.10	20.0
BD17826	Cadmium, Total	mg/L	0.0000063	0.000147	0.100	0.102	0.102	0.106	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BD17826	Calcium, Dissolved	mg/L	-0.00424	0.152	5.00	40.3	39.9	5.03	4.25 to 5.75	120	70.0 to 130	0.998	20.0
BD17826	Calcium, Total	mg/L	-0.00686	0.152	5.00	37.7	38.7	4.91	4.25 to 5.75	74.0	70.0 to 130	2.62	20.0
BD17826	Chloride	mg/L	0.051	1.00	10.0	25.3	25.4	10.6	9.00 to 11.0	85.0	80.0 to 120	0.394	20.0
BD17826	Chromium, Dissolved	mg/L	-0.0000134	0.000440	0.100	0.0984	0.0964	0.101	0.0850 to 0.115	98.1	70.0 to 130	2.05	20.0
BD17826	Chromium, Total	mg/L	0.0000913	0.000440	0.100	0.0989	0.0980	0.100	0.0850 to 0.115	98.6	70.0 to 130	0.914	20.0
BD17826	Cobalt, Dissolved	mg/L	-0.0000014	0.000147	0.100	0.0995	0.0975	0.104	0.0850 to 0.115	99.5	70.0 to 130	2.03	20.0
BD17826	Cobalt, Total	mg/L	-0.0000009	0.000147	0.100	0.101	0.0989	0.104	0.0850 to 0.115	101	70.0 to 130	2.10	20.0
BD17826	Fluoride	mg/L	0.0601	0.125	2.50	2.71	2.69	2.68	2.25 to 2.75	103	80.0 to 120	0.741	20.0
BD17826	Iron, Dissolved	mg/L	-0.00120	0.0176	0.2	1.32	1.32	0.203	0.170 to 0.230	100	70.0 to 130	0.00	20.0
BD17826	Iron, Total	mg/L	-0.000954	0.0176	0.2	2.23	2.25	0.202	0.170 to 0.230	80.0	70.0 to 130	0.893	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/19/23 11:02
Customer ID:
Delivery Date: 9/20/23 11:17

Description: Gorgas Ash Pond - MW-13R

Laboratory ID Number: BD17826

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17826	Lead, Dissolved	mg/L	0.0000047	0.000147	0.100	0.101	0.0991	0.101	0.0850 to 0.115	101	70.0 to 130	1.90	20.0
BD17826	Lead, Total	mg/L	0.0000048	0.000147	0.100	0.102	0.103	0.0999	0.0850 to 0.115	102	70.0 to 130	0.976	20.0
BD17826	Lithium, Dissolved	mg/L	0.000731	0.0154	0.200	0.230	0.229	0.207	0.170 to 0.230	101	70.0 to 130	0.436	20.0
BD17826	Lithium, Total	mg/L	0.000155	0.0154	0.200	0.225	0.231	0.204	0.170 to 0.230	98.6	70.0 to 130	2.63	20.0
BD17826	Magnesium, Dissolved	mg/L	-0.0283	0.0462	5.00	19.8	19.7	5.26	4.25 to 5.75	108	70.0 to 130	0.506	20.0
BD17826	Magnesium, Total	mg/L	-0.00443	0.0462	5.00	19.1	19.4	5.14	4.25 to 5.75	92.0	70.0 to 130	1.56	20.0
BD17826	Manganese, Dissolved	mg/L	0.0000088	0.00033	0.100	0.152	0.150	0.102	0.0850 to 0.115	96.8	70.0 to 130	1.32	20.0
BD17826	Manganese, Total	mg/L	0.0000062	0.00033	0.100	0.151	0.148	0.100	0.0850 to 0.115	98.8	70.0 to 130	2.01	20.0
BD17826	Mercury, Total by CVAA	mg/L	3.000E-05	0.000500	0.004	0.00396	0.00402	0.00403	0.00340 to 0.00460	99.0	70.0 to 130	1.50	20.0
BD17826	Molybdenum, Dissolved	mg/L	0.00116	0.0100	0.2	0.201	0.203	0.202	0.170 to 0.230	100	70.0 to 130	0.990	20.0
BD17826	Molybdenum, Total	mg/L	0.002	0.0100	0.2	0.198	0.203	0.203	0.170 to 0.230	99.0	70.0 to 130	2.49	20.0
BD17826	Potassium, Dissolved	mg/L	0.00592	0.367	10.0	11.0	10.8	10.1	8.50 to 11.5	96.3	70.0 to 130	1.83	20.0
BD17826	Potassium, Total	mg/L	0.0118	0.367	10.0	10.9	10.9	9.82	8.50 to 11.5	95.8	70.0 to 130	0.00	20.0
BD17826	Selenium, Dissolved	mg/L	0.0000140	0.00100	0.100	0.104	0.101	0.107	0.0850 to 0.115	104	70.0 to 130	2.93	20.0
BD17826	Selenium, Total	mg/L	0.0000754	0.00100	0.100	0.105	0.106	0.105	0.0850 to 0.115	105	70.0 to 130	0.948	20.0
BD17826	Silicon, Dissolved	mg/L	0.00203	0.0440	1.00	13.2	13.1	1.04	0.850 to 1.15	120	70.0 to 130	0.760	20.0
BD17826	Silicon, Total	mg/L	0.00143	0.0440	1.00	13.1	13.2	1.03	0.850 to 1.15	90.0	70.0 to 130	0.760	20.0
BD17826	Sodium, Dissolved	mg/L	0.00446	0.0880	5.00	24.7	24.5	5.26	4.25 to 5.75	106	70.0 to 130	0.813	20.0
BD17826	Sodium, Total	mg/L	0.00438	0.0880	5.00	22.6	22.9	5.16	4.25 to 5.75	92.0	70.0 to 130	1.32	20.0
BD17833	Sulfate	mg/L	-0.0276	2.0	640	1050	1010	20.0	18.0 to 22.0	111	80.0 to 120	3.88	20.0
BD17826	Thallium, Dissolved	mg/L	-0.0000003	0.000147	0.100	0.103	0.101	0.102	0.0850 to 0.115	103	70.0 to 130	1.96	20.0
BD17826	Thallium, Total	mg/L	0.0000121	0.000147	0.100	0.105	0.105	0.103	0.0850 to 0.115	105	70.0 to 130	0.00	20.0
BD17826	Total Organic Carbon	mg/L	0.215	1.00	10.0	10.5	10.6	9.79		105	80.0 to 120	0.948	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/19/23 11:02
Customer ID:
Delivery Date: 9/20/23 11:17

Description: Gorgas Ash Pond - MW-13R

Laboratory ID Number: BD17826

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17836	Alkalinity	mg CaCO3/L					222	52.9	45.0 to 55.0			1.82	10.0
BD17826	Nitrogen, Nitrate/Nitrite	mg/L as N	0.03	0.200	2.00	1.94	0.058	1.89	1.80 to 2.20	97.0	90.0 to 110	0.00	15.0
BD17834	Solids, Dissolved	mg/L	0.0000	25.0			177	51.0	40.0 to 60.0			4.42	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond Equipment Blank-1

Location Code: WMWGORAPEB
Collected: 9/19/23 11:45
Customer ID:
Submittal Date: 9/20/23 11:18

Laboratory ID Number: BD17827

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	9/21/23 06:53	9/21/23 16:47		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	9/21/23 06:53	9/21/23 16:47		1.015	Not Detected	mg/L	0.070035	0.406	U
* Iron, Total	9/21/23 06:53	9/21/23 16:47		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Total	9/21/23 06:53	9/21/23 16:47		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	9/21/23 06:53	9/21/23 16:47		1.015	Not Detected	mg/L	0.021315	0.406	U
* Molybdenum, Total	9/21/23 06:53	9/21/23 16:47		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Total (calc.)	9/21/23 06:53	9/21/23 16:47		1	Not Detected	mg/L			
* Silicon, Total	9/21/23 06:53	9/21/23 16:47		1.015	Not Detected	mg/L	0.02030	0.25375	U
* Sodium, Total	9/21/23 06:53	9/21/23 16:47		1.015	Not Detected	mg/L	0.04060	0.406	U
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	9/21/23 06:53	9/21/23 14:20		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Arsenic, Total	9/21/23 06:53	9/25/23 11:03		1.015	Not Detected	mg/L	0.000112	0.000203	U
* Aluminum, Total	9/21/23 06:53	9/21/23 14:20		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Barium, Total	9/21/23 06:53	9/21/23 14:20		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Beryllium, Total	9/21/23 06:53	9/25/23 11:03		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	9/21/23 06:53	9/21/23 14:20		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	9/21/23 06:53	9/21/23 14:20		1.015	0.000259	mg/L	0.000203	0.001015	J
* Cobalt, Total	9/21/23 06:53	9/21/23 14:20		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	9/21/23 06:53	9/21/23 14:20		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	9/21/23 06:53	9/21/23 14:20		1.015	Not Detected	mg/L	0.000152	0.001015	U
* Potassium, Total	9/21/23 06:53	9/21/23 14:20		1.015	Not Detected	mg/L	0.169505	0.5075	U
* Selenium, Total	9/21/23 06:53	9/21/23 14:20		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	9/21/23 06:53	9/21/23 14:20		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	9/21/23 12:12	9/21/23 17:59		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	9/22/23 12:50	9/22/23 12:50		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	9/20/23 14:45	9/22/23 11:15		1	Not Detected	mg/L		25	U

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments:

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond Equipment Blank-1

Location Code: WMWGORAPEB
Collected: 9/19/23 11:45
Customer ID:
Submittal Date: 9/20/23 11:18

Laboratory ID Number: BD17827

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	9/25/23 14:50	9/25/23 14:50		1	Not Detected	mg/L	1.00	2	U
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	9/25/23 10:15	9/25/23 10:15		1	Not Detected	mg/L	0.50	1	U
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	9/25/23 11:48	9/25/23 11:48		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	9/27/23 10:40	9/27/23 10:40		1	Not Detected	mg/L	0.6	2	U

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments:

Reported: 10/25/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAPEB
Sample Date: 9/19/23 11:45
Customer ID:
Delivery Date: 9/20/23 11:18

Description: Gorgas Ash Pond Equipment Blank-1

Laboratory ID Number: BD17827

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17836	Aluminum, Total	mg/L	0.000928	0.0198	0.100	0.0938	0.0938	0.0960	0.0850 to 0.115	93.8	70.0 to 130	0.00	20.0
BD17836	Antimony, Total	mg/L	0.000299	0.00100	0.100	0.105	0.105	0.104	0.0850 to 0.115	105	70.0 to 130	0.00	20.0
BD17836	Arsenic, Total	mg/L	0.0000684	0.000200	0.100	0.105	0.103	0.110	0.0850 to 0.115	104	70.0 to 130	1.92	20.0
BD17836	Barium, Total	mg/L	0.0000055	0.00100	0.100	0.166	0.164	0.0992	0.0850 to 0.115	97.2	70.0 to 130	1.21	20.0
BD17836	Beryllium, Total	mg/L	0.0000828	0.000880	0.100	0.0984	0.0988	0.103	0.0850 to 0.115	98.4	70.0 to 130	0.406	20.0
BD17836	Boron, Total	mg/L	0.000491	0.0650	1.00	1.14	1.13	1.04	0.850 to 1.15	105	70.0 to 130	0.881	20.0
BD17836	Cadmium, Total	mg/L	0.0000063	0.000147	0.100	0.103	0.101	0.106	0.0850 to 0.115	103	70.0 to 130	1.96	20.0
BD17836	Calcium, Total	mg/L	-0.00686	0.152	5.00	72.5	70.3	4.91	4.25 to 5.75	240	70.0 to 130	3.08	20.0
BD17836	Chloride	mg/L	0.0197	1.00	10.0	14.2	14.3	10.6	9.00 to 11.0	103	80.0 to 120	0.702	20.0
BD17836	Chromium, Total	mg/L	0.0000913	0.000440	0.100	0.0971	0.0970	0.100	0.0850 to 0.115	97.1	70.0 to 130	0.103	20.0
BD17836	Cobalt, Total	mg/L	-0.0000009	0.000147	0.100	0.0987	0.0978	0.104	0.0850 to 0.115	98.6	70.0 to 130	0.916	20.0
BD17836	Fluoride	mg/L	0.036	0.125	2.50	2.79	2.75	2.62	2.25 to 2.75	107	80.0 to 120	1.44	20.0
BD17836	Iron, Total	mg/L	-0.000954	0.0176	0.2	1.02	1.01	0.202	0.170 to 0.230	100	70.0 to 130	0.985	20.0
BD17836	Lead, Total	mg/L	0.0000048	0.000147	0.100	0.102	0.104	0.0999	0.0850 to 0.115	102	70.0 to 130	1.94	20.0
BD17836	Lithium, Total	mg/L	0.000155	0.0154	0.200	0.223	0.221	0.204	0.170 to 0.230	103	70.0 to 130	0.901	20.0
BD17836	Magnesium, Total	mg/L	-0.00443	0.0462	5.00	23.6	23.5	5.14	4.25 to 5.75	98.0	70.0 to 130	0.425	20.0
BD17836	Manganese, Total	mg/L	0.0000062	0.00033	0.100	0.150	0.149	0.100	0.0850 to 0.115	96.6	70.0 to 130	0.669	20.0
BD17836	Mercury, Total by CVAA	mg/L	3.000E-05	0.000500	0.004	0.00399	0.00405	0.00403	0.00340 to 0.00460	99.8	70.0 to 130	1.49	20.0
BD17836	Molybdenum, Total	mg/L	0.002	0.0100	0.2	0.205	0.205	0.203	0.170 to 0.230	102	70.0 to 130	0.00	20.0
BD17836	Potassium, Total	mg/L	0.0118	0.367	10.0	10.8	10.7	9.82	8.50 to 11.5	96.1	70.0 to 130	0.930	20.0
BD17836	Selenium, Total	mg/L	0.0000754	0.00100	0.100	0.106	0.105	0.105	0.0850 to 0.115	106	70.0 to 130	0.948	20.0
BD17836	Silicon, Total	mg/L	0.00143	0.0440	1.00	12.7	12.7	1.03	0.850 to 1.15	100	70.0 to 130	0.00	20.0
BD17836	Sodium, Total	mg/L	0.00438	0.0880	5.00	23.1	23.0	5.16	4.25 to 5.75	100	70.0 to 130	0.434	20.0
BD17833	Sulfate	mg/L	-0.0276	2.0	640	1050	1010	20.0	18.0 to 22.0	111	80.0 to 120	3.88	20.0

Comments:

Reported: 10/25/2023
Version: 3.5
COA_CCR

Batch QC Summary

Customer Account: WMWGORAPEB
Sample Date: 9/19/23 11:45
Customer ID:
Delivery Date: 9/20/23 11:18

Description: Gorgas Ash Pond Equipment Blank-1

Laboratory ID Number: BD17827

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17836	Thallium, Total	mg/L	0.0000121	0.000147	0.100	0.105	0.107	0.103	0.0850 to 0.115	105	70.0 to 130	1.89	20.0
BD17836	Total Organic Carbon	mg/L	0.235	1.00	10.0	9.77	10.1	9.37		97.7	80.0 to 120	3.32	20.0

Comments:

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAPEB
Sample Date: 9/19/23 11:45
Customer ID:
Delivery Date: 9/20/23 11:18

Description: Gorgas Ash Pond Equipment Blank-1

Laboratory ID Number: BD17827

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17836	Nitrogen, Nitrate/Nitrite	mg/L as N	0.01	0.200	2.00	2.00	0.002	1.93	1.80 to 2.20	100	90.0 to 110	0.00	15.0
BD17834	Solids, Dissolved	mg/L	0.0000	25.0			177	51.0	40.0 to 60.0			4.42	10.0

Comments:

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-40H

Location Code: WMWGORAP
Collected: 9/18/23 12:04
Customer ID:
Submittal Date: 9/20/23 11:22

Laboratory ID Number: BD17828

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	9/21/23 06:53	9/21/23 16:50		1.015	0.0350	mg/L	0.030000	0.1015	J
* Calcium, Total	9/21/23 06:53	9/21/23 19:20		10.15	219	mg/L	0.70035	4.06	
* Iron, Total	9/21/23 06:53	9/21/23 16:50		1.015	2.44	mg/L	0.008120	0.0406	
* Lithium, Total	9/21/23 06:53	9/21/23 16:50		1.015	0.0616	mg/L	0.007105	0.01999956	
* Magnesium, Total	9/21/23 06:53	9/21/23 19:20		10.15	101	mg/L	0.21315	4.06	
* Molybdenum, Total	9/21/23 06:53	9/21/23 16:50		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Total (calc.)	9/21/23 06:53	9/21/23 16:50		1	25.7	mg/L			
* Silicon, Total	9/21/23 06:53	9/21/23 16:50		1.015	12.0	mg/L	0.02030	0.25375	
* Sodium, Total	9/21/23 06:53	9/21/23 19:20		10.15	72.8	mg/L	0.4060	4.06	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	9/20/23 15:27	9/21/23 15:18		1.015	0.0377	mg/L	0.030000	0.1015	J
* Calcium, Dissolved	9/20/23 15:27	9/21/23 18:13		10.15	213	mg/L	0.70035	4.06	
* Iron, Dissolved	9/20/23 15:27	9/21/23 15:18		1.015	1.56	mg/L	0.008120	0.0406	
* Lithium, Dissolved	9/20/23 15:27	9/21/23 15:18		1.015	0.0580	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	9/20/23 15:27	9/21/23 18:13		10.15	97.3	mg/L	0.21315	4.06	
* Molybdenum, Dissolved	9/20/23 15:27	9/21/23 15:18		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Dissolved (calc.)	9/20/23 15:27	9/21/23 15:18		1	25.7	mg/L			
* Silicon, Dissolved	9/20/23 15:27	9/21/23 15:18		1.015	12.0	mg/L	0.02030	0.25375	
* Sodium, Dissolved	9/20/23 15:27	9/21/23 18:13		10.15	79.3	mg/L	0.4060	4.06	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	9/21/23 06:53	9/21/23 14:24		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Total	9/21/23 06:53	9/21/23 14:24		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Total	9/21/23 06:53	9/25/23 11:07		1.015	0.000331	mg/L	0.000112	0.000203	
* Barium, Total	9/21/23 06:53	9/21/23 14:24		1.015	0.0280	mg/L	0.000508	0.001015	
* Beryllium, Total	9/21/23 06:53	9/25/23 11:07		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	9/21/23 06:53	9/21/23 14:24		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	9/21/23 06:53	9/21/23 14:24		1.015	0.000300	mg/L	0.000203	0.001015	J
* Cobalt, Total	9/21/23 06:53	9/21/23 14:24		1.015	0.0000985	mg/L	0.000068	0.000203	J
* Lead, Total	9/21/23 06:53	9/21/23 14:24		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	9/21/23 06:53	9/21/23 14:24		1.015	0.242	mg/L	0.000152	0.001015	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-40H

Location Code: WMWGORAP
Collected: 9/18/23 12:04
Customer ID:
Submittal Date: 9/20/23 11:22

Laboratory ID Number: BD17828

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	10/12/23 15:17	10/12/23 19:06		1.015	5.45	mg/L	0.169505	0.5075	C
* Selenium, Total	9/21/23 06:53	9/21/23 14:24		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	9/21/23 06:53	9/21/23 14:24		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8		***Analyst: DLJ***							
* Antimony, Dissolved	9/20/23 15:27	9/21/23 12:27		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	9/20/23 15:27	9/21/23 12:27		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Dissolved	9/20/23 15:27	9/21/23 12:27		1.015	0.000218	mg/L	0.000112	0.000203	
* Barium, Dissolved	9/20/23 15:27	9/21/23 12:27		1.015	0.0280	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	9/20/23 15:27	9/21/23 12:27		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	9/20/23 15:27	9/21/23 12:27		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	9/20/23 15:27	9/21/23 12:27		1.015	0.000226	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	9/20/23 15:27	9/21/23 12:27		1.015	0.0000756	mg/L	0.000068	0.000203	J
* Lead, Dissolved	9/20/23 15:27	9/21/23 12:27		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	9/20/23 15:27	9/21/23 12:27		1.015	0.159	mg/L	0.000152	0.001015	
* Potassium, Dissolved	10/12/23 23:23	10/12/23 13:17		1.015	7.65	mg/L	0.169505	0.5075	C
* Selenium, Dissolved	9/20/23 15:27	9/21/23 12:27		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	9/20/23 15:27	9/21/23 12:27		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1		***Analyst: ABB***							
* Mercury, Total by CVAA	9/21/23 12:12	9/21/23 18:03		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2		***Analyst: SC***							
* Nitrogen, Nitrate/Nitrite	9/22/23 12:52	9/22/23 12:52		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B		***Analyst: JAG***							
Alkalinity pH Endpoint	9/28/23 11:28	9/28/23 12:44		1	4.55	SU		2	
* Alkalinity	9/28/23 11:28	9/28/23 12:44		1	234	mg CaCO3/L		1	
Analytical Method: SM 2540C		***Analyst: CNJ***							
* Solids, Dissolved	9/20/23 14:45	9/22/23 11:15		1	1310	mg/L		100	
Analytical Method: SM 4500CO2 D		***Analyst: JAG***							
* Bicarbonate Alkalinity, (calc.)	9/28/23 11:28	9/28/23 12:44		1	234	mg CaCO3/L		1	A
* Carbonate Alkalinity, (calc.)	9/28/23 11:28	9/28/23 12:44		1	Not Detected	mg CaCO3/L		0.5	A
Analytical Method: SM 5310 B		***Analyst: SC***							
* Total Organic Carbon	9/25/23 15:03	9/25/23 15:03		1	1.63	mg/L	1.00	2	J

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-40H

Location Code: WMWGORAP
Collected: 9/18/23 12:04
Customer ID:
Submittal Date: 9/20/23 11:22

Laboratory ID Number: BD17828

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	9/25/23 10:07	9/25/23 10:07		1	9.85	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	9/25/23 11:50	9/25/23 11:50		1	0.141	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	9/27/23 10:41	9/27/23 10:41		40	692	mg/L	24.0	80	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	9/18/23 12:00	9/18/23 12:00			1698.82	uS/cm			FA
pH	9/18/23 12:00	9/18/23 12:00			6.70	SU			FA
Temperature	9/18/23 12:00	9/18/23 12:00			21.06	C			FA
Turbidity	9/18/23 12:00	9/18/23 12:00			3.77	NTU			FA
Sulfide	9/18/23 12:00	9/18/23 12:00			0	mg/L			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 10/25/2023
Version: 3.5
COA_CCR

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/18/23 12:04
Customer ID:
Delivery Date: 9/20/23 11:22

Description: Gorgas Ash Pond - MW-40H

Laboratory ID Number: BD17828

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17836	Aluminum, Dissolved	mg/L	0.000195	0.0198	0.100	0.0924	0.0913	0.0999	0.0850 to 0.115	92.4	70.0 to 130	1.20	20.0
BD17836	Aluminum, Total	mg/L	0.000928	0.0198	0.100	0.0938	0.0938	0.0960	0.0850 to 0.115	93.8	70.0 to 130	0.00	20.0
BD17836	Antimony, Dissolved	mg/L	0.000811	0.00100	0.100	0.0959	0.0943	0.0934	0.0850 to 0.115	95.9	70.0 to 130	1.68	20.0
BD17836	Antimony, Total	mg/L	0.000299	0.00100	0.100	0.105	0.105	0.104	0.0850 to 0.115	105	70.0 to 130	0.00	20.0
BD17836	Arsenic, Dissolved	mg/L	0.0000311	0.000200	0.100	0.106	0.109	0.108	0.0850 to 0.115	105	70.0 to 130	2.79	20.0
BD17836	Arsenic, Total	mg/L	0.0000684	0.000200	0.100	0.105	0.103	0.110	0.0850 to 0.115	104	70.0 to 130	1.92	20.0
BD17836	Barium, Dissolved	mg/L	-0.0000095	0.00100	0.100	0.154	0.156	0.0956	0.0850 to 0.115	89.2	70.0 to 130	1.29	20.0
BD17836	Barium, Total	mg/L	0.0000055	0.00100	0.100	0.166	0.164	0.0992	0.0850 to 0.115	97.2	70.0 to 130	1.21	20.0
BD17836	Beryllium, Dissolved	mg/L	0.0000442	0.000880	0.100	0.106	0.106	0.0959	0.0850 to 0.115	106	70.0 to 130	0.00	20.0
BD17836	Beryllium, Total	mg/L	0.0000828	0.000880	0.100	0.0984	0.0988	0.103	0.0850 to 0.115	98.4	70.0 to 130	0.406	20.0
BD17836	Boron, Dissolved	mg/L	-0.000123	0.0650	1.00	1.13	1.13	1.03	0.850 to 1.15	104	70.0 to 130	0.00	20.0
BD17836	Boron, Total	mg/L	0.000491	0.0650	1.00	1.14	1.13	1.04	0.850 to 1.15	105	70.0 to 130	0.881	20.0
BD17836	Cadmium, Dissolved	mg/L	0.0000000	0.000147	0.100	0.101	0.0997	0.101	0.0850 to 0.115	101	70.0 to 130	1.30	20.0
BD17836	Cadmium, Total	mg/L	0.0000063	0.000147	0.100	0.103	0.101	0.106	0.0850 to 0.115	103	70.0 to 130	1.96	20.0
BD17836	Calcium, Dissolved	mg/L	-0.00424	0.152	5.00	70.0	67.4	5.03	4.25 to 5.75	148	70.0 to 130	3.78	20.0
BD17836	Calcium, Total	mg/L	-0.00686	0.152	5.00	72.5	70.3	4.91	4.25 to 5.75	240	70.0 to 130	3.08	20.0
BD17836	Chloride	mg/L	0.0197	1.00	10.0	14.2	14.3	10.6	9.00 to 11.0	103	80.0 to 120	0.702	20.0
BD17836	Chromium, Dissolved	mg/L	-0.0000134	0.000440	0.100	0.0982	0.0953	0.101	0.0850 to 0.115	98.2	70.0 to 130	3.00	20.0
BD17836	Chromium, Total	mg/L	0.0000913	0.000440	0.100	0.0971	0.0970	0.100	0.0850 to 0.115	97.1	70.0 to 130	0.103	20.0
BD17836	Cobalt, Dissolved	mg/L	-0.0000014	0.000147	0.100	0.0987	0.0965	0.104	0.0850 to 0.115	98.6	70.0 to 130	2.25	20.0
BD17836	Cobalt, Total	mg/L	-0.0000009	0.000147	0.100	0.0987	0.0978	0.104	0.0850 to 0.115	98.6	70.0 to 130	0.916	20.0
BD17836	Fluoride	mg/L	0.036	0.125	2.50	2.79	2.75	2.62	2.25 to 2.75	107	80.0 to 120	1.44	20.0
BD17836	Iron, Dissolved	mg/L	-0.00120	0.0176	0.2	0.965	0.965	0.203	0.170 to 0.230	98.5	70.0 to 130	0.00	20.0
BD17836	Iron, Total	mg/L	-0.000954	0.0176	0.2	1.02	1.01	0.202	0.170 to 0.230	100	70.0 to 130	0.985	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/18/23 12:04
Customer ID:
Delivery Date: 9/20/23 11:22

Description: Gorgas Ash Pond - MW-40H

Laboratory ID Number: BD17828

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17836	Lead, Dissolved	mg/L	0.0000047	0.000147	0.100	0.0992	0.100	0.101	0.0850 to 0.115	99.2	70.0 to 130	0.803	20.0
BD17836	Lead, Total	mg/L	0.0000048	0.000147	0.100	0.102	0.104	0.0999	0.0850 to 0.115	102	70.0 to 130	1.94	20.0
BD17836	Lithium, Dissolved	mg/L	0.000731	0.0154	0.200	0.221	0.220	0.207	0.170 to 0.230	102	70.0 to 130	0.454	20.0
BD17836	Lithium, Total	mg/L	0.000155	0.0154	0.200	0.223	0.221	0.204	0.170 to 0.230	103	70.0 to 130	0.901	20.0
BD17836	Magnesium, Dissolved	mg/L	-0.0283	0.0462	5.00	23.7	23.8	5.26	4.25 to 5.75	102	70.0 to 130	0.421	20.0
BD17836	Magnesium, Total	mg/L	-0.00443	0.0462	5.00	23.6	23.5	5.14	4.25 to 5.75	98.0	70.0 to 130	0.425	20.0
BD17836	Manganese, Dissolved	mg/L	0.0000088	0.00033	0.100	0.151	0.148	0.102	0.0850 to 0.115	96.0	70.0 to 130	2.01	20.0
BD17836	Manganese, Total	mg/L	0.0000062	0.00033	0.100	0.150	0.149	0.100	0.0850 to 0.115	96.6	70.0 to 130	0.669	20.0
BD17836	Mercury, Total by CVAA	mg/L	3.000E-05	0.000500	0.004	0.00399	0.00405	0.00403	0.00340 to 0.00460	99.8	70.0 to 130	1.49	20.0
BD17836	Molybdenum, Dissolved	mg/L	0.00116	0.0100	0.2	0.203	0.203	0.202	0.170 to 0.230	102	70.0 to 130	0.00	20.0
BD17836	Molybdenum, Total	mg/L	0.002	0.0100	0.2	0.205	0.205	0.203	0.170 to 0.230	102	70.0 to 130	0.00	20.0
BD17828	Potassium, Dissolved	mg/L	0.00785	0.367	10.0	17.4	17.2	10.2	8.50 to 11.5	97.5	70.0 to 130	1.16	20.0
BD17828	Potassium, Total	mg/L	0.0106	0.367	10.0	15.8	15.6	10.2	8.50 to 11.5	104	70.0 to 130	1.27	20.0
BD17836	Selenium, Dissolved	mg/L	0.0000140	0.00100	0.100	0.104	0.102	0.107	0.0850 to 0.115	104	70.0 to 130	1.94	20.0
BD17836	Selenium, Total	mg/L	0.0000754	0.00100	0.100	0.106	0.105	0.105	0.0850 to 0.115	106	70.0 to 130	0.948	20.0
BD17836	Silicon, Dissolved	mg/L	0.00203	0.0440	1.00	12.7	12.8	1.04	0.850 to 1.15	100	70.0 to 130	0.784	20.0
BD17836	Silicon, Total	mg/L	0.00143	0.0440	1.00	12.7	12.7	1.03	0.850 to 1.15	100	70.0 to 130	0.00	20.0
BD17836	Sodium, Dissolved	mg/L	0.00446	0.0880	5.00	23.2	23.2	5.26	4.25 to 5.75	104	70.0 to 130	0.00	20.0
BD17836	Sodium, Total	mg/L	0.00438	0.0880	5.00	23.1	23.0	5.16	4.25 to 5.75	100	70.0 to 130	0.434	20.0
BD17833	Sulfate	mg/L	-0.0276	2.0	640	1050	1010	20.0	18.0 to 22.0	111	80.0 to 120	3.88	20.0
BD17836	Thallium, Dissolved	mg/L	-0.0000003	0.000147	0.100	0.102	0.103	0.102	0.0850 to 0.115	102	70.0 to 130	0.976	20.0
BD17836	Thallium, Total	mg/L	0.0000121	0.000147	0.100	0.105	0.107	0.103	0.0850 to 0.115	105	70.0 to 130	1.89	20.0
BD17836	Total Organic Carbon	mg/L	0.235	1.00	10.0	9.77	10.1	9.37		97.7	80.0 to 120	3.32	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/18/23 12:04
Customer ID:
Delivery Date: 9/20/23 11:22

Description: Gorgas Ash Pond - MW-40H

Laboratory ID Number: BD17828

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17836	Alkalinity	mg CaCO3/L					222	52.9	45.0 to 55.0			1.82	10.0
BD17836	Nitrogen, Nitrate/Nitrite	mg/L as N	0.01	0.200	2.00	2.00	0.002	1.93	1.80 to 2.20	100	90.0 to 110	0.00	15.0
BD17834	Solids, Dissolved	mg/L	0.0000	25.0			177	51.0	40.0 to 60.0			4.42	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-26H

Location Code: WMWGORAP
Collected: 9/18/23 14:35
Customer ID:
Submittal Date: 9/20/23 11:22

Laboratory ID Number: BD17829

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	9/21/23 06:53	9/21/23 16:53		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	9/21/23 06:53	9/21/23 16:53		1.015	27.3	mg/L	0.070035	0.406	
* Iron, Total	9/21/23 06:53	9/21/23 16:53		1.015	0.735	mg/L	0.008120	0.0406	
* Lithium, Total	9/21/23 06:53	9/21/23 16:53		1.015	0.0856	mg/L	0.007105	0.01999956	
* Magnesium, Total	9/21/23 06:53	9/21/23 16:53		1.015	12.0	mg/L	0.021315	0.406	
* Molybdenum, Total	9/21/23 06:53	9/21/23 16:53		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Total (calc.)	9/21/23 06:53	9/21/23 16:53		1	23.3	mg/L			
* Silicon, Total	9/21/23 06:53	9/21/23 16:53		1.015	10.9	mg/L	0.02030	0.25375	
* Sodium, Total	9/21/23 06:53	9/21/23 19:29		10.15	67.2	mg/L	0.4060	4.06	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	9/20/23 15:27	9/21/23 15:21		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Dissolved	9/20/23 15:27	9/21/23 15:21		1.015	27.4	mg/L	0.070035	0.406	
* Iron, Dissolved	9/20/23 15:27	9/21/23 15:21		1.015	0.735	mg/L	0.008120	0.0406	
* Lithium, Dissolved	9/20/23 15:27	9/21/23 15:21		1.015	0.0849	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	9/20/23 15:27	9/21/23 15:21		1.015	12.0	mg/L	0.021315	0.406	
* Molybdenum, Dissolved	9/20/23 15:27	9/21/23 15:21		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Dissolved (calc.)	9/20/23 15:27	9/21/23 15:21		1	23.1	mg/L			
* Silicon, Dissolved	9/20/23 15:27	9/21/23 15:21		1.015	10.8	mg/L	0.02030	0.25375	
* Sodium, Dissolved	9/20/23 15:27	9/21/23 18:16		10.15	64.4	mg/L	0.4060	4.06	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	9/21/23 06:53	9/21/23 14:27		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Total	9/21/23 06:53	9/21/23 14:27		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Total	9/21/23 06:53	9/25/23 11:11		1.015	Not Detected	mg/L	0.000112	0.000203	U
* Barium, Total	9/21/23 06:53	9/21/23 14:27		1.015	0.733	mg/L	0.000508	0.001015	
* Beryllium, Total	9/21/23 06:53	9/25/23 11:11		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	9/21/23 06:53	9/21/23 14:27		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	9/21/23 06:53	9/21/23 14:27		1.015	0.000321	mg/L	0.000203	0.001015	J
* Cobalt, Total	9/21/23 06:53	9/21/23 14:27		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	9/21/23 06:53	9/21/23 14:27		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	9/21/23 06:53	9/21/23 14:27		1.015	0.0149	mg/L	0.000152	0.001015	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-26H

Location Code: WMWGORAP
Collected: 9/18/23 14:35
Customer ID:
Submittal Date: 9/20/23 11:22

Laboratory ID Number: BD17829

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	9/21/23 06:53	9/21/23 14:27		1.015	2.38	mg/L	0.169505	0.5075	
* Selenium, Total	9/21/23 06:53	9/21/23 14:27		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	9/21/23 06:53	9/21/23 14:27		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	9/20/23 15:27	9/21/23 12:31		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	9/20/23 15:27	9/21/23 12:31		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Dissolved	9/20/23 15:27	9/21/23 12:31		1.015	0.000211	mg/L	0.000112	0.000203	
* Barium, Dissolved	9/20/23 15:27	9/21/23 12:31		1.015	0.679	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	9/20/23 15:27	9/21/23 12:31		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	9/20/23 15:27	9/21/23 12:31		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	9/20/23 15:27	9/21/23 12:31		1.015	0.000204	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	9/20/23 15:27	9/21/23 12:31		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Dissolved	9/20/23 15:27	9/21/23 12:31		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	9/20/23 15:27	9/21/23 12:31		1.015	0.0145	mg/L	0.000152	0.001015	
* Potassium, Dissolved	9/20/23 15:27	9/21/23 12:31		1.015	2.40	mg/L	0.169505	0.5075	
* Selenium, Dissolved	9/20/23 15:27	9/21/23 12:31		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	9/20/23 15:27	9/21/23 12:31		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	9/21/23 12:12	9/21/23 18:07		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	9/22/23 12:53	9/22/23 12:53		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: JAG***								
Alkalinity pH Endpoint	9/28/23 11:28	9/28/23 12:44		1	4.49	SU		2	
* Alkalinity	9/28/23 11:28	9/28/23 12:44		1	273	mg CaCO3/L		1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	9/20/23 14:45	9/22/23 11:15		1	324	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: JAG***								
* Bicarbonate Alkalinity, (calc.)	9/28/23 11:28	9/28/23 12:44		1	272	mg CaCO3/L		1	
* Carbonate Alkalinity, (calc.)	9/28/23 11:28	9/28/23 12:44		1	0.907	mg CaCO3/L		0.5	
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	9/25/23 15:18	9/25/23 15:18		1	Not Detected	mg/L	1.00	2	U

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-26H

Location Code: WMWGORAP
Collected: 9/18/23 14:35
Customer ID:
Submittal Date: 9/20/23 11:22

Laboratory ID Number: BD17829

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	9/25/23 10:08	9/25/23 10:08		1	2.22	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	9/25/23 11:51	9/25/23 11:51		1	0.147	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	9/27/23 10:42	9/27/23 10:42		1	4.78	mg/L	0.6	2	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	9/18/23 14:32	9/18/23 14:32			468.41	uS/cm			FA
pH	9/18/23 14:32	9/18/23 14:32			7.25	SU			FA
Temperature	9/18/23 14:32	9/18/23 14:32			19.76	C			FA
Turbidity	9/18/23 14:32	9/18/23 14:32			1.94	NTU			FA
Sulfide	9/18/23 14:32	9/18/23 14:32			0	mg/L			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/18/23 14:35
Customer ID:
Delivery Date: 9/20/23 11:22

Description: Gorgas Ash Pond - MW-26H

Laboratory ID Number: BD17829

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17836	Aluminum, Dissolved	mg/L	0.000195	0.0198	0.100	0.0924	0.0913	0.0999	0.0850 to 0.115	92.4	70.0 to 130	1.20	20.0
BD17836	Aluminum, Total	mg/L	0.000928	0.0198	0.100	0.0938	0.0938	0.0960	0.0850 to 0.115	93.8	70.0 to 130	0.00	20.0
BD17836	Antimony, Dissolved	mg/L	0.000811	0.00100	0.100	0.0959	0.0943	0.0934	0.0850 to 0.115	95.9	70.0 to 130	1.68	20.0
BD17836	Antimony, Total	mg/L	0.000299	0.00100	0.100	0.105	0.105	0.104	0.0850 to 0.115	105	70.0 to 130	0.00	20.0
BD17836	Arsenic, Dissolved	mg/L	0.0000311	0.000200	0.100	0.106	0.109	0.108	0.0850 to 0.115	105	70.0 to 130	2.79	20.0
BD17836	Arsenic, Total	mg/L	0.0000684	0.000200	0.100	0.105	0.103	0.110	0.0850 to 0.115	104	70.0 to 130	1.92	20.0
BD17836	Barium, Dissolved	mg/L	-0.0000095	0.00100	0.100	0.154	0.156	0.0956	0.0850 to 0.115	89.2	70.0 to 130	1.29	20.0
BD17836	Barium, Total	mg/L	0.0000055	0.00100	0.100	0.166	0.164	0.0992	0.0850 to 0.115	97.2	70.0 to 130	1.21	20.0
BD17836	Beryllium, Dissolved	mg/L	0.0000442	0.000880	0.100	0.106	0.106	0.0959	0.0850 to 0.115	106	70.0 to 130	0.00	20.0
BD17836	Beryllium, Total	mg/L	0.0000828	0.000880	0.100	0.0984	0.0988	0.103	0.0850 to 0.115	98.4	70.0 to 130	0.406	20.0
BD17836	Boron, Dissolved	mg/L	-0.000123	0.0650	1.00	1.13	1.13	1.03	0.850 to 1.15	104	70.0 to 130	0.00	20.0
BD17836	Boron, Total	mg/L	0.000491	0.0650	1.00	1.14	1.13	1.04	0.850 to 1.15	105	70.0 to 130	0.881	20.0
BD17836	Cadmium, Dissolved	mg/L	0.0000000	0.000147	0.100	0.101	0.0997	0.101	0.0850 to 0.115	101	70.0 to 130	1.30	20.0
BD17836	Cadmium, Total	mg/L	0.0000063	0.000147	0.100	0.103	0.101	0.106	0.0850 to 0.115	103	70.0 to 130	1.96	20.0
BD17836	Calcium, Dissolved	mg/L	-0.00424	0.152	5.00	70.0	67.4	5.03	4.25 to 5.75	148	70.0 to 130	3.78	20.0
BD17836	Calcium, Total	mg/L	-0.00686	0.152	5.00	72.5	70.3	4.91	4.25 to 5.75	240	70.0 to 130	3.08	20.0
BD17836	Chloride	mg/L	0.0197	1.00	10.0	14.2	14.3	10.6	9.00 to 11.0	103	80.0 to 120	0.702	20.0
BD17836	Chromium, Dissolved	mg/L	-0.0000134	0.000440	0.100	0.0982	0.0953	0.101	0.0850 to 0.115	98.2	70.0 to 130	3.00	20.0
BD17836	Chromium, Total	mg/L	0.0000913	0.000440	0.100	0.0971	0.0970	0.100	0.0850 to 0.115	97.1	70.0 to 130	0.103	20.0
BD17836	Cobalt, Dissolved	mg/L	-0.0000014	0.000147	0.100	0.0987	0.0965	0.104	0.0850 to 0.115	98.6	70.0 to 130	2.25	20.0
BD17836	Cobalt, Total	mg/L	-0.0000009	0.000147	0.100	0.0987	0.0978	0.104	0.0850 to 0.115	98.6	70.0 to 130	0.916	20.0
BD17836	Fluoride	mg/L	0.036	0.125	2.50	2.79	2.75	2.62	2.25 to 2.75	107	80.0 to 120	1.44	20.0
BD17836	Iron, Dissolved	mg/L	-0.00120	0.0176	0.2	0.965	0.965	0.203	0.170 to 0.230	98.5	70.0 to 130	0.00	20.0
BD17836	Iron, Total	mg/L	-0.000954	0.0176	0.2	1.02	1.01	0.202	0.170 to 0.230	100	70.0 to 130	0.985	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/18/23 14:35
Customer ID:
Delivery Date: 9/20/23 11:22

Description: Gorgas Ash Pond - MW-26H

Laboratory ID Number: BD17829

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17836	Lead, Dissolved	mg/L	0.0000047	0.000147	0.100	0.0992	0.100	0.101	0.0850 to 0.115	99.2	70.0 to 130	0.803	20.0
BD17836	Lead, Total	mg/L	0.0000048	0.000147	0.100	0.102	0.104	0.0999	0.0850 to 0.115	102	70.0 to 130	1.94	20.0
BD17836	Lithium, Dissolved	mg/L	0.000731	0.0154	0.200	0.221	0.220	0.207	0.170 to 0.230	102	70.0 to 130	0.454	20.0
BD17836	Lithium, Total	mg/L	0.000155	0.0154	0.200	0.223	0.221	0.204	0.170 to 0.230	103	70.0 to 130	0.901	20.0
BD17836	Magnesium, Dissolved	mg/L	-0.0283	0.0462	5.00	23.7	23.8	5.26	4.25 to 5.75	102	70.0 to 130	0.421	20.0
BD17836	Magnesium, Total	mg/L	-0.00443	0.0462	5.00	23.6	23.5	5.14	4.25 to 5.75	98.0	70.0 to 130	0.425	20.0
BD17836	Manganese, Dissolved	mg/L	0.0000088	0.00033	0.100	0.151	0.148	0.102	0.0850 to 0.115	96.0	70.0 to 130	2.01	20.0
BD17836	Manganese, Total	mg/L	0.0000062	0.00033	0.100	0.150	0.149	0.100	0.0850 to 0.115	96.6	70.0 to 130	0.669	20.0
BD17836	Mercury, Total by CVAA	mg/L	3.000E-05	0.000500	0.004	0.00399	0.00405	0.00403	0.00340 to 0.00460	99.8	70.0 to 130	1.49	20.0
BD17836	Molybdenum, Dissolved	mg/L	0.00116	0.0100	0.2	0.203	0.203	0.202	0.170 to 0.230	102	70.0 to 130	0.00	20.0
BD17836	Molybdenum, Total	mg/L	0.002	0.0100	0.2	0.205	0.205	0.203	0.170 to 0.230	102	70.0 to 130	0.00	20.0
BD17836	Potassium, Dissolved	mg/L	0.00592	0.367	10.0	10.8	10.7	10.1	8.50 to 11.5	96.3	70.0 to 130	0.930	20.0
BD17836	Potassium, Total	mg/L	0.0118	0.367	10.0	10.8	10.7	9.82	8.50 to 11.5	96.1	70.0 to 130	0.930	20.0
BD17836	Selenium, Dissolved	mg/L	0.0000140	0.00100	0.100	0.104	0.102	0.107	0.0850 to 0.115	104	70.0 to 130	1.94	20.0
BD17836	Selenium, Total	mg/L	0.0000754	0.00100	0.100	0.106	0.105	0.105	0.0850 to 0.115	106	70.0 to 130	0.948	20.0
BD17836	Silicon, Dissolved	mg/L	0.00203	0.0440	1.00	12.7	12.8	1.04	0.850 to 1.15	100	70.0 to 130	0.784	20.0
BD17836	Silicon, Total	mg/L	0.00143	0.0440	1.00	12.7	12.7	1.03	0.850 to 1.15	100	70.0 to 130	0.00	20.0
BD17836	Sodium, Dissolved	mg/L	0.00446	0.0880	5.00	23.2	23.2	5.26	4.25 to 5.75	104	70.0 to 130	0.00	20.0
BD17836	Sodium, Total	mg/L	0.00438	0.0880	5.00	23.1	23.0	5.16	4.25 to 5.75	100	70.0 to 130	0.434	20.0
BD17833	Sulfate	mg/L	-0.0276	2.0	640	1050	1010	20.0	18.0 to 22.0	111	80.0 to 120	3.88	20.0
BD17836	Thallium, Dissolved	mg/L	-0.0000003	0.000147	0.100	0.102	0.103	0.102	0.0850 to 0.115	102	70.0 to 130	0.976	20.0
BD17836	Thallium, Total	mg/L	0.0000121	0.000147	0.100	0.105	0.107	0.103	0.0850 to 0.115	105	70.0 to 130	1.89	20.0
BD17836	Total Organic Carbon	mg/L	0.235	1.00	10.0	9.77	10.1	9.37		97.7	80.0 to 120	3.32	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/18/23 14:35
Customer ID:
Delivery Date: 9/20/23 11:22

Description: Gorgas Ash Pond - MW-26H

Laboratory ID Number: BD17829

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17836	Alkalinity	mg CaCO3/L					222	52.9	45.0 to 55.0			1.82	10.0
BD17836	Nitrogen, Nitrate/Nitrite	mg/L as N	0.01	0.200	2.00	2.00	0.002	1.93	1.80 to 2.20	100	90.0 to 110	0.00	15.0
BD17834	Solids, Dissolved	mg/L	0.0000	25.0			177	51.0	40.0 to 60.0			4.42	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-8

Location Code: WMWGORAP
Collected: 9/18/23 16:22
Customer ID:
Submittal Date: 9/20/23 11:22

Laboratory ID Number: BD17830

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	9/21/23 06:53	9/21/23 16:56		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	9/21/23 06:53	9/21/23 16:56		1.015	6.08	mg/L	0.070035	0.406	
* Iron, Total	9/21/23 06:53	9/21/23 16:56		1.015	1.18	mg/L	0.008120	0.0406	
* Lithium, Total	9/21/23 06:53	9/21/23 16:56		1.015	0.00906	mg/L	0.007105	0.01999956	J
* Magnesium, Total	9/21/23 06:53	9/21/23 16:56		1.015	7.59	mg/L	0.021315	0.406	
* Molybdenum, Total	9/21/23 06:53	9/21/23 16:56		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Total (calc.)	9/21/23 06:53	9/21/23 16:56		1	37.4	mg/L			
* Silicon, Total	9/21/23 06:53	9/21/23 16:56		1.015	17.5	mg/L	0.02030	0.25375	
* Sodium, Total	9/21/23 06:53	9/21/23 16:56		1.015	10.8	mg/L	0.04060	0.406	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	9/20/23 15:27	9/21/23 15:24		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Dissolved	9/20/23 15:27	9/21/23 15:24		1.015	6.93	mg/L	0.070035	0.406	
* Iron, Dissolved	9/20/23 15:27	9/21/23 15:24		1.015	2.07	mg/L	0.008120	0.0406	
* Lithium, Dissolved	9/20/23 15:27	9/21/23 15:24		1.015	0.0102	mg/L	0.007105	0.01999956	J
* Magnesium, Dissolved	9/20/23 15:27	9/21/23 15:24		1.015	8.03	mg/L	0.021315	0.406	
* Molybdenum, Dissolved	9/20/23 15:27	9/21/23 15:24		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Dissolved (calc.)	9/20/23 15:27	9/21/23 15:24		1	37.2	mg/L			
* Silicon, Dissolved	9/20/23 15:27	9/21/23 15:24		1.015	17.4	mg/L	0.02030	0.25375	
* Sodium, Dissolved	9/20/23 15:27	9/21/23 15:24		1.015	11.2	mg/L	0.04060	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	9/21/23 06:53	9/21/23 14:31		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Total	9/21/23 06:53	9/21/23 14:31		1.015	0.0362	mg/L	0.009135	0.05075	J
* Arsenic, Total	9/21/23 06:53	9/25/23 11:15		1.015	0.000244	mg/L	0.000112	0.000203	
* Barium, Total	9/21/23 06:53	9/21/23 14:31		1.015	0.0289	mg/L	0.000508	0.001015	
* Beryllium, Total	9/21/23 06:53	9/25/23 11:15		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	9/21/23 06:53	9/21/23 14:31		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	9/21/23 06:53	9/21/23 14:31		1.015	0.000368	mg/L	0.000203	0.001015	J
* Cobalt, Total	9/21/23 06:53	9/21/23 14:31		1.015	0.00251	mg/L	0.000068	0.000203	
* Lead, Total	9/21/23 06:53	9/21/23 14:31		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	9/21/23 06:53	9/21/23 14:31		1.015	0.554	mg/L	0.000152	0.001015	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-8

Location Code: WMWGORAP
Collected: 9/18/23 16:22
Customer ID:
Submittal Date: 9/20/23 11:22

Laboratory ID Number: BD17830

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	9/21/23 06:53	9/21/23 14:31		1.015	0.746	mg/L	0.169505	0.5075	
* Selenium, Total	9/21/23 06:53	9/21/23 14:31		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	9/21/23 06:53	9/21/23 14:31		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	9/20/23 15:27	9/21/23 12:34		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	9/20/23 15:27	9/21/23 12:34		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Dissolved	9/20/23 15:27	9/21/23 12:34		1.015	0.000401	mg/L	0.000112	0.000203	
* Barium, Dissolved	9/20/23 15:27	9/21/23 12:34		1.015	0.0388	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	9/20/23 15:27	9/21/23 12:34		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	9/20/23 15:27	9/21/23 12:34		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	9/20/23 15:27	9/21/23 12:34		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	9/20/23 15:27	9/21/23 12:34		1.015	0.00284	mg/L	0.000068	0.000203	
* Lead, Dissolved	9/20/23 15:27	9/21/23 12:34		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	9/20/23 15:27	9/21/23 12:34		1.015	0.524	mg/L	0.000152	0.001015	
* Potassium, Dissolved	9/20/23 15:27	9/21/23 12:34		1.015	0.739	mg/L	0.169505	0.5075	
* Selenium, Dissolved	9/20/23 15:27	9/21/23 12:34		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	9/20/23 15:27	9/21/23 12:34		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	9/21/23 12:12	9/21/23 18:11		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	9/22/23 12:55	9/22/23 12:55		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: JAG***								
Alkalinity pH Endpoint	9/28/23 11:28	9/28/23 12:44		1	4.53	SU		2	
* Alkalinity	9/28/23 11:28	9/28/23 12:44		1	54.5	mg CaCO3/L		1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	9/20/23 14:45	9/22/23 11:15		1	91.3	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: JAG***								
* Bicarbonate Alkalinity, (calc.)	9/28/23 11:28	9/28/23 12:44		1	54.5	mg CaCO3/L		1	
* Carbonate Alkalinity, (calc.)	9/28/23 11:28	9/28/23 12:44		1	Not Detected	mg CaCO3/L		0.5	
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	9/25/23 15:32	9/25/23 15:32		1	Not Detected	mg/L	1.00	2	U

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-8

Location Code: WMWGORAP
Collected: 9/18/23 16:22
Customer ID:
Submittal Date: 9/20/23 11:22

Laboratory ID Number: BD17830

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	9/25/23 10:09	9/25/23 10:09		1	3.07	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	9/25/23 11:52	9/25/23 11:52		1	0.106	mg/L	0.06	0.125	J
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	9/27/23 10:44	9/27/23 10:44		1	10.1	mg/L	0.6	2	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	9/18/23 16:19	9/18/23 16:19			107.72	uS/cm			FA
pH	9/18/23 16:19	9/18/23 16:19			5.42	SU			FA
Temperature	9/18/23 16:19	9/18/23 16:19			20.60	C			FA
Turbidity	9/18/23 16:19	9/18/23 16:19			3.3	NTU			FA
Sulfide	9/18/23 16:19	9/18/23 16:19			0	mg/L			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 10/25/2023
Version: 3.5
COA_CCR

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/18/23 16:22
Customer ID:
Delivery Date: 9/20/23 11:22

Description: Gorgas Ash Pond - MW-8

Laboratory ID Number: BD17830

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17836	Aluminum, Dissolved	mg/L	0.000195	0.0198	0.100	0.0924	0.0913	0.0999	0.0850 to 0.115	92.4	70.0 to 130	1.20	20.0
BD17836	Aluminum, Total	mg/L	0.000928	0.0198	0.100	0.0938	0.0938	0.0960	0.0850 to 0.115	93.8	70.0 to 130	0.00	20.0
BD17836	Antimony, Dissolved	mg/L	0.000811	0.00100	0.100	0.0959	0.0943	0.0934	0.0850 to 0.115	95.9	70.0 to 130	1.68	20.0
BD17836	Antimony, Total	mg/L	0.000299	0.00100	0.100	0.105	0.105	0.104	0.0850 to 0.115	105	70.0 to 130	0.00	20.0
BD17836	Arsenic, Dissolved	mg/L	0.0000311	0.000200	0.100	0.106	0.109	0.108	0.0850 to 0.115	105	70.0 to 130	2.79	20.0
BD17836	Arsenic, Total	mg/L	0.0000684	0.000200	0.100	0.105	0.103	0.110	0.0850 to 0.115	104	70.0 to 130	1.92	20.0
BD17836	Barium, Dissolved	mg/L	-0.0000095	0.00100	0.100	0.154	0.156	0.0956	0.0850 to 0.115	89.2	70.0 to 130	1.29	20.0
BD17836	Barium, Total	mg/L	0.0000055	0.00100	0.100	0.166	0.164	0.0992	0.0850 to 0.115	97.2	70.0 to 130	1.21	20.0
BD17836	Beryllium, Dissolved	mg/L	0.0000442	0.000880	0.100	0.106	0.106	0.0959	0.0850 to 0.115	106	70.0 to 130	0.00	20.0
BD17836	Beryllium, Total	mg/L	0.0000828	0.000880	0.100	0.0984	0.0988	0.103	0.0850 to 0.115	98.4	70.0 to 130	0.406	20.0
BD17836	Boron, Dissolved	mg/L	-0.000123	0.0650	1.00	1.13	1.13	1.03	0.850 to 1.15	104	70.0 to 130	0.00	20.0
BD17836	Boron, Total	mg/L	0.000491	0.0650	1.00	1.14	1.13	1.04	0.850 to 1.15	105	70.0 to 130	0.881	20.0
BD17836	Cadmium, Dissolved	mg/L	0.0000000	0.000147	0.100	0.101	0.0997	0.101	0.0850 to 0.115	101	70.0 to 130	1.30	20.0
BD17836	Cadmium, Total	mg/L	0.0000063	0.000147	0.100	0.103	0.101	0.106	0.0850 to 0.115	103	70.0 to 130	1.96	20.0
BD17836	Calcium, Dissolved	mg/L	-0.00424	0.152	5.00	70.0	67.4	5.03	4.25 to 5.75	148	70.0 to 130	3.78	20.0
BD17836	Calcium, Total	mg/L	-0.00686	0.152	5.00	72.5	70.3	4.91	4.25 to 5.75	240	70.0 to 130	3.08	20.0
BD17836	Chloride	mg/L	0.0197	1.00	10.0	14.2	14.3	10.6	9.00 to 11.0	103	80.0 to 120	0.702	20.0
BD17836	Chromium, Dissolved	mg/L	-0.0000134	0.000440	0.100	0.0982	0.0953	0.101	0.0850 to 0.115	98.2	70.0 to 130	3.00	20.0
BD17836	Chromium, Total	mg/L	0.0000913	0.000440	0.100	0.0971	0.0970	0.100	0.0850 to 0.115	97.1	70.0 to 130	0.103	20.0
BD17836	Cobalt, Dissolved	mg/L	-0.0000014	0.000147	0.100	0.0987	0.0965	0.104	0.0850 to 0.115	98.6	70.0 to 130	2.25	20.0
BD17836	Cobalt, Total	mg/L	-0.0000009	0.000147	0.100	0.0987	0.0978	0.104	0.0850 to 0.115	98.6	70.0 to 130	0.916	20.0
BD17836	Fluoride	mg/L	0.036	0.125	2.50	2.79	2.75	2.62	2.25 to 2.75	107	80.0 to 120	1.44	20.0
BD17836	Iron, Dissolved	mg/L	-0.00120	0.0176	0.2	0.965	0.965	0.203	0.170 to 0.230	98.5	70.0 to 130	0.00	20.0
BD17836	Iron, Total	mg/L	-0.000954	0.0176	0.2	1.02	1.01	0.202	0.170 to 0.230	100	70.0 to 130	0.985	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/18/23 16:22
Customer ID:
Delivery Date: 9/20/23 11:22

Description: Gorgas Ash Pond - MW-8

Laboratory ID Number: BD17830

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17836	Lead, Dissolved	mg/L	0.0000047	0.000147	0.100	0.0992	0.100	0.101	0.0850 to 0.115	99.2	70.0 to 130	0.803	20.0
BD17836	Lead, Total	mg/L	0.0000048	0.000147	0.100	0.102	0.104	0.0999	0.0850 to 0.115	102	70.0 to 130	1.94	20.0
BD17836	Lithium, Dissolved	mg/L	0.000731	0.0154	0.200	0.221	0.220	0.207	0.170 to 0.230	102	70.0 to 130	0.454	20.0
BD17836	Lithium, Total	mg/L	0.000155	0.0154	0.200	0.223	0.221	0.204	0.170 to 0.230	103	70.0 to 130	0.901	20.0
BD17836	Magnesium, Dissolved	mg/L	-0.0283	0.0462	5.00	23.7	23.8	5.26	4.25 to 5.75	102	70.0 to 130	0.421	20.0
BD17836	Magnesium, Total	mg/L	-0.00443	0.0462	5.00	23.6	23.5	5.14	4.25 to 5.75	98.0	70.0 to 130	0.425	20.0
BD17836	Manganese, Dissolved	mg/L	0.0000088	0.00033	0.100	0.151	0.148	0.102	0.0850 to 0.115	96.0	70.0 to 130	2.01	20.0
BD17836	Manganese, Total	mg/L	0.0000062	0.00033	0.100	0.150	0.149	0.100	0.0850 to 0.115	96.6	70.0 to 130	0.669	20.0
BD17836	Mercury, Total by CVAA	mg/L	3.000E-05	0.000500	0.004	0.00399	0.00405	0.00403	0.00340 to 0.00460	99.8	70.0 to 130	1.49	20.0
BD17836	Molybdenum, Dissolved	mg/L	0.00116	0.0100	0.2	0.203	0.203	0.202	0.170 to 0.230	102	70.0 to 130	0.00	20.0
BD17836	Molybdenum, Total	mg/L	0.002	0.0100	0.2	0.205	0.205	0.203	0.170 to 0.230	102	70.0 to 130	0.00	20.0
BD17836	Potassium, Dissolved	mg/L	0.00592	0.367	10.0	10.8	10.7	10.1	8.50 to 11.5	96.3	70.0 to 130	0.930	20.0
BD17836	Potassium, Total	mg/L	0.0118	0.367	10.0	10.8	10.7	9.82	8.50 to 11.5	96.1	70.0 to 130	0.930	20.0
BD17836	Selenium, Dissolved	mg/L	0.0000140	0.00100	0.100	0.104	0.102	0.107	0.0850 to 0.115	104	70.0 to 130	1.94	20.0
BD17836	Selenium, Total	mg/L	0.0000754	0.00100	0.100	0.106	0.105	0.105	0.0850 to 0.115	106	70.0 to 130	0.948	20.0
BD17836	Silicon, Dissolved	mg/L	0.00203	0.0440	1.00	12.7	12.8	1.04	0.850 to 1.15	100	70.0 to 130	0.784	20.0
BD17836	Silicon, Total	mg/L	0.00143	0.0440	1.00	12.7	12.7	1.03	0.850 to 1.15	100	70.0 to 130	0.00	20.0
BD17836	Sodium, Dissolved	mg/L	0.00446	0.0880	5.00	23.2	23.2	5.26	4.25 to 5.75	104	70.0 to 130	0.00	20.0
BD17836	Sodium, Total	mg/L	0.00438	0.0880	5.00	23.1	23.0	5.16	4.25 to 5.75	100	70.0 to 130	0.434	20.0
BD17833	Sulfate	mg/L	-0.0276	2.0	640	1050	1010	20.0	18.0 to 22.0	111	80.0 to 120	3.88	20.0
BD17836	Thallium, Dissolved	mg/L	-0.0000003	0.000147	0.100	0.102	0.103	0.102	0.0850 to 0.115	102	70.0 to 130	0.976	20.0
BD17836	Thallium, Total	mg/L	0.0000121	0.000147	0.100	0.105	0.107	0.103	0.0850 to 0.115	105	70.0 to 130	1.89	20.0
BD17836	Total Organic Carbon	mg/L	0.235	1.00	10.0	9.77	10.1	9.37		97.7	80.0 to 120	3.32	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/18/23 16:22
Customer ID:
Delivery Date: 9/20/23 11:22

Description: Gorgas Ash Pond - MW-8

Laboratory ID Number: BD17830

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17836	Alkalinity	mg CaCO3/L					222	52.9	45.0 to 55.0			1.82	10.0
BD17836	Nitrogen, Nitrate/Nitrite	mg/L as N	0.01	0.200	2.00	2.00	0.002	1.93	1.80 to 2.20	100	90.0 to 110	0.00	15.0
BD17834	Solids, Dissolved	mg/L	0.0000	25.0			177	51.0	40.0 to 60.0			4.42	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-11R

Location Code: WMWGORAP
Collected: 9/19/23 12:00
Customer ID:
Submittal Date: 9/20/23 11:22

Laboratory ID Number: BD17831

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	9/21/23 06:53	9/21/23 16:59		1.015	0.222	mg/L	0.030000	0.1015	
* Calcium, Total	9/21/23 06:53	9/21/23 19:33		10.15	56.0	mg/L	0.70035	4.06	
* Iron, Total	9/21/23 06:53	9/21/23 19:33		10.15	6.67	mg/L	0.08120	0.406	
* Lithium, Total	9/21/23 06:53	9/21/23 16:59		1.015	0.0324	mg/L	0.007105	0.01999956	
* Magnesium, Total	9/21/23 06:53	9/21/23 16:59		1.015	19.0	mg/L	0.021315	0.406	
* Molybdenum, Total	9/21/23 06:53	9/21/23 16:59		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Total (calc.)	9/21/23 06:53	9/21/23 16:59		1	34.0	mg/L			
* Silicon, Total	9/21/23 06:53	9/21/23 16:59		1.015	15.9	mg/L	0.02030	0.25375	
* Sodium, Total	9/21/23 06:53	9/21/23 16:59		1.015	16.7	mg/L	0.04060	0.406	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	9/20/23 15:27	9/21/23 15:27		1.015	0.213	mg/L	0.030000	0.1015	
* Calcium, Dissolved	9/20/23 15:27	9/21/23 18:25		10.15	56.3	mg/L	0.70035	4.06	
* Iron, Dissolved	9/20/23 15:27	9/21/23 15:27		1.015	1.52	mg/L	0.008120	0.0406	
* Lithium, Dissolved	9/20/23 15:27	9/21/23 15:27		1.015	0.0320	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	9/20/23 15:27	9/21/23 15:27		1.015	18.9	mg/L	0.021315	0.406	
* Molybdenum, Dissolved	9/20/23 15:27	9/21/23 15:27		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Dissolved (calc.)	9/20/23 15:27	9/21/23 15:27		1	33.4	mg/L			
* Silicon, Dissolved	9/20/23 15:27	9/21/23 15:27		1.015	15.6	mg/L	0.02030	0.25375	
* Sodium, Dissolved	9/20/23 15:27	9/21/23 15:27		1.015	16.3	mg/L	0.04060	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	9/21/23 06:53	9/21/23 14:35		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Total	9/21/23 06:53	9/21/23 14:35		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Total	9/21/23 06:53	9/25/23 11:19		1.015	0.00378	mg/L	0.000112	0.000203	
* Barium, Total	9/21/23 06:53	9/21/23 14:35		1.015	0.133	mg/L	0.000508	0.001015	
* Beryllium, Total	9/21/23 06:53	9/25/23 11:19		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	9/21/23 06:53	9/21/23 14:35		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	9/21/23 06:53	9/21/23 14:35		1.015	0.000264	mg/L	0.000203	0.001015	J
* Cobalt, Total	9/21/23 06:53	9/21/23 14:35		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	9/21/23 06:53	9/21/23 14:35		1.015	0.000187	mg/L	0.000068	0.000203	J
* Manganese, Total	9/21/23 06:53	9/21/23 14:35		1.015	0.0777	mg/L	0.000152	0.001015	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-11R

Location Code: WMWGORAP
Collected: 9/19/23 12:00
Customer ID:
Submittal Date: 9/20/23 11:22

Laboratory ID Number: BD17831

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	9/21/23 06:53	9/21/23 14:35		1.015	1.54	mg/L	0.169505	0.5075	
* Selenium, Total	9/21/23 06:53	9/21/23 14:35		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	9/21/23 06:53	9/21/23 14:35		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	9/20/23 15:27	9/21/23 12:38		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	9/20/23 15:27	9/21/23 12:38		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Dissolved	9/20/23 15:27	9/21/23 12:38		1.015	0.000954	mg/L	0.000112	0.000203	
* Barium, Dissolved	9/20/23 15:27	9/21/23 12:38		1.015	0.114	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	9/20/23 15:27	9/21/23 12:38		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	9/20/23 15:27	9/21/23 12:38		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	9/20/23 15:27	9/21/23 12:38		1.015	0.000221	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	9/20/23 15:27	9/21/23 12:38		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Dissolved	9/20/23 15:27	9/21/23 12:38		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	9/20/23 15:27	9/21/23 12:38		1.015	0.0775	mg/L	0.000152	0.001015	
* Potassium, Dissolved	9/20/23 15:27	9/21/23 12:38		1.015	1.49	mg/L	0.169505	0.5075	
* Selenium, Dissolved	9/20/23 15:27	9/21/23 12:38		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	9/20/23 15:27	9/21/23 12:38		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	9/21/23 12:12	9/21/23 18:15		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	9/22/23 12:57	9/22/23 12:57		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: JAG***								
Alkalinity pH Endpoint	9/28/23 11:28	9/28/23 12:44		1	4.53	SU		2	
* Alkalinity	9/28/23 11:28	9/28/23 12:44		1	178	mg CaCO3/L		1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	9/20/23 14:45	9/22/23 11:15		1	313	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: JAG***								
* Bicarbonate Alkalinity, (calc.)	9/28/23 11:28	9/28/23 12:44		1	178	mg CaCO3/L		1	
* Carbonate Alkalinity, (calc.)	9/28/23 11:28	9/28/23 12:44		1	Not Detected	mg CaCO3/L		0.5	
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	9/25/23 15:47	9/25/23 15:47		1	Not Detected	mg/L	1.00	2	U

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-11R

Location Code: WMWGORAP
Collected: 9/19/23 12:00
Customer ID:
Submittal Date: 9/20/23 11:22

Laboratory ID Number: BD17831

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	9/25/23 10:10	9/25/23 10:10		1	7.64	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	9/25/23 11:53	9/25/23 11:53		1	0.0949	mg/L	0.06	0.125	J
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	9/27/23 10:45	9/27/23 10:45		3	54.0	mg/L	1.8	6	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	9/19/23 11:58	9/19/23 11:58			453.04	uS/cm			FA
pH	9/19/23 11:58	9/19/23 11:58			6.49	SU			FA
Temperature	9/19/23 11:58	9/19/23 11:58			19.02	C			FA
Turbidity	9/19/23 11:58	9/19/23 11:58			9	NTU			FA
Sulfide	9/19/23 11:58	9/19/23 11:58			0	mg/L			FA

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 10/25/2023
Version: 3.5
COA_CCR

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/19/23 12:00
Customer ID:
Delivery Date: 9/20/23 11:22

Description: Gorgas Ash Pond - MW-11R

Laboratory ID Number: BD17831

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17836	Aluminum, Dissolved	mg/L	0.000195	0.0198	0.100	0.0924	0.0913	0.0999	0.0850 to 0.115	92.4	70.0 to 130	1.20	20.0
BD17836	Aluminum, Total	mg/L	0.000928	0.0198	0.100	0.0938	0.0938	0.0960	0.0850 to 0.115	93.8	70.0 to 130	0.00	20.0
BD17836	Antimony, Dissolved	mg/L	0.000811	0.00100	0.100	0.0959	0.0943	0.0934	0.0850 to 0.115	95.9	70.0 to 130	1.68	20.0
BD17836	Antimony, Total	mg/L	0.000299	0.00100	0.100	0.105	0.105	0.104	0.0850 to 0.115	105	70.0 to 130	0.00	20.0
BD17836	Arsenic, Dissolved	mg/L	0.0000311	0.000200	0.100	0.106	0.109	0.108	0.0850 to 0.115	105	70.0 to 130	2.79	20.0
BD17836	Arsenic, Total	mg/L	0.0000684	0.000200	0.100	0.105	0.103	0.110	0.0850 to 0.115	104	70.0 to 130	1.92	20.0
BD17836	Barium, Dissolved	mg/L	-0.0000095	0.00100	0.100	0.154	0.156	0.0956	0.0850 to 0.115	89.2	70.0 to 130	1.29	20.0
BD17836	Barium, Total	mg/L	0.0000055	0.00100	0.100	0.166	0.164	0.0992	0.0850 to 0.115	97.2	70.0 to 130	1.21	20.0
BD17836	Beryllium, Dissolved	mg/L	0.0000442	0.000880	0.100	0.106	0.106	0.0959	0.0850 to 0.115	106	70.0 to 130	0.00	20.0
BD17836	Beryllium, Total	mg/L	0.0000828	0.000880	0.100	0.0984	0.0988	0.103	0.0850 to 0.115	98.4	70.0 to 130	0.406	20.0
BD17836	Boron, Dissolved	mg/L	-0.000123	0.0650	1.00	1.13	1.13	1.03	0.850 to 1.15	104	70.0 to 130	0.00	20.0
BD17836	Boron, Total	mg/L	0.000491	0.0650	1.00	1.14	1.13	1.04	0.850 to 1.15	105	70.0 to 130	0.881	20.0
BD17836	Cadmium, Dissolved	mg/L	0.0000000	0.000147	0.100	0.101	0.0997	0.101	0.0850 to 0.115	101	70.0 to 130	1.30	20.0
BD17836	Cadmium, Total	mg/L	0.0000063	0.000147	0.100	0.103	0.101	0.106	0.0850 to 0.115	103	70.0 to 130	1.96	20.0
BD17836	Calcium, Dissolved	mg/L	-0.00424	0.152	5.00	70.0	67.4	5.03	4.25 to 5.75	148	70.0 to 130	3.78	20.0
BD17836	Calcium, Total	mg/L	-0.00686	0.152	5.00	72.5	70.3	4.91	4.25 to 5.75	240	70.0 to 130	3.08	20.0
BD17836	Chloride	mg/L	0.0197	1.00	10.0	14.2	14.3	10.6	9.00 to 11.0	103	80.0 to 120	0.702	20.0
BD17836	Chromium, Dissolved	mg/L	-0.0000134	0.000440	0.100	0.0982	0.0953	0.101	0.0850 to 0.115	98.2	70.0 to 130	3.00	20.0
BD17836	Chromium, Total	mg/L	0.0000913	0.000440	0.100	0.0971	0.0970	0.100	0.0850 to 0.115	97.1	70.0 to 130	0.103	20.0
BD17836	Cobalt, Dissolved	mg/L	-0.0000014	0.000147	0.100	0.0987	0.0965	0.104	0.0850 to 0.115	98.6	70.0 to 130	2.25	20.0
BD17836	Cobalt, Total	mg/L	-0.0000009	0.000147	0.100	0.0987	0.0978	0.104	0.0850 to 0.115	98.6	70.0 to 130	0.916	20.0
BD17836	Fluoride	mg/L	0.036	0.125	2.50	2.79	2.75	2.62	2.25 to 2.75	107	80.0 to 120	1.44	20.0
BD17836	Iron, Dissolved	mg/L	-0.00120	0.0176	0.2	0.965	0.965	0.203	0.170 to 0.230	98.5	70.0 to 130	0.00	20.0
BD17836	Iron, Total	mg/L	-0.000954	0.0176	0.2	1.02	1.01	0.202	0.170 to 0.230	100	70.0 to 130	0.985	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/19/23 12:00
Customer ID:
Delivery Date: 9/20/23 11:22

Description: Gorgas Ash Pond - MW-11R

Laboratory ID Number: BD17831

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17836	Lead, Dissolved	mg/L	0.0000047	0.000147	0.100	0.0992	0.100	0.101	0.0850 to 0.115	99.2	70.0 to 130	0.803	20.0
BD17836	Lead, Total	mg/L	0.0000048	0.000147	0.100	0.102	0.104	0.0999	0.0850 to 0.115	102	70.0 to 130	1.94	20.0
BD17836	Lithium, Dissolved	mg/L	0.000731	0.0154	0.200	0.221	0.220	0.207	0.170 to 0.230	102	70.0 to 130	0.454	20.0
BD17836	Lithium, Total	mg/L	0.000155	0.0154	0.200	0.223	0.221	0.204	0.170 to 0.230	103	70.0 to 130	0.901	20.0
BD17836	Magnesium, Dissolved	mg/L	-0.0283	0.0462	5.00	23.7	23.8	5.26	4.25 to 5.75	102	70.0 to 130	0.421	20.0
BD17836	Magnesium, Total	mg/L	-0.00443	0.0462	5.00	23.6	23.5	5.14	4.25 to 5.75	98.0	70.0 to 130	0.425	20.0
BD17836	Manganese, Dissolved	mg/L	0.0000088	0.00033	0.100	0.151	0.148	0.102	0.0850 to 0.115	96.0	70.0 to 130	2.01	20.0
BD17836	Manganese, Total	mg/L	0.0000062	0.00033	0.100	0.150	0.149	0.100	0.0850 to 0.115	96.6	70.0 to 130	0.669	20.0
BD17836	Mercury, Total by CVAA	mg/L	3.000E-05	0.000500	0.004	0.00399	0.00405	0.00403	0.00340 to 0.00460	99.8	70.0 to 130	1.49	20.0
BD17836	Molybdenum, Dissolved	mg/L	0.00116	0.0100	0.2	0.203	0.203	0.202	0.170 to 0.230	102	70.0 to 130	0.00	20.0
BD17836	Molybdenum, Total	mg/L	0.002	0.0100	0.2	0.205	0.205	0.203	0.170 to 0.230	102	70.0 to 130	0.00	20.0
BD17836	Potassium, Dissolved	mg/L	0.00592	0.367	10.0	10.8	10.7	10.1	8.50 to 11.5	96.3	70.0 to 130	0.930	20.0
BD17836	Potassium, Total	mg/L	0.0118	0.367	10.0	10.8	10.7	9.82	8.50 to 11.5	96.1	70.0 to 130	0.930	20.0
BD17836	Selenium, Dissolved	mg/L	0.0000140	0.00100	0.100	0.104	0.102	0.107	0.0850 to 0.115	104	70.0 to 130	1.94	20.0
BD17836	Selenium, Total	mg/L	0.0000754	0.00100	0.100	0.106	0.105	0.105	0.0850 to 0.115	106	70.0 to 130	0.948	20.0
BD17836	Silicon, Dissolved	mg/L	0.00203	0.0440	1.00	12.7	12.8	1.04	0.850 to 1.15	100	70.0 to 130	0.784	20.0
BD17836	Silicon, Total	mg/L	0.00143	0.0440	1.00	12.7	12.7	1.03	0.850 to 1.15	100	70.0 to 130	0.00	20.0
BD17836	Sodium, Dissolved	mg/L	0.00446	0.0880	5.00	23.2	23.2	5.26	4.25 to 5.75	104	70.0 to 130	0.00	20.0
BD17836	Sodium, Total	mg/L	0.00438	0.0880	5.00	23.1	23.0	5.16	4.25 to 5.75	100	70.0 to 130	0.434	20.0
BD17833	Sulfate	mg/L	-0.0276	2.0	640	1050	1010	20.0	18.0 to 22.0	111	80.0 to 120	3.88	20.0
BD17836	Thallium, Dissolved	mg/L	-0.0000003	0.000147	0.100	0.102	0.103	0.102	0.0850 to 0.115	102	70.0 to 130	0.976	20.0
BD17836	Thallium, Total	mg/L	0.0000121	0.000147	0.100	0.105	0.107	0.103	0.0850 to 0.115	105	70.0 to 130	1.89	20.0
BD17836	Total Organic Carbon	mg/L	0.235	1.00	10.0	9.77	10.1	9.37		97.7	80.0 to 120	3.32	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/19/23 12:00
Customer ID:
Delivery Date: 9/20/23 11:22

Description: Gorgas Ash Pond - MW-11R

Laboratory ID Number: BD17831

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17836	Alkalinity	mg CaCO3/L					222	52.9	45.0 to 55.0			1.82	10.0
BD17836	Nitrogen, Nitrate/Nitrite	mg/L as N	0.01	0.200	2.00	2.00	0.002	1.93	1.80 to 2.20	100	90.0 to 110	0.00	15.0
BD17834	Solids, Dissolved	mg/L	0.0000	25.0			177	51.0	40.0 to 60.0			4.42	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 10/25/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-38H

Location Code: WMWGORAP
Collected: 9/19/23 14:00
Customer ID:
Submittal Date: 9/20/23 11:22

Laboratory ID Number: BD17832

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	9/21/23 06:53	9/21/23 17:02		1.015	0.0486	mg/L	0.030000	0.1015	J
* Calcium, Total	9/21/23 06:53	9/21/23 17:02		1.015	10.7	mg/L	0.070035	0.406	
* Iron, Total	9/21/23 06:53	9/21/23 17:02		1.015	0.0733	mg/L	0.008120	0.0406	
* Lithium, Total	9/21/23 06:53	9/21/23 17:02		1.015	0.0606	mg/L	0.007105	0.01999956	
* Magnesium, Total	9/21/23 06:53	9/21/23 17:02		1.015	3.65	mg/L	0.021315	0.406	
* Molybdenum, Total	9/21/23 06:53	9/21/23 17:02		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Total (calc.)	9/21/23 06:53	9/21/23 17:02		1	16.0	mg/L			
* Silicon, Total	9/21/23 06:53	9/21/23 17:02		1.015	7.50	mg/L	0.02030	0.25375	
* Sodium, Total	9/21/23 06:53	9/21/23 19:36		10.15	133	mg/L	0.4060	4.06	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	9/20/23 15:27	9/21/23 15:30		1.015	0.0462	mg/L	0.030000	0.1015	J
* Calcium, Dissolved	9/20/23 15:27	9/21/23 15:30		1.015	9.64	mg/L	0.070035	0.406	
* Iron, Dissolved	9/20/23 15:27	9/21/23 15:30		1.015	0.0495	mg/L	0.008120	0.0406	
* Lithium, Dissolved	9/20/23 15:27	9/21/23 15:30		1.015	0.0605	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	9/20/23 15:27	9/21/23 15:30		1.015	3.30	mg/L	0.021315	0.406	
* Molybdenum, Dissolved	9/20/23 15:27	9/21/23 15:30		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Dissolved (calc.)	9/20/23 15:27	9/21/23 15:30		1	16.2	mg/L			
* Silicon, Dissolved	9/20/23 15:27	9/21/23 15:30		1.015	7.55	mg/L	0.02030	0.25375	
* Sodium, Dissolved	9/20/23 15:27	9/21/23 18:29		10.15	117	mg/L	0.4060	4.06	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	9/21/23 06:53	9/21/23 14:39		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Total	9/21/23 06:53	9/21/23 14:39		1.015	0.0285	mg/L	0.009135	0.05075	J
* Arsenic, Total	9/21/23 06:53	9/25/23 11:22		1.015	0.00194	mg/L	0.000112	0.000203	
* Barium, Total	9/21/23 06:53	9/21/23 14:39		1.015	0.251	mg/L	0.000508	0.001015	
* Beryllium, Total	9/21/23 06:53	9/25/23 11:22		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	9/21/23 06:53	9/21/23 14:39		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	9/21/23 06:53	9/21/23 14:39		1.015	0.000417	mg/L	0.000203	0.001015	J
* Cobalt, Total	9/21/23 06:53	9/21/23 14:39		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	9/21/23 06:53	9/21/23 14:39		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	9/21/23 06:53	9/21/23 14:39		1.015	0.0199	mg/L	0.000152	0.001015	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-38H

Location Code: WMWGORAP
Collected: 9/19/23 14:00
Customer ID:
Submittal Date: 9/20/23 11:22

Laboratory ID Number: BD17832

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	9/21/23 06:53	9/21/23 14:39		1.015	4.33	mg/L	0.169505	0.5075	
* Selenium, Total	9/21/23 06:53	9/21/23 14:39		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	9/21/23 06:53	9/21/23 14:39		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	9/20/23 15:27	9/21/23 12:42		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	9/20/23 15:27	9/21/23 12:42		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Dissolved	9/20/23 15:27	9/21/23 12:42		1.015	0.00143	mg/L	0.000112	0.000203	
* Barium, Dissolved	9/20/23 15:27	9/21/23 12:42		1.015	0.234	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	9/20/23 15:27	9/21/23 12:42		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	9/20/23 15:27	9/21/23 12:42		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	9/20/23 15:27	9/21/23 12:42		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	9/20/23 15:27	9/21/23 12:42		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Dissolved	9/20/23 15:27	9/21/23 12:42		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	9/20/23 15:27	9/21/23 12:42		1.015	0.0170	mg/L	0.000152	0.001015	
* Potassium, Dissolved	9/20/23 15:27	9/21/23 12:42		1.015	3.61	mg/L	0.169505	0.5075	
* Selenium, Dissolved	9/20/23 15:27	9/21/23 12:42		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	9/20/23 15:27	9/21/23 12:42		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	9/21/23 12:12	9/21/23 18:19		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	9/22/23 12:59	9/22/23 12:59		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: JAG***								
Alkalinity pH Endpoint	9/28/23 11:28	9/28/23 12:44		1	4.49	SU		2	
* Alkalinity	9/28/23 11:28	9/28/23 12:44		1	243	mg CaCO3/L		1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	9/20/23 14:45	9/22/23 11:15		1	349	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: JAG***								
* Bicarbonate Alkalinity, (calc.)	9/28/23 11:28	9/28/23 12:44		1	240	mg CaCO3/L		1	
* Carbonate Alkalinity, (calc.)	9/28/23 11:28	9/28/23 12:44		1	3.26	mg CaCO3/L		0.5	
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	9/25/23 16:02	9/25/23 16:02		1	1.46	mg/L	1.00	2	J

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-38H

Location Code: WMWGORAP
Collected: 9/19/23 14:00
Customer ID:
Submittal Date: 9/20/23 11:22

Laboratory ID Number: BD17832

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	9/25/23 10:21	9/25/23 10:21		3	31.6	mg/L	1.50	3	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	9/25/23 11:54	9/25/23 11:54		1	0.237	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	9/27/23 10:46	9/27/23 10:46		1	29.1	mg/L	0.6	2	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	9/19/23 13:58	9/19/23 13:58			535.31	uS/cm			FA
pH	9/19/23 13:58	9/19/23 13:58			7.59	SU			FA
Temperature	9/19/23 13:58	9/19/23 13:58			19.81	C			FA
Turbidity	9/19/23 13:58	9/19/23 13:58			2.44	NTU			FA
Sulfide	9/19/23 13:58	9/19/23 13:58			0	mg/L			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 10/25/2023
Version: 3.5
COA_CCR

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/19/23 14:00
Customer ID:
Delivery Date: 9/20/23 11:22

Description: Gorgas Ash Pond - MW-38H

Laboratory ID Number: BD17832

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17836	Aluminum, Dissolved	mg/L	0.000195	0.0198	0.100	0.0924	0.0913	0.0999	0.0850 to 0.115	92.4	70.0 to 130	1.20	20.0
BD17836	Aluminum, Total	mg/L	0.000928	0.0198	0.100	0.0938	0.0938	0.0960	0.0850 to 0.115	93.8	70.0 to 130	0.00	20.0
BD17836	Antimony, Dissolved	mg/L	0.000811	0.00100	0.100	0.0959	0.0943	0.0934	0.0850 to 0.115	95.9	70.0 to 130	1.68	20.0
BD17836	Antimony, Total	mg/L	0.000299	0.00100	0.100	0.105	0.105	0.104	0.0850 to 0.115	105	70.0 to 130	0.00	20.0
BD17836	Arsenic, Dissolved	mg/L	0.0000311	0.000200	0.100	0.106	0.109	0.108	0.0850 to 0.115	105	70.0 to 130	2.79	20.0
BD17836	Arsenic, Total	mg/L	0.0000684	0.000200	0.100	0.105	0.103	0.110	0.0850 to 0.115	104	70.0 to 130	1.92	20.0
BD17836	Barium, Dissolved	mg/L	-0.0000095	0.00100	0.100	0.154	0.156	0.0956	0.0850 to 0.115	89.2	70.0 to 130	1.29	20.0
BD17836	Barium, Total	mg/L	0.0000055	0.00100	0.100	0.166	0.164	0.0992	0.0850 to 0.115	97.2	70.0 to 130	1.21	20.0
BD17836	Beryllium, Dissolved	mg/L	0.0000442	0.000880	0.100	0.106	0.106	0.0959	0.0850 to 0.115	106	70.0 to 130	0.00	20.0
BD17836	Beryllium, Total	mg/L	0.0000828	0.000880	0.100	0.0984	0.0988	0.103	0.0850 to 0.115	98.4	70.0 to 130	0.406	20.0
BD17836	Boron, Dissolved	mg/L	-0.000123	0.0650	1.00	1.13	1.13	1.03	0.850 to 1.15	104	70.0 to 130	0.00	20.0
BD17836	Boron, Total	mg/L	0.000491	0.0650	1.00	1.14	1.13	1.04	0.850 to 1.15	105	70.0 to 130	0.881	20.0
BD17836	Cadmium, Dissolved	mg/L	0.0000000	0.000147	0.100	0.101	0.0997	0.101	0.0850 to 0.115	101	70.0 to 130	1.30	20.0
BD17836	Cadmium, Total	mg/L	0.0000063	0.000147	0.100	0.103	0.101	0.106	0.0850 to 0.115	103	70.0 to 130	1.96	20.0
BD17836	Calcium, Dissolved	mg/L	-0.00424	0.152	5.00	70.0	67.4	5.03	4.25 to 5.75	148	70.0 to 130	3.78	20.0
BD17836	Calcium, Total	mg/L	-0.00686	0.152	5.00	72.5	70.3	4.91	4.25 to 5.75	240	70.0 to 130	3.08	20.0
BD17836	Chloride	mg/L	0.0197	1.00	10.0	14.2	14.3	10.6	9.00 to 11.0	103	80.0 to 120	0.702	20.0
BD17836	Chromium, Dissolved	mg/L	-0.0000134	0.000440	0.100	0.0982	0.0953	0.101	0.0850 to 0.115	98.2	70.0 to 130	3.00	20.0
BD17836	Chromium, Total	mg/L	0.0000913	0.000440	0.100	0.0971	0.0970	0.100	0.0850 to 0.115	97.1	70.0 to 130	0.103	20.0
BD17836	Cobalt, Dissolved	mg/L	-0.0000014	0.000147	0.100	0.0987	0.0965	0.104	0.0850 to 0.115	98.6	70.0 to 130	2.25	20.0
BD17836	Cobalt, Total	mg/L	-0.0000009	0.000147	0.100	0.0987	0.0978	0.104	0.0850 to 0.115	98.6	70.0 to 130	0.916	20.0
BD17836	Fluoride	mg/L	0.036	0.125	2.50	2.79	2.75	2.62	2.25 to 2.75	107	80.0 to 120	1.44	20.0
BD17836	Iron, Dissolved	mg/L	-0.00120	0.0176	0.2	0.965	0.965	0.203	0.170 to 0.230	98.5	70.0 to 130	0.00	20.0
BD17836	Iron, Total	mg/L	-0.000954	0.0176	0.2	1.02	1.01	0.202	0.170 to 0.230	100	70.0 to 130	0.985	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/19/23 14:00
Customer ID:
Delivery Date: 9/20/23 11:22

Description: Gorgas Ash Pond - MW-38H

Laboratory ID Number: BD17832

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17836	Lead, Dissolved	mg/L	0.0000047	0.000147	0.100	0.0992	0.100	0.101	0.0850 to 0.115	99.2	70.0 to 130	0.803	20.0
BD17836	Lead, Total	mg/L	0.0000048	0.000147	0.100	0.102	0.104	0.0999	0.0850 to 0.115	102	70.0 to 130	1.94	20.0
BD17836	Lithium, Dissolved	mg/L	0.000731	0.0154	0.200	0.221	0.220	0.207	0.170 to 0.230	102	70.0 to 130	0.454	20.0
BD17836	Lithium, Total	mg/L	0.000155	0.0154	0.200	0.223	0.221	0.204	0.170 to 0.230	103	70.0 to 130	0.901	20.0
BD17836	Magnesium, Dissolved	mg/L	-0.0283	0.0462	5.00	23.7	23.8	5.26	4.25 to 5.75	102	70.0 to 130	0.421	20.0
BD17836	Magnesium, Total	mg/L	-0.00443	0.0462	5.00	23.6	23.5	5.14	4.25 to 5.75	98.0	70.0 to 130	0.425	20.0
BD17836	Manganese, Dissolved	mg/L	0.0000088	0.00033	0.100	0.151	0.148	0.102	0.0850 to 0.115	96.0	70.0 to 130	2.01	20.0
BD17836	Manganese, Total	mg/L	0.0000062	0.00033	0.100	0.150	0.149	0.100	0.0850 to 0.115	96.6	70.0 to 130	0.669	20.0
BD17836	Mercury, Total by CVAA	mg/L	3.000E-05	0.000500	0.004	0.00399	0.00405	0.00403	0.00340 to 0.00460	99.8	70.0 to 130	1.49	20.0
BD17836	Molybdenum, Dissolved	mg/L	0.00116	0.0100	0.2	0.203	0.203	0.202	0.170 to 0.230	102	70.0 to 130	0.00	20.0
BD17836	Molybdenum, Total	mg/L	0.002	0.0100	0.2	0.205	0.205	0.203	0.170 to 0.230	102	70.0 to 130	0.00	20.0
BD17836	Potassium, Dissolved	mg/L	0.00592	0.367	10.0	10.8	10.7	10.1	8.50 to 11.5	96.3	70.0 to 130	0.930	20.0
BD17836	Potassium, Total	mg/L	0.0118	0.367	10.0	10.8	10.7	9.82	8.50 to 11.5	96.1	70.0 to 130	0.930	20.0
BD17836	Selenium, Dissolved	mg/L	0.0000140	0.00100	0.100	0.104	0.102	0.107	0.0850 to 0.115	104	70.0 to 130	1.94	20.0
BD17836	Selenium, Total	mg/L	0.0000754	0.00100	0.100	0.106	0.105	0.105	0.0850 to 0.115	106	70.0 to 130	0.948	20.0
BD17836	Silicon, Dissolved	mg/L	0.00203	0.0440	1.00	12.7	12.8	1.04	0.850 to 1.15	100	70.0 to 130	0.784	20.0
BD17836	Silicon, Total	mg/L	0.00143	0.0440	1.00	12.7	12.7	1.03	0.850 to 1.15	100	70.0 to 130	0.00	20.0
BD17836	Sodium, Dissolved	mg/L	0.00446	0.0880	5.00	23.2	23.2	5.26	4.25 to 5.75	104	70.0 to 130	0.00	20.0
BD17836	Sodium, Total	mg/L	0.00438	0.0880	5.00	23.1	23.0	5.16	4.25 to 5.75	100	70.0 to 130	0.434	20.0
BD17833	Sulfate	mg/L	-0.0276	2.0	640	1050	1010	20.0	18.0 to 22.0	111	80.0 to 120	3.88	20.0
BD17836	Thallium, Dissolved	mg/L	-0.0000003	0.000147	0.100	0.102	0.103	0.102	0.0850 to 0.115	102	70.0 to 130	0.976	20.0
BD17836	Thallium, Total	mg/L	0.0000121	0.000147	0.100	0.105	0.107	0.103	0.0850 to 0.115	105	70.0 to 130	1.89	20.0
BD17836	Total Organic Carbon	mg/L	0.235	1.00	10.0	9.77	10.1	9.37		97.7	80.0 to 120	3.32	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/19/23 14:00
Customer ID:
Delivery Date: 9/20/23 11:22

Description: Gorgas Ash Pond - MW-38H

Laboratory ID Number: BD17832

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17836	Alkalinity	mg CaCO3/L					222	52.9	45.0 to 55.0			1.82	10.0
BD17836	Nitrogen, Nitrate/Nitrite	mg/L as N	0.01	0.200	2.00	2.00	0.002	1.93	1.80 to 2.20	100	90.0 to 110	0.00	15.0
BD17834	Solids, Dissolved	mg/L	0.0000	25.0			177	51.0	40.0 to 60.0			4.42	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-42H

Location Code: WMWGORAP
Collected: 9/19/23 15:30
Customer ID:
Submittal Date: 9/20/23 11:22

Laboratory ID Number: BD17833

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	9/21/23 06:53	9/21/23 17:06		1.015	0.0599	mg/L	0.030000	0.1015	J
* Calcium, Total	9/21/23 06:53	9/21/23 19:39		10.15	131	mg/L	0.70035	4.06	
* Iron, Total	9/21/23 06:53	9/21/23 19:39		10.15	4.72	mg/L	0.08120	0.406	
* Lithium, Total	9/21/23 06:53	9/21/23 17:06		1.015	0.0346	mg/L	0.007105	0.01999956	
* Magnesium, Total	9/21/23 06:53	9/21/23 19:39		10.15	47.2	mg/L	0.21315	4.06	
* Molybdenum, Total	9/21/23 06:53	9/21/23 17:06		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Total (calc.)	9/21/23 06:53	9/21/23 17:06		1	23.5	mg/L			
* Silicon, Total	9/21/23 06:53	9/21/23 17:06		1.015	11.0	mg/L	0.02030	0.25375	
* Sodium, Total	9/21/23 06:53	9/21/23 17:06		1.015	39.5	mg/L	0.04060	0.406	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	9/20/23 15:27	9/21/23 15:33		1.015	0.0574	mg/L	0.030000	0.1015	J
* Calcium, Dissolved	9/20/23 15:27	9/21/23 18:32		10.15	133	mg/L	0.70035	4.06	
* Iron, Dissolved	9/20/23 15:27	9/21/23 15:33		1.015	3.64	mg/L	0.008120	0.0406	
* Lithium, Dissolved	9/20/23 15:27	9/21/23 15:33		1.015	0.0346	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	9/20/23 15:27	9/21/23 18:32		10.15	48.1	mg/L	0.21315	4.06	
* Molybdenum, Dissolved	9/20/23 15:27	9/21/23 15:33		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Dissolved (calc.)	9/20/23 15:27	9/21/23 15:33		1	23.5	mg/L			
* Silicon, Dissolved	9/20/23 15:27	9/21/23 15:33		1.015	11.0	mg/L	0.02030	0.25375	
* Sodium, Dissolved	9/20/23 15:27	9/21/23 15:33		1.015	39.3	mg/L	0.04060	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	9/21/23 06:53	9/21/23 14:43		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Arsenic, Total	9/21/23 06:53	9/25/23 11:26		1.015	0.0111	mg/L	0.000112	0.000203	
* Aluminum, Total	9/21/23 06:53	9/21/23 14:43		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Barium, Total	9/21/23 06:53	9/21/23 14:43		1.015	0.0223	mg/L	0.000508	0.001015	
* Beryllium, Total	9/21/23 06:53	9/25/23 11:26		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	9/21/23 06:53	9/21/23 14:43		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	9/21/23 06:53	9/21/23 14:43		1.015	0.000271	mg/L	0.000203	0.001015	J
* Cobalt, Total	9/21/23 06:53	9/21/23 14:43		1.015	0.000321	mg/L	0.000068	0.000203	
* Lead, Total	9/21/23 06:53	9/21/23 14:43		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	9/21/23 06:53	9/21/23 14:43		1.015	0.816	mg/L	0.000152	0.001015	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 10/25/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-42H

Location Code: WMWGORAP
Collected: 9/19/23 15:30
Customer ID:
Submittal Date: 9/20/23 11:22

Laboratory ID Number: BD17833

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	9/21/23 06:53	9/21/23 14:43		1.015	2.19	mg/L	0.169505	0.5075	
* Selenium, Total	9/21/23 06:53	9/21/23 14:43		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	9/21/23 06:53	9/21/23 14:43		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	9/20/23 15:27	9/21/23 12:46		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	9/20/23 15:27	9/21/23 12:46		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Dissolved	9/20/23 15:27	9/21/23 12:46		1.015	0.00927	mg/L	0.000112	0.000203	
* Barium, Dissolved	9/20/23 15:27	9/21/23 12:46		1.015	0.0219	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	9/20/23 15:27	9/21/23 12:46		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	9/20/23 15:27	9/21/23 12:46		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	9/20/23 15:27	9/21/23 12:46		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	9/20/23 15:27	9/21/23 12:46		1.015	0.000326	mg/L	0.000068	0.000203	
* Lead, Dissolved	9/20/23 15:27	9/21/23 12:46		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	9/20/23 15:27	9/21/23 12:46		1.015	0.832	mg/L	0.000152	0.001015	
* Potassium, Dissolved	9/20/23 15:27	9/21/23 12:46		1.015	2.13	mg/L	0.169505	0.5075	
* Selenium, Dissolved	9/20/23 15:27	9/21/23 12:46		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	9/20/23 15:27	9/21/23 12:46		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	9/21/23 12:12	9/21/23 18:23		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	9/22/23 13:01	9/22/23 13:01		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: JAG***								
Alkalinity pH Endpoint	9/28/23 11:28	9/28/23 12:44		1	4.51	SU		2	
* Alkalinity	9/28/23 11:28	9/28/23 12:44		1	192	mg CaCO3/L		1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	9/20/23 14:45	9/22/23 11:15		1	798	mg/L		50	
Analytical Method: SM 4500CO2 D	***Analyst: JAG***								
* Bicarbonate Alkalinity, (calc.)	9/28/23 11:28	9/28/23 12:44		1	192	mg CaCO3/L		1	A
* Carbonate Alkalinity, (calc.)	9/28/23 11:28	9/28/23 12:44		1	Not Detected	mg CaCO3/L		0.5	A
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	9/25/23 16:19	9/25/23 16:19		1	Not Detected	mg/L	1.00	2	U

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 10/25/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-42H

Location Code: WMWGORAP
Collected: 9/19/23 15:30
Customer ID:
Submittal Date: 9/20/23 11:22

Laboratory ID Number: BD17833

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	9/25/23 10:13	9/25/23 10:13		1	11.0	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	9/25/23 11:56	9/25/23 11:56		1	0.128	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	9/27/23 10:47	9/27/23 10:47		32	339	mg/L	19.2	64	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	9/19/23 15:27	9/19/23 15:27			1063.73	uS/cm			FA
pH	9/19/23 15:27	9/19/23 15:27			6.58	SU			FA
Temperature	9/19/23 15:27	9/19/23 15:27			18.56	C			FA
Turbidity	9/19/23 15:27	9/19/23 15:27			9.61	NTU			FA
Sulfide	9/19/23 15:27	9/19/23 15:27			0	mg/L			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/19/23 15:30
Customer ID:
Delivery Date: 9/20/23 11:22

Description: Gorgas Ash Pond - MW-42H

Laboratory ID Number: BD17833

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17836	Aluminum, Dissolved	mg/L	0.000195	0.0198	0.100	0.0924	0.0913	0.0999	0.0850 to 0.115	92.4	70.0 to 130	1.20	20.0
BD17836	Aluminum, Total	mg/L	0.000928	0.0198	0.100	0.0938	0.0938	0.0960	0.0850 to 0.115	93.8	70.0 to 130	0.00	20.0
BD17836	Antimony, Dissolved	mg/L	0.000811	0.00100	0.100	0.0959	0.0943	0.0934	0.0850 to 0.115	95.9	70.0 to 130	1.68	20.0
BD17836	Antimony, Total	mg/L	0.000299	0.00100	0.100	0.105	0.105	0.104	0.0850 to 0.115	105	70.0 to 130	0.00	20.0
BD17836	Arsenic, Dissolved	mg/L	0.0000311	0.000200	0.100	0.106	0.109	0.108	0.0850 to 0.115	105	70.0 to 130	2.79	20.0
BD17836	Arsenic, Total	mg/L	0.0000684	0.000200	0.100	0.105	0.103	0.110	0.0850 to 0.115	104	70.0 to 130	1.92	20.0
BD17836	Barium, Dissolved	mg/L	-0.0000095	0.00100	0.100	0.154	0.156	0.0956	0.0850 to 0.115	89.2	70.0 to 130	1.29	20.0
BD17836	Barium, Total	mg/L	0.0000055	0.00100	0.100	0.166	0.164	0.0992	0.0850 to 0.115	97.2	70.0 to 130	1.21	20.0
BD17836	Beryllium, Dissolved	mg/L	0.0000442	0.000880	0.100	0.106	0.106	0.0959	0.0850 to 0.115	106	70.0 to 130	0.00	20.0
BD17836	Beryllium, Total	mg/L	0.0000828	0.000880	0.100	0.0984	0.0988	0.103	0.0850 to 0.115	98.4	70.0 to 130	0.406	20.0
BD17836	Boron, Dissolved	mg/L	-0.000123	0.0650	1.00	1.13	1.13	1.03	0.850 to 1.15	104	70.0 to 130	0.00	20.0
BD17836	Boron, Total	mg/L	0.000491	0.0650	1.00	1.14	1.13	1.04	0.850 to 1.15	105	70.0 to 130	0.881	20.0
BD17836	Cadmium, Dissolved	mg/L	0.0000000	0.000147	0.100	0.101	0.0997	0.101	0.0850 to 0.115	101	70.0 to 130	1.30	20.0
BD17836	Cadmium, Total	mg/L	0.0000063	0.000147	0.100	0.103	0.101	0.106	0.0850 to 0.115	103	70.0 to 130	1.96	20.0
BD17836	Calcium, Dissolved	mg/L	-0.00424	0.152	5.00	70.0	67.4	5.03	4.25 to 5.75	148	70.0 to 130	3.78	20.0
BD17836	Calcium, Total	mg/L	-0.00686	0.152	5.00	72.5	70.3	4.91	4.25 to 5.75	240	70.0 to 130	3.08	20.0
BD17836	Chloride	mg/L	0.0197	1.00	10.0	14.2	14.3	10.6	9.00 to 11.0	103	80.0 to 120	0.702	20.0
BD17836	Chromium, Dissolved	mg/L	-0.0000134	0.000440	0.100	0.0982	0.0953	0.101	0.0850 to 0.115	98.2	70.0 to 130	3.00	20.0
BD17836	Chromium, Total	mg/L	0.0000913	0.000440	0.100	0.0971	0.0970	0.100	0.0850 to 0.115	97.1	70.0 to 130	0.103	20.0
BD17836	Cobalt, Dissolved	mg/L	-0.0000014	0.000147	0.100	0.0987	0.0965	0.104	0.0850 to 0.115	98.6	70.0 to 130	2.25	20.0
BD17836	Cobalt, Total	mg/L	-0.0000009	0.000147	0.100	0.0987	0.0978	0.104	0.0850 to 0.115	98.6	70.0 to 130	0.916	20.0
BD17836	Fluoride	mg/L	0.036	0.125	2.50	2.79	2.75	2.62	2.25 to 2.75	107	80.0 to 120	1.44	20.0
BD17836	Iron, Dissolved	mg/L	-0.00120	0.0176	0.2	0.965	0.965	0.203	0.170 to 0.230	98.5	70.0 to 130	0.00	20.0
BD17836	Iron, Total	mg/L	-0.000954	0.0176	0.2	1.02	1.01	0.202	0.170 to 0.230	100	70.0 to 130	0.985	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/19/23 15:30
Customer ID:
Delivery Date: 9/20/23 11:22

Description: Gorgas Ash Pond - MW-42H

Laboratory ID Number: BD17833

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17836	Lead, Dissolved	mg/L	0.0000047	0.000147	0.100	0.0992	0.100	0.101	0.0850 to 0.115	99.2	70.0 to 130	0.803	20.0
BD17836	Lead, Total	mg/L	0.0000048	0.000147	0.100	0.102	0.104	0.0999	0.0850 to 0.115	102	70.0 to 130	1.94	20.0
BD17836	Lithium, Dissolved	mg/L	0.000731	0.0154	0.200	0.221	0.220	0.207	0.170 to 0.230	102	70.0 to 130	0.454	20.0
BD17836	Lithium, Total	mg/L	0.000155	0.0154	0.200	0.223	0.221	0.204	0.170 to 0.230	103	70.0 to 130	0.901	20.0
BD17836	Magnesium, Dissolved	mg/L	-0.0283	0.0462	5.00	23.7	23.8	5.26	4.25 to 5.75	102	70.0 to 130	0.421	20.0
BD17836	Magnesium, Total	mg/L	-0.00443	0.0462	5.00	23.6	23.5	5.14	4.25 to 5.75	98.0	70.0 to 130	0.425	20.0
BD17836	Manganese, Dissolved	mg/L	0.0000088	0.00033	0.100	0.151	0.148	0.102	0.0850 to 0.115	96.0	70.0 to 130	2.01	20.0
BD17836	Manganese, Total	mg/L	0.0000062	0.00033	0.100	0.150	0.149	0.100	0.0850 to 0.115	96.6	70.0 to 130	0.669	20.0
BD17836	Mercury, Total by CVAA	mg/L	3.000E-05	0.000500	0.004	0.00399	0.00405	0.00403	0.00340 to 0.00460	99.8	70.0 to 130	1.49	20.0
BD17836	Molybdenum, Dissolved	mg/L	0.00116	0.0100	0.2	0.203	0.203	0.202	0.170 to 0.230	102	70.0 to 130	0.00	20.0
BD17836	Molybdenum, Total	mg/L	0.002	0.0100	0.2	0.205	0.205	0.203	0.170 to 0.230	102	70.0 to 130	0.00	20.0
BD17836	Potassium, Dissolved	mg/L	0.00592	0.367	10.0	10.8	10.7	10.1	8.50 to 11.5	96.3	70.0 to 130	0.930	20.0
BD17836	Potassium, Total	mg/L	0.0118	0.367	10.0	10.8	10.7	9.82	8.50 to 11.5	96.1	70.0 to 130	0.930	20.0
BD17836	Selenium, Dissolved	mg/L	0.0000140	0.00100	0.100	0.104	0.102	0.107	0.0850 to 0.115	104	70.0 to 130	1.94	20.0
BD17836	Selenium, Total	mg/L	0.0000754	0.00100	0.100	0.106	0.105	0.105	0.0850 to 0.115	106	70.0 to 130	0.948	20.0
BD17836	Silicon, Dissolved	mg/L	0.00203	0.0440	1.00	12.7	12.8	1.04	0.850 to 1.15	100	70.0 to 130	0.784	20.0
BD17836	Silicon, Total	mg/L	0.00143	0.0440	1.00	12.7	12.7	1.03	0.850 to 1.15	100	70.0 to 130	0.00	20.0
BD17836	Sodium, Dissolved	mg/L	0.00446	0.0880	5.00	23.2	23.2	5.26	4.25 to 5.75	104	70.0 to 130	0.00	20.0
BD17836	Sodium, Total	mg/L	0.00438	0.0880	5.00	23.1	23.0	5.16	4.25 to 5.75	100	70.0 to 130	0.434	20.0
BD17833	Sulfate	mg/L	-0.0276	2.0	640	1050	1010	20.0	18.0 to 22.0	111	80.0 to 120	3.88	20.0
BD17836	Thallium, Dissolved	mg/L	-0.0000003	0.000147	0.100	0.102	0.103	0.102	0.0850 to 0.115	102	70.0 to 130	0.976	20.0
BD17836	Thallium, Total	mg/L	0.0000121	0.000147	0.100	0.105	0.107	0.103	0.0850 to 0.115	105	70.0 to 130	1.89	20.0
BD17836	Total Organic Carbon	mg/L	0.235	1.00	10.0	9.77	10.1	9.37		97.7	80.0 to 120	3.32	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/19/23 15:30
Customer ID:
Delivery Date: 9/20/23 11:22

Description: Gorgas Ash Pond - MW-42H

Laboratory ID Number: BD17833

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17836	Alkalinity	mg CaCO3/L					222	52.9	45.0 to 55.0			1.82	10.0
BD17836	Nitrogen, Nitrate/Nitrite	mg/L as N	0.01	0.200	2.00	2.00	0.002	1.93	1.80 to 2.20	100	90.0 to 110	0.00	15.0
BD17834	Solids, Dissolved	mg/L	0.0000	25.0			177	51.0	40.0 to 60.0			4.42	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 10/25/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond - MW-18R

Location Code: WMWGORAP
Collected: 9/19/23 16:45
Customer ID:
Submittal Date: 9/20/23 11:22

Laboratory ID Number: BD17834

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	9/21/23 06:53	9/21/23 17:09		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	9/21/23 06:53	9/21/23 17:09		1.015	33.1	mg/L	0.070035	0.406	
* Iron, Total	9/21/23 06:53	9/21/23 17:09		1.015	3.53	mg/L	0.008120	0.0406	
* Lithium, Total	9/21/23 06:53	9/21/23 17:09		1.015	0.00814	mg/L	0.007105	0.01999956	J
* Magnesium, Total	9/21/23 06:53	9/21/23 17:09		1.015	8.33	mg/L	0.021315	0.406	
* Molybdenum, Total	9/21/23 06:53	9/21/23 17:09		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Total (calc.)	9/21/23 06:53	9/21/23 17:09		1	25.5	mg/L			
* Silicon, Total	9/21/23 06:53	9/21/23 17:09		1.015	11.9	mg/L	0.02030	0.25375	
* Sodium, Total	9/21/23 06:53	9/21/23 17:09		1.015	11.9	mg/L	0.04060	0.406	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	9/20/23 15:27	9/21/23 15:37		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Dissolved	9/20/23 15:27	9/21/23 15:37		1.015	32.8	mg/L	0.070035	0.406	
* Iron, Dissolved	9/20/23 15:27	9/21/23 15:37		1.015	3.50	mg/L	0.008120	0.0406	
* Lithium, Dissolved	9/20/23 15:27	9/21/23 15:37		1.015	0.00844	mg/L	0.007105	0.01999956	J
* Magnesium, Dissolved	9/20/23 15:27	9/21/23 15:37		1.015	8.20	mg/L	0.021315	0.406	
* Molybdenum, Dissolved	9/20/23 15:27	9/21/23 15:37		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Dissolved (calc.)	9/20/23 15:27	9/21/23 15:37		1	25.3	mg/L			
* Silicon, Dissolved	9/20/23 15:27	9/21/23 15:37		1.015	11.8	mg/L	0.02030	0.25375	
* Sodium, Dissolved	9/20/23 15:27	9/21/23 15:37		1.015	11.8	mg/L	0.04060	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	9/21/23 06:53	9/21/23 14:46		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Total	9/21/23 06:53	9/21/23 14:46		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Total	9/21/23 06:53	9/25/23 11:30		1.015	0.000488	mg/L	0.000112	0.000203	
* Barium, Total	9/21/23 06:53	9/21/23 14:46		1.015	0.0955	mg/L	0.000508	0.001015	
* Beryllium, Total	9/21/23 06:53	9/25/23 11:30		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	9/21/23 06:53	9/21/23 14:46		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	9/21/23 06:53	9/21/23 14:46		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	9/21/23 06:53	9/21/23 14:46		1.015	0.000694	mg/L	0.000068	0.000203	
* Lead, Total	9/21/23 06:53	9/21/23 14:46		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	9/21/23 06:53	9/21/23 14:46		1.015	0.176	mg/L	0.000152	0.001015	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-18R

Location Code: WMWGORAP
Collected: 9/19/23 16:45
Customer ID:
Submittal Date: 9/20/23 11:22

Laboratory ID Number: BD17834

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	9/21/23 06:53	9/21/23 14:46		1.015	1.09	mg/L	0.169505	0.5075	
* Selenium, Total	9/21/23 06:53	9/21/23 14:46		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	9/21/23 06:53	9/21/23 14:46		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	9/20/23 15:27	9/21/23 12:49		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	9/20/23 15:27	9/21/23 12:49		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Dissolved	9/20/23 15:27	9/21/23 12:49		1.015	0.000537	mg/L	0.000112	0.000203	
* Barium, Dissolved	9/20/23 15:27	9/21/23 12:49		1.015	0.0878	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	9/20/23 15:27	9/21/23 12:49		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	9/20/23 15:27	9/21/23 12:49		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	9/20/23 15:27	9/21/23 12:49		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	9/20/23 15:27	9/21/23 12:49		1.015	0.000613	mg/L	0.000068	0.000203	
* Lead, Dissolved	9/20/23 15:27	9/21/23 12:49		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	9/20/23 15:27	9/21/23 12:49		1.015	0.168	mg/L	0.000152	0.001015	
* Potassium, Dissolved	9/20/23 15:27	9/21/23 12:49		1.015	1.12	mg/L	0.169505	0.5075	
* Selenium, Dissolved	9/20/23 15:27	9/21/23 12:49		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	9/20/23 15:27	9/21/23 12:49		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	9/21/23 12:12	9/21/23 18:27		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	9/22/23 13:03	9/22/23 13:03		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: JAG***								
Alkalinity pH Endpoint	9/28/23 11:28	9/28/23 12:44		1	4.53	SU		2	
* Alkalinity	9/28/23 11:28	9/28/23 12:44		1	120	mg CaCO3/L		1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	9/20/23 14:45	9/22/23 11:15		1	185	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: JAG***								
* Bicarbonate Alkalinity, (calc.)	9/28/23 11:28	9/28/23 12:44		1	120	mg CaCO3/L		1	
* Carbonate Alkalinity, (calc.)	9/28/23 11:28	9/28/23 12:44		1	Not Detected	mg CaCO3/L		0.5	
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	9/25/23 16:34	9/25/23 16:34		1	Not Detected	mg/L	1.00	2	U

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-18R

Location Code: WMWGORAP
Collected: 9/19/23 16:45
Customer ID:
Submittal Date: 9/20/23 11:22

Laboratory ID Number: BD17834

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	9/25/23 10:14	9/25/23 10:14		1	3.44	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	9/25/23 11:57	9/25/23 11:57		1	0.110	mg/L	0.06	0.125	J
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	9/27/23 11:06	9/27/23 11:06		1	23.5	mg/L	0.6	2	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	9/19/23 16:43	9/19/23 16:43			287.43	uS/cm			FA
pH	9/19/23 16:43	9/19/23 16:43			6.39	SU			FA
Temperature	9/19/23 16:43	9/19/23 16:43			17.53	C			FA
Turbidity	9/19/23 16:43	9/19/23 16:43			1.32	NTU			FA
Sulfide	9/19/23 16:43	9/19/23 16:43			0	mg/L			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 10/25/2023
Version: 3.5
COA_CCR

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/19/23 16:45
Customer ID:
Delivery Date: 9/20/23 11:22

Description: Gorgas Ash Pond - MW-18R

Laboratory ID Number: BD17834

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17836	Aluminum, Dissolved	mg/L	0.000195	0.0198	0.100	0.0924	0.0913	0.0999	0.0850 to 0.115	92.4	70.0 to 130	1.20	20.0
BD17836	Aluminum, Total	mg/L	0.000928	0.0198	0.100	0.0938	0.0938	0.0960	0.0850 to 0.115	93.8	70.0 to 130	0.00	20.0
BD17836	Antimony, Dissolved	mg/L	0.000811	0.00100	0.100	0.0959	0.0943	0.0934	0.0850 to 0.115	95.9	70.0 to 130	1.68	20.0
BD17836	Antimony, Total	mg/L	0.000299	0.00100	0.100	0.105	0.105	0.104	0.0850 to 0.115	105	70.0 to 130	0.00	20.0
BD17836	Arsenic, Dissolved	mg/L	0.0000311	0.000200	0.100	0.106	0.109	0.108	0.0850 to 0.115	105	70.0 to 130	2.79	20.0
BD17836	Arsenic, Total	mg/L	0.0000684	0.000200	0.100	0.105	0.103	0.110	0.0850 to 0.115	104	70.0 to 130	1.92	20.0
BD17836	Barium, Dissolved	mg/L	-0.0000095	0.00100	0.100	0.154	0.156	0.0956	0.0850 to 0.115	89.2	70.0 to 130	1.29	20.0
BD17836	Barium, Total	mg/L	0.0000055	0.00100	0.100	0.166	0.164	0.0992	0.0850 to 0.115	97.2	70.0 to 130	1.21	20.0
BD17836	Beryllium, Dissolved	mg/L	0.0000442	0.000880	0.100	0.106	0.106	0.0959	0.0850 to 0.115	106	70.0 to 130	0.00	20.0
BD17836	Beryllium, Total	mg/L	0.0000828	0.000880	0.100	0.0984	0.0988	0.103	0.0850 to 0.115	98.4	70.0 to 130	0.406	20.0
BD17836	Boron, Dissolved	mg/L	-0.000123	0.0650	1.00	1.13	1.13	1.03	0.850 to 1.15	104	70.0 to 130	0.00	20.0
BD17836	Boron, Total	mg/L	0.000491	0.0650	1.00	1.14	1.13	1.04	0.850 to 1.15	105	70.0 to 130	0.881	20.0
BD17836	Cadmium, Dissolved	mg/L	0.0000000	0.000147	0.100	0.101	0.0997	0.101	0.0850 to 0.115	101	70.0 to 130	1.30	20.0
BD17836	Cadmium, Total	mg/L	0.0000063	0.000147	0.100	0.103	0.101	0.106	0.0850 to 0.115	103	70.0 to 130	1.96	20.0
BD17836	Calcium, Dissolved	mg/L	-0.00424	0.152	5.00	70.0	67.4	5.03	4.25 to 5.75	148	70.0 to 130	3.78	20.0
BD17836	Calcium, Total	mg/L	-0.00686	0.152	5.00	72.5	70.3	4.91	4.25 to 5.75	240	70.0 to 130	3.08	20.0
BD17836	Chloride	mg/L	0.0197	1.00	10.0	14.2	14.3	10.6	9.00 to 11.0	103	80.0 to 120	0.702	20.0
BD17836	Chromium, Dissolved	mg/L	-0.0000134	0.000440	0.100	0.0982	0.0953	0.101	0.0850 to 0.115	98.2	70.0 to 130	3.00	20.0
BD17836	Chromium, Total	mg/L	0.0000913	0.000440	0.100	0.0971	0.0970	0.100	0.0850 to 0.115	97.1	70.0 to 130	0.103	20.0
BD17836	Cobalt, Dissolved	mg/L	-0.0000014	0.000147	0.100	0.0987	0.0965	0.104	0.0850 to 0.115	98.6	70.0 to 130	2.25	20.0
BD17836	Cobalt, Total	mg/L	-0.0000009	0.000147	0.100	0.0987	0.0978	0.104	0.0850 to 0.115	98.6	70.0 to 130	0.916	20.0
BD17836	Fluoride	mg/L	0.036	0.125	2.50	2.79	2.75	2.62	2.25 to 2.75	107	80.0 to 120	1.44	20.0
BD17836	Iron, Dissolved	mg/L	-0.00120	0.0176	0.2	0.965	0.965	0.203	0.170 to 0.230	98.5	70.0 to 130	0.00	20.0
BD17836	Iron, Total	mg/L	-0.000954	0.0176	0.2	1.02	1.01	0.202	0.170 to 0.230	100	70.0 to 130	0.985	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/19/23 16:45
Customer ID:
Delivery Date: 9/20/23 11:22

Description: Gorgas Ash Pond - MW-18R

Laboratory ID Number: BD17834

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17836	Lead, Dissolved	mg/L	0.0000047	0.000147	0.100	0.0992	0.100	0.101	0.0850 to 0.115	99.2	70.0 to 130	0.803	20.0
BD17836	Lead, Total	mg/L	0.0000048	0.000147	0.100	0.102	0.104	0.0999	0.0850 to 0.115	102	70.0 to 130	1.94	20.0
BD17836	Lithium, Dissolved	mg/L	0.000731	0.0154	0.200	0.221	0.220	0.207	0.170 to 0.230	102	70.0 to 130	0.454	20.0
BD17836	Lithium, Total	mg/L	0.000155	0.0154	0.200	0.223	0.221	0.204	0.170 to 0.230	103	70.0 to 130	0.901	20.0
BD17836	Magnesium, Dissolved	mg/L	-0.0283	0.0462	5.00	23.7	23.8	5.26	4.25 to 5.75	102	70.0 to 130	0.421	20.0
BD17836	Magnesium, Total	mg/L	-0.00443	0.0462	5.00	23.6	23.5	5.14	4.25 to 5.75	98.0	70.0 to 130	0.425	20.0
BD17836	Manganese, Dissolved	mg/L	0.0000088	0.00033	0.100	0.151	0.148	0.102	0.0850 to 0.115	96.0	70.0 to 130	2.01	20.0
BD17836	Manganese, Total	mg/L	0.0000062	0.00033	0.100	0.150	0.149	0.100	0.0850 to 0.115	96.6	70.0 to 130	0.669	20.0
BD17836	Mercury, Total by CVAA	mg/L	3.000E-05	0.000500	0.004	0.00399	0.00405	0.00403	0.00340 to 0.00460	99.8	70.0 to 130	1.49	20.0
BD17836	Molybdenum, Dissolved	mg/L	0.00116	0.0100	0.2	0.203	0.203	0.202	0.170 to 0.230	102	70.0 to 130	0.00	20.0
BD17836	Molybdenum, Total	mg/L	0.002	0.0100	0.2	0.205	0.205	0.203	0.170 to 0.230	102	70.0 to 130	0.00	20.0
BD17836	Potassium, Dissolved	mg/L	0.00592	0.367	10.0	10.8	10.7	10.1	8.50 to 11.5	96.3	70.0 to 130	0.930	20.0
BD17836	Potassium, Total	mg/L	0.0118	0.367	10.0	10.8	10.7	9.82	8.50 to 11.5	96.1	70.0 to 130	0.930	20.0
BD17836	Selenium, Dissolved	mg/L	0.0000140	0.00100	0.100	0.104	0.102	0.107	0.0850 to 0.115	104	70.0 to 130	1.94	20.0
BD17836	Selenium, Total	mg/L	0.0000754	0.00100	0.100	0.106	0.105	0.105	0.0850 to 0.115	106	70.0 to 130	0.948	20.0
BD17836	Silicon, Dissolved	mg/L	0.00203	0.0440	1.00	12.7	12.8	1.04	0.850 to 1.15	100	70.0 to 130	0.784	20.0
BD17836	Silicon, Total	mg/L	0.00143	0.0440	1.00	12.7	12.7	1.03	0.850 to 1.15	100	70.0 to 130	0.00	20.0
BD17836	Sodium, Dissolved	mg/L	0.00446	0.0880	5.00	23.2	23.2	5.26	4.25 to 5.75	104	70.0 to 130	0.00	20.0
BD17836	Sodium, Total	mg/L	0.00438	0.0880	5.00	23.1	23.0	5.16	4.25 to 5.75	100	70.0 to 130	0.434	20.0
BD17836	Sulfate	mg/L	-0.0895	2.0	60.0	103	103	19.9	18.0 to 22.0	100	80.0 to 120	0.00	20.0
BD17836	Thallium, Dissolved	mg/L	-0.0000003	0.000147	0.100	0.102	0.103	0.102	0.0850 to 0.115	102	70.0 to 130	0.976	20.0
BD17836	Thallium, Total	mg/L	0.0000121	0.000147	0.100	0.105	0.107	0.103	0.0850 to 0.115	105	70.0 to 130	1.89	20.0
BD17836	Total Organic Carbon	mg/L	0.235	1.00	10.0	9.77	10.1	9.37		97.7	80.0 to 120	3.32	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 10/25/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/19/23 16:45
Customer ID:
Delivery Date: 9/20/23 11:22

Description: Gorgas Ash Pond - MW-18R

Laboratory ID Number: BD17834

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17836	Alkalinity	mg CaCO3/L					222	52.9	45.0 to 55.0			1.82	10.0
BD17836	Nitrogen, Nitrate/Nitrite	mg/L as N	0.01	0.200	2.00	2.00	0.002	1.93	1.80 to 2.20	100	90.0 to 110	0.00	15.0
BD17834	Solids, Dissolved	mg/L	0.0000	25.0			177	51.0	40.0 to 60.0			4.42	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 10/25/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond Field Blank-3

Location Code: WMWGORAPFB
Collected: 9/19/23 17:15
Customer ID:
Submittal Date: 9/20/23 11:23

Laboratory ID Number: BD17835

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	9/21/23 06:53	9/21/23 17:12		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	9/21/23 06:53	9/21/23 17:12		1.015	Not Detected	mg/L	0.070035	0.406	U
* Iron, Total	9/21/23 06:53	9/21/23 17:12		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Total	9/21/23 06:53	9/21/23 17:12		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	9/21/23 06:53	9/21/23 17:12		1.015	Not Detected	mg/L	0.021315	0.406	U
* Molybdenum, Total	9/21/23 06:53	9/21/23 17:12		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Total (calc.)	9/21/23 06:53	9/21/23 17:12		1	Not Detected	mg/L			
* Silicon, Total	9/21/23 06:53	9/21/23 17:12		1.015	Not Detected	mg/L	0.02030	0.25375	U
* Sodium, Total	9/21/23 06:53	9/21/23 17:12		1.015	Not Detected	mg/L	0.04060	0.406	U
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	9/21/23 06:53	9/21/23 14:50		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Total	9/21/23 06:53	9/21/23 14:50		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Total	9/21/23 06:53	9/25/23 11:34		1.015	Not Detected	mg/L	0.000112	0.000203	U
* Barium, Total	9/21/23 06:53	9/21/23 14:50		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Beryllium, Total	9/21/23 06:53	9/25/23 11:34		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	9/21/23 06:53	9/21/23 14:50		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	9/21/23 06:53	9/21/23 14:50		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	9/21/23 06:53	9/21/23 14:50		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	9/21/23 06:53	9/21/23 14:50		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	9/21/23 06:53	9/21/23 14:50		1.015	Not Detected	mg/L	0.000152	0.001015	U
* Potassium, Total	9/21/23 06:53	9/21/23 14:50		1.015	Not Detected	mg/L	0.169505	0.5075	U
* Selenium, Total	9/21/23 06:53	9/21/23 14:50		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	9/21/23 06:53	9/21/23 14:50		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	9/21/23 12:12	9/21/23 18:31		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	9/22/23 13:05	9/22/23 13:05		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	9/26/23 10:35	9/27/23 13:03		1	Not Detected	mg/L		25	U

MDL's and RL's are adjusted for sample dilution, as applicable

Comments:

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond Field Blank-3

Location Code: WMWGORAPFB
Collected: 9/19/23 17:15
Customer ID:
Submittal Date: 9/20/23 11:23

Laboratory ID Number: BD17835

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	9/25/23 16:48	9/25/23 16:48		1	Not Detected	mg/L	1.00	2	U
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	9/25/23 10:16	9/25/23 10:16		1	Not Detected	mg/L	0.50	1	U
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	9/25/23 11:58	9/25/23 11:58		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	9/27/23 11:07	9/27/23 11:07		1	Not Detected	mg/L	0.6	2	U

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments:

Reported: 10/25/2023
Version: 3.5
COA_CCR

Batch QC Summary

Customer Account: WMWGORAPFB
Sample Date: 9/19/23 17:15
Customer ID:
Delivery Date: 9/20/23 11:23

Description: Gorgas Ash Pond Field Blank-3

Laboratory ID Number: BD17835

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17836	Aluminum, Total	mg/L	0.000928	0.0198	0.100	0.0938	0.0938	0.0960	0.0850 to 0.115	93.8	70.0 to 130	0.00	20.0
BD17836	Antimony, Total	mg/L	0.000299	0.00100	0.100	0.105	0.105	0.104	0.0850 to 0.115	105	70.0 to 130	0.00	20.0
BD17836	Arsenic, Total	mg/L	0.0000684	0.000200	0.100	0.105	0.103	0.110	0.0850 to 0.115	104	70.0 to 130	1.92	20.0
BD17836	Barium, Total	mg/L	0.0000055	0.00100	0.100	0.166	0.164	0.0992	0.0850 to 0.115	97.2	70.0 to 130	1.21	20.0
BD17836	Beryllium, Total	mg/L	0.0000828	0.000880	0.100	0.0984	0.0988	0.103	0.0850 to 0.115	98.4	70.0 to 130	0.406	20.0
BD17836	Boron, Total	mg/L	0.000491	0.0650	1.00	1.14	1.13	1.04	0.850 to 1.15	105	70.0 to 130	0.881	20.0
BD17836	Cadmium, Total	mg/L	0.0000063	0.000147	0.100	0.103	0.101	0.106	0.0850 to 0.115	103	70.0 to 130	1.96	20.0
BD17836	Calcium, Total	mg/L	-0.00686	0.152	5.00	72.5	70.3	4.91	4.25 to 5.75	240	70.0 to 130	3.08	20.0
BD17836	Chloride	mg/L	0.0197	1.00	10.0	14.2	14.3	10.6	9.00 to 11.0	103	80.0 to 120	0.702	20.0
BD17836	Chromium, Total	mg/L	0.0000913	0.000440	0.100	0.0971	0.0970	0.100	0.0850 to 0.115	97.1	70.0 to 130	0.103	20.0
BD17836	Cobalt, Total	mg/L	-0.0000009	0.000147	0.100	0.0987	0.0978	0.104	0.0850 to 0.115	98.6	70.0 to 130	0.916	20.0
BD17836	Fluoride	mg/L	0.036	0.125	2.50	2.79	2.75	2.62	2.25 to 2.75	107	80.0 to 120	1.44	20.0
BD17836	Iron, Total	mg/L	-0.000954	0.0176	0.2	1.02	1.01	0.202	0.170 to 0.230	100	70.0 to 130	0.985	20.0
BD17836	Lead, Total	mg/L	0.0000048	0.000147	0.100	0.102	0.104	0.0999	0.0850 to 0.115	102	70.0 to 130	1.94	20.0
BD17836	Lithium, Total	mg/L	0.000155	0.0154	0.200	0.223	0.221	0.204	0.170 to 0.230	103	70.0 to 130	0.901	20.0
BD17836	Magnesium, Total	mg/L	-0.00443	0.0462	5.00	23.6	23.5	5.14	4.25 to 5.75	98.0	70.0 to 130	0.425	20.0
BD17836	Manganese, Total	mg/L	0.0000062	0.00033	0.100	0.150	0.149	0.100	0.0850 to 0.115	96.6	70.0 to 130	0.669	20.0
BD17836	Mercury, Total by CVAA	mg/L	3.000E-05	0.000500	0.004	0.00399	0.00405	0.00403	0.00340 to 0.00460	99.8	70.0 to 130	1.49	20.0
BD17836	Molybdenum, Total	mg/L	0.002	0.0100	0.2	0.205	0.205	0.203	0.170 to 0.230	102	70.0 to 130	0.00	20.0
BD17836	Potassium, Total	mg/L	0.0118	0.367	10.0	10.8	10.7	9.82	8.50 to 11.5	96.1	70.0 to 130	0.930	20.0
BD17836	Selenium, Total	mg/L	0.0000754	0.00100	0.100	0.106	0.105	0.105	0.0850 to 0.115	106	70.0 to 130	0.948	20.0
BD17836	Silicon, Total	mg/L	0.00143	0.0440	1.00	12.7	12.7	1.03	0.850 to 1.15	100	70.0 to 130	0.00	20.0
BD17836	Sodium, Total	mg/L	0.00438	0.0880	5.00	23.1	23.0	5.16	4.25 to 5.75	100	70.0 to 130	0.434	20.0
BD17836	Sulfate	mg/L	-0.0895	2.0	60.0	103	103	19.9	18.0 to 22.0	100	80.0 to 120	0.00	20.0

Comments:

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAPFB
Sample Date: 9/19/23 17:15
Customer ID:
Delivery Date: 9/20/23 11:23

Description: Gorgas Ash Pond Field Blank-3

Laboratory ID Number: BD17835

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17836	Thallium, Total	mg/L	0.0000121	0.000147	0.100	0.105	0.107	0.103	0.0850 to 0.115	105	70.0 to 130	1.89	20.0
BD17836	Total Organic Carbon	mg/L	0.235	1.00	10.0	9.77	10.1	9.37		97.7	80.0 to 120	3.32	20.0

Comments:

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAPFB
Sample Date: 9/19/23 17:15
Customer ID:
Delivery Date: 9/20/23 11:23

Description: Gorgas Ash Pond Field Blank-3

Laboratory ID Number: BD17835

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17836	Nitrogen, Nitrate/Nitrite	mg/L as N	0.01	0.200	2.00	2.00	0.002	1.93	1.80 to 2.20	100	90.0 to 110	0.00	15.0
BD17836	Solids, Dissolved	mg/L	1.00	25.0			303	53.0	40.0 to 60.0			0.995	10.0

Comments:

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - PZ-18R

Location Code: WMWGORAP
Collected: 9/19/23 17:45
Customer ID:
Submittal Date: 9/20/23 11:23

Laboratory ID Number: BD17836

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	9/21/23 06:53	9/21/23 17:15		1.015	0.0868	mg/L	0.030000	0.1015	J
* Calcium, Total	9/21/23 06:53	9/21/23 19:42		10.15	60.5	mg/L	0.70035	4.06	RA
* Iron, Total	9/21/23 06:53	9/21/23 17:15		1.015	0.820	mg/L	0.008120	0.0406	
* Lithium, Total	9/21/23 06:53	9/21/23 17:15		1.015	0.0166	mg/L	0.007105	0.01999956	J
* Magnesium, Total	9/21/23 06:53	9/21/23 17:15		1.015	18.7	mg/L	0.021315	0.406	
* Molybdenum, Total	9/21/23 06:53	9/21/23 17:15		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Total (calc.)	9/21/23 06:53	9/21/23 17:15		1	25.0	mg/L			
* Silicon, Total	9/21/23 06:53	9/21/23 17:15		1.015	11.7	mg/L	0.02030	0.25375	
* Sodium, Total	9/21/23 06:53	9/21/23 17:15		1.015	18.1	mg/L	0.04060	0.406	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	9/20/23 15:27	9/21/23 15:40		1.015	0.0858	mg/L	0.030000	0.1015	J
* Calcium, Dissolved	9/20/23 15:27	9/21/23 18:35		10.15	62.6	mg/L	0.70035	4.06	RA
* Iron, Dissolved	9/20/23 15:27	9/21/23 15:40		1.015	0.768	mg/L	0.008120	0.0406	
* Lithium, Dissolved	9/20/23 15:27	9/21/23 15:40		1.015	0.0160	mg/L	0.007105	0.01999956	J
* Magnesium, Dissolved	9/20/23 15:27	9/21/23 15:40		1.015	18.6	mg/L	0.021315	0.406	
* Molybdenum, Dissolved	9/20/23 15:27	9/21/23 15:40		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Dissolved (calc.)	9/20/23 15:27	9/21/23 15:40		1	25.0	mg/L			
* Silicon, Dissolved	9/20/23 15:27	9/21/23 15:40		1.015	11.7	mg/L	0.02030	0.25375	
* Sodium, Dissolved	9/20/23 15:27	9/21/23 15:40		1.015	18.0	mg/L	0.04060	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	9/21/23 06:53	9/21/23 14:54		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Total	9/21/23 06:53	9/21/23 14:54		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Total	9/21/23 06:53	9/25/23 11:38		1.015	0.00104	mg/L	0.000112	0.000203	
* Barium, Total	9/21/23 06:53	9/21/23 14:54		1.015	0.0688	mg/L	0.000508	0.001015	
* Beryllium, Total	9/21/23 06:53	9/25/23 11:38		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	9/21/23 06:53	9/21/23 14:54		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	9/21/23 06:53	9/21/23 14:54		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	9/21/23 06:53	9/21/23 14:54		1.015	0.0000883	mg/L	0.000068	0.000203	J
* Lead, Total	9/21/23 06:53	9/21/23 14:54		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	9/21/23 06:53	9/21/23 14:54		1.015	0.0534	mg/L	0.000152	0.001015	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - PZ-18R

Location Code: WMWGORAP
Collected: 9/19/23 17:45
Customer ID:
Submittal Date: 9/20/23 11:23

Laboratory ID Number: BD17836

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	9/21/23 06:53	9/21/23 14:54		1.015	1.19	mg/L	0.169505	0.5075	
* Selenium, Total	9/21/23 06:53	9/21/23 14:54		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	9/21/23 06:53	9/21/23 14:54		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	9/20/23 15:27	9/21/23 12:53		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	9/20/23 15:27	9/21/23 12:53		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Dissolved	9/20/23 15:27	9/21/23 12:53		1.015	0.00104	mg/L	0.000112	0.000203	
* Barium, Dissolved	9/20/23 15:27	9/21/23 12:53		1.015	0.0648	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	9/20/23 15:27	9/21/23 12:53		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	9/20/23 15:27	9/21/23 12:53		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	9/20/23 15:27	9/21/23 12:53		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	9/20/23 15:27	9/21/23 12:53		1.015	0.0000834	mg/L	0.000068	0.000203	J
* Lead, Dissolved	9/20/23 15:27	9/21/23 12:53		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	9/20/23 15:27	9/21/23 12:53		1.015	0.0550	mg/L	0.000152	0.001015	
* Potassium, Dissolved	9/20/23 15:27	9/21/23 12:53		1.015	1.17	mg/L	0.169505	0.5075	
* Selenium, Dissolved	9/20/23 15:27	9/21/23 12:53		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	9/20/23 15:27	9/21/23 12:53		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	9/21/23 12:12	9/21/23 18:35		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	9/22/23 13:06	9/22/23 13:06		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: JAG***								
Alkalinity pH Endpoint	9/28/23 11:28	9/28/23 12:44		1	4.46	SU		2	
* Alkalinity	9/28/23 11:28	9/28/23 12:44		1	218	mg CaCO3/L		1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	9/26/23 10:35	9/27/23 13:03		1	300	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: JAG***								
* Bicarbonate Alkalinity, (calc.)	9/28/23 11:28	9/28/23 12:44		1	217	mg CaCO3/L		1	
* Carbonate Alkalinity, (calc.)	9/28/23 11:28	9/28/23 12:44		1	0.851	mg CaCO3/L		0.5	
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	9/25/23 17:03	9/25/23 17:03		1	Not Detected	mg/L	1.00	2	U

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - PZ-18R

Location Code: WMWGORAP
Collected: 9/19/23 17:45
Customer ID:
Submittal Date: 9/20/23 11:23

Laboratory ID Number: BD17836

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	9/25/23 10:17	9/25/23 10:17		1	3.86	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	9/25/23 11:59	9/25/23 11:59		1	0.123	mg/L	0.06	0.125	J
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	9/27/23 11:08	9/27/23 11:08		3	42.7	mg/L	1.8	6	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	9/19/23 17:44	9/19/23 17:44			502.20	uS/cm			FA
pH	9/19/23 17:44	9/19/23 17:44			7.08	SU			FA
Temperature	9/19/23 17:44	9/19/23 17:44			17.37	C			FA
Turbidity	9/19/23 17:44	9/19/23 17:44			1.25	NTU			FA
Sulfide	9/19/23 17:44	9/19/23 17:44			0	mg/L			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/19/23 17:45
Customer ID:
Delivery Date: 9/20/23 11:23

Description: Gorgas Ash Pond - PZ-18R

Laboratory ID Number: BD17836

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17836	Aluminum, Dissolved	mg/L	0.000195	0.0198	0.100	0.0924	0.0913	0.0999	0.0850 to 0.115	92.4	70.0 to 130	1.20	20.0
BD17836	Aluminum, Total	mg/L	0.000928	0.0198	0.100	0.0938	0.0938	0.0960	0.0850 to 0.115	93.8	70.0 to 130	0.00	20.0
BD17836	Antimony, Dissolved	mg/L	0.000811	0.00100	0.100	0.0959	0.0943	0.0934	0.0850 to 0.115	95.9	70.0 to 130	1.68	20.0
BD17836	Antimony, Total	mg/L	0.000299	0.00100	0.100	0.105	0.105	0.104	0.0850 to 0.115	105	70.0 to 130	0.00	20.0
BD17836	Arsenic, Dissolved	mg/L	0.0000311	0.000200	0.100	0.106	0.109	0.108	0.0850 to 0.115	105	70.0 to 130	2.79	20.0
BD17836	Arsenic, Total	mg/L	0.0000684	0.000200	0.100	0.105	0.103	0.110	0.0850 to 0.115	104	70.0 to 130	1.92	20.0
BD17836	Barium, Dissolved	mg/L	-0.0000095	0.00100	0.100	0.154	0.156	0.0956	0.0850 to 0.115	89.2	70.0 to 130	1.29	20.0
BD17836	Barium, Total	mg/L	0.0000055	0.00100	0.100	0.166	0.164	0.0992	0.0850 to 0.115	97.2	70.0 to 130	1.21	20.0
BD17836	Beryllium, Dissolved	mg/L	0.0000442	0.000880	0.100	0.106	0.106	0.0959	0.0850 to 0.115	106	70.0 to 130	0.00	20.0
BD17836	Beryllium, Total	mg/L	0.0000828	0.000880	0.100	0.0984	0.0988	0.103	0.0850 to 0.115	98.4	70.0 to 130	0.406	20.0
BD17836	Boron, Dissolved	mg/L	-0.000123	0.0650	1.00	1.13	1.13	1.03	0.850 to 1.15	104	70.0 to 130	0.00	20.0
BD17836	Boron, Total	mg/L	0.000491	0.0650	1.00	1.14	1.13	1.04	0.850 to 1.15	105	70.0 to 130	0.881	20.0
BD17836	Cadmium, Dissolved	mg/L	0.0000000	0.000147	0.100	0.101	0.0997	0.101	0.0850 to 0.115	101	70.0 to 130	1.30	20.0
BD17836	Cadmium, Total	mg/L	0.0000063	0.000147	0.100	0.103	0.101	0.106	0.0850 to 0.115	103	70.0 to 130	1.96	20.0
BD17836	Calcium, Dissolved	mg/L	-0.00424	0.152	5.00	70.0	67.4	5.03	4.25 to 5.75	148	70.0 to 130	3.78	20.0
BD17836	Calcium, Total	mg/L	-0.00686	0.152	5.00	72.5	70.3	4.91	4.25 to 5.75	240	70.0 to 130	3.08	20.0
BD17836	Chloride	mg/L	0.0197	1.00	10.0	14.2	14.3	10.6	9.00 to 11.0	103	80.0 to 120	0.702	20.0
BD17836	Chromium, Dissolved	mg/L	-0.0000134	0.000440	0.100	0.0982	0.0953	0.101	0.0850 to 0.115	98.2	70.0 to 130	3.00	20.0
BD17836	Chromium, Total	mg/L	0.0000913	0.000440	0.100	0.0971	0.0970	0.100	0.0850 to 0.115	97.1	70.0 to 130	0.103	20.0
BD17836	Cobalt, Dissolved	mg/L	-0.0000014	0.000147	0.100	0.0987	0.0965	0.104	0.0850 to 0.115	98.6	70.0 to 130	2.25	20.0
BD17836	Cobalt, Total	mg/L	-0.0000009	0.000147	0.100	0.0987	0.0978	0.104	0.0850 to 0.115	98.6	70.0 to 130	0.916	20.0
BD17836	Fluoride	mg/L	0.036	0.125	2.50	2.79	2.75	2.62	2.25 to 2.75	107	80.0 to 120	1.44	20.0
BD17836	Iron, Dissolved	mg/L	-0.00120	0.0176	0.2	0.965	0.965	0.203	0.170 to 0.230	98.5	70.0 to 130	0.00	20.0
BD17836	Iron, Total	mg/L	-0.000954	0.0176	0.2	1.02	1.01	0.202	0.170 to 0.230	100	70.0 to 130	0.985	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/19/23 17:45
Customer ID:
Delivery Date: 9/20/23 11:23

Description: Gorgas Ash Pond - PZ-18R

Laboratory ID Number: BD17836

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17836	Lead, Dissolved	mg/L	0.0000047	0.000147	0.100	0.0992	0.100	0.101	0.0850 to 0.115	99.2	70.0 to 130	0.803	20.0
BD17836	Lead, Total	mg/L	0.0000048	0.000147	0.100	0.102	0.104	0.0999	0.0850 to 0.115	102	70.0 to 130	1.94	20.0
BD17836	Lithium, Dissolved	mg/L	0.000731	0.0154	0.200	0.221	0.220	0.207	0.170 to 0.230	102	70.0 to 130	0.454	20.0
BD17836	Lithium, Total	mg/L	0.000155	0.0154	0.200	0.223	0.221	0.204	0.170 to 0.230	103	70.0 to 130	0.901	20.0
BD17836	Magnesium, Dissolved	mg/L	-0.0283	0.0462	5.00	23.7	23.8	5.26	4.25 to 5.75	102	70.0 to 130	0.421	20.0
BD17836	Magnesium, Total	mg/L	-0.00443	0.0462	5.00	23.6	23.5	5.14	4.25 to 5.75	98.0	70.0 to 130	0.425	20.0
BD17836	Manganese, Dissolved	mg/L	0.0000088	0.00033	0.100	0.151	0.148	0.102	0.0850 to 0.115	96.0	70.0 to 130	2.01	20.0
BD17836	Manganese, Total	mg/L	0.0000062	0.00033	0.100	0.150	0.149	0.100	0.0850 to 0.115	96.6	70.0 to 130	0.669	20.0
BD17836	Mercury, Total by CVAA	mg/L	3.000E-05	0.000500	0.004	0.00399	0.00405	0.00403	0.00340 to 0.00460	99.8	70.0 to 130	1.49	20.0
BD17836	Molybdenum, Dissolved	mg/L	0.00116	0.0100	0.2	0.203	0.203	0.202	0.170 to 0.230	102	70.0 to 130	0.00	20.0
BD17836	Molybdenum, Total	mg/L	0.002	0.0100	0.2	0.205	0.205	0.203	0.170 to 0.230	102	70.0 to 130	0.00	20.0
BD17836	Potassium, Dissolved	mg/L	0.00592	0.367	10.0	10.8	10.7	10.1	8.50 to 11.5	96.3	70.0 to 130	0.930	20.0
BD17836	Potassium, Total	mg/L	0.0118	0.367	10.0	10.8	10.7	9.82	8.50 to 11.5	96.1	70.0 to 130	0.930	20.0
BD17836	Selenium, Dissolved	mg/L	0.0000140	0.00100	0.100	0.104	0.102	0.107	0.0850 to 0.115	104	70.0 to 130	1.94	20.0
BD17836	Selenium, Total	mg/L	0.0000754	0.00100	0.100	0.106	0.105	0.105	0.0850 to 0.115	106	70.0 to 130	0.948	20.0
BD17836	Silicon, Dissolved	mg/L	0.00203	0.0440	1.00	12.7	12.8	1.04	0.850 to 1.15	100	70.0 to 130	0.784	20.0
BD17836	Silicon, Total	mg/L	0.00143	0.0440	1.00	12.7	12.7	1.03	0.850 to 1.15	100	70.0 to 130	0.00	20.0
BD17836	Sodium, Dissolved	mg/L	0.00446	0.0880	5.00	23.2	23.2	5.26	4.25 to 5.75	104	70.0 to 130	0.00	20.0
BD17836	Sodium, Total	mg/L	0.00438	0.0880	5.00	23.1	23.0	5.16	4.25 to 5.75	100	70.0 to 130	0.434	20.0
BD17836	Sulfate	mg/L	-0.0895	2.0	60.0	103	103	19.9	18.0 to 22.0	100	80.0 to 120	0.00	20.0
BD17836	Thallium, Dissolved	mg/L	-0.0000003	0.000147	0.100	0.102	0.103	0.102	0.0850 to 0.115	102	70.0 to 130	0.976	20.0
BD17836	Thallium, Total	mg/L	0.0000121	0.000147	0.100	0.105	0.107	0.103	0.0850 to 0.115	105	70.0 to 130	1.89	20.0
BD17836	Total Organic Carbon	mg/L	0.235	1.00	10.0	9.77	10.1	9.37		97.7	80.0 to 120	3.32	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/19/23 17:45
Customer ID:
Delivery Date: 9/20/23 11:23

Description: Gorgas Ash Pond - PZ-18R

Laboratory ID Number: BD17836

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17836	Alkalinity	mg CaCO3/L					222	52.9	45.0 to 55.0			1.82	10.0
BD17836	Nitrogen, Nitrate/Nitrite	mg/L as N	0.01	0.200	2.00	2.00	0.002	1.93	1.80 to 2.20	100	90.0 to 110	0.00	15.0
BD17836	Solids, Dissolved	mg/L	1.00	25.0			303	53.0	40.0 to 60.0			0.995	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Definitions

Project Number: WMWGORAP_1423

Abbreviation	Description
DF	Dilution Factor
LCS	Lab Control Sample
LFM	Lab Fortified Matrix
MB	Method Blank
MDL	Method Detection Limit; minimum concentration of an analyte that can be determined with 99% confidence that the concentration is greater than zero.
MS	Matrix Spike
MSD	Matrix Spike Duplicate
Prec	Precision (% RPD)
Q	Qualifier; comment used to note deviations or additional information associated with analytical results.
QC	Quality Control
Rec	Recovery of Matrix Spike
RL	Reporting Limit; lowest concentration at which an analyte can be quantitatively measured.
Vio Spec	Violation Specification; regulatory limit which has been exceeded by the sample analyzed.

Qualifier	Description
A	Bicarbonate alkalinity, carbonate alkalinity, hydroxide alkalinity, free carbon dioxide, and/or total carbon dioxide calculations are estimates due to pH>10SU and/or TDS>500mg/L.
AI	Bicarbonate alkalinity, carbonate alkalinity, hydroxide alkalinity, free carbon dioxide, and/or total carbon dioxide calculations are invalid due to pH>12SU and not reported.
C	Analyte was verified by re-analysis.
FA	Field results were reviewed by the Water Field Group. Refer to APC Field Case Narrative.
J	Reported value is an estimate because concentration is less than reporting limit.
R	Matrix spike recovery and/or matrix spike duplicate recovery is outside of specification limit.
RA	Matrix spike is invalid due to sample concentration.
U	Compound was analyzed, but not detected.

Alabama Power
Lab & Field SERVICES

Chain of Custody
Groundwater

APC General Testing Laboratory

☑ Field Complete ☐ Outside Lab

☑ Lab Complete

Lab ETA

Requested Complete Date	Routine	Results To	Dustin Brooks
Collector	TJ Daugherty	Requested By	Greg Budd
		Location	Gorgas Ash Pond

Bottles

1	Metals	500 mL	3	Hg	250 mL	5	TDS/Alkalinity	500 mL	7	N/A	N/A
2	Dissolved Metals	500 mL	4	Nitrite, Nitrate; TOC	250 mL	6	Anions	500 mL	8	N/A	N/A

Comments
Samples submitted to lab
Changed MW-41D to MW-41HD per sample events. BC 08/31/2023

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id	pH Check
MW-41HD	08/30/2023	10:53	6	Groundwater		BD16842	☑
MW-41HD Dup	08/30/2023	10:53	6	Sample Duplicate		BD16843	☑
MW-41HS	08/30/2023	12:22	6	Groundwater		BD16844	☑
FB-1	08/30/2023	13:20	5	Field Blank		BD16845	☑
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Relinquished By	Received By	Date/Time
	Brooke Caton Digitally signed by Brooke Caton Date: 2023.08.31 14:21:01 -05'00'	08/31/2023 14:21

SmarTroll ID	7586-41445-5-4	Cooler Temp	0.4 °C
Turbidity ID	4677-23343-4-2	Thermometer ID	10614-61208-2-1
Sample Event	1423	pH Strip ID	10853-62410-10-9

Bottles/Pre-Preserved Bottles are provided by the GTL

Total Metals and Alkalinity are not performed on Dissolved Sets

Dissolved Metals and Alkalinity are not performed on blanks i.e. Field Blanks or Equipment Blanks

Alabama Power
Lab & Field SERVICES

Chain of Custody Groundwater

APC General Testing Laboratory

☑ Field Complete ☐ Outside Lab
☑ Lab Complete

Lab ETA

Requested Complete Date	Routine	Results To	Dustin Brooks
Collector	Dallas Gentry	Requested By	Greg Budd
		Location	Gorgas Ash Pond

Bottles

1	Metals	500 mL	3	Hg	250 mL	5	TDS/Alkalinity	500 mL	7	N/A	N/A
2	Dissolved Metals	500 mL	4	Nitrite, Nitrate; TOC	250 mL	6	Anions	500 mL	8	N/A	N/A

Comments

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id	pH Check
MW-21	09/05/2023	10:24	6	Groundwater		BD17104	☑
MW-21V	09/05/2023	12:54	6	Groundwater		BD17105	☑
MW-30HA	09/05/2023	15:34	6	Groundwater		BD17106	☑
FB-2	09/05/2023	16:30	5	Field Blank		BD17107	☑
MW-27HR	09/06/2023	08:52	6	Groundwater		BD17108	☑
MW-36V	09/06/2023	11:45	6	Groundwater		BD17109	☑
MW-36H	09/06/2023	15:22	6	Groundwater		BD17110	☑
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Relinquished By	Received By	Date/Time
		09/07/2023 07:32

SmarTroll ID	7586-41443-5-2	Cooler Temp	1.3 ℃
Turbidity ID	9901-57263-1-1	Thermometer ID	10614-61208-2-1
Sample Event	1423	pH Strip ID	10853-62410-10-9

Bottles/Pre-Preserved Bottles are provided by the GTL

Total Metals and Alkalinity are not performed on Dissolved Sets

Dissolved Metals and Alkalinity are not performed on blanks i.e. Field Blanks or Equipment Blanks

Chain of Custody
Groundwater
APC General Testing Laboratory

☑ Field Complete ☐ Outside Lab
☑ Lab Complete

Lab ETA

Requested Complete Date	Routine	Results To	Dustin Brooks
Collector	TJ Daugherty	Requested By	Greg Budd
		Location	Gorgas Ash Pond

Bottles

1	Metals	500 mL	3	Hg	250 mL	5	TDS/Alkalinity	500 mL	7	N/A	N/A
2	Dissolved Metals	500 mL	4	Nitrite, Nitrate; TOC	250 mL	6	Anions	500 mL	8	N/A	N/A

Comments

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id	pH Check
MW-6S	09/05/2023	13:17	6	Groundwater		BD17111	☑
MW-6S Dup	09/05/2023	13:17	6	Sample Duplicate		BD17112	☑
MW-6D	09/05/2023	14:28	6	Groundwater		BD17113	☑
MW-23H	09/06/2023	11:15	6	Groundwater		BD17114	☑
MW-23V	09/06/2023	12:15	6	Groundwater		BD17115	☑
MW-24H	09/06/2023	14:05	6	Groundwater		BD17116	☑
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Relinquished By	Received By	Date/Time
		09/07/2023 10:24

SmarTroll ID	7586-41445-5-4	Cooler Temp	0.9 °C
Turbidity ID	4677-23343-4-2	Thermometer ID	10614-61208-2-1
Sample Event	1423	pH Strip ID	10853-62410-10-9

Bottles/Pre-Preserved Bottles are provided by the GTL

Total Metals and Alkalinity are not performed on Dissolved Sets

Dissolved Metals and Alkalinity are not performed on blanks i.e. Field Blanks or Equipment Blanks

Chain of Custody
Groundwater
APC General Testing Laboratory

☑ Field Complete ☐ Outside Lab
☑ Lab Complete

Lab ETA

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Budd
Collector	Anthony Goggins	Requested By	Greg Budd
		Location	Gorgas Ash Pond

Bottles

1	Metals	500 mL	3	Hg	250 mL	5	TDS/Alkalinity	500 mL	7	N/A	N/A
2	Dissolved Metals	500 mL	4	Nitrite, Nitrate; TOC	250 mL	6	Anions	500 mL	8	N/A	N/A

Comments: relinquish to Biology shipping lab 091323 1525
MW-22 and MW-22 Dup changed to PZ-22 and PZ-22 Dup. Updated collection time for PZ-22 and PZ-22 Dup from 15:15 to

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id	pH Check
MW-17V	09/11/2023	13:10	6	Groundwater		BD17492	☑
MW-17	09/11/2023	14:08	6	Groundwater		BD17493	☑
PZ-22	09/11/2023	15:10	6	Groundwater		BD17494	☑
PZ-22 Dup	09/11/2023	15:10	6	Sample Duplicate		BD17495	☑
FB-6	09/11/2023	15:50	5	Field Blank		BD17496	☑
MW-28H	09/11/2023	16:45	6	Groundwater		BD17497	☑
MW-29H	09/13/2023	10:15	6	Groundwater		BD17498	☑
MW-29H Dup	09/13/2023	10:15	6	Sample Duplicate		BD17499	☑
MW-32H	09/13/2023	11:45	6	Groundwater		BD17500	☑
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Relinquished By	Received By	Date/Time
	Brooke Caton Digitally signed by Brooke Caton Date: 2023.09.14 09:59:56 -05'00'	09/14/2023 10:00

SmarTroll ID	7586-41446-5-5	Cooler Temp	0.9 C
Turbidity ID	9830-57039-1-1	Thermometer ID	10614-61208-2-1
Sample Event	1423	pH Strip ID	10853-62410-10-9

Bottles/Pre-Preserved Bottles are provided by the GTL

Total Metals and Alkalinity are not performed on Dissolved Sets

Dissolved Metals and Alkalinity are not performed on blanks i.e. Field Blanks or Equipment Blanks

Alabama Power
Lab & Field SERVICES

Chain of Custody
Groundwater
APC General Testing Laboratory

☑ Field Complete ☐ Outside Lab
☑ Lab Complete

Lab ETA

Requested Complete Date	Routine	Results To	Dustin Brooks
Collector	Dallas Gentry	Requested By	Greg Budd
		Location	Gorgas Ash Pond

Bottles

1	Metals	500 mL	3	Hg	250 mL	5	TDS/Alkalinity	500 mL	7	N/A	N/A
2	Dissolved Metals	500 mL	4	Nitrite, Nitrate; TOC	250 mL	6	Anions	500 mL	8	N/A	N/A

Comments

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id	pH Check
MW-15	09/11/2023	11:43	6	Groundwater		BD17501	☑
MW-15V	09/11/2023	13:11	6	Groundwater		BD17502	☑
MW-37HR	09/11/2023	14:55	6	Groundwater		BD17503	☑
FB-5	09/11/2023	15:50	5	Field Blank		BD17504	☑
MW-16S	09/12/2023	09:46	6	Groundwater		BD17505	☑
MW-16D	09/12/2023	10:57	6	Groundwater		BD17506	☑
PZ-16	09/12/2023	11:56	6	Groundwater		BD17507	☑
MW-14R	09/12/2023	13:31	6	Groundwater		BD17508	☑
MW-47	09/12/2023	14:32	6	Groundwater		BD17509	☑
MW-31H	09/13/2023	10:22	6	Groundwater		BD17510	☑
MW-31V	09/13/2023	12:10	6	Groundwater		BD17511	☑
MW-01R	09/13/2023	14:26	6	Groundwater		BD17512	☑
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Relinquished By	Received By	Date/Time
		09/14/2023 08:37

SmarTroll ID	7586-41443-5-2	Cooler Temp	0.6 °C
Turbidity ID	9901-57263-1-1	Thermometer ID	10614-61208-2-1
Sample Event	1423	pH Strip ID	10853-62410-10-9

Bottles/Pre-Preserved Bottles are provided by the GTL

Total Metals and Alkalinity are not performed on Dissolved Sets

Dissolved Metals and Alkalinity are not performed on blanks i.e. Field Blanks or Equipment Blanks

Alabama Power
Lab & Field SERVICES

Chain of Custody Groundwater

APC General Testing Laboratory

☑ Field Complete ☐ Outside Lab
☑ Lab Complete

Lab ETA:

Requested Complete Date	Routine	Results To	Dustin Brooks
Collector	TJ Daugherty	Requested By	Greg Budd
		Location	Gorgas Ash Pond

Bottles

1	Metals	500 mL	3	Hg	250 mL	5	TDS/Alkalinity	500 mL	7	N/A	N/A
2	Dissolved Metals	500 mL	4	Nitrite, Nitrate; TOC	250 mL	6	Anions	500 mL	8	N/A	N/A

Comments: Dissolved set collected at MW-6V

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id	pH Check
MW-7	09/11/2023	11:10	6	Groundwater		BD17513	☑
MW-6V	09/11/2023	16:22	6	Groundwater		BD17514	☑
MW-6V Dis	09/11/2023	16:22	4	Field Filtered		BD17515	☑
MW-3	09/12/2023	10:10	6	Groundwater		BD17516	☑
MW-03V	09/12/2023	12:10	6	Groundwater		BD17517	☑
MW-05R	09/12/2023	14:30	6	Groundwater		BD17518	☑
MW-12V	09/13/2023	11:27	6	Groundwater		BD17519	☑
MW-12	09/13/2023	13:30	6	Groundwater		BD17520	☑
MW-09R	09/13/2023	15:25	6	Groundwater		BD17521	☑
MW-09R Dup	09/13/2023	15:25	6	Sample Duplicate		BD17522	☑
MW-9V	09/13/2023	17:55	6	Groundwater		BD17523	☑
FB-4	09/13/2023	18:30	5	Field Blank		BD17524	☑
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Relinquished By	Received By	Date/Time
		09/14/2023 08:39

SmarTroll ID	7586-41445-5-4	Cooler Temp	0.8 °C
Turbidity ID	4677-23343-4-2	Thermometer ID	10614-61208-2-1
Sample Event	1423	pH Strip ID	10853-62410-10-9

Bottles/Pre-Preserved Bottles are provided by the GTL

Total Metals and Alkalinity are not performed on Dissolved Sets

Dissolved Metals and Alkalinity are not performed on blanks i.e. Field Blanks or Equipment Blanks

Alabama Power
Lab & Field SERVICES

Chain of Custody
Groundwater
APC General Testing Laboratory

☑ Field Complete ☐ Outside Lab
☑ Lab Complete

Lab ETA

Requested Complete Date	Routine	Results To	Dustin Brooks
Collector	Dallas Gentry	Requested By	Greg Budd
		Location	Gorgas Ash Pond

Bottles

1	Metals	500 mL	3	Hg	250 mL	5	TDS/Alkalinity	500 mL	7	N/A	N/A
2	Dissolved Metals	500 mL	4	Nitrite, Nitrate; TOC	250 mL	6	Anions	500 mL	8	N/A	N/A

Comments: Relinquished to GSC Building 8 secure lab DFG 09/19/2023 1559

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id	pH Check
MW-25HA	09/18/2023	13:52	6	Groundwater		BD17823	☑
MW-45V	09/18/2023	15:50	6	Groundwater		BD17824	☑
MW-10R	09/19/2023	09:51	6	Groundwater		BD17825	☑
MW-13R	09/19/2023	11:02	6	Groundwater		BD17826	☑
EB-1	09/19/2023	11:45	5	Equipment Blank		BD17827	☑
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Relinquished By	Received By	Date/Time
	Brooke Caton Digitally signed by Brooke Caton Date: 2023.09.20 11:13:59 -05'00'	09/20/2023 11:14

SmarTroll ID	7586-41443-5-2	Cooler Temp	0.6 °C
Turbidity ID	9901-57263-1-1	Thermometer ID	10614-61208-2-1
Sample Event	1423	pH Strip ID	10853-62410-10-9

Bottles/Pre-Preserved Bottles are provided by the GTL

Total Metals and Alkalinity are not performed on Dissolved Sets

Dissolved Metals and Alkalinity are not performed on blanks i.e. Field Blanks or Equipment Blanks

Alabama Power
Lab & Field SERVICES

Chain of Custody Groundwater

APC General Testing Laboratory

☑ Field Complete ☐ Outside Lab

☑ Lab Complete

Lab ETA

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Budd
Collector	Anthony Goggins	Requested By	Greg Budd
		Location	Gorgas Ash Pond

Bottles

1	Metals	500 mL	3	Hg	250 mL	5	TDS/Alkalinity	500 mL	7	N/A	N/A
2	Dissolved Metals	500 mL	4	Nitrite, Nitrate; TOC	250 mL	6	Anions	500 mL	8	N/A	N/A

Comments: Relinquished to GSC Bld 8 shipping Lab 091923 1617

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id	pH Check
MW-46	09/18/2023	15:58	6	Groundwater		BD17817	☑
MW-46 Dup	09/18/2023	15:58	6	Sample Duplicate		BD17818	☑
MW-2	09/18/2023	17:10	6	Groundwater		BD17819	☑
MW-19	09/19/2023	07:53	6	Groundwater		BD17820	☐
MW-18VR	09/19/2023	09:00	6	Groundwater		BD17821	☑
MW-43H	09/19/2023	10:39	6	Groundwater		BD17822	☑
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Relinquished By	Received By	Date/Time
	Brooke Caton Digitally signed by Brooke Caton Date: 2023.09.20 11:13:45 -05'00'	09/20/2023 11:13

SmarTroll ID	7586-41446-5-5	Cooler Temp	1.2 ℃
Turbidity ID	9830-57039-1-1	Thermometer ID	10614-61208-2-1
Sample Event	1423	pH Strip ID	10853-62410-10-9

Bottles/Pre-Preserved Bottles are provided by the GTL

Total Metals and Alkalinity are not performed on Dissolved Sets

Dissolved Metals and Alkalinity are not performed on blanks i.e. Field Blanks or Equipment Blanks

Alabama Power
Lab & Field SERVICES

Chain of Custody Groundwater

APC General Testing Laboratory

☑ Field Complete ☐ Outside Lab

☑ Lab Complete

Lab ETA

Requested Complete Date	Routine	Results To	Dustin Brooks
Collector	TJ Daugherty	Requested By	Greg Budd
		Location	Gorgas Ash Pond

Bottles

1	Metals	500 mL	3	Hg	250 mL	5	TDS/Alkalinity	500 mL	7	N/A	N/A
2	Dissolved Metals	500 mL	4	Nitrite, Nitrate; TOC	250 mL	6	Anions	500 mL	8	N/A	N/A

Comments

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id	pH Check
MW-40H	09/18/2023	12:04	6	Groundwater		BD17828	☑
MW-26H	09/18/2023	14:35	6	Groundwater		BD17829	☑
MW-8	09/18/2023	16:22	6	Groundwater		BD17830	☑
MW-11R	09/19/2023	12:00	6	Groundwater		BD17831	☑
MW-38H	09/19/2023	14:00	6	Groundwater		BD17832	☑
MW-42H	09/19/2023	15:30	6	Groundwater		BD17833	☑
MW-18R	09/19/2023	16:45	6	Groundwater		BD17834	☑
FB-3	09/19/2023	17:15	5	Field Blank		BD17835	☑
PZ-18R	09/19/2023	17:45	6	Groundwater		BD17836	☑
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Relinquished By	Received By	Date/Time
		09/20/2023 10:31

SmarTroll ID	7586-41445-5-4	Cooler Temp	0.5 °C
Turbidity ID	4677-23343-4-2	Thermometer ID	10614-61208-2-1
Sample Event	1423	pH Strip ID	10853-62410-10-9

Bottles/Pre-Preserved Bottles are provided by the GTL

Total Metals and Alkalinity are not performed on Dissolved Sets

Dissolved Metals and Alkalinity are not performed on blanks i.e. Field Blanks or Equipment Blanks

Chain of Custody
Groundwater

APC General Testing Laboratory

☑ Field Complete ☑ Outside Lab
☑ Lab Complete

Lab ETA

Requested Complete Date	Routine	Results To	Dustin Brooks
Collector	TJ Daugherty	Requested By	Greg Budd
		Location	Gorgas Ash Pond

Bottles

1	Radium	1 L	3	N/A	N/A	5	N/A	N/A	7	N/A	N/A
2	N/A	N/A	4	N/A	N/A	6	N/A	N/A	8	N/A	N/A

Comments: Samples submitted to lab
Changed MW-41D to MW-41HD per sample events. BC 08/31/2023

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id	pH Check
MW-41HD	08/30/2023	10:53	1	Groundwater		BD16846	☑
MW-41HD Dup	08/30/2023	10:53	1	Sample Duplicate		BD16847	☑
MW-41HS	08/30/2023	12:22	1	Groundwater		BD16848	☑
FB-1	08/30/2023	13:20	1	Field Blank		BD16849	☑
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Relinquished By	Received By	Date/Time
	Brooke Caton Digitally signed by Brooke Caton Date: 2023.08.31 14:21:18 -05'00'	08/31/2023 14:21

SmarTroll ID	7586-41445-5-4	Cooler Temp	N/A
Turbidity ID	4677-23343-4-2	Thermometer ID	N/A
Sample Event	1423	pH Strip ID	10853-62410-10-9

Bottles/Pre-Preserved Bottles are provided by the GTL

Total Metals and Alkalinity are not performed on Dissolved Sets

Dissolved Metals and Alkalinity are not performed on blanks i.e. Field Blanks or Equipment Blanks

9.0

Alabama Power Lab & Field SERVICES

Chain of Custody Groundwater

APC General Testing Laboratory

☑ Field Complete

☑ Lab Complete

☑ Outside Lab

Lab ETA

Requested Complete Date	Routine	Results To	Dustin Brooks
Collector	Dallas Gentry	Requested By	Greg Budd
		Location	Gorgas Ash Pond

Bottles

1	Radium	1 L	3	N/A	N/A	5	N/A	N/A	7	N/A	N/A
2	N/A	N/A	4	N/A	N/A	6	N/A	N/A	8	N/A	N/A

Comments

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id	pH Check
MW-21	09/05/2023	10:24	1	Groundwater		BD17117	☑
MW-21V	09/05/2023	12:54	1	Groundwater		BD17118	☑
MW-30HA	09/05/2023	15:34	1	Groundwater		BD17119	☑
FB-2	09/05/2023	16:30	1	Field Blank		BD17120	☑
MW-27HR	09/06/2023	08:52	1	Groundwater		BD17121	☑
MW-36V	09/06/2023	11:45	1	Groundwater		BD17122	☑
MW-36H	09/06/2023	15:22	1	Groundwater		BD17123	☑
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Relinquished By	Received By	Date/Time
Dallas Gentry		09/07/2023 07:32

SmarTroll ID	7586-41443-5-2	Cooler Temp	N/A
Turbidity ID	9901-57263-1-1	Thermometer ID	N/A
Sample Event	1423	pH Strip ID	10853-62410-10-9

Bottles/Pre-Preserved Bottles are provided by the GTL

Total Metals and Alkalinity are not performed on Dissolved Sets

Dissolved Metals and Alkalinity are not performed on blanks i.e. Field Blanks or Equipment Blanks

Alabama Power
Lab & Field SERVICES

Chain of Custody Groundwater

APC General Testing Laboratory

☑ Field Complete
☑ Lab Complete
☑ Outside Lab

Lab ETA

Requested Complete Date	Routine	Results To	Dustin Brooks
Collector	TJ Daugherty	Requested By	Greg Budd
		Location	Gorgas Ash Pond

Bottles

1	Radium	1 L	3	N/A	N/A	5	N/A	N/A	7	N/A	N/A
2	N/A	N/A	4	N/A	N/A	6	N/A	N/A	8	N/A	N/A

Comments: Rad MS/MSD @ MW-23V

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id	pH Check
MW-6S	09/05/2023	13:17	1	Groundwater		BD17124	☑
MW-6S Dup	09/05/2023	13:17	1	Sample Duplicate		BD17125	☑
MW-6D	09/05/2023	14:28	1	Groundwater		BD17126	☑
MW-23H	09/06/2023	11:15	1	Groundwater		BD17127	☑
MW-23V	09/06/2023	12:15	3	Groundwater		BD17128	☑
MW-24H	09/06/2023	14:05	1	Groundwater		BD17129	☑
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Relinquished By	Received By	Date/Time
		09/07/2023 10:24

SmarTroll ID	7586-41445-5-4	Cooler Temp	N/A
Turbidity ID	4677-23343-4-2	Thermometer ID	N/A
Sample Event	1423	pH Strip ID	10853-62410-10-9

Bottles/Pre-Preserved Bottles are provided by the GTL

Total Metals and Alkalinity are not performed on Dissolved Sets

Dissolved Metals and Alkalinity are not performed on blanks i.e. Field Blanks or Equipment Blanks

Chain of Custody
Groundwater
APC General Testing Laboratory

☑ Field Complete ☑ Outside Lab
☑ Lab Complete

Lab ETA

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Budd
Collector	Anthony Goggins	Requested By	Greg Budd
		Location	Gorgas Ash Pond

Bottles

1	Radium	1 L	3	N/A	N/A	5	N/A	N/A	7	N/A	N/A
2	N/A	N/A	4	N/A	N/A	6	N/A	N/A	8	N/A	N/A

Comments: MS/MSD collected @ MW28H; relinquish to Biology shipping lab 091323 1525
MW-22 and MW-22 Dup changed to PZ-22 and PZ-22 Dup. Updated collection time for PZ-22 and PZ-22 Dup from 15:15 to

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id	pH Check
MW-17V	09/11/2023	13:10	1	Groundwater		BD17525	☑
MW-17	09/11/2023	14:08	1	Groundwater		BD17526	☑
PZ-22	09/11/2023	15:10	1	Groundwater		BD17527	☑
PZ-22 Dup	09/11/2023	15:10	1	Sample Duplicate		BD17528	☑
FB-6	09/11/2023	15:50	1	Field Blank		BD17529	☑
MW-28H	09/11/2023	16:45	3	Groundwater		BD17530	☑
MW-29H	09/13/2023	10:15	1	Groundwater		BD17531	☑
MW-29H Dup	09/13/2023	10:15	1	Sample Duplicate		BD17532	☑
MW-32H	09/13/2023	11:45	1	Groundwater		BD17533	☑
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Relinquished By	Received By	Date/Time
	Brooke Caton Digitally signed by Brooke Caton Date: 2023.09.14 10:00:11 -05'00'	09/14/2023 10:00

SmarTroll ID	7586-41446-5-5	Cooler Temp	N/A
Turbidity ID	9830-57039-1-1	Thermometer ID	N/A
Sample Event	1423	pH Strip ID	10853-62410-10-9

Bottles/Pre-Preserved Bottles are provided by the GTL

Total Metals and Alkalinity are not performed on Dissolved Sets

Dissolved Metals and Alkalinity are not performed on blanks i.e. Field Blanks or Equipment Blanks

9.0

Alabama Power
Lab & Field SERVICES

Chain of Custody
Groundwater

APC General Testing Laboratory

☑ Field Complete ☑ Outside Lab
☑ Lab Complete

Lab ETA

Requested Complete Date	Routine	Results To	Dustin Brooks
Collector	Dallas Gentry	Requested By	Greg Budd
		Location	Gorgas Ash Pond

Bottles

1	Radium	1 L	3	N/A	N/A	5	N/A	N/A	7	N/A	N/A
2	N/A	N/A	4	N/A	N/A	6	N/A	N/A	8	N/A	N/A

Comments: Radium MS/MSD collected at Mw-16S

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id	pH Check
MW-15	09/11/2023	11:43	1	Groundwater		BD17534	☑
MW-15V	09/11/2023	13:11	1	Groundwater		BD17535	☑
MW-37HR	09/11/2023	14:55	1	Groundwater		BD17536	☑
FB-5	09/11/2023	15:50	1	Field Blank		BD17537	☑
MW-16S	09/12/2023	09:46	3	Groundwater		BD17538	☑
MW-16D	09/12/2023	10:57	1	Groundwater		BD17539	☑
PZ-16	09/12/2023	11:56	1	Groundwater		BD17540	☑
MW-14R	09/12/2023	13:31	1	Groundwater		BD17541	☑
MW-47	09/12/2023	14:32	1	Groundwater		BD17542	☑
MW-31H	09/13/2023	10:22	1	Groundwater		BD17543	☑
MW-31V	09/13/2023	12:10	1	Groundwater		BD17544	☑
MW-01R	09/13/2023	14:26	1	Groundwater		BD17545	☑
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Relinquished By	Received By	Date/Time
		09/14/2023 08:37

SmarTroll ID	7586-41443-5-2	Cooler Temp	N/A
Turbidity ID	9901-57263-1-1	Thermometer ID	N/A
Sample Event	1423	pH Strip ID	10853-62410-10-9

Bottles/Pre-Preserved Bottles are provided by the GTL

Total Metals and Alkalinity are not performed on Dissolved Sets

Dissolved Metals and Alkalinity are not performed on blanks i.e. Field Blanks or Equipment Blanks

Alabama Power
Lab & Field SERVICES

Chain of Custody
Groundwater

APC General Testing Laboratory

☑ Field Complete ☑ Outside Lab
☑ Lab Complete

Lab ETA

Requested Complete Date: Routine
Collector: TJ Daugherty
Results To: Dustin Brooks
Requested By: Greg Budd
Location: Gorgas Ash Pond

Bottles

1	Radium	1 L	3	N/A	N/A	5	N/A	N/A	7	N/A	N/A
2	N/A	N/A	4	N/A	N/A	6	N/A	N/A	8	N/A	N/A

Comments: Dissolved set collected at MW-6V

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id	pH Check
MW-7	09/11/2023	11:10	1	Groundwater		BD17546	☑
MW-6V	09/11/2023	16:22	1	Groundwater		BD17547	☑
MW-6V Dis	09/11/2023	16:22	1	Field Filtered		BD17548	☑
MW-3	09/12/2023	10:10	1	Groundwater		BD17549	☑
MW-03V	09/12/2023	12:10	1	Groundwater		BD17550	☑
MW-05R	09/12/2023	14:30	1	Groundwater		BD17551	☑
MW-12V	09/13/2023	11:27	1	Groundwater		BD17552	☑
MW-12	09/13/2023	13:30	1	Groundwater		BD17553	☑
MW-09R	09/13/2023	15:25	1	Groundwater		BD17554	☑
MW-09R Dup	09/13/2023	15:25	1	Sample Duplicate		BD17555	☑
MW-9V	09/13/2023	17:55	1	Groundwater		BD17556	☑
FB-4	09/13/2023	18:30	1	Field Blank		BD17557	☑
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Relinquished By	Received By	Date/Time
		09/14/2023 08:39

SmarTroll ID: 7586-41445-5-4
Turbidity ID: 4677-23343-4-2
Sample Event: 1423
Cooler Temp: N/A
Thermometer ID: N/A
pH Strip ID: 10853-62410-10-9

Bottles/Pre-Preserved Bottles are provided by the GTL

Total Metals and Alkalinity are not performed on Dissolved Sets

Dissolved Metals and Alkalinity are not performed on blanks i.e. Field Blanks or Equipment Blanks

Alabama Power
Lab & Field SERVICES

Chain of Custody
Groundwater
APC General Testing Laboratory

☑ Field Complete ☑ Outside Lab
☑ Lab Complete

Lab ETA

Requested Complete Date	Routine	Results To	Dustin Brooks
Collector	Dallas Gentry	Requested By	Greg Budd
		Location	Gorgas Ash Pond

Bottles

1	Radium	1 L	3	N/A	N/A	5	N/A	N/A	7	N/A	N/A
2	N/A	N/A	4	N/A	N/A	6	N/A	N/A	8	N/A	N/A

Comments: Radium MS/MSD collected at MW-10R. Relinquished to GSC Building 8 secure lab DFG 09/19/2023 1559

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id	pH Check
MW-25HA	09/18/2023	13:52	1	Groundwater		BD17843	☑
MW-45V	09/18/2023	15:50	1	Groundwater		BD17844	☑
MW-10R	09/19/2023	09:51	3	Groundwater		BD17845	☑
MW-13R	09/19/2023	11:02	1	Groundwater		BD17846	☑
EB-1	09/19/2023	11:45	1	Equipment Blank		BD17847	☑
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Relinquished By	Received By	Date/Time
Dallas Gentry	Brooke Caton Digitally signed by Brooke Caton Date: 2023.09.20 11:15:07 -05'00'	09/20/2023 11:15

SmarTroll ID	7586-41443-5-2	Cooler Temp	N/A
Turbidity ID	9901-57263-1-1	Thermometer ID	N/A
Sample Event	1423	pH Strip ID	10853-62410-10-9

Bottles/Pre-Preserved Bottles are provided by the GTL

Total Metals and Alkalinity are not performed on Dissolved Sets

Dissolved Metals and Alkalinity are not performed on blanks i.e. Field Blanks or Equipment Blanks

Alabama Power Lab & Field Services

Chain of Custody Groundwater

APC General Testing Laboratory

☑ Field Complete ☑ Outside Lab

☑ Lab Complete

Lab ETA

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Budd
Collector	Anthony Goggins	Requested By	Greg Budd
		Location	Gorgas Ash Pond

Bottles

1	Radium	1 L	3	N/A	N/A	5	N/A	N/A	7	N/A	N/A
2	N/A	N/A	4	N/A	N/A	6	N/A	N/A	8	N/A	N/A

Comments: Relinquished to GSC Bld 8 shipping Lab 091923 1617

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id	pH Check
MW-46	09/18/2023	15:58	1	Groundwater		BD17837	☑
MW-46 Dup	09/18/2023	15:58	1	Sample Duplicate		BD17838	☑
MW-2	09/18/2023	17:10	1	Groundwater		BD17839	☑
MW-19	09/19/2023	07:53	1	Groundwater		BD17840	☑
MW-18VR	09/19/2023	09:00	1	Groundwater		BD17841	☑
MW-43H	09/19/2023	10:39	1	Groundwater		BD17842	☑
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Relinquished By	Received By	Date/Time
	Brooke Caton Digitally signed by Brooke Caton Date: 2023.09.20 11:14:39 -05'00'	09/20/2023 11:14

SmarTroll ID	7586-41446-5-5	Cooler Temp	N/A
Turbidity ID	9830-57039-1-1	Thermometer ID	N/A
Sample Event	1423	pH Strip ID	10853-62410-10-9

Bottles/Pre-Preserved Bottles are provided by the GTL

Total Metals and Alkalinity are not performed on Dissolved Sets

Dissolved Metals and Alkalinity are not performed on blanks i.e. Field Blanks or Equipment Blanks

Alabama Power Lab & Field SERVICES

Chain of Custody Groundwater

APC General Testing Laboratory

☑ Field Complete ☑ Outside Lab

☑ Lab Complete

Lab ETA

Requested Complete Date	Routine	Results To	Dustin Brooks
Collector	TJ Daugherty	Requested By	Greg Budd
		Location	Gorgas Ash Pond

Bottles

1	Radium	1 L	3	N/A	N/A	5	N/A	N/A	7	N/A	N/A
2	N/A	N/A	4	N/A	N/A	6	N/A	N/A	8	N/A	N/A

Comments

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id	pH Check
MW-40H	09/18/2023	12:04	1	Groundwater		BD17848	☑
MW-26H	09/18/2023	14:35	1	Groundwater		BD17849	☑
MW-8	09/18/2023	16:22	1	Groundwater		BD17850	☑
MW-11R	09/19/2023	12:00	1	Groundwater		BD17851	☑
MW-38H	09/19/2023	14:00	1	Groundwater		BD17852	☑
MW-42H	09/19/2023	15:30	1	Groundwater		BD17853	☑
MW-18R	09/19/2023	16:45	1	Groundwater		BD17854	☑
FB-3	09/19/2023	17:15	1	Field Blank		BD17855	☑
PZ-18R	09/19/2023	17:45	1	Groundwater		BD17856	☑
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Relinquished By	Received By	Date/Time
		09/20/2023 10:31

SmarTroll ID	7586-41445-5-4	Cooler Temp	N/A
Turbidity ID	4677-23343-4-2	Thermometer ID	N/A
Sample Event	1423	pH Strip ID	10853-62410-10-9

Bottles/Pre-Preserved Bottles are provided by the GTL

Total Metals and Alkalinity are not performed on Dissolved Sets

Dissolved Metals and Alkalinity are not performed on blanks i.e. Field Blanks or Equipment Blanks

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040
205-664-6001

Analytical Report

Sample Group : WMWGORAP_1424

Project/Site : Gorgas Ash Pond
Parrish, AL 35580

For : Southern Company Services
3535 Colonnade Parkway
Birmingham, AL 35243

Attention : Dustin Brooks & Greg Budd

Released By : Brooke Caton
tbwill@southernco.com
(205) 664-6101

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040
(205) 664-6001

September 26, 2023

Dear Dustin Brooks,

Enclosed are the analytical results for sample(s) received by the laboratory on August 31, 2023.
All results reported herein conform to the laboratory's most current Quality Assurance Manual. Results marked with an asterisk conform to the most current applicable TNI/NELAC requirements. Exceptions will be noted in the body of the report.

Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2024

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Quality Control: Brooke Caton

Digitally signed by Brooke Caton
Date: 2023.09.26 13:26:11 -05'00'

Supervision: T Durant Maske

Digitally signed by T Durant Maske
DN: cn=T Durant Maske gn=T Durant Maske c=US United States l=US United States e=tdmaske@southernco.com
Reason: I am the author of this document
Location:
Date: 2023-09-26 15:44-05:00

Total Metals ICP

Gorgas Ash Pond

WMWGORAP_1424

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
BD16826	765305	WMWGORAP_1424
BD16827	765305	WMWGORAP_1424
BD16828	765305	WMWGORAP_1424
BD16829	765305	WMWGORAP_1424
BD16830	765305	WMWGORAP_1424
BD16831	765305	WMWGORAP_1424

4. All of the above samples were analyzed by EPA 200.7 and prepared by EPA 1638.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- Prior to sample analysis, an initial calibration verification (ICV) was analyzed, and all criteria were met.
- Following the ICV, an initial calibration blank (ICB) was analyzed, and all criteria were met.
- All continued calibration verification (CCV) were within the acceptance criteria for the requested analytes.
- All continued calibration blanks (CCB) were analyzed, and all criteria were met.
- A preparation method blank and laboratory control sample were digested and analyzed with the samples in each digestion batch.
- All laboratory control sample criteria were met.
- The method blank associated with each digestion batch passed all acceptance criteria for all requested analytes.
- All calibration curve requirements were within acceptance criteria.
- All sample internal standard criteria were met.
- The spectral interference check associated with EPA 200.7 was analyzed, and all acceptance criteria were met.
- It is noted that the QC summary page typically provides the QC results from the original batch analytical sequence. If dilutions were subsequently performed to bring sample concentrations within the calibration range, any additional QC data from the dilution analyses may need to be obtained from the laboratory. Any qualifications applied to original analyses or dilution re-analyses are based upon QC data available at the time of review.

Matrix Specific Quality Control Procedures:

Similarity of matrix and therefore relevance of matrix specific QC results should not be automatically inferred for any

sample other than the sample selected for QC.

- A matrix spike and matrix spike duplicate were digested and analyzed with each ICP batch. All acceptance criteria for accuracy were met, except for the following:
    - BD16831 Sodium MS/MSD spike levels were less than 30% of the sample concentrations.
- A matrix spike and matrix spike duplicate were digested and analyzed with each ICP batch. All acceptance criteria for precision were met.

7. The following samples were diluted due to the analyzed sample concentration being greater than the high standard of the calibration curve:

Sample ID	**Analyte**	**Dilution Factor**
BD16827	Sodium	10.15
BD16828	Calcium	10.15
BD16828	Sodium	101.5
BD16830	Sodium	10.15
BD16831	Sodium	10.15

8. The raw data results are shown with dilution factors included.

Case Narrative

Dissolved Metals ICP

Gorgas Ash Pond

WMWGORAP_1424

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
BD16827	765397	WMWGORAP_1424
BD16828	765397	WMWGORAP_1424
BD16830	765397	WMWGORAP_1424
BD16831	765397	WMWGORAP_1424

4. All of the above samples were analyzed and prepared by EPA 200.7 for dissolved analysis.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- Prior to sample analysis, an initial calibration verification (ICV) was analyzed, and all criteria were met.
- Following the ICV, an initial calibration blank (ICB) was analyzed, and all criteria were met.
- All continued calibration verification (CCV) were within the acceptance criteria for the requested analytes.
- All continued calibration blanks (CCB) were analyzed, and all criteria were met.
- Due to no filtered method blank (MB) or laboratory control sample (LCS) submitted with the sample set, an unfiltered MB and LCS were analyzed with the samples in each batch.
- All laboratory control sample criteria were met.
- The method blank associated with each batch passed all acceptance criteria for all requested analytes.
- All calibration curve requirements were within acceptance criteria.
- All sample internal standard criteria were met.
- The spectral interference check associated with EPA 200.7 was analyzed and all acceptance criteria were met.
- It is noted that the QC summary page typically provides the QC results from the original batch analytical sequence. If dilutions were subsequently performed to bring sample concentrations within the calibration range, any additional QC data from the dilution analyses may need to be obtained from the laboratory. Any qualifications applied to original analyses or dilution re-analyses are based upon QC data available at the time of review.

Matrix Specific Quality Control Procedures:

Similarity of matrix and therefore relevance of matrix specific QC results should not be automatically inferred for any

sample other than the sample selected for QC.

- A matrix spike and matrix spike duplicate were analyzed with each ICP batch. All acceptance criteria for accuracy were met, except for the following:
  - BD16831 Sodium MS/MSD spike levels were less than 30% of the sample concentrations.
- A matrix spike and matrix spike duplicate were analyzed with each ICP batch. All acceptance criteria for precision were met.

7. The following samples were diluted due to the analyzed sample concentration being greater than the high standard of the calibration curve:

Sample ID	**Analyte**	**Dilution Factor**
BD16827	Sodium	10.15
BD16828	Calcium	10.15
BD16828	Sodium	101.5
BD16830	Sodium	10.15
BD16831	Sodium	10.15

8. The raw data results are shown with dilution factors included.

Total Metals ICPMS

Gorgas Ash Pond

WMWGORAP_1424

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
BD16826	765813	WMWGORAP_1424
BD16827	765813	WMWGORAP_1424
BD16828	765813	WMWGORAP_1424
BD16829	765813	WMWGORAP_1424
BD16830	765813	WMWGORAP_1424
BD16831	765813	WMWGORAP_1424

4. All of the above samples were analyzed by EPA 200.8 and prepared by EPA 1638.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- All tune and calibration met criteria for all requested analytes.
- Prior to sample analysis, an initial calibration verification (ICV) was analyzed, and all criteria were met.
- Following the ICV, an initial calibration blank (ICB) was analyzed and was below the limit of quantitation for all requested analytes.
- All continued calibration verification (CCV) were within the acceptance criteria for the requested analytes.
- All continued calibration blanks (CCB) were below the limit of quantitation for the requested analytes.
- A preparation method blank and laboratory control sample were digested and analyzed with the samples in each digestion batch.
- All laboratory control sample criteria were met.
- The method blank associated with each digestion batch passed all acceptance criteria for all requested analytes.
- The interference check samples associated with EPA 200.8 were analyzed and passed for all requested analytes.
- All sample internal standard criteria were met.
- It is noted that the QC summary page typically provides the QC results from the original batch analytical sequence. If dilutions were subsequently performed to bring sample concentrations within the calibration range, any additional QC data from the dilution analyses may need to be obtained from the laboratory. Any qualifications applied to original analyses or dilution re-analyses are based upon QC data available at the time of review.

Matrix Specific Quality Control Procedures:

Similarity of matrix and therefore relevance of matrix specific QC results should not be automatically inferred for any sample other than the sample selected for QC.

- A matrix spike and matrix spike duplicate were digested and analyzed with each ICPMS batch. All acceptance criteria for accuracy were met.
- A matrix spike and matrix spike duplicate were digested and analyzed with each ICPMS batch. All acceptance criteria for precision were met.

7. All samples were analyzed without a dilution factor.
8. The raw data results are shown with dilution factors included.

Case Narrative

Dissolved Metals ICPMS

Gorgas Ash Pond

WMWGORAP_1424

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	**Batch ID**	**Project ID**
BD16827	765814	WMWGORAP_1424
BD16828	765814	WMWGORAP_1424
BD16830	765814	WMWGORAP_1424
BD16831	765814	WMWGORAP_1424

4. All of the above samples were analyzed and prepared by EPA 200.8 for dissolved analysis.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- All tune and calibration met criteria for all requested analytes.
- Prior to sample analysis, an initial calibration verification (ICV) was analyzed, and all criteria were met.
- Following the ICV, an initial calibration blank (ICB) was analyzed and was below the limit of quantitation for all requested analytes.
- All continued calibration verification (CCV) were within the acceptance criteria for the requested analytes.
- All continued calibration blanks (CCB) were below the limit of quantitation for the requested analytes.
- Due to no filtered method blank (MB) or laboratory control sample (LCS) submitted with the sample set, an unfiltered MB and LCS were analyzed with the samples in each batch.
- All laboratory control sample criteria were met.
- The method blank associated with each preparation batch passed all acceptance criteria for all requested analytes.
- The interference check samples associated with EPA 200.8 were analyzed and passed for all requested analytes.
- All sample internal standard criteria were met.
- It is noted that the QC summary page typically provides the QC results from the original batch analytical sequence. If dilutions were subsequently performed to bring sample concentrations within the calibration range, any additional QC data from the dilution analyses may need to be obtained from the laboratory. Any qualifications applied to original analyses or dilution re-analyses are based upon QC data available at the time of review.

Matrix Specific Quality Control Procedures:

Similarity of matrix and therefore relevance of matrix specific QC results should not be automatically inferred for any

sample other than the sample selected for QC.

- A matrix spike and matrix spike duplicate were analyzed with each ICPMS batch. All acceptance criteria for accuracy were met.
- A matrix spike and matrix spike duplicate were analyzed with each ICPMS batch. All acceptance criteria for precision were met.

7. All samples were analyzed without a dilution factor.
8. The raw data results are shown with dilution factors included.

Case Narrative

Mercury

Gorgas Ash Pond

WMWGORAP_1424

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
BD16826	765314	WMWGORAP_1424
BD16827	765314	WMWGORAP_1424
BD16828	765314	WMWGORAP_1424
BD16829	765314	WMWGORAP_1424
BD16830	765314	WMWGORAP_1424
BD16831	765314	WMWGORAP_1424

4. All of the above samples were analyzed and prepared by EPA 245.1.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- Prior to sample analysis, an initial calibration verification (ICV) was analyzed and all criteria were met.
- Following the ICV, an initial calibration blank (ICB) was analyzed and was below the method detection limit for the requested analyte.
- All continued calibration verification (CCV) were within the acceptance criteria for the requested analyte.
- All continued calibration blanks (CCB) were below the limit of quantitation for the requested analyte.
- A preparation method blank and laboratory control sample were digested and analyzed with the samples in each digestion batch.
- All laboratory control sample criteria were met.
- The method blank associated with each digestion batch was below the limit of quantitation for the requested analyte.
- All calibration met criteria for the requested analyte.
- All response signals were satisfactory.

Matrix Specific Quality Control Procedures:

Similarity of matrix and therefore relevance of matrix specific QC results should not be automatically inferred for any sample other than the sample selected for QC.

- A matrix spike and matrix spike duplicate were digested and analyzed with each analytical batch. All acceptance criteria for accuracy were met.

- A matrix spike and matrix spike duplicate were digested and analyzed with each analytical batch. All acceptance criteria for precision were met.

7. All samples were analyzed without a dilution.

Case Narrative

Total Dissolved Solids

Gorgas Ash Pond

WMWGORAP_1424

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	**Batch ID**	**Project ID**
BD16826	765266	WMWGORAP_1424
BD16827	765266	WMWGORAP_1424
BD16828	765266	WMWGORAP_1424
BD16829	765266	WMWGORAP_1424
BD16830	765266	WMWGORAP_1424
BD16831	765266	WMWGORAP_1424

4. All of the above samples were prepared and analyzed by Standard Method 2540C.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- A Method Blank was analyzed with each batch. All criteria were met.
- All final weights of samples, standards, and blanks agreed within 0.5mg of the previous weight.
- A sample duplicate was analyzed with each batch, and RPD was ≤10%.
- A laboratory control sample was analyzed with each batch. All criteria were met.
- Samples were between 2.5mg and 200mg residue.
- All samples with residue <2.5mg had the maximum volume of 150mL filtered. Affected samples are as follows:
    - BD16826
    - BD16829

Case Narrative

Alkalinity

Gorgas Ash Pond

WMWGORAP_1424

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
BD16827	766185, 766186, 766187, 766188	WMWGORAP_1424
BD16828	766185, 766186, 766187, 766188	WMWGORAP_1424
BD16830	766185, 766186, 766187, 766188	WMWGORAP_1424
BD16831	766185, 766186, 766187, 766188	WMWGORAP_1424

4. All of the above samples were prepared and analyzed by Standard Method 2320B.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- An initial pH check was analyzed with each batch. The acceptance criteria were met.
- A final pH check was analyzed with each batch. The acceptance criteria were met.
- An alkalinity laboratory control sample was analyzed with each batch. Range criteria of within 10% of true value was met.
- An alkalinity sample duplicate was analyzed with each batch. Precision criteria less than 10 RPD was met.

7. The following samples had pH>10 and/or TDS>500mg/L. Therefore, the calculations for carbonate and bicarbonate are estimates:
    - BD16828

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Case Narrative

Anions

Gorgas Ash Pond

WMWGORAP_1424

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
BD16826	766040, 766042, 765945	WMWGORAP_1424
BD16827	766040, 766042, 765945	WMWGORAP_1424
BD16828	766040, 766042, 765945	WMWGORAP_1424
BD16829	766040, 766042, 765945	WMWGORAP_1424
BD16830	766040, 766042, 765945	WMWGORAP_1424
BD16831	766040, 766042, 765945	WMWGORAP_1424

4. All of the above samples were analyzed and prepared by SM4500 Cl E, SM4500 F G, and SM4500 SO4 E.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- All calibration met criteria for the requested analyte.
- Prior to sample analysis, an initial calibration verification (ICV), and all criteria were met.
- Prior to sample analysis, an initial calibration blank (ICB) was analyzed and was below half the limit of quantitation for the requested analyte.
- All continued calibration verification (CCV) were within the acceptance criteria for the requested analyte.
- All continued calibration blanks (CCB) were below the limit of quantitation for the requested analyte.
- It is noted that the QC summary page typically provides the QC results from the original batch analytical sequence. If dilutions were subsequently performed to bring sample concentrations within the calibration range, any additional QC data from the dilution analyses may need to be obtained from the laboratory. Any qualifications applied to original analyses or dilution re-analyses are based upon QC data available at the time of review.

Matrix Specific Quality Control Procedures:

Similarity of matrix and therefore relevance of matrix specific QC results should not be automatically inferred for any sample other than the sample selected for QC.

Revision 5

- A matrix spike and matrix spike duplicate were analyzed with each batch. All acceptance criteria for accuracy were met.
- A matrix spike and matrix spike duplicate were analyzed with each batch. All acceptance criteria for precision were met.

7. The following samples were diluted due to the analyzed sample concentration being greater than the high standard of the calibration curve:

Sample ID	Analyte	Dilution Factor
BD16827	Chloride	2
BD16828	Chloride, Sulfate	25, 50

8. The raw data results are shown with dilution factors included.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Case Narrative

Alabama Power

Nitrate-Nitrite

Gorgas Ash Pond

WMWGORAP_1424

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	**Batch ID**	**Project ID**
BD16826	765469	WMWGORAP_1424
BD16827	765469	WMWGORAP_1424
BD16828	765469	WMWGORAP_1424
BD16829	765469	WMWGORAP_1424
BD16830	765469	WMWGORAP_1424
BD16831	765469	WMWGORAP_1424

4. All of the above samples were prepared and analyzed for NO_x by EPA 353.2.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- Water baseline report was run and met criteria.
- All calibration met criteria for the requested analytes.
- Prior to sample analysis, an initial calibration verification (ICV) was analyzed and met all criteria.
- All continued calibration verification (CCV) were within the acceptance criteria.
- Prior to sample analysis, an initial calibration blank (ICB) was analyzed and were below limit of detection.
- All continued calibration blanks (CCB) were below the limit of detection.

EPA 353.2 Specific QC:

- Prior to sample analysis, Cadmium coil reduction efficiency check met criteria.
- Matrix Specific QC:
    - A sample duplicate was run and criteria for precision was met.
    - A matrix spike was run and criteria for accuracy was met.

7. All samples were analyzed without a dilution factor.
8. The raw data results are shown with dilution factors included.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Case Narrative

Total Organic Carbon

Gorgas Ash Pond

WMWGORAP_1424

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	**Batch ID**	**Project ID**
BD16826	765589	WMWGORAP_1424
BD16827	765589	WMWGORAP_1424
BD16828	765589	WMWGORAP_1424
BD16829	765589	WMWGORAP_1424
BD16830	765589	WMWGORAP_1424
BD16831	765589	WMWGORAP_1424

4. All of the above samples were prepared and analyzed by Standard Method 5310B.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- All calibration criteria were met.
- Prior to sample analysis, an initial calibration verification (ICV) was analyzed and met all criteria.
- Prior to sample analysis, an initial calibration blank (ICB) was analyzed and was <1/2RL.
- All continued calibration verifications (CCVs) were within the acceptance range.
- All continued calibration blanks (CCBs) were <1/2RL.

Matrix Specific Quality Control Procedures:

- A matrix spike and matrix spike duplicate were analyzed with each batch. All acceptance criteria for accuracy were met.
- A matrix spike and matrix spike duplicate were analyzed with each batch. All acceptance criteria for precision were met.

7. All samples were analyzed without a dilution factor.
8. The raw data results are shown with dilution factors included.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond Field Blank-1

Location Code: WMWGORAPFB
Collected: 8/30/23 12:05
Customer ID:
Submittal Date: 8/31/23 14:17

Laboratory ID Number: BD16826

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	9/5/23 11:05	9/6/23 11:34		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	9/5/23 11:05	9/6/23 11:34		1.015	Not Detected	mg/L	0.070035	0.406	U
* Iron, Total	9/5/23 11:05	9/6/23 11:34		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Total	9/5/23 11:05	9/6/23 11:34		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	9/5/23 11:05	9/6/23 11:34		1.015	Not Detected	mg/L	0.021315	0.406	U
* Molybdenum, Total	9/5/23 11:05	9/6/23 11:34		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Total (calc.)	9/5/23 11:05	9/6/23 11:34		1	Not Detected	mg/L			
* Silicon, Total	9/5/23 11:05	9/6/23 11:34		1.015	Not Detected	mg/L	0.02030	0.25375	U
* Sodium, Total	9/5/23 11:05	9/6/23 11:34		1.015	Not Detected	mg/L	0.04060	0.406	U
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	9/5/23 11:05	9/5/23 14:37		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Total	9/5/23 11:05	9/5/23 14:37		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Total	9/5/23 11:05	9/5/23 14:37		1.015	Not Detected	mg/L	0.000112	0.000203	U
* Barium, Total	9/5/23 11:05	9/5/23 14:37		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Beryllium, Total	9/5/23 11:05	9/5/23 14:37		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	9/5/23 11:05	9/5/23 14:37		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	9/5/23 11:05	9/5/23 14:37		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	9/5/23 11:05	9/5/23 14:37		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	9/5/23 11:05	9/5/23 14:37		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	9/5/23 11:05	9/5/23 14:37		1.015	Not Detected	mg/L	0.000152	0.001015	U
* Potassium, Total	9/5/23 11:05	9/5/23 14:37		1.015	Not Detected	mg/L	0.169505	0.5075	U
* Selenium, Total	9/5/23 11:05	9/5/23 14:37		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	9/5/23 11:05	9/5/23 14:37		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	9/1/23 12:34	9/1/23 16:32		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	9/5/23 08:44	9/5/23 08:44		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	8/31/23 15:40	9/1/23 13:30		1	Not Detected	mg/L		25	U

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments:

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond Field Blank-1

Location Code: WMWGORAPFB
Collected: 8/30/23 12:05
Customer ID:
Submittal Date: 8/31/23 14:17

Laboratory ID Number: BD16826

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	9/6/23 18:17	9/6/23 18:17		1	Not Detected	mg/L	1.00	2	U
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	9/11/23 10:51	9/11/23 10:51		1	Not Detected	mg/L	0.50	1	U
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	9/11/23 14:53	9/11/23 14:53		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	9/7/23 13:56	9/7/23 13:56		1	Not Detected	mg/L	0.6	2	U

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments:

Batch QC Summary

Customer Account: WMWGORAPFB
Sample Date: 8/30/23 12:05
Customer ID:
Delivery Date: 8/31/23 14:17

Description: Gorgas Ash Pond Field Blank-1

Laboratory ID Number: BD16826

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD16831	Aluminum, Total	mg/L	0.00124	0.0198	0.100	0.117	0.119	0.103	0.0850 to 0.115	101	70.0 to 130	1.69	20.0
BD16831	Antimony, Total	mg/L	0.000308	0.00100	0.100	0.102	0.102	0.102	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BD16831	Arsenic, Total	mg/L	-0.0000200	0.000200	0.100	0.110	0.109	0.109	0.0850 to 0.115	110	70.0 to 130	0.913	20.0
BD16831	Barium, Total	mg/L	-0.0000011	0.00100	0.100	0.145	0.148	0.101	0.0850 to 0.115	95.2	70.0 to 130	2.05	20.0
BD16831	Beryllium, Total	mg/L	0.0000669	0.000880	0.100	0.110	0.109	0.106	0.0850 to 0.115	110	70.0 to 130	0.913	20.0
BD16831	Boron, Total	mg/L	-0.00160	0.0650	1.00	1.06	1.06	1.01	0.850 to 1.15	106	70.0 to 130	0.00	20.0
BD16831	Cadmium, Total	mg/L	0.0000053	0.000147	0.100	0.108	0.110	0.108	0.0850 to 0.115	108	70.0 to 130	1.83	20.0
BD16831	Calcium, Total	mg/L	-0.0201	0.152	5.00	6.39	6.54	4.95	4.25 to 5.75	101	70.0 to 130	2.32	20.0
BD16831	Chloride	mg/L	0.0102	1.00	10.0	17.9	17.5	10.3	9.00 to 11.0	99.1	80.0 to 120	2.26	20.0
BD16831	Chromium, Total	mg/L	-0.0000178	0.000440	0.100	0.104	0.104	0.103	0.0850 to 0.115	104	70.0 to 130	0.00	20.0
BD16831	Cobalt, Total	mg/L	-0.0000002	0.000147	0.100	0.107	0.108	0.106	0.0850 to 0.115	107	70.0 to 130	0.930	20.0
BD16831	Fluoride	mg/L	0.0259	0.125	2.50	2.72	2.79	2.66	2.25 to 2.75	103	80.0 to 120	2.54	20.0
BD16831	Iron, Total	mg/L	-0.000723	0.0176	0.2	0.219	0.220	0.200	0.170 to 0.230	101	70.0 to 130	0.456	20.0
BD16831	Lead, Total	mg/L	-0.0000008	0.000147	0.100	0.0970	0.0975	0.0972	0.0850 to 0.115	97.0	70.0 to 130	0.514	20.0
BD16831	Lithium, Total	mg/L	0.000465	0.0154	0.200	0.267	0.266	0.202	0.170 to 0.230	101	70.0 to 130	0.375	20.0
BD16831	Magnesium, Total	mg/L	0.00340	0.0462	5.00	5.35	5.40	5.01	4.25 to 5.75	100	70.0 to 130	0.930	20.0
BD16831	Manganese, Total	mg/L	0.0000021	0.00033	0.100	0.110	0.109	0.105	0.0850 to 0.115	106	70.0 to 130	0.913	20.0
BD16831	Mercury, Total by CVAA	mg/L	4.000E-05	0.000500	0.004	0.00401	0.00402	0.004	0.00340 to 0.00460	100	70.0 to 130	0.249	20.0
BD16831	Molybdenum, Total	mg/L	0.002	0.0100	0.2	0.199	0.202	0.199	0.170 to 0.230	99.5	70.0 to 130	1.50	20.0
BD16831	Potassium, Total	mg/L	0.0291	0.367	10.0	11.1	11.2	10.2	8.50 to 11.5	101	70.0 to 130	0.897	20.0
BD16831	Selenium, Total	mg/L	0.0000734	0.00100	0.100	0.0960	0.0990	0.104	0.0850 to 0.115	96.0	70.0 to 130	3.08	20.0
BD16831	Silicon, Total	mg/L	0.000140	0.0440	1.00	9.95	10.0	1.02	0.850 to 1.15	101	70.0 to 130	0.501	20.0
BD16831	Sodium, Total	mg/L	0.0129	0.0880	5.00	121	123	5.23	4.25 to 5.75	-180	70.0 to 130	1.64	20.0
BD16831	Sulfate	mg/L	-0.0876	2.0	20.0	34.5	34.5	20.9	18.0 to 22.0	100	80.0 to 120	0.00	20.0

Comments:

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAPFB
Sample Date: 8/30/23 12:05
Customer ID:
Delivery Date: 8/31/23 14:17

Description: Gorgas Ash Pond Field Blank-1

Laboratory ID Number: BD16826

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD16831	Thallium, Total	mg/L	0.0000143	0.000147	0.100	0.103	0.103	0.104	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BD16845	Total Organic Carbon	mg/L	0.227	1.00	10.0	9.92	10.4	9.44		99.2	80.0 to 120	4.72	20.0

Comments:

Batch QC Summary

Customer Account: WMWGORAPFB
Sample Date: 8/30/23 12:05
Customer ID:
Delivery Date: 8/31/23 14:17

Description: Gorgas Ash Pond Field Blank-1

Laboratory ID Number: BD16826

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD16845	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.02	0.200	2.00	2.01	-0.027	1.88	1.80 to 2.20	100	90.0 to 110	0.00	15.0
BD16844	Solids, Dissolved	mg/L	0.0000	25.0			240	54.0	40.0 to 60.0			2.53	10.0

Comments:

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-33HO

Location Code: WMWGORAP
Collected: 8/30/23 13:56
Customer ID:
Submittal Date: 8/31/23 14:17

Laboratory ID Number: BD16827

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	9/5/23 11:05	9/6/23 11:37		1.015	0.0400	mg/L	0.030000	0.1015	J
* Calcium, Total	9/5/23 11:05	9/6/23 11:37		1.015	22.1	mg/L	0.070035	0.406	
* Iron, Total	9/5/23 11:05	9/6/23 11:37		1.015	0.277	mg/L	0.008120	0.0406	
* Lithium, Total	9/5/23 11:05	9/6/23 11:37		1.015	0.0489	mg/L	0.007105	0.01999956	
* Magnesium, Total	9/5/23 11:05	9/6/23 11:37		1.015	8.66	mg/L	0.021315	0.406	
* Molybdenum, Total	9/5/23 11:05	9/6/23 11:37		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Total (calc.)	9/5/23 11:05	9/6/23 11:37		1	19.6	mg/L			
* Silicon, Total	9/5/23 11:05	9/6/23 11:37		1.015	9.17	mg/L	0.02030	0.25375	
* Sodium, Total	9/5/23 11:05	9/6/23 13:48		10.15	97.5	mg/L	0.4060	4.06	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	9/5/23 08:59	9/6/23 11:09		1.015	0.0383	mg/L	0.030000	0.1015	J
* Calcium, Dissolved	9/5/23 08:59	9/6/23 11:09		1.015	22.2	mg/L	0.070035	0.406	
* Iron, Dissolved	9/5/23 08:59	9/6/23 11:09		1.015	0.0512	mg/L	0.008120	0.0406	
* Lithium, Dissolved	9/5/23 08:59	9/6/23 11:09		1.015	0.0499	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	9/5/23 08:59	9/6/23 11:09		1.015	8.75	mg/L	0.021315	0.406	
* Molybdenum, Dissolved	9/5/23 08:59	9/6/23 11:09		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Dissolved (calc.)	9/5/23 08:59	9/6/23 11:09		1	19.4	mg/L			
* Silicon, Dissolved	9/5/23 08:59	9/6/23 11:09		1.015	9.06	mg/L	0.02030	0.25375	
* Sodium, Dissolved	9/5/23 08:59	9/6/23 13:26		10.15	99.1	mg/L	0.4060	4.06	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	9/5/23 11:05	9/5/23 14:41		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Total	9/5/23 11:05	9/5/23 14:41		1.015	0.0598	mg/L	0.009135	0.05075	
* Arsenic, Total	9/5/23 11:05	9/5/23 14:41		1.015	0.000822	mg/L	0.000112	0.000203	
* Barium, Total	9/5/23 11:05	9/5/23 14:41		1.015	0.472	mg/L	0.000508	0.001015	
* Beryllium, Total	9/5/23 11:05	9/5/23 14:41		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	9/5/23 11:05	9/5/23 14:41		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	9/5/23 11:05	9/5/23 14:41		1.015	0.000279	mg/L	0.000203	0.001015	J
* Cobalt, Total	9/5/23 11:05	9/5/23 14:41		1.015	0.000136	mg/L	0.000068	0.000203	J
* Lead, Total	9/5/23 11:05	9/5/23 14:41		1.015	0.000224	mg/L	0.000068	0.000203	
* Manganese, Total	9/5/23 11:05	9/5/23 14:41		1.015	0.0302	mg/L	0.000152	0.001015	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-33HO

Location Code: WMWGORAP
Collected: 8/30/23 13:56
Customer ID:
Submittal Date: 8/31/23 14:17

Laboratory ID Number: BD16827

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	9/5/23 11:05	9/5/23 14:41		1.015	5.99	mg/L	0.169505	0.5075	
* Selenium, Total	9/5/23 11:05	9/5/23 14:41		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	9/5/23 11:05	9/5/23 14:41		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	9/5/23 08:59	9/5/23 10:21		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	9/5/23 08:59	9/5/23 10:21		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Dissolved	9/5/23 08:59	9/5/23 10:21		1.015	0.000675	mg/L	0.000112	0.000203	
* Barium, Dissolved	9/5/23 08:59	9/5/23 10:21		1.015	0.487	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	9/5/23 08:59	9/5/23 10:21		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	9/5/23 08:59	9/5/23 10:21		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	9/5/23 08:59	9/5/23 10:21		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	9/5/23 08:59	9/5/23 10:21		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Dissolved	9/5/23 08:59	9/5/23 10:21		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	9/5/23 08:59	9/5/23 10:21		1.015	0.0265	mg/L	0.000152	0.001015	
* Potassium, Dissolved	9/5/23 08:59	9/5/23 10:21		1.015	5.96	mg/L	0.169505	0.5075	
* Selenium, Dissolved	9/5/23 08:59	9/5/23 10:21		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	9/5/23 08:59	9/5/23 10:21		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	9/1/23 12:34	9/1/23 16:36		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	9/5/23 08:46	9/5/23 08:46		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: DHC***								
* Alkalinity	9/12/23 09:08	9/12/23 10:50		1	211	mg CaCO3/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	8/31/23 15:40	9/1/23 13:30		1	328	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: DHC***								
* Bicarbonate Alkalinity, (calc.)	9/12/23 09:08	9/12/23 10:50		1	209	mg CaCO3/L		1	
* Carbonate Alkalinity, (calc.)	9/12/23 09:08	9/12/23 10:50		1	1.56	mg CaCO3/L		0.5	
Analytical Method: SM 4500H+ B	***Analyst: DHC***								
Alkalinity pH Endpoint	9/12/23 09:08	9/12/23 10:50		1	4.51	SU		2	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-33HO

Location Code: WMWGORAP
Collected: 8/30/23 13:56
Customer ID:
Submittal Date: 8/31/23 14:17

Laboratory ID Number: BD16827

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	9/6/23 18:32	9/6/23 18:32		1	1.60	mg/L	1.00	2	J
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	9/11/23 11:00	9/11/23 11:00		2	28.5	mg/L	1.00	2	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	9/11/23 14:54	9/11/23 14:54		1	0.213	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	9/7/23 13:58	9/7/23 13:58		1	32.8	mg/L	0.6	2	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	8/30/23 13:53	8/30/23 13:53			589.38	uS/cm			FA
pH	8/30/23 13:53	8/30/23 13:53			7.58	SU			FA
Temperature	8/30/23 13:53	8/30/23 13:53			28.45	C			FA
Turbidity	8/30/23 13:53	8/30/23 13:53			8.74	NTU			FA
Sulfide	8/30/23 13:53	8/30/23 13:53			2.0	mg/L			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 8/30/23 13:56
Customer ID:
Delivery Date: 8/31/23 14:17

Description: Gorgas Ash Pond - MW-33HO

Laboratory ID Number: BD16827

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD16831	Aluminum, Dissolved	mg/L	0.000239	0.0198	0.100	0.112	0.112	0.105	0.0850 to 0.115	112	70.0 to 130	0.00	20.0
BD16831	Aluminum, Total	mg/L	0.00124	0.0198	0.100	0.117	0.119	0.103	0.0850 to 0.115	101	70.0 to 130	1.69	20.0
BD16831	Antimony, Dissolved	mg/L	0.000465	0.00100	0.100	0.0941	0.0938	0.0905	0.0850 to 0.115	94.1	70.0 to 130	0.319	20.0
BD16831	Antimony, Total	mg/L	0.000308	0.00100	0.100	0.102	0.102	0.102	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BD16831	Arsenic, Dissolved	mg/L	-0.0000238	0.000200	0.100	0.100	0.101	0.104	0.0850 to 0.115	100	70.0 to 130	0.995	20.0
BD16831	Arsenic, Total	mg/L	-0.0000200	0.000200	0.100	0.110	0.109	0.109	0.0850 to 0.115	110	70.0 to 130	0.913	20.0
BD16831	Barium, Dissolved	mg/L	-0.0000251	0.00100	0.100	0.151	0.152	0.0957	0.0850 to 0.115	100	70.0 to 130	0.660	20.0
BD16831	Barium, Total	mg/L	-0.0000011	0.00100	0.100	0.145	0.148	0.101	0.0850 to 0.115	95.2	70.0 to 130	2.05	20.0
BD16831	Beryllium, Dissolved	mg/L	0.0000411	0.000880	0.100	0.0908	0.0987	0.0935	0.0850 to 0.115	90.8	70.0 to 130	8.34	20.0
BD16831	Beryllium, Total	mg/L	0.0000669	0.000880	0.100	0.110	0.109	0.106	0.0850 to 0.115	110	70.0 to 130	0.913	20.0
BD16831	Boron, Dissolved	mg/L	-0.00209	0.0650	1.00	1.06	1.06	1.03	0.850 to 1.15	106	70.0 to 130	0.00	20.0
BD16831	Boron, Total	mg/L	-0.00160	0.0650	1.00	1.06	1.06	1.01	0.850 to 1.15	106	70.0 to 130	0.00	20.0
BD16831	Cadmium, Dissolved	mg/L	0.0000000	0.000147	0.100	0.104	0.102	0.103	0.0850 to 0.115	104	70.0 to 130	1.94	20.0
BD16831	Cadmium, Total	mg/L	0.0000053	0.000147	0.100	0.108	0.110	0.108	0.0850 to 0.115	108	70.0 to 130	1.83	20.0
BD16831	Calcium, Dissolved	mg/L	-0.0217	0.152	5.00	6.57	6.57	5.13	4.25 to 5.75	103	70.0 to 130	0.00	20.0
BD16831	Calcium, Total	mg/L	-0.0201	0.152	5.00	6.39	6.54	4.95	4.25 to 5.75	101	70.0 to 130	2.32	20.0
BD16831	Chloride	mg/L	0.0102	1.00	10.0	17.9	17.5	10.3	9.00 to 11.0	99.1	80.0 to 120	2.26	20.0
BD16831	Chromium, Dissolved	mg/L	-0.0000252	0.000440	0.100	0.101	0.101	0.102	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BD16831	Chromium, Total	mg/L	-0.0000178	0.000440	0.100	0.104	0.104	0.103	0.0850 to 0.115	104	70.0 to 130	0.00	20.0
BD16831	Cobalt, Dissolved	mg/L	0.0000028	0.000147	0.100	0.104	0.104	0.105	0.0850 to 0.115	104	70.0 to 130	0.00	20.0
BD16831	Cobalt, Total	mg/L	-0.0000002	0.000147	0.100	0.107	0.108	0.106	0.0850 to 0.115	107	70.0 to 130	0.930	20.0
BD16831	Fluoride	mg/L	0.0259	0.125	2.50	2.72	2.79	2.66	2.25 to 2.75	103	80.0 to 120	2.54	20.0
BD16831	Iron, Dissolved	mg/L	-0.000779	0.0176	0.2	0.213	0.212	0.204	0.170 to 0.230	102	70.0 to 130	0.471	20.0
BD16831	Iron, Total	mg/L	-0.000723	0.0176	0.2	0.219	0.220	0.200	0.170 to 0.230	101	70.0 to 130	0.456	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 8/30/23 13:56
Customer ID:
Delivery Date: 8/31/23 14:17

Description: Gorgas Ash Pond - MW-33HO

Laboratory ID Number: BD16827

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD16831	Lead, Dissolved	mg/L	0.0000066	0.000147	0.100	0.0962	0.104	0.0986	0.0850 to 0.115	96.2	70.0 to 130	7.79	20.0
BD16831	Lead, Total	mg/L	-0.0000008	0.000147	0.100	0.0970	0.0975	0.0972	0.0850 to 0.115	97.0	70.0 to 130	0.514	20.0
BD16831	Lithium, Dissolved	mg/L	0.000564	0.0154	0.200	0.266	0.263	0.201	0.170 to 0.230	101	70.0 to 130	1.13	20.0
BD16831	Lithium, Total	mg/L	0.000465	0.0154	0.200	0.267	0.266	0.202	0.170 to 0.230	101	70.0 to 130	0.375	20.0
BD16831	Magnesium, Dissolved	mg/L	0.00190	0.0462	5.00	5.35	5.33	5.09	4.25 to 5.75	100	70.0 to 130	0.375	20.0
BD16831	Magnesium, Total	mg/L	0.00340	0.0462	5.00	5.35	5.40	5.01	4.25 to 5.75	100	70.0 to 130	0.930	20.0
BD16831	Manganese, Dissolved	mg/L	0.0000112	0.00033	0.100	0.108	0.107	0.105	0.0850 to 0.115	104	70.0 to 130	0.930	20.0
BD16831	Manganese, Total	mg/L	0.0000021	0.00033	0.100	0.110	0.109	0.105	0.0850 to 0.115	106	70.0 to 130	0.913	20.0
BD16831	Mercury, Total by CVAA	mg/L	4.000E-05	0.000500	0.004	0.00401	0.00402	0.004	0.00340 to 0.00460	100	70.0 to 130	0.249	20.0
BD16831	Molybdenum, Dissolved	mg/L	0.00162	0.0100	0.2	0.202	0.202	0.201	0.170 to 0.230	101	70.0 to 130	0.00	20.0
BD16831	Molybdenum, Total	mg/L	0.002	0.0100	0.2	0.199	0.202	0.199	0.170 to 0.230	99.5	70.0 to 130	1.50	20.0
BD16831	Potassium, Dissolved	mg/L	0.0293	0.367	10.0	11.4	11.5	10.4	8.50 to 11.5	104	70.0 to 130	0.873	20.0
BD16831	Potassium, Total	mg/L	0.0291	0.367	10.0	11.1	11.2	10.2	8.50 to 11.5	101	70.0 to 130	0.897	20.0
BD16831	Selenium, Dissolved	mg/L	0.0000823	0.00100	0.100	0.105	0.106	0.102	0.0850 to 0.115	104	70.0 to 130	0.948	20.0
BD16831	Selenium, Total	mg/L	0.0000734	0.00100	0.100	0.0960	0.0990	0.104	0.0850 to 0.115	96.0	70.0 to 130	3.08	20.0
BD16831	Silicon, Dissolved	mg/L	0.00139	0.0440	1.00	9.98	9.98	1.04	0.850 to 1.15	119	70.0 to 130	0.00	20.0
BD16831	Silicon, Total	mg/L	0.000140	0.0440	1.00	9.95	10.0	1.02	0.850 to 1.15	101	70.0 to 130	0.501	20.0
BD16831	Sodium, Dissolved	mg/L	0.000834	0.0880	5.00	119	119	5.23	4.25 to 5.75	60.0	70.0 to 130	0.00	20.0
BD16831	Sodium, Total	mg/L	0.0129	0.0880	5.00	121	123	5.23	4.25 to 5.75	-180	70.0 to 130	1.64	20.0
BD16831	Sulfate	mg/L	-0.0876	2.0	20.0	34.5	34.5	20.9	18.0 to 22.0	100	80.0 to 120	0.00	20.0
BD16831	Thallium, Dissolved	mg/L	0.0000086	0.000147	0.100	0.101	0.107	0.103	0.0850 to 0.115	101	70.0 to 130	5.77	20.0
BD16831	Thallium, Total	mg/L	0.0000143	0.000147	0.100	0.103	0.103	0.104	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BD16845	Total Organic Carbon	mg/L	0.227	1.00	10.0	9.92	10.4	9.44		99.2	80.0 to 120	4.72	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 8/30/23 13:56
Customer ID:
Delivery Date: 8/31/23 14:17

Description: Gorgas Ash Pond - MW-33HO

Laboratory ID Number: BD16827

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD16831	Alkalinity	mg CaCO3/L					224	51.9	45.0 to 55.0			0.00	10.0
BD16845	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.02	0.200	2.00	2.01	-0.027	1.88	1.80 to 2.20	100	90.0 to 110	0.00	15.0
BD16844	Solids, Dissolved	mg/L	0.0000	25.0			240	54.0	40.0 to 60.0			2.53	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-34HO

Location Code: WMWGORAP
Collected: 8/31/23 08:12
Customer ID:
Submittal Date: 8/31/23 14:18

Laboratory ID Number: BD16828

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	9/5/23 11:05	9/6/23 11:40		1.015	0.104	mg/L	0.030000	0.1015	
* Calcium, Total	9/5/23 11:05	9/6/23 13:51		10.15	77.0	mg/L	0.70035	4.06	
* Iron, Total	9/5/23 11:05	9/6/23 11:40		1.015	0.542	mg/L	0.008120	0.0406	
* Lithium, Total	9/5/23 11:05	9/6/23 11:40		1.015	0.155	mg/L	0.007105	0.01999956	
* Magnesium, Total	9/5/23 11:05	9/6/23 11:40		1.015	23.2	mg/L	0.021315	0.406	
* Molybdenum, Total	9/5/23 11:05	9/6/23 11:40		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Total (calc.)	9/5/23 11:05	9/6/23 11:40		1	11.7	mg/L			
* Silicon, Total	9/5/23 11:05	9/6/23 11:40		1.015	5.45	mg/L	0.02030	0.25375	
* Sodium, Total	9/5/23 11:05	9/6/23 13:54		101.5	775	mg/L	4.060	40.6	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	9/5/23 08:59	9/6/23 11:12		1.015	0.103	mg/L	0.030000	0.1015	
* Calcium, Dissolved	9/5/23 08:59	9/6/23 13:29		10.15	81.8	mg/L	0.70035	4.06	
* Iron, Dissolved	9/5/23 08:59	9/6/23 11:12		1.015	0.187	mg/L	0.008120	0.0406	
* Lithium, Dissolved	9/5/23 08:59	9/6/23 11:12		1.015	0.165	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	9/5/23 08:59	9/6/23 11:12		1.015	24.6	mg/L	0.021315	0.406	
* Molybdenum, Dissolved	9/5/23 08:59	9/6/23 11:12		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Dissolved (calc.)	9/5/23 08:59	9/6/23 11:12		1	11.5	mg/L			
* Silicon, Dissolved	9/5/23 08:59	9/6/23 11:12		1.015	5.37	mg/L	0.02030	0.25375	
* Sodium, Dissolved	9/5/23 08:59	9/6/23 13:32		101.5	847	mg/L	4.060	40.6	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	9/5/23 11:05	9/5/23 14:44		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Total	9/5/23 11:05	9/5/23 14:44		1.015	0.0657	mg/L	0.009135	0.05075	
* Arsenic, Total	9/5/23 11:05	9/5/23 14:44		1.015	0.000650	mg/L	0.000112	0.000203	
* Barium, Total	9/5/23 11:05	9/5/23 14:44		1.015	0.0400	mg/L	0.000508	0.001015	
* Beryllium, Total	9/5/23 11:05	9/5/23 14:44		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	9/5/23 11:05	9/5/23 14:44		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	9/5/23 11:05	9/5/23 14:44		1.015	0.000348	mg/L	0.000203	0.001015	J
* Cobalt, Total	9/5/23 11:05	9/5/23 14:44		1.015	0.000184	mg/L	0.000068	0.000203	J
* Lead, Total	9/5/23 11:05	9/5/23 14:44		1.015	0.000146	mg/L	0.000068	0.000203	J
* Manganese, Total	9/5/23 11:05	9/5/23 14:44		1.015	0.127	mg/L	0.000152	0.001015	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Description: Gorgas Ash Pond - MW-34HO

Location Code: WMWGORAP
Collected: 8/31/23 08:12
Customer ID:
Submittal Date: 8/31/23 14:18

Laboratory ID Number: BD16828

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	9/5/23 11:05	9/5/23 14:44		1.015	29.4	mg/L	0.169505	0.5075	
* Selenium, Total	9/5/23 11:05	9/5/23 14:44		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	9/5/23 11:05	9/5/23 14:44		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	9/5/23 08:59	9/5/23 10:24		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	9/5/23 08:59	9/5/23 10:24		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Dissolved	9/5/23 08:59	9/5/23 10:24		1.015	0.000616	mg/L	0.000112	0.000203	
* Barium, Dissolved	9/5/23 08:59	9/5/23 10:24		1.015	0.0343	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	9/5/23 08:59	9/5/23 10:24		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	9/5/23 08:59	9/5/23 10:24		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	9/5/23 08:59	9/5/23 10:24		1.015	0.000233	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	9/5/23 08:59	9/5/23 10:24		1.015	0.0000978	mg/L	0.000068	0.000203	J
* Lead, Dissolved	9/5/23 08:59	9/5/23 10:24		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	9/5/23 08:59	9/5/23 10:24		1.015	0.137	mg/L	0.000152	0.001015	
* Potassium, Dissolved	9/5/23 08:59	9/5/23 10:24		1.015	28.7	mg/L	0.169505	0.5075	
* Selenium, Dissolved	9/5/23 08:59	9/5/23 10:24		1.015	0.00286	mg/L	0.000508	0.001015	
* Thallium, Dissolved	9/5/23 08:59	9/5/23 10:24		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	9/1/23 12:34	9/1/23 16:40		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	9/5/23 08:48	9/5/23 08:48		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: DHC***								
* Alkalinity	9/12/23 09:08	9/12/23 10:50		1	305	mg CaCO3/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	8/31/23 15:40	9/1/23 13:30		1	2680	mg/L		208.3	
Analytical Method: SM 4500CO2 D	***Analyst: DHC***								
* Bicarbonate Alkalinity, (calc.)	9/12/23 09:08	9/12/23 10:50		1	302	mg CaCO3/L		1	
* Carbonate Alkalinity, (calc.)	9/12/23 09:08	9/12/23 10:50		1	2.91	mg CaCO3/L		0.5	
Analytical Method: SM 4500H+ B	***Analyst: DHC***								
Alkalinity pH Endpoint	9/12/23 09:08	9/12/23 10:50		1	4.52	SU		2	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-34HO

Location Code: WMWGORAP
Collected: 8/31/23 08:12
Customer ID:
Submittal Date: 8/31/23 14:18

Laboratory ID Number: BD16828

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	9/6/23 18:50	9/6/23 18:50		1	6.79	mg/L	1.00	2	
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	9/11/23 11:01	9/11/23 11:01		25	290	mg/L	12.50	25	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	9/11/23 14:55	9/11/23 14:55		1	0.399	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	9/7/23 14:06	9/7/23 14:06		50	1210	mg/L	30.0	100	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	8/31/23 08:09	8/31/23 08:09			3317.18	uS/cm			FA
pH	8/31/23 08:09	8/31/23 08:09			7.42	SU			FA
Temperature	8/31/23 08:09	8/31/23 08:09			22.17	C			FA
Turbidity	8/31/23 08:09	8/31/23 08:09			7.47	NTU			FA
Sulfide	8/31/23 08:09	8/31/23 08:09			2.0	mg/L			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 8/31/23 08:12
Customer ID:
Delivery Date: 8/31/23 14:18

Description: Gorgas Ash Pond - MW-34HO

Laboratory ID Number: BD16828

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD16831	Aluminum, Dissolved	mg/L	0.000239	0.0198	0.100	0.112	0.112	0.105	0.0850 to 0.115	112	70.0 to 130	0.00	20.0
BD16831	Aluminum, Total	mg/L	0.00124	0.0198	0.100	0.117	0.119	0.103	0.0850 to 0.115	101	70.0 to 130	1.69	20.0
BD16831	Antimony, Dissolved	mg/L	0.000465	0.00100	0.100	0.0941	0.0938	0.0905	0.0850 to 0.115	94.1	70.0 to 130	0.319	20.0
BD16831	Antimony, Total	mg/L	0.000308	0.00100	0.100	0.102	0.102	0.102	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BD16831	Arsenic, Dissolved	mg/L	-0.0000238	0.000200	0.100	0.100	0.101	0.104	0.0850 to 0.115	100	70.0 to 130	0.995	20.0
BD16831	Arsenic, Total	mg/L	-0.0000200	0.000200	0.100	0.110	0.109	0.109	0.0850 to 0.115	110	70.0 to 130	0.913	20.0
BD16831	Barium, Dissolved	mg/L	-0.0000251	0.00100	0.100	0.151	0.152	0.0957	0.0850 to 0.115	100	70.0 to 130	0.660	20.0
BD16831	Barium, Total	mg/L	-0.0000011	0.00100	0.100	0.145	0.148	0.101	0.0850 to 0.115	95.2	70.0 to 130	2.05	20.0
BD16831	Beryllium, Dissolved	mg/L	0.0000411	0.000880	0.100	0.0908	0.0987	0.0935	0.0850 to 0.115	90.8	70.0 to 130	8.34	20.0
BD16831	Beryllium, Total	mg/L	0.0000669	0.000880	0.100	0.110	0.109	0.106	0.0850 to 0.115	110	70.0 to 130	0.913	20.0
BD16831	Boron, Dissolved	mg/L	-0.00209	0.0650	1.00	1.06	1.06	1.03	0.850 to 1.15	106	70.0 to 130	0.00	20.0
BD16831	Boron, Total	mg/L	-0.00160	0.0650	1.00	1.06	1.06	1.01	0.850 to 1.15	106	70.0 to 130	0.00	20.0
BD16831	Cadmium, Dissolved	mg/L	0.0000000	0.000147	0.100	0.104	0.102	0.103	0.0850 to 0.115	104	70.0 to 130	1.94	20.0
BD16831	Cadmium, Total	mg/L	0.0000053	0.000147	0.100	0.108	0.110	0.108	0.0850 to 0.115	108	70.0 to 130	1.83	20.0
BD16831	Calcium, Dissolved	mg/L	-0.0217	0.152	5.00	6.57	6.57	5.13	4.25 to 5.75	103	70.0 to 130	0.00	20.0
BD16831	Calcium, Total	mg/L	-0.0201	0.152	5.00	6.39	6.54	4.95	4.25 to 5.75	101	70.0 to 130	2.32	20.0
BD16831	Chloride	mg/L	0.0102	1.00	10.0	17.9	17.5	10.3	9.00 to 11.0	99.1	80.0 to 120	2.26	20.0
BD16831	Chromium, Dissolved	mg/L	-0.0000252	0.000440	0.100	0.101	0.101	0.102	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BD16831	Chromium, Total	mg/L	-0.0000178	0.000440	0.100	0.104	0.104	0.103	0.0850 to 0.115	104	70.0 to 130	0.00	20.0
BD16831	Cobalt, Dissolved	mg/L	0.0000028	0.000147	0.100	0.104	0.104	0.105	0.0850 to 0.115	104	70.0 to 130	0.00	20.0
BD16831	Cobalt, Total	mg/L	-0.0000002	0.000147	0.100	0.107	0.108	0.106	0.0850 to 0.115	107	70.0 to 130	0.930	20.0
BD16831	Fluoride	mg/L	0.0259	0.125	2.50	2.72	2.79	2.66	2.25 to 2.75	103	80.0 to 120	2.54	20.0
BD16831	Iron, Dissolved	mg/L	-0.000779	0.0176	0.2	0.213	0.212	0.204	0.170 to 0.230	102	70.0 to 130	0.471	20.0
BD16831	Iron, Total	mg/L	-0.000723	0.0176	0.2	0.219	0.220	0.200	0.170 to 0.230	101	70.0 to 130	0.456	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 8/31/23 08:12
Customer ID:
Delivery Date: 8/31/23 14:18

Description: Gorgas Ash Pond - MW-34HO

Laboratory ID Number: BD16828

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD16831	Lead, Dissolved	mg/L	0.0000066	0.000147	0.100	0.0962	0.104	0.0986	0.0850 to 0.115	96.2	70.0 to 130	7.79	20.0
BD16831	Lead, Total	mg/L	-0.0000008	0.000147	0.100	0.0970	0.0975	0.0972	0.0850 to 0.115	97.0	70.0 to 130	0.514	20.0
BD16831	Lithium, Dissolved	mg/L	0.000564	0.0154	0.200	0.266	0.263	0.201	0.170 to 0.230	101	70.0 to 130	1.13	20.0
BD16831	Lithium, Total	mg/L	0.000465	0.0154	0.200	0.267	0.266	0.202	0.170 to 0.230	101	70.0 to 130	0.375	20.0
BD16831	Magnesium, Dissolved	mg/L	0.00190	0.0462	5.00	5.35	5.33	5.09	4.25 to 5.75	100	70.0 to 130	0.375	20.0
BD16831	Magnesium, Total	mg/L	0.00340	0.0462	5.00	5.35	5.40	5.01	4.25 to 5.75	100	70.0 to 130	0.930	20.0
BD16831	Manganese, Dissolved	mg/L	0.0000112	0.00033	0.100	0.108	0.107	0.105	0.0850 to 0.115	104	70.0 to 130	0.930	20.0
BD16831	Manganese, Total	mg/L	0.0000021	0.00033	0.100	0.110	0.109	0.105	0.0850 to 0.115	106	70.0 to 130	0.913	20.0
BD16831	Mercury, Total by CVAA	mg/L	4.000E-05	0.000500	0.004	0.00401	0.00402	0.004	0.00340 to 0.00460	100	70.0 to 130	0.249	20.0
BD16831	Molybdenum, Dissolved	mg/L	0.00162	0.0100	0.2	0.202	0.202	0.201	0.170 to 0.230	101	70.0 to 130	0.00	20.0
BD16831	Molybdenum, Total	mg/L	0.002	0.0100	0.2	0.199	0.202	0.199	0.170 to 0.230	99.5	70.0 to 130	1.50	20.0
BD16831	Potassium, Dissolved	mg/L	0.0293	0.367	10.0	11.4	11.5	10.4	8.50 to 11.5	104	70.0 to 130	0.873	20.0
BD16831	Potassium, Total	mg/L	0.0291	0.367	10.0	11.1	11.2	10.2	8.50 to 11.5	101	70.0 to 130	0.897	20.0
BD16831	Selenium, Dissolved	mg/L	0.0000823	0.00100	0.100	0.105	0.106	0.102	0.0850 to 0.115	104	70.0 to 130	0.948	20.0
BD16831	Selenium, Total	mg/L	0.0000734	0.00100	0.100	0.0960	0.0990	0.104	0.0850 to 0.115	96.0	70.0 to 130	3.08	20.0
BD16831	Silicon, Dissolved	mg/L	0.00139	0.0440	1.00	9.98	9.98	1.04	0.850 to 1.15	119	70.0 to 130	0.00	20.0
BD16831	Silicon, Total	mg/L	0.000140	0.0440	1.00	9.95	10.0	1.02	0.850 to 1.15	101	70.0 to 130	0.501	20.0
BD16831	Sodium, Dissolved	mg/L	0.000834	0.0880	5.00	119	119	5.23	4.25 to 5.75	60.0	70.0 to 130	0.00	20.0
BD16831	Sodium, Total	mg/L	0.0129	0.0880	5.00	121	123	5.23	4.25 to 5.75	-180	70.0 to 130	1.64	20.0
BD16831	Sulfate	mg/L	-0.0876	2.0	20.0	34.5	34.5	20.9	18.0 to 22.0	100	80.0 to 120	0.00	20.0
BD16831	Thallium, Dissolved	mg/L	0.0000086	0.000147	0.100	0.101	0.107	0.103	0.0850 to 0.115	101	70.0 to 130	5.77	20.0
BD16831	Thallium, Total	mg/L	0.0000143	0.000147	0.100	0.103	0.103	0.104	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BD16845	Total Organic Carbon	mg/L	0.227	1.00	10.0	9.92	10.4	9.44		99.2	80.0 to 120	4.72	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 8/31/23 08:12
Customer ID:
Delivery Date: 8/31/23 14:18

Description: Gorgas Ash Pond - MW-34HO

Laboratory ID Number: BD16828

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD16831	Alkalinity	mg CaCO3/L					224	51.9	45.0 to 55.0			0.00	10.0
BD16845	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.02	0.200	2.00	2.01	-0.027	1.88	1.80 to 2.20	100	90.0 to 110	0.00	15.0
BD16844	Solids, Dissolved	mg/L	0.0000	25.0			240	54.0	40.0 to 60.0			2.53	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond Equipment Blank-1

Location Code: WMWGORAPEB
Collected: 8/31/23 10:00
Customer ID:
Submittal Date: 8/31/23 14:18

Laboratory ID Number: BD16829

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	9/5/23 11:05	9/6/23 11:43		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	9/5/23 11:05	9/6/23 11:43		1.015	Not Detected	mg/L	0.070035	0.406	U
* Iron, Total	9/5/23 11:05	9/6/23 11:43		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Total	9/5/23 11:05	9/6/23 11:43		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	9/5/23 11:05	9/6/23 11:43		1.015	Not Detected	mg/L	0.021315	0.406	U
* Molybdenum, Total	9/5/23 11:05	9/6/23 11:43		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Total (calc.)	9/5/23 11:05	9/6/23 11:43		1	Not Detected	mg/L			
* Silicon, Total	9/5/23 11:05	9/6/23 11:43		1.015	Not Detected	mg/L	0.02030	0.25375	U
* Sodium, Total	9/5/23 11:05	9/6/23 11:43		1.015	0.0995	mg/L	0.04060	0.406	J
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	9/5/23 11:05	9/5/23 14:48		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Total	9/5/23 11:05	9/5/23 14:48		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Total	9/5/23 11:05	9/5/23 14:48		1.015	Not Detected	mg/L	0.000112	0.000203	U
* Barium, Total	9/5/23 11:05	9/5/23 14:48		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Beryllium, Total	9/5/23 11:05	9/5/23 14:48		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	9/5/23 11:05	9/5/23 14:48		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	9/5/23 11:05	9/5/23 14:48		1.015	0.000212	mg/L	0.000203	0.001015	J
* Cobalt, Total	9/5/23 11:05	9/5/23 14:48		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	9/5/23 11:05	9/5/23 14:48		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	9/5/23 11:05	9/5/23 14:48		1.015	Not Detected	mg/L	0.000152	0.001015	U
* Potassium, Total	9/5/23 11:05	9/5/23 14:48		1.015	Not Detected	mg/L	0.169505	0.5075	U
* Selenium, Total	9/5/23 11:05	9/5/23 14:48		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	9/5/23 11:05	9/5/23 14:48		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	9/1/23 12:34	9/1/23 16:44		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	9/5/23 08:50	9/5/23 08:50		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	8/31/23 15:40	9/1/23 13:30		1	Not Detected	mg/L		25	U

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments:

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond Equipment Blank-1

Location Code: WMWGORAPEB
Collected: 8/31/23 10:00
Customer ID:
Submittal Date: 8/31/23 14:18

Laboratory ID Number: BD16829

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	9/6/23 19:04	9/6/23 19:04		1	Not Detected	mg/L	1.00	2	U
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	9/11/23 10:54	9/11/23 10:54		1	Not Detected	mg/L	0.50	1	U
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	9/11/23 14:57	9/11/23 14:57		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	9/7/23 14:00	9/7/23 14:00		1	1.93	mg/L	0.6	2	J

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments:

Batch QC Summary

Customer Account: WMWGORAPEB
Sample Date: 8/31/23 10:00
Customer ID:
Delivery Date: 8/31/23 14:18

Description: Gorgas Ash Pond Equipment Blank-1

Laboratory ID Number: BD16829

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD16831	Aluminum, Total	mg/L	0.00124	0.0198	0.100	0.117	0.119	0.103	0.0850 to 0.115	101	70.0 to 130	1.69	20.0
BD16831	Antimony, Total	mg/L	0.000308	0.00100	0.100	0.102	0.102	0.102	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BD16831	Arsenic, Total	mg/L	-0.0000200	0.000200	0.100	0.110	0.109	0.109	0.0850 to 0.115	110	70.0 to 130	0.913	20.0
BD16831	Barium, Total	mg/L	-0.0000011	0.00100	0.100	0.145	0.148	0.101	0.0850 to 0.115	95.2	70.0 to 130	2.05	20.0
BD16831	Beryllium, Total	mg/L	0.0000669	0.000880	0.100	0.110	0.109	0.106	0.0850 to 0.115	110	70.0 to 130	0.913	20.0
BD16831	Boron, Total	mg/L	-0.00160	0.0650	1.00	1.06	1.06	1.01	0.850 to 1.15	106	70.0 to 130	0.00	20.0
BD16831	Cadmium, Total	mg/L	0.0000053	0.000147	0.100	0.108	0.110	0.108	0.0850 to 0.115	108	70.0 to 130	1.83	20.0
BD16831	Calcium, Total	mg/L	-0.0201	0.152	5.00	6.39	6.54	4.95	4.25 to 5.75	101	70.0 to 130	2.32	20.0
BD16831	Chloride	mg/L	0.0102	1.00	10.0	17.9	17.5	10.3	9.00 to 11.0	99.1	80.0 to 120	2.26	20.0
BD16831	Chromium, Total	mg/L	-0.0000178	0.000440	0.100	0.104	0.104	0.103	0.0850 to 0.115	104	70.0 to 130	0.00	20.0
BD16831	Cobalt, Total	mg/L	-0.0000002	0.000147	0.100	0.107	0.108	0.106	0.0850 to 0.115	107	70.0 to 130	0.930	20.0
BD16831	Fluoride	mg/L	0.0259	0.125	2.50	2.72	2.79	2.66	2.25 to 2.75	103	80.0 to 120	2.54	20.0
BD16831	Iron, Total	mg/L	-0.000723	0.0176	0.2	0.219	0.220	0.200	0.170 to 0.230	101	70.0 to 130	0.456	20.0
BD16831	Lead, Total	mg/L	-0.0000008	0.000147	0.100	0.0970	0.0975	0.0972	0.0850 to 0.115	97.0	70.0 to 130	0.514	20.0
BD16831	Lithium, Total	mg/L	0.000465	0.0154	0.200	0.267	0.266	0.202	0.170 to 0.230	101	70.0 to 130	0.375	20.0
BD16831	Magnesium, Total	mg/L	0.00340	0.0462	5.00	5.35	5.40	5.01	4.25 to 5.75	100	70.0 to 130	0.930	20.0
BD16831	Manganese, Total	mg/L	0.0000021	0.00033	0.100	0.110	0.109	0.105	0.0850 to 0.115	106	70.0 to 130	0.913	20.0
BD16831	Mercury, Total by CVAA	mg/L	4.000E-05	0.000500	0.004	0.00401	0.00402	0.004	0.00340 to 0.00460	100	70.0 to 130	0.249	20.0
BD16831	Molybdenum, Total	mg/L	0.002	0.0100	0.2	0.199	0.202	0.199	0.170 to 0.230	99.5	70.0 to 130	1.50	20.0
BD16831	Potassium, Total	mg/L	0.0291	0.367	10.0	11.1	11.2	10.2	8.50 to 11.5	101	70.0 to 130	0.897	20.0
BD16831	Selenium, Total	mg/L	0.0000734	0.00100	0.100	0.0960	0.0990	0.104	0.0850 to 0.115	96.0	70.0 to 130	3.08	20.0
BD16831	Silicon, Total	mg/L	0.000140	0.0440	1.00	9.95	10.0	1.02	0.850 to 1.15	101	70.0 to 130	0.501	20.0
BD16831	Sodium, Total	mg/L	0.0129	0.0880	5.00	121	123	5.23	4.25 to 5.75	-180	70.0 to 130	1.64	20.0
BD16831	Sulfate	mg/L	-0.0876	2.0	20.0	34.5	34.5	20.9	18.0 to 22.0	100	80.0 to 120	0.00	20.0

Comments:

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAPEB
Sample Date: 8/31/23 10:00
Customer ID:
Delivery Date: 8/31/23 14:18

Description: Gorgas Ash Pond Equipment Blank-1

Laboratory ID Number: BD16829

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD16831	Thallium, Total	mg/L	0.0000143	0.000147	0.100	0.103	0.103	0.104	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BD16845	Total Organic Carbon	mg/L	0.227	1.00	10.0	9.92	10.4	9.44		99.2	80.0 to 120	4.72	20.0

Comments:

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAPEB
Sample Date: 8/31/23 10:00
Customer ID:
Delivery Date: 8/31/23 14:18

Description: Gorgas Ash Pond Equipment Blank-1

Laboratory ID Number: BD16829

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD16845	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.02	0.200	2.00	2.01	-0.027	1.88	1.80 to 2.20	100	90.0 to 110	0.00	15.0
BD16844	Solids, Dissolved	mg/L	0.0000	25.0			240	54.0	40.0 to 60.0			2.53	10.0

Comments:

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-35HO

Location Code: WMWGORAP
Collected: 8/31/23 10:51
Customer ID:
Submittal Date: 8/31/23 14:18

Laboratory ID Number: BD16830

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	9/5/23 11:05	9/6/23 11:47		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	9/5/23 11:05	9/6/23 11:47		1.015	1.38	mg/L	0.070035	0.406	
* Iron, Total	9/5/23 11:05	9/6/23 11:47		1.015	0.0173	mg/L	0.008120	0.0406	J
* Lithium, Total	9/5/23 11:05	9/6/23 11:47		1.015	0.0653	mg/L	0.007105	0.01999956	
* Magnesium, Total	9/5/23 11:05	9/6/23 11:47		1.015	0.325	mg/L	0.021315	0.406	J
* Molybdenum, Total	9/5/23 11:05	9/6/23 11:47		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Total (calc.)	9/5/23 11:05	9/6/23 11:47		1	19.2	mg/L			
* Silicon, Total	9/5/23 11:05	9/6/23 11:47		1.015	8.96	mg/L	0.02030	0.25375	
* Sodium, Total	9/5/23 11:05	9/6/23 13:58		10.15	114	mg/L	0.4060	4.06	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	9/5/23 08:59	9/6/23 11:15		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Dissolved	9/5/23 08:59	9/6/23 11:15		1.015	1.47	mg/L	0.070035	0.406	
* Iron, Dissolved	9/5/23 08:59	9/6/23 11:15		1.015	0.00945	mg/L	0.008120	0.0406	J
* Lithium, Dissolved	9/5/23 08:59	9/6/23 11:15		1.015	0.0648	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	9/5/23 08:59	9/6/23 11:15		1.015	0.356	mg/L	0.021315	0.406	J
* Molybdenum, Dissolved	9/5/23 08:59	9/6/23 11:15		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Dissolved (calc.)	9/5/23 08:59	9/6/23 11:15		1	19.1	mg/L			
* Silicon, Dissolved	9/5/23 08:59	9/6/23 11:15		1.015	8.91	mg/L	0.02030	0.25375	
* Sodium, Dissolved	9/5/23 08:59	9/6/23 13:35		10.15	119	mg/L	0.4060	4.06	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	9/5/23 11:05	9/5/23 14:52		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Total	9/5/23 11:05	9/5/23 14:52		1.015	0.0158	mg/L	0.009135	0.05075	J
* Arsenic, Total	9/5/23 11:05	9/5/23 14:52		1.015	Not Detected	mg/L	0.000112	0.000203	U
* Barium, Total	9/5/23 11:05	9/5/23 14:52		1.015	0.0494	mg/L	0.000508	0.001015	
* Beryllium, Total	9/5/23 11:05	9/5/23 14:52		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	9/5/23 11:05	9/5/23 14:52		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	9/5/23 11:05	9/5/23 14:52		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	9/5/23 11:05	9/5/23 14:52		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	9/5/23 11:05	9/5/23 14:52		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	9/5/23 11:05	9/5/23 14:52		1.015	0.00401	mg/L	0.000152	0.001015	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-35HO

Location Code: WMWGORAP
Collected: 8/31/23 10:51
Customer ID:
Submittal Date: 8/31/23 14:18

Laboratory ID Number: BD16830

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	9/5/23 11:05	9/5/23 14:52		1.015	0.941	mg/L	0.169505	0.5075	
* Selenium, Total	9/5/23 11:05	9/5/23 14:52		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	9/5/23 11:05	9/5/23 14:52		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	9/5/23 08:59	9/5/23 10:28		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	9/5/23 08:59	9/5/23 10:28		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Dissolved	9/5/23 08:59	9/5/23 10:28		1.015	Not Detected	mg/L	0.000112	0.000203	U
* Barium, Dissolved	9/5/23 08:59	9/5/23 10:28		1.015	0.0519	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	9/5/23 08:59	9/5/23 10:28		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	9/5/23 08:59	9/5/23 10:28		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	9/5/23 08:59	9/5/23 10:28		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	9/5/23 08:59	9/5/23 10:28		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Dissolved	9/5/23 08:59	9/5/23 10:28		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	9/5/23 08:59	9/5/23 10:28		1.015	0.00407	mg/L	0.000152	0.001015	
* Potassium, Dissolved	9/5/23 08:59	9/5/23 10:28		1.015	1.12	mg/L	0.169505	0.5075	
* Selenium, Dissolved	9/5/23 08:59	9/5/23 10:28		1.015	0.000976	mg/L	0.000508	0.001015	J
* Thallium, Dissolved	9/5/23 08:59	9/5/23 10:28		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	9/1/23 12:34	9/1/23 16:48		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	9/5/23 08:52	9/5/23 08:52		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: DHC***								
* Alkalinity	9/12/23 09:08	9/12/23 10:50		1	223	mg CaCO3/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	8/31/23 15:40	9/1/23 13:30		1	292	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: DHC***								
* Bicarbonate Alkalinity, (calc.)	9/12/23 09:08	9/12/23 10:50		1	214	mg CaCO3/L		1	
* Carbonate Alkalinity, (calc.)	9/12/23 09:08	9/12/23 10:50		1	8.78	mg CaCO3/L		0.5	
Analytical Method: SM 4500H+ B	***Analyst: DHC***								
Alkalinity pH Endpoint	9/12/23 09:08	9/12/23 10:50		1	4.44	SU		2	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-35HO

Location Code: WMWGORAP
Collected: 8/31/23 10:51
Customer ID:
Submittal Date: 8/31/23 14:18

Laboratory ID Number: BD16830

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	9/6/23 19:17	9/6/23 19:17		1	Not Detected	mg/L	1.00	2	U
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	9/11/23 10:55	9/11/23 10:55		1	8.21	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	9/11/23 14:58	9/11/23 14:58		1	0.153	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	9/7/23 14:01	9/7/23 14:01		1	14.5	mg/L	0.6	2	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	8/31/23 10:48	8/31/23 10:48			452.55	uS/cm			FA
pH	8/31/23 10:48	8/31/23 10:48			8.24	SU			FA
Temperature	8/31/23 10:48	8/31/23 10:48			21.56	C			FA
Turbidity	8/31/23 10:48	8/31/23 10:48			5.86	NTU			FA
Sulfide	8/31/23 10:48	8/31/23 10:48			0	mg/L			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 8/31/23 10:51
Customer ID:
Delivery Date: 8/31/23 14:18

Description: Gorgas Ash Pond - MW-35HO

Laboratory ID Number: BD16830

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD16831	Aluminum, Dissolved	mg/L	0.000239	0.0198	0.100	0.112	0.112	0.105	0.0850 to 0.115	112	70.0 to 130	0.00	20.0
BD16831	Aluminum, Total	mg/L	0.00124	0.0198	0.100	0.117	0.119	0.103	0.0850 to 0.115	101	70.0 to 130	1.69	20.0
BD16831	Antimony, Dissolved	mg/L	0.000465	0.00100	0.100	0.0941	0.0938	0.0905	0.0850 to 0.115	94.1	70.0 to 130	0.319	20.0
BD16831	Antimony, Total	mg/L	0.000308	0.00100	0.100	0.102	0.102	0.102	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BD16831	Arsenic, Dissolved	mg/L	-0.0000238	0.000200	0.100	0.100	0.101	0.104	0.0850 to 0.115	100	70.0 to 130	0.995	20.0
BD16831	Arsenic, Total	mg/L	-0.0000200	0.000200	0.100	0.110	0.109	0.109	0.0850 to 0.115	110	70.0 to 130	0.913	20.0
BD16831	Barium, Dissolved	mg/L	-0.0000251	0.00100	0.100	0.151	0.152	0.0957	0.0850 to 0.115	100	70.0 to 130	0.660	20.0
BD16831	Barium, Total	mg/L	-0.0000011	0.00100	0.100	0.145	0.148	0.101	0.0850 to 0.115	95.2	70.0 to 130	2.05	20.0
BD16831	Beryllium, Dissolved	mg/L	0.0000411	0.000880	0.100	0.0908	0.0987	0.0935	0.0850 to 0.115	90.8	70.0 to 130	8.34	20.0
BD16831	Beryllium, Total	mg/L	0.0000669	0.000880	0.100	0.110	0.109	0.106	0.0850 to 0.115	110	70.0 to 130	0.913	20.0
BD16831	Boron, Dissolved	mg/L	-0.00209	0.0650	1.00	1.06	1.06	1.03	0.850 to 1.15	106	70.0 to 130	0.00	20.0
BD16831	Boron, Total	mg/L	-0.00160	0.0650	1.00	1.06	1.06	1.01	0.850 to 1.15	106	70.0 to 130	0.00	20.0
BD16831	Cadmium, Dissolved	mg/L	0.0000000	0.000147	0.100	0.104	0.102	0.103	0.0850 to 0.115	104	70.0 to 130	1.94	20.0
BD16831	Cadmium, Total	mg/L	0.0000053	0.000147	0.100	0.108	0.110	0.108	0.0850 to 0.115	108	70.0 to 130	1.83	20.0
BD16831	Calcium, Dissolved	mg/L	-0.0217	0.152	5.00	6.57	6.57	5.13	4.25 to 5.75	103	70.0 to 130	0.00	20.0
BD16831	Calcium, Total	mg/L	-0.0201	0.152	5.00	6.39	6.54	4.95	4.25 to 5.75	101	70.0 to 130	2.32	20.0
BD16831	Chloride	mg/L	0.0102	1.00	10.0	17.9	17.5	10.3	9.00 to 11.0	99.1	80.0 to 120	2.26	20.0
BD16831	Chromium, Dissolved	mg/L	-0.0000252	0.000440	0.100	0.101	0.101	0.102	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BD16831	Chromium, Total	mg/L	-0.0000178	0.000440	0.100	0.104	0.104	0.103	0.0850 to 0.115	104	70.0 to 130	0.00	20.0
BD16831	Cobalt, Dissolved	mg/L	0.0000028	0.000147	0.100	0.104	0.104	0.105	0.0850 to 0.115	104	70.0 to 130	0.00	20.0
BD16831	Cobalt, Total	mg/L	-0.0000002	0.000147	0.100	0.107	0.108	0.106	0.0850 to 0.115	107	70.0 to 130	0.930	20.0
BD16831	Fluoride	mg/L	0.0259	0.125	2.50	2.72	2.79	2.66	2.25 to 2.75	103	80.0 to 120	2.54	20.0
BD16831	Iron, Dissolved	mg/L	-0.000779	0.0176	0.2	0.213	0.212	0.204	0.170 to 0.230	102	70.0 to 130	0.471	20.0
BD16831	Iron, Total	mg/L	-0.000723	0.0176	0.2	0.219	0.220	0.200	0.170 to 0.230	101	70.0 to 130	0.456	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 8/31/23 10:51
Customer ID:
Delivery Date: 8/31/23 14:18

Description: Gorgas Ash Pond - MW-35HO

Laboratory ID Number: BD16830

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD16831	Lead, Dissolved	mg/L	0.0000066	0.000147	0.100	0.0962	0.104	0.0986	0.0850 to 0.115	96.2	70.0 to 130	7.79	20.0
BD16831	Lead, Total	mg/L	-0.0000008	0.000147	0.100	0.0970	0.0975	0.0972	0.0850 to 0.115	97.0	70.0 to 130	0.514	20.0
BD16831	Lithium, Dissolved	mg/L	0.000564	0.0154	0.200	0.266	0.263	0.201	0.170 to 0.230	101	70.0 to 130	1.13	20.0
BD16831	Lithium, Total	mg/L	0.000465	0.0154	0.200	0.267	0.266	0.202	0.170 to 0.230	101	70.0 to 130	0.375	20.0
BD16831	Magnesium, Dissolved	mg/L	0.00190	0.0462	5.00	5.35	5.33	5.09	4.25 to 5.75	100	70.0 to 130	0.375	20.0
BD16831	Magnesium, Total	mg/L	0.00340	0.0462	5.00	5.35	5.40	5.01	4.25 to 5.75	100	70.0 to 130	0.930	20.0
BD16831	Manganese, Dissolved	mg/L	0.0000112	0.00033	0.100	0.108	0.107	0.105	0.0850 to 0.115	104	70.0 to 130	0.930	20.0
BD16831	Manganese, Total	mg/L	0.0000021	0.00033	0.100	0.110	0.109	0.105	0.0850 to 0.115	106	70.0 to 130	0.913	20.0
BD16831	Mercury, Total by CVAA	mg/L	4.000E-05	0.000500	0.004	0.00401	0.00402	0.004	0.00340 to 0.00460	100	70.0 to 130	0.249	20.0
BD16831	Molybdenum, Dissolved	mg/L	0.00162	0.0100	0.2	0.202	0.202	0.201	0.170 to 0.230	101	70.0 to 130	0.00	20.0
BD16831	Molybdenum, Total	mg/L	0.002	0.0100	0.2	0.199	0.202	0.199	0.170 to 0.230	99.5	70.0 to 130	1.50	20.0
BD16831	Potassium, Dissolved	mg/L	0.0293	0.367	10.0	11.4	11.5	10.4	8.50 to 11.5	104	70.0 to 130	0.873	20.0
BD16831	Potassium, Total	mg/L	0.0291	0.367	10.0	11.1	11.2	10.2	8.50 to 11.5	101	70.0 to 130	0.897	20.0
BD16831	Selenium, Dissolved	mg/L	0.0000823	0.00100	0.100	0.105	0.106	0.102	0.0850 to 0.115	104	70.0 to 130	0.948	20.0
BD16831	Selenium, Total	mg/L	0.0000734	0.00100	0.100	0.0960	0.0990	0.104	0.0850 to 0.115	96.0	70.0 to 130	3.08	20.0
BD16831	Silicon, Dissolved	mg/L	0.00139	0.0440	1.00	9.98	9.98	1.04	0.850 to 1.15	119	70.0 to 130	0.00	20.0
BD16831	Silicon, Total	mg/L	0.000140	0.0440	1.00	9.95	10.0	1.02	0.850 to 1.15	101	70.0 to 130	0.501	20.0
BD16831	Sodium, Dissolved	mg/L	0.000834	0.0880	5.00	119	119	5.23	4.25 to 5.75	60.0	70.0 to 130	0.00	20.0
BD16831	Sodium, Total	mg/L	0.0129	0.0880	5.00	121	123	5.23	4.25 to 5.75	-180	70.0 to 130	1.64	20.0
BD16831	Sulfate	mg/L	-0.0876	2.0	20.0	34.5	34.5	20.9	18.0 to 22.0	100	80.0 to 120	0.00	20.0
BD16831	Thallium, Dissolved	mg/L	0.0000086	0.000147	0.100	0.101	0.107	0.103	0.0850 to 0.115	101	70.0 to 130	5.77	20.0
BD16831	Thallium, Total	mg/L	0.0000143	0.000147	0.100	0.103	0.103	0.104	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BD16845	Total Organic Carbon	mg/L	0.227	1.00	10.0	9.92	10.4	9.44		99.2	80.0 to 120	4.72	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 8/31/23 10:51
Customer ID:
Delivery Date: 8/31/23 14:18

Description: Gorgas Ash Pond - MW-35HO

Laboratory ID Number: BD16830

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD16831	Alkalinity	mg CaCO3/L					224	51.9	45.0 to 55.0			0.00	10.0
BD16845	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.02	0.200	2.00	2.01	-0.027	1.88	1.80 to 2.20	100	90.0 to 110	0.00	15.0
BD16844	Solids, Dissolved	mg/L	0.0000	25.0			240	54.0	40.0 to 60.0			2.53	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 9/26/2023
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-35HO Dup

Location Code: WMWGORAP
Collected: 8/31/23 10:51
Customer ID:
Submittal Date: 8/31/23 14:18

Laboratory ID Number: BD16831

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	9/5/23 11:05	9/6/23 11:50		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	9/5/23 11:05	9/6/23 11:50		1.015	1.36	mg/L	0.070035	0.406	
* Iron, Total	9/5/23 11:05	9/6/23 11:50		1.015	0.0175	mg/L	0.008120	0.0406	J
* Lithium, Total	9/5/23 11:05	9/6/23 11:50		1.015	0.0648	mg/L	0.007105	0.01999956	
* Magnesium, Total	9/5/23 11:05	9/6/23 11:50		1.015	0.326	mg/L	0.021315	0.406	J
* Molybdenum, Total	9/5/23 11:05	9/6/23 11:50		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Total (calc.)	9/5/23 11:05	9/6/23 11:50		1	19.1	mg/L			
* Silicon, Total	9/5/23 11:05	9/6/23 11:50		1.015	8.94	mg/L	0.02030	0.25375	
* Sodium, Total	9/5/23 11:05	9/6/23 14:01		10.15	130	mg/L	0.4060	4.06	RA
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	9/5/23 08:59	9/6/23 11:18		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Dissolved	9/5/23 08:59	9/6/23 11:18		1.015	1.41	mg/L	0.070035	0.406	
* Iron, Dissolved	9/5/23 08:59	9/6/23 11:18		1.015	0.00914	mg/L	0.008120	0.0406	J
* Lithium, Dissolved	9/5/23 08:59	9/6/23 11:18		1.015	0.0648	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	9/5/23 08:59	9/6/23 11:18		1.015	0.350	mg/L	0.021315	0.406	J
* Molybdenum, Dissolved	9/5/23 08:59	9/6/23 11:18		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Dissolved (calc.)	9/5/23 08:59	9/6/23 11:18		1	18.8	mg/L			
* Silicon, Dissolved	9/5/23 08:59	9/6/23 11:18		1.015	8.79	mg/L	0.02030	0.25375	
* Sodium, Dissolved	9/5/23 08:59	9/6/23 13:39		10.15	116	mg/L	0.4060	4.06	RA
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	9/5/23 11:05	9/5/23 14:56		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Total	9/5/23 11:05	9/5/23 14:56		1.015	0.0160	mg/L	0.009135	0.05075	J
* Arsenic, Total	9/5/23 11:05	9/5/23 14:56		1.015	Not Detected	mg/L	0.000112	0.000203	U
* Barium, Total	9/5/23 11:05	9/5/23 14:56		1.015	0.0498	mg/L	0.000508	0.001015	
* Beryllium, Total	9/5/23 11:05	9/5/23 14:56		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	9/5/23 11:05	9/5/23 14:56		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	9/5/23 11:05	9/5/23 14:56		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	9/5/23 11:05	9/5/23 14:56		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	9/5/23 11:05	9/5/23 14:56		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	9/5/23 11:05	9/5/23 14:56		1.015	0.00431	mg/L	0.000152	0.001015	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-35HO Dup

Location Code: WMWGORAP
Collected: 8/31/23 10:51
Customer ID:
Submittal Date: 8/31/23 14:18

Laboratory ID Number: BD16831

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	9/5/23 11:05	9/5/23 14:56		1.015	0.956	mg/L	0.169505	0.5075	
* Selenium, Total	9/5/23 11:05	9/5/23 14:56		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	9/5/23 11:05	9/5/23 14:56		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	9/5/23 08:59	9/5/23 10:32		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	9/5/23 08:59	9/5/23 10:32		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Dissolved	9/5/23 08:59	9/5/23 10:32		1.015	Not Detected	mg/L	0.000112	0.000203	U
* Barium, Dissolved	9/5/23 08:59	9/5/23 10:32		1.015	0.0505	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	9/5/23 08:59	9/5/23 10:32		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	9/5/23 08:59	9/5/23 10:32		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	9/5/23 08:59	9/5/23 10:32		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	9/5/23 08:59	9/5/23 10:32		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Dissolved	9/5/23 08:59	9/5/23 10:32		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	9/5/23 08:59	9/5/23 10:32		1.015	0.00411	mg/L	0.000152	0.001015	
* Potassium, Dissolved	9/5/23 08:59	9/5/23 10:32		1.015	1.04	mg/L	0.169505	0.5075	
* Selenium, Dissolved	9/5/23 08:59	9/5/23 10:32		1.015	0.000860	mg/L	0.000508	0.001015	J
* Thallium, Dissolved	9/5/23 08:59	9/5/23 10:32		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	9/1/23 12:34	9/1/23 16:52		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	9/5/23 08:53	9/5/23 08:53		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: DHC***								
* Alkalinity	9/12/23 09:08	9/12/23 10:50		1	224	mg CaCO3/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	8/31/23 15:40	9/1/23 13:30		1	290	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: DHC***								
* Bicarbonate Alkalinity, (calc.)	9/12/23 09:08	9/12/23 10:50		1	215	mg CaCO3/L		1	
* Carbonate Alkalinity, (calc.)	9/12/23 09:08	9/12/23 10:50		1	9.02	mg CaCO3/L		0.5	
Analytical Method: SM 4500H+ B	***Analyst: DHC***								
Alkalinity pH Endpoint	9/12/23 09:08	9/12/23 10:50		1	4.41	SU		2	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-35HO Dup

Location Code: WMWGORAP
Collected: 8/31/23 10:51
Customer ID:
Submittal Date: 8/31/23 14:18

Laboratory ID Number: BD16831

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	9/6/23 19:31	9/6/23 19:31		1	Not Detected	mg/L	1.00	2	U
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	9/11/23 10:57	9/11/23 10:57		1	7.99	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	9/11/23 14:59	9/11/23 14:59		1	0.143	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	9/7/23 14:02	9/7/23 14:02		1	14.4	mg/L	0.6	2	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	8/31/23 10:48	8/31/23 10:48			452.55	uS/cm			FA
pH	8/31/23 10:48	8/31/23 10:48			8.24	SU			FA
Temperature	8/31/23 10:48	8/31/23 10:48			21.56	C			FA
Turbidity	8/31/23 10:48	8/31/23 10:48			5.86	NTU			FA
Sulfide	8/31/23 10:48	8/31/23 10:48			0	mg/L			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 8/31/23 10:51
Customer ID:
Delivery Date: 8/31/23 14:18

Description: Gorgas Ash Pond - MW-35HO Dup

Laboratory ID Number: BD16831

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD16831	Aluminum, Dissolved	mg/L	0.000239	0.0198	0.100	0.112	0.112	0.105	0.0850 to 0.115	112	70.0 to 130	0.00	20.0
BD16831	Aluminum, Total	mg/L	0.00124	0.0198	0.100	0.117	0.119	0.103	0.0850 to 0.115	101	70.0 to 130	1.69	20.0
BD16831	Antimony, Dissolved	mg/L	0.000465	0.00100	0.100	0.0941	0.0938	0.0905	0.0850 to 0.115	94.1	70.0 to 130	0.319	20.0
BD16831	Antimony, Total	mg/L	0.000308	0.00100	0.100	0.102	0.102	0.102	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BD16831	Arsenic, Dissolved	mg/L	-0.0000238	0.000200	0.100	0.100	0.101	0.104	0.0850 to 0.115	100	70.0 to 130	0.995	20.0
BD16831	Arsenic, Total	mg/L	-0.0000200	0.000200	0.100	0.110	0.109	0.109	0.0850 to 0.115	110	70.0 to 130	0.913	20.0
BD16831	Barium, Dissolved	mg/L	-0.0000251	0.00100	0.100	0.151	0.152	0.0957	0.0850 to 0.115	100	70.0 to 130	0.660	20.0
BD16831	Barium, Total	mg/L	-0.0000011	0.00100	0.100	0.145	0.148	0.101	0.0850 to 0.115	95.2	70.0 to 130	2.05	20.0
BD16831	Beryllium, Dissolved	mg/L	0.0000411	0.000880	0.100	0.0908	0.0987	0.0935	0.0850 to 0.115	90.8	70.0 to 130	8.34	20.0
BD16831	Beryllium, Total	mg/L	0.0000669	0.000880	0.100	0.110	0.109	0.106	0.0850 to 0.115	110	70.0 to 130	0.913	20.0
BD16831	Boron, Dissolved	mg/L	-0.00209	0.0650	1.00	1.06	1.06	1.03	0.850 to 1.15	106	70.0 to 130	0.00	20.0
BD16831	Boron, Total	mg/L	-0.00160	0.0650	1.00	1.06	1.06	1.01	0.850 to 1.15	106	70.0 to 130	0.00	20.0
BD16831	Cadmium, Dissolved	mg/L	0.0000000	0.000147	0.100	0.104	0.102	0.103	0.0850 to 0.115	104	70.0 to 130	1.94	20.0
BD16831	Cadmium, Total	mg/L	0.0000053	0.000147	0.100	0.108	0.110	0.108	0.0850 to 0.115	108	70.0 to 130	1.83	20.0
BD16831	Calcium, Dissolved	mg/L	-0.0217	0.152	5.00	6.57	6.57	5.13	4.25 to 5.75	103	70.0 to 130	0.00	20.0
BD16831	Calcium, Total	mg/L	-0.0201	0.152	5.00	6.39	6.54	4.95	4.25 to 5.75	101	70.0 to 130	2.32	20.0
BD16831	Chloride	mg/L	0.0102	1.00	10.0	17.9	17.5	10.3	9.00 to 11.0	99.1	80.0 to 120	2.26	20.0
BD16831	Chromium, Dissolved	mg/L	-0.0000252	0.000440	0.100	0.101	0.101	0.102	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BD16831	Chromium, Total	mg/L	-0.0000178	0.000440	0.100	0.104	0.104	0.103	0.0850 to 0.115	104	70.0 to 130	0.00	20.0
BD16831	Cobalt, Dissolved	mg/L	0.0000028	0.000147	0.100	0.104	0.104	0.105	0.0850 to 0.115	104	70.0 to 130	0.00	20.0
BD16831	Cobalt, Total	mg/L	-0.0000002	0.000147	0.100	0.107	0.108	0.106	0.0850 to 0.115	107	70.0 to 130	0.930	20.0
BD16831	Fluoride	mg/L	0.0259	0.125	2.50	2.72	2.79	2.66	2.25 to 2.75	103	80.0 to 120	2.54	20.0
BD16831	Iron, Dissolved	mg/L	-0.000779	0.0176	0.2	0.213	0.212	0.204	0.170 to 0.230	102	70.0 to 130	0.471	20.0
BD16831	Iron, Total	mg/L	-0.000723	0.0176	0.2	0.219	0.220	0.200	0.170 to 0.230	101	70.0 to 130	0.456	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 8/31/23 10:51
Customer ID:
Delivery Date: 8/31/23 14:18

Description: Gorgas Ash Pond - MW-35HO Dup

Laboratory ID Number: BD16831

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD16831	Lead, Dissolved	mg/L	0.0000066	0.000147	0.100	0.0962	0.104	0.0986	0.0850 to 0.115	96.2	70.0 to 130	7.79	20.0
BD16831	Lead, Total	mg/L	-0.0000008	0.000147	0.100	0.0970	0.0975	0.0972	0.0850 to 0.115	97.0	70.0 to 130	0.514	20.0
BD16831	Lithium, Dissolved	mg/L	0.000564	0.0154	0.200	0.266	0.263	0.201	0.170 to 0.230	101	70.0 to 130	1.13	20.0
BD16831	Lithium, Total	mg/L	0.000465	0.0154	0.200	0.267	0.266	0.202	0.170 to 0.230	101	70.0 to 130	0.375	20.0
BD16831	Magnesium, Dissolved	mg/L	0.00190	0.0462	5.00	5.35	5.33	5.09	4.25 to 5.75	100	70.0 to 130	0.375	20.0
BD16831	Magnesium, Total	mg/L	0.00340	0.0462	5.00	5.35	5.40	5.01	4.25 to 5.75	100	70.0 to 130	0.930	20.0
BD16831	Manganese, Dissolved	mg/L	0.0000112	0.00033	0.100	0.108	0.107	0.105	0.0850 to 0.115	104	70.0 to 130	0.930	20.0
BD16831	Manganese, Total	mg/L	0.0000021	0.00033	0.100	0.110	0.109	0.105	0.0850 to 0.115	106	70.0 to 130	0.913	20.0
BD16831	Mercury, Total by CVAA	mg/L	4.000E-05	0.000500	0.004	0.00401	0.00402	0.004	0.00340 to 0.00460	100	70.0 to 130	0.249	20.0
BD16831	Molybdenum, Dissolved	mg/L	0.00162	0.0100	0.2	0.202	0.202	0.201	0.170 to 0.230	101	70.0 to 130	0.00	20.0
BD16831	Molybdenum, Total	mg/L	0.002	0.0100	0.2	0.199	0.202	0.199	0.170 to 0.230	99.5	70.0 to 130	1.50	20.0
BD16831	Potassium, Dissolved	mg/L	0.0293	0.367	10.0	11.4	11.5	10.4	8.50 to 11.5	104	70.0 to 130	0.873	20.0
BD16831	Potassium, Total	mg/L	0.0291	0.367	10.0	11.1	11.2	10.2	8.50 to 11.5	101	70.0 to 130	0.897	20.0
BD16831	Selenium, Dissolved	mg/L	0.0000823	0.00100	0.100	0.105	0.106	0.102	0.0850 to 0.115	104	70.0 to 130	0.948	20.0
BD16831	Selenium, Total	mg/L	0.0000734	0.00100	0.100	0.0960	0.0990	0.104	0.0850 to 0.115	96.0	70.0 to 130	3.08	20.0
BD16831	Silicon, Dissolved	mg/L	0.00139	0.0440	1.00	9.98	9.98	1.04	0.850 to 1.15	119	70.0 to 130	0.00	20.0
BD16831	Silicon, Total	mg/L	0.000140	0.0440	1.00	9.95	10.0	1.02	0.850 to 1.15	101	70.0 to 130	0.501	20.0
BD16831	Sodium, Dissolved	mg/L	0.000834	0.0880	5.00	119	119	5.23	4.25 to 5.75	60.0	70.0 to 130	0.00	20.0
BD16831	Sodium, Total	mg/L	0.0129	0.0880	5.00	121	123	5.23	4.25 to 5.75	-180	70.0 to 130	1.64	20.0
BD16831	Sulfate	mg/L	-0.0876	2.0	20.0	34.5	34.5	20.9	18.0 to 22.0	100	80.0 to 120	0.00	20.0
BD16831	Thallium, Dissolved	mg/L	0.0000086	0.000147	0.100	0.101	0.107	0.103	0.0850 to 0.115	101	70.0 to 130	5.77	20.0
BD16831	Thallium, Total	mg/L	0.0000143	0.000147	0.100	0.103	0.103	0.104	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BD16845	Total Organic Carbon	mg/L	0.227	1.00	10.0	9.92	10.4	9.44		99.2	80.0 to 120	4.72	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 8/31/23 10:51
Customer ID:
Delivery Date: 8/31/23 14:18

Description: Gorgas Ash Pond - MW-35HO Dup

Laboratory ID Number: BD16831

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD16831	Alkalinity	mg CaCO3/L					224	51.9	45.0 to 55.0			0.00	10.0
BD16845	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.02	0.200	2.00	2.01	-0.027	1.88	1.80 to 2.20	100	90.0 to 110	0.00	15.0
BD16844	Solids, Dissolved	mg/L	0.0000	25.0			240	54.0	40.0 to 60.0			2.53	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Definitions

Project Number: WMWGORAP_1424

Abbreviation	Description
DF	Dilution Factor
LCS	Lab Control Sample
LFM	Lab Fortified Matrix
MB	Method Blank
MDL	Method Detection Limit; minimum concentration of an analyte that can be determined with 99% confidence that the concentration is greater than zero.
MS	Matrix Spike
MSD	Matrix Spike Duplicate
Prec	Precision (% RPD)
Q	Qualifier; comment used to note deviations or additional information associated with analytical results.
QC	Quality Control
Rec	Recovery of Matrix Spike
RL	Reporting Limit; lowest concentration at which an analyte can be quantitatively measured.
Vio Spec	Violation Specification; regulatory limit which has been exceeded by the sample analyzed.

Qualifier	Description
FA	Field results were reviewed by the Water Field Group. Refer to APC Field Case Narrative.
J	Reported value is an estimate because concentration is less than reporting limit.
RA	Matrix spike is invalid due to sample concentration.
U	Compound was analyzed, but not detected.

Alabama Power Lab & Field Services

Chain of Custody Groundwater

APC General Testing Laboratory

☑ Field Complete

☑ Lab Complete

☐ Outside Lab

Lab ETA

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Collector	Dallas Gentry	Requested By	Greg Dyer
		Location	Gorgas Ash Pond

Bottles

1	Metals	500 mL	3	Hg	250 mL	5	TDS/Alkalinity	500 mL	7	N/A	N/A
2	Dissolved Metals	500 mL	4	Nitrite, Nitrate; TOC	250 mL	6	Anions	500 mL	8	N/A	N/A

Comments

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id	pH Check
FB-1	08/30/2023	12:05	5	Field Blank		BD16826	☑
MW-33HO	08/30/2023	13:56	6	Groundwater		BD16827	☑
MW-34HO	08/31/2023	08:12	6	Groundwater		BD16828	☑
EB-1	08/31/2023	10:00	5	Equipment Blank		BD16829	☑
MW-35HO	08/31/2023	10:51	6	Groundwater		BD16830	☑
MW-35HO dup	08/31/2023	10:51	6	Sample Duplicate		BD16831	☑
							☐
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Relinquished By	Received By	Date/Time
Dallas Gentry		08/31/2023 13:34

SmarTroll ID	7586-41443-5-2	Cooler Temp	1.9 ℃
Turbidity ID	9901-57263-1-1	Thermometer ID	10614-61208-2-1
Sample Event	1424	pH Strip ID	10853-62410-10-9

Bottles/Pre-Preserved Bottles are provided by the GTL

Total Metals and Alkalinity are not performed on Dissolved Sets

Dissolved Metals and Alkalinity are not performed on blanks i.e. Field Blanks or Equipment Blanks

Alabama Power Lab & Field Services

Chain of Custody Groundwater

APC General Testing Laboratory

☑ Field Complete
☑ Lab Complete
☑ Outside Lab

Lab ETA

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Collector	Dallas Gentry	Requested By	Greg Dyer
		Location	Gorgas Ash Pond

Bottles

1	Radium	1 L	3	N/A	N/A	5	N/A	N/A	7	N/A	N/A
2	N/A	N/A	4	N/A	N/A	6	N/A	N/A	8	N/A	N/A

Comments: Radium MS/MSD collected at MW-34HO

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id	pH Check
FB-1	08/30/2023	12:05	1	Field Blank		BD16832	☑
MW-33HO	08/30/2023	13:56	1	Groundwater		BD16833	☑
MW-34HO	08/31/2023	08:12	3	Groundwater		BD16834	☑
EB-1	08/31/2023	10:00	1	Equipment Blank		BD16835	☑
MW-35HO	08/31/2023	10:51	1	Groundwater		BD16836	☑
MW-35HO dup	08/31/2023	10:51	1	Sample Duplicate		BD16837	☑
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Relinquished By	Received By	Date/Time
		08/31/2023 13:34

SmarTroll ID	7586-41443-5-2	Cooler Temp	N/A
Turbidity ID	9901-57263-1-1	Thermometer ID	N/A
Sample Event	1424	pH Strip ID	10853-62410-10-9

Bottles/Pre-Preserved Bottles are provided by the GTL

Total Metals and Alkalinity are not performed on Dissolved Sets

Dissolved Metals and Alkalinity are not performed on blanks i.e. Field Blanks or Equipment Blanks

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040
205-664-6001

Analytical Report

Sample Group : WMWGORAP_1425

Project/Site : Gorgas Ash Pond
Parrish, AL 35580

For : Southern Company Services
3535 Colonnade Parkway
Birmingham, AL 35243

Attention : Dustin Brooks & Greg Budd

Released By : Brooke Caton
tbwill@southernco.com
(205) 664-6101

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040
(205) 664-6001

October 02, 2023

Dear Dustin Brooks,

Enclosed are the analytical results for sample(s) received by the laboratory on September 05, 2023.
All results reported herein conform to the laboratory’s most current Quality Assurance Manual. Results marked with an asterisk conform to the most current applicable TNI/NELAC requirements. Exceptions will be noted in the body of the report.

Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2024

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Quality Control: Brooke Caton

Digitally signed by Brooke Caton
Date: 2023.10.02 12:18:20 -05'00'

Supervision: T Durant Maske

Digitally signed by T Durant Maske
DN: cn=T Durant Maske gn=T Durant Maske c=US United States l=US United States e=tdmaske@southernco.com
Reason: I am the author of this document
Location:
Date: 2023-10-03 10:36-05:00

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Case Narrative

Alabama Power

Total Metals ICP

Gorgas Ash Pond

WMWGORAP_1425

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	**Batch ID**	**Project ID**
BD16950	765622	WMWGORAP_1425
BD16951	765622	WMWGORAP_1425
BD16952	765622	WMWGORAP_1425
BD16953	765622	WMWGORAP_1425

4. All of the above samples were analyzed by EPA 200.7 and prepared by EPA 1638.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- Prior to sample analysis, an initial calibration verification (ICV) was analyzed, and all criteria were met.
- Following the ICV, an initial calibration blank (ICB) was analyzed, and all criteria were met.
- All continued calibration verification (CCV) were within the acceptance criteria for the requested analytes.
- All continued calibration blanks (CCB) were analyzed, and all criteria were met.
- A preparation method blank and laboratory control sample were digested and analyzed with the samples in each digestion batch.
- All laboratory control sample criteria were met.
- The method blank associated with each digestion batch passed all acceptance criteria for all requested analytes.
- All calibration curve requirements were within acceptance criteria.
- All sample internal standard criteria were met.
- The spectral interference check associated with EPA 200.7 was analyzed, and all acceptance criteria were met.
- It is noted that the QC summary page typically provides the QC results from the original batch analytical sequence. If dilutions were subsequently performed to bring sample concentrations within the calibration range, any additional QC data from the dilution analyses may need to be obtained from the laboratory. Any qualifications applied to original analyses or dilution re-analyses are based upon QC data available at the time of review.

Matrix Specific Quality Control Procedures:

Similarity of matrix and therefore relevance of matrix specific QC results should not be automatically inferred for any sample other than the sample selected for QC.

- A matrix spike and matrix spike duplicate were digested and analyzed with each ICP batch. All acceptance criteria for accuracy were met, except for the following:
    - BD16953 Sodium MS/MSD spike levels were less than 30% of the sample concentrations.
- A matrix spike and matrix spike duplicate were digested and analyzed with each ICP batch. All acceptance criteria for precision were met.

7. The following samples were diluted due to the analyzed sample concentration being greater than the high standard of the calibration curve:

Sample ID	Analyte	Dilution Factor
BD16952	Sodium	10.15
BD16953	Sodium	10.15

8. The raw data results are shown with dilution factors included.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Case Narrative

Dissolved Metals ICP

Gorgas Ash Pond

WMWGORAP_1425

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	**Batch ID**	**Project ID**
BD16952	765602	WMWGORAP_1425
BD16953	765602	WMWGORAP_1425

4. All of the above samples were analyzed and prepared by EPA 200.7 for dissolved analysis.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- Prior to sample analysis, an initial calibration verification (ICV) was analyzed, and all criteria were met.
- Following the ICV, an initial calibration blank (ICB) was analyzed, and all criteria were met.
- All continued calibration verification (CCV) were within the acceptance criteria for the requested analytes.
- All continued calibration blanks (CCB) were analyzed, and all criteria were met.
- Due to no filtered method blank (MB) or laboratory control sample (LCS) submitted with the sample set, an unfiltered MB and LCS were analyzed with the samples in each batch.
- All laboratory control sample criteria were met.
- The method blank associated with each batch passed all acceptance criteria for all requested analytes.
- All calibration curve requirements were within acceptance criteria.
- All sample internal standard criteria were met.
- The spectral interference check associated with EPA 200.7 was analyzed and all acceptance criteria were met.
- It is noted that the QC summary page typically provides the QC results from the original batch analytical sequence. If dilutions were subsequently performed to bring sample concentrations within the calibration range, any additional QC data from the dilution analyses may need to be obtained from the laboratory. Any qualifications applied to original analyses or dilution re-analyses are based upon QC data available at the time of review.

Matrix Specific Quality Control Procedures:

Similarity of matrix and therefore relevance of matrix specific QC results should not be automatically inferred for any sample other than the sample selected for QC.

Case Narrative

- A matrix spike and matrix spike duplicate were analyzed with each ICP batch. All acceptance criteria for accuracy were met., except for the following:
    - BD16953 Sodium MS/MSD spike levels were less than 30% of the sample concentrations.
- A matrix spike and matrix spike duplicate were analyzed with each ICP batch. All acceptance criteria for precision were met.

7. The following samples were diluted due to the analyzed sample concentration being greater than the high standard of the calibration curve:

Sample ID	Analyte	Dilution Factor
BD16952	Sodium	10.15
BD16953	Sodium	10.15

8. The raw data results are shown with dilution factors included.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Case Narrative

Total Metals ICPMS

Gorgas Ash Pond

WMWGORAP_1425

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
BD16950	765902	WMWGORAP_1425
BD16951	765902	WMWGORAP_1425
BD16952	765902	WMWGORAP_1425
BD16953	765902	WMWGORAP_1425

4. All of the above samples were analyzed by EPA 200.8 and prepared by EPA 1638.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- All tune and calibration met criteria for all requested analytes.
- Prior to sample analysis, an initial calibration verification (ICV) was analyzed, and all criteria were met.
- Following the ICV, an initial calibration blank (ICB) was analyzed and was below the limit of quantitation for all requested analytes.
- All continued calibration verification (CCV) were within the acceptance criteria for the requested analytes.
- All continued calibration blanks (CCB) were below the limit of quantitation for the requested analytes.
- A preparation method blank and laboratory control sample were digested and analyzed with the samples in each digestion batch.
- All laboratory control sample criteria were met.
- The method blank associated with each digestion batch passed all acceptance criteria for all requested analytes.
- The interference check samples associated with EPA 200.8 were analyzed and passed for all requested analytes.
- All sample internal standard criteria were met.
- It is noted that the QC summary page typically provides the QC results from the original batch analytical sequence. If dilutions were subsequently performed to bring sample concentrations within the calibration range, any additional QC data from the dilution analyses may need to be obtained from the laboratory. Any qualifications applied to original analyses or dilution re-analyses are based upon QC data available at the time of review.

Matrix Specific Quality Control Procedures:

Similarity of matrix and therefore relevance of matrix specific QC results should not be automatically inferred for any sample other than the sample selected for QC.

- A matrix spike and matrix spike duplicate were digested and analyzed with each ICPMS batch. All acceptance criteria for accuracy were met.
- A matrix spike and matrix spike duplicate were digested and analyzed with each ICPMS batch. All acceptance criteria for precision were met.

7. All samples were analyzed without a dilution factor.
8. The raw data results are shown with dilution factors included.

Case Narrative

Dissolved Metals ICPMS

Gorgas Ash Pond

WMWGORAP_1425

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	**Batch ID**	**Project ID**
BD16952	766277, 767604	WMWGORAP_1425
BD16953	766277, 767604	WMWGORAP_1425

4. All of the above samples were analyzed and prepared by EPA 200.8 for dissolved analysis.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- All tune and calibration met criteria for all requested analytes.
- Prior to sample analysis, an initial calibration verification (ICV) was analyzed, and all criteria were met.
- Following the ICV, an initial calibration blank (ICB) was analyzed and was below the limit of quantitation for all requested analytes.
- All continued calibration verification (CCV) were within the acceptance criteria for the requested analytes.
- All continued calibration blanks (CCB) were below the limit of quantitation for the requested analytes.
- Due to no filtered method blank (MB) or laboratory control sample (LCS) submitted with the sample set, an unfiltered MB and LCS were analyzed with the samples in each batch.
- All laboratory control sample criteria were met.
- The method blank associated with each preparation batch passed all acceptance criteria for all requested analytes.
- The interference check samples associated with EPA 200.8 were analyzed and passed for all requested analytes.
- All sample internal standard criteria were met.
- It is noted that the QC summary page typically provides the QC results from the original batch analytical sequence. If dilutions were subsequently performed to bring sample concentrations within the calibration range, any additional QC data from the dilution analyses may need to be obtained from the laboratory. Any qualifications applied to original analyses or dilution re-analyses are based upon QC data available at the time of review.

Matrix Specific Quality Control Procedures:

Similarity of matrix and therefore relevance of matrix specific QC results should not be automatically inferred for any sample other than the sample selected for QC.

- A matrix spike and matrix spike duplicate were analyzed with each ICPMS batch. All acceptance criteria for accuracy were met.
- A matrix spike and matrix spike duplicate were analyzed with each ICPMS batch. All acceptance criteria for precision were met.

7. All samples were analyzed without a dilution factor.
8. The raw data results are shown with dilution factors included.

Case Narrative

Mercury

Gorgas Ash Pond

WMWGORAP_1425

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
BD16950	765877	WMWGORAP_1425
BD16951	765877	WMWGORAP_1425
BD16952	765877	WMWGORAP_1425
BD16953	765877	WMWGORAP_1425

4. All of the above samples were analyzed and prepared by EPA 245.1.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- Prior to sample analysis, an initial calibration verification (ICV) was analyzed and all criteria were met.
- Following the ICV, an initial calibration blank (ICB) was analyzed and was below the method detection limit for the requested analyte.
- All continued calibration verification (CCV) were within the acceptance criteria for the requested analyte.
- All continued calibration blanks (CCB) were below the limit of quantitation for the requested analyte.
- A preparation method blank and laboratory control sample were digested and analyzed with the samples in each digestion batch.
- All laboratory control sample criteria were met.
- The method blank associated with each digestion batch was below the limit of quantitation for the requested analyte.
- All calibration met criteria for the requested analyte.
- All response signals were satisfactory.

Matrix Specific Quality Control Procedures:

Similarity of matrix and therefore relevance of matrix specific QC results should not be automatically inferred for any sample other than the sample selected for QC.

- A matrix spike and matrix spike duplicate were digested and analyzed with each analytical batch. All acceptance criteria for accuracy were met.
- A matrix spike and matrix spike duplicate were digested and analyzed with each analytical batch. All acceptance criteria for precision were met.

7. All samples were analyzed without a dilution.

Case Narrative

Total Dissolved Solids

Gorgas Ash Pond

WMWGORAP_1425

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
BD16950	765656	WMWGORAP_1425
BD16951	765656	WMWGORAP_1425
BD16952	765656	WMWGORAP_1425
BD16953	765656	WMWGORAP_1425

4. All of the above samples were prepared and analyzed by Standard Method 2540C.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- A Method Blank was analyzed with each batch. All criteria were met.
- All final weights of samples, standards, and blanks agreed within 0.5mg of the previous weight.
- A sample duplicate was analyzed with each batch, and RPD was ≤10%.
- A laboratory control sample was analyzed with each batch. All criteria were met.
- Samples were between 2.5mg and 200mg residue.
- All samples with residue <2.5mg had the maximum volume of 150mL filtered. Affected samples are as follows:
    - BD16950
    - BD16951

Case Narrative

Alkalinity

Gorgas Ash Pond

WMWGORAP_1425

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
BD16952	766698, 766699, 766700, 766701	WMWGORAP_1425
BD16953	766698, 766699, 766700, 766701	WMWGORAP_1425

4. All of the above samples were prepared and analyzed by Standard Method 2320B.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- An initial pH check was analyzed with each batch. The acceptance criteria were met.
- A final pH check was analyzed with each batch. The acceptance criteria were met.
- An alkalinity laboratory control sample was analyzed with each batch. Range criteria of within 10% of true value was met.
- An alkalinity sample duplicate was analyzed with each batch. Precision criteria less than 10 RPD was met.

7. The following samples had pH>10 and/or TDS>500mg/L. Therefore, the calculations for carbonate and bicarbonate are estimates:
    - BD16953

Case Narrative

Anions

Gorgas Ash Pond

WMWGORAP_1425

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
BD16950	766041, 766043, 765946	WMWGORAP_1425
BD16951	766041, 766043, 765946	WMWGORAP_1425
BD16952	766041, 766043, 765946	WMWGORAP_1425
BD16953	766041, 766043, 765946	WMWGORAP_1425

4. All of the above samples were analyzed and prepared by SM4500 Cl E, SM4500 F G, and SM4500 SO4 E.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- All calibration met criteria for the requested analyte.
- Prior to sample analysis, an initial calibration verification (ICV), and all criteria were met.
- Prior to sample analysis, an initial calibration blank (ICB) was analyzed and was below half the limit of quantitation for the requested analyte.
- All continued calibration verification (CCV) were within the acceptance criteria for the requested analyte.
- All continued calibration blanks (CCB) were below the limit of quantitation for the requested analyte.
- It is noted that the QC summary page typically provides the QC results from the original batch analytical sequence. If dilutions were subsequently performed to bring sample concentrations within the calibration range, any additional QC data from the dilution analyses may need to be obtained from the laboratory. Any qualifications applied to original analyses or dilution re-analyses are based upon QC data available at the time of review.

Matrix Specific Quality Control Procedures:

Similarity of matrix and therefore relevance of matrix specific QC results should not be automatically inferred for any sample other than the sample selected for QC.

- A matrix spike and matrix spike duplicate were analyzed with each batch. All acceptance criteria for accuracy were met.

Revision 5

- A matrix spike and matrix spike duplicate were analyzed with each batch. All acceptance criteria for precision were met.

7. The following samples were diluted due to the analyzed sample concentration being greater than the high standard of the calibration curve:

Sample ID	Analyte	Dilution Factor
BD16952	Chloride	4
BD16953	Chloride	4

8. The raw data results are shown with dilution factors included.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Case Narrative

Nitrate-Nitrite

Gorgas Ash Pond

WMWGORAP_1425

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
BD16950	766080	WMWGORAP_1425
BD16951	766080	WMWGORAP_1425
BD16952	766080	WMWGORAP_1425
BD16953	766080	WMWGORAP_1425

4. All of the above samples were prepared and analyzed for NO_x by EPA 353.2.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- Water baseline report was run and met criteria.
- All calibration met criteria for the requested analytes.
- Prior to sample analysis, an initial calibration verification (ICV) was analyzed and met all criteria.
- All continued calibration verification (CCV) were within the acceptance criteria.
- Prior to sample analysis, an initial calibration blank (ICB) was analyzed and were below limit of detection.
- All continued calibration blanks (CCB) were below the limit of detection.

EPA 353.2 Specific QC:

- Prior to sample analysis, Cadmium coil reduction efficiency check met criteria.
- Matrix Specific QC:
  - A sample duplicate was run and criteria for precision was met.
  - A matrix spike was run and criteria for accuracy was met.

7. All samples were analyzed without a dilution factor.
8. The raw data results are shown with dilution factors included.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Case Narrative

Total Organic Carbon

Gorgas Ash Pond

WMWGORAP_1425

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
BD16950	765590	WMWGORAP_1425
BD16951	765590	WMWGORAP_1425
BD16952	765590	WMWGORAP_1425
BD16953	765590	WMWGORAP_1425

4. All of the above samples were prepared and analyzed by Standard Method 5310B.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- All calibration criteria were met.
- Prior to sample analysis, an initial calibration verification (ICV) was analyzed and met all criteria.
- Prior to sample analysis, an initial calibration blank (ICB) was analyzed and was <1/2RL.
- All continued calibration verifications (CCVs) were within the acceptance range.
- All continued calibration blanks (CCBs) were <1/2RL.

Matrix Specific Quality Control Procedures:

- A matrix spike and matrix spike duplicate were analyzed with each batch. All acceptance criteria for accuracy were met.
- A matrix spike and matrix spike duplicate were analyzed with each batch. All acceptance criteria for precision were met.

7. All samples were analyzed without a dilution factor.
8. The raw data results are shown with dilution factors included.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond Field Blank-1

Location Code: WMWGORAPFB
Collected: 9/5/23 08:35
Customer ID:
Submittal Date: 9/5/23 14:35

Laboratory ID Number: BD16950

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	9/6/23 14:57	9/14/23 13:36		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	9/6/23 14:57	9/14/23 13:36		1.015	Not Detected	mg/L	0.070035	0.406	U
* Iron, Total	9/6/23 14:57	9/14/23 13:36		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Total	9/6/23 14:57	9/14/23 13:36		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	9/6/23 14:57	9/14/23 13:36		1.015	Not Detected	mg/L	0.021315	0.406	U
* Molybdenum, Total	9/6/23 14:57	9/14/23 13:36		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Total (calc.)	9/6/23 14:57	9/14/23 13:36		1	Not Detected	mg/L			
* Silicon, Total	9/6/23 14:57	9/14/23 13:36		1.015	Not Detected	mg/L	0.02030	0.25375	U
* Sodium, Total	9/6/23 14:57	9/14/23 13:36		1.015	Not Detected	mg/L	0.04060	0.406	U
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	9/6/23 14:57	9/6/23 16:13		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Total	9/6/23 14:57	9/6/23 16:13		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Total	9/6/23 14:57	9/6/23 16:13		1.015	Not Detected	mg/L	0.000112	0.000203	U
* Barium, Total	9/6/23 14:57	9/6/23 16:13		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Beryllium, Total	9/6/23 14:57	9/6/23 16:13		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	9/6/23 14:57	9/6/23 16:13		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	9/6/23 14:57	9/6/23 16:13		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	9/6/23 14:57	9/6/23 16:13		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	9/6/23 14:57	9/6/23 16:13		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	9/6/23 14:57	9/6/23 16:13		1.015	Not Detected	mg/L	0.000152	0.001015	U
* Potassium, Total	9/6/23 14:57	9/6/23 16:13		1.015	Not Detected	mg/L	0.169505	0.5075	U
* Selenium, Total	9/6/23 14:57	9/6/23 16:13		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	9/6/23 14:57	9/6/23 16:13		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	9/7/23 16:09	9/7/23 20:06		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	9/11/23 08:37	9/11/23 08:37		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	9/6/23 11:00	9/7/23 13:20		1	Not Detected	mg/L		25	U

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments:

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond Field Blank-1

Location Code: WMWGORAPFB
Collected: 9/5/23 08:35
Customer ID:
Submittal Date: 9/5/23 14:35

Laboratory ID Number: BD16950

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	9/6/23 21:45	9/6/23 21:45		1	Not Detected	mg/L	1.00	2	U
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	9/11/23 11:12	9/11/23 11:12		1	Not Detected	mg/L	0.50	1	U
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	9/11/23 15:11	9/11/23 15:11		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	9/7/23 14:17	9/7/23 14:17		1	Not Detected	mg/L	0.6	2	U

MDL's and RL's are adjusted for sample dilution, as applicable

Comments:

Batch QC Summary

Customer Account: WMWGORAPFB
Sample Date: 9/5/23 08:35
Customer ID:
Delivery Date: 9/5/23 14:35

Description: Gorgas Ash Pond Field Blank-1

Laboratory ID Number: BD16950

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD16953	Aluminum, Total	mg/L	0.000753	0.0198	0.100	0.139	0.137	0.103	0.0850 to 0.115	101	70.0 to 130	1.45	20.0
BD16953	Antimony, Total	mg/L	0.000352	0.00100	0.100	0.0997	0.101	0.0947	0.0850 to 0.115	99.7	70.0 to 130	1.30	20.0
BD16953	Arsenic, Total	mg/L	0.0000145	0.000200	0.100	0.0990	0.0978	0.0993	0.0850 to 0.115	98.5	70.0 to 130	1.22	20.0
BD16953	Barium, Total	mg/L	-0.0000030	0.00100	0.100	0.179	0.184	0.0994	0.0850 to 0.115	95.2	70.0 to 130	2.75	20.0
BD16953	Beryllium, Total	mg/L	0.0000301	0.000880	0.100	0.0956	0.0926	0.0947	0.0850 to 0.115	95.6	70.0 to 130	3.19	20.0
BD16953	Boron, Total	mg/L	-0.000029	0.0650	1.00	1.07	1.08	1.01	0.850 to 1.15	102	70.0 to 130	0.930	20.0
BD16953	Cadmium, Total	mg/L	0.0000024	0.000147	0.100	0.0954	0.0957	0.0977	0.0850 to 0.115	95.4	70.0 to 130	0.314	20.0
BD16953	Calcium, Total	mg/L	-0.0118	0.152	5.00	7.09	7.12	5.04	4.25 to 5.75	101	70.0 to 130	0.422	20.0
BD16953	Chloride	mg/L	-0.0538	1.00	40.0	72.4	73.2	10.2	9.00 to 11.0	102	80.0 to 120	1.10	20.0
BD16953	Chromium, Total	mg/L	-0.0000767	0.000440	0.100	0.100	0.0971	0.0996	0.0850 to 0.115	100	70.0 to 130	2.94	20.0
BD16953	Cobalt, Total	mg/L	-0.0000086	0.000147	0.100	0.105	0.102	0.104	0.0850 to 0.115	105	70.0 to 130	2.90	20.0
BD16953	Fluoride	mg/L	0.0296	0.125	2.50	2.81	2.78	2.66	2.25 to 2.75	106	80.0 to 120	1.07	20.0
BD16953	Iron, Total	mg/L	0.000008	0.0176	0.2	0.221	0.217	0.204	0.170 to 0.230	101	70.0 to 130	1.83	20.0
BD16953	Lead, Total	mg/L	0.0000077	0.000147	0.100	0.103	0.103	0.100	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BD16953	Lithium, Total	mg/L	0.00122	0.0154	0.200	0.253	0.248	0.203	0.170 to 0.230	103	70.0 to 130	2.00	20.0
BD16953	Magnesium, Total	mg/L	-0.00376	0.0462	5.00	5.65	5.63	5.24	4.25 to 5.75	104	70.0 to 130	0.355	20.0
BD16953	Manganese, Total	mg/L	0.0000036	0.00033	0.100	0.104	0.102	0.102	0.0850 to 0.115	101	70.0 to 130	1.94	20.0
BD16953	Mercury, Total by CVAA	mg/L	4.000E-05	0.000500	0.004	0.004	0.00405	0.00404	0.00340 to 0.00460	100	70.0 to 130	1.24	20.0
BD16953	Molybdenum, Total	mg/L	0.001	0.0100	0.2	0.208	0.208	0.201	0.170 to 0.230	104	70.0 to 130	0.00	20.0
BD16953	Potassium, Total	mg/L	-0.0155	0.367	10.0	11.3	11.0	10.2	8.50 to 11.5	99.5	70.0 to 130	2.69	20.0
BD16953	Selenium, Total	mg/L	0.0000913	0.00100	0.100	0.0648	0.0609	0.102	0.0850 to 0.115	64.8	70.0 to 130	6.21	20.0
BD16953	Silicon, Total	mg/L	0.000006	0.0440	1.00	6.18	6.20	1.04	0.850 to 1.15	107	70.0 to 130	0.323	20.0
BD16953	Sodium, Total	mg/L	0.00810	0.0880	5.00	221	209	5.21	4.25 to 5.75	-300	70.0 to 130	5.58	20.0
BD16953	Sulfate	mg/L	0.179	2.0	20.0	44.5	44.6	20.7	18.0 to 22.0	95.0	80.0 to 120	0.224	20.0

Comments:

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAPFB
Sample Date: 9/5/23 08:35
Customer ID:
Delivery Date: 9/5/23 14:35

Description: Gorgas Ash Pond Field Blank-1

Laboratory ID Number: BD16950

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD16953	Thallium, Total	mg/L	-0.0000016	0.000147	0.100	0.107	0.105	0.108	0.0850 to 0.115	107	70.0 to 130	1.89	20.0
BD16953	Total Organic Carbon	mg/L	0.148	1.00	10.0	10.8	11.3	8.80		92.6	80.0 to 120	4.52	20.0

Comments:

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAPFB
Sample Date: 9/5/23 08:35
Customer ID:
Delivery Date: 9/5/23 14:35

Description: Gorgas Ash Pond Field Blank-1

Laboratory ID Number: BD16950

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17109	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.05	0.200	2.00	2.24	0.199	1.94	1.80 to 2.20	99.8	90.0 to 110	20.7	15.0
BD16953	Solids, Dissolved	mg/L	1.00	25.0			504	52.0	40.0 to 60.0			1.57	10.0

Comments:

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gorgas Ash Pond Equipment Blank-1

Location Code: WMWGORAPEB
Collected: 9/5/23 08:45
Customer ID:
Submittal Date: 9/5/23 14:35

Laboratory ID Number: BD16951

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	9/6/23 14:57	9/14/23 13:39		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	9/6/23 14:57	9/14/23 13:39		1.015	Not Detected	mg/L	0.070035	0.406	U
* Iron, Total	9/6/23 14:57	9/14/23 13:39		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Total	9/6/23 14:57	9/14/23 13:39		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	9/6/23 14:57	9/14/23 13:39		1.015	Not Detected	mg/L	0.021315	0.406	U
* Molybdenum, Total	9/6/23 14:57	9/14/23 13:39		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Total (calc.)	9/6/23 14:57	9/14/23 13:39		1	Not Detected	mg/L			
* Silicon, Total	9/6/23 14:57	9/14/23 13:39		1.015	Not Detected	mg/L	0.02030	0.25375	U
* Sodium, Total	9/6/23 14:57	9/14/23 13:39		1.015	Not Detected	mg/L	0.04060	0.406	U
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	9/6/23 14:57	9/6/23 16:16		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Total	9/6/23 14:57	9/6/23 16:16		1.015	Not Detected	mg/L	0.009135	0.05075	U
* Arsenic, Total	9/6/23 14:57	9/6/23 16:16		1.015	Not Detected	mg/L	0.000112	0.000203	U
* Barium, Total	9/6/23 14:57	9/6/23 16:16		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Beryllium, Total	9/6/23 14:57	9/6/23 16:16		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	9/6/23 14:57	9/6/23 16:16		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	9/6/23 14:57	9/6/23 16:16		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	9/6/23 14:57	9/6/23 16:16		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	9/6/23 14:57	9/6/23 16:16		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	9/6/23 14:57	9/6/23 16:16		1.015	Not Detected	mg/L	0.000152	0.001015	U
* Potassium, Total	9/6/23 14:57	9/6/23 16:16		1.015	Not Detected	mg/L	0.169505	0.5075	U
* Selenium, Total	9/6/23 14:57	9/6/23 16:16		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	9/6/23 14:57	9/6/23 16:16		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	9/7/23 16:09	9/7/23 20:10		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	9/11/23 08:39	9/11/23 08:39		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	9/6/23 11:00	9/7/23 13:20		1	Not Detected	mg/L		25	U

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments:

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond Equipment Blank-1

Location Code: WMWGORAPEB
Collected: 9/5/23 08:45
Customer ID:
Submittal Date: 9/5/23 14:35

Laboratory ID Number: BD16951

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	9/6/23 21:59	9/6/23 21:59		1	Not Detected	mg/L	1.00	2	U
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	9/11/23 11:13	9/11/23 11:13		1	Not Detected	mg/L	0.50	1	U
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	9/11/23 15:13	9/11/23 15:13		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	9/7/23 14:18	9/7/23 14:18		1	Not Detected	mg/L	0.6	2	U

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments:

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAPEB
Sample Date: 9/5/23 08:45
Customer ID:
Delivery Date: 9/5/23 14:35

Description: Gorgas Ash Pond Equipment Blank-1

Laboratory ID Number: BD16951

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD16953	Aluminum, Total	mg/L	0.000753	0.0198	0.100	0.139	0.137	0.103	0.0850 to 0.115	101	70.0 to 130	1.45	20.0
BD16953	Antimony, Total	mg/L	0.000352	0.00100	0.100	0.0997	0.101	0.0947	0.0850 to 0.115	99.7	70.0 to 130	1.30	20.0
BD16953	Arsenic, Total	mg/L	0.0000145	0.000200	0.100	0.0990	0.0978	0.0993	0.0850 to 0.115	98.5	70.0 to 130	1.22	20.0
BD16953	Barium, Total	mg/L	-0.0000030	0.00100	0.100	0.179	0.184	0.0994	0.0850 to 0.115	95.2	70.0 to 130	2.75	20.0
BD16953	Beryllium, Total	mg/L	0.0000301	0.000880	0.100	0.0956	0.0926	0.0947	0.0850 to 0.115	95.6	70.0 to 130	3.19	20.0
BD16953	Boron, Total	mg/L	-0.000029	0.0650	1.00	1.07	1.08	1.01	0.850 to 1.15	102	70.0 to 130	0.930	20.0
BD16953	Cadmium, Total	mg/L	0.0000024	0.000147	0.100	0.0954	0.0957	0.0977	0.0850 to 0.115	95.4	70.0 to 130	0.314	20.0
BD16953	Calcium, Total	mg/L	-0.0118	0.152	5.00	7.09	7.12	5.04	4.25 to 5.75	101	70.0 to 130	0.422	20.0
BD16953	Chloride	mg/L	-0.0538	1.00	40.0	72.4	73.2	10.2	9.00 to 11.0	102	80.0 to 120	1.10	20.0
BD16953	Chromium, Total	mg/L	-0.0000767	0.000440	0.100	0.100	0.0971	0.0996	0.0850 to 0.115	100	70.0 to 130	2.94	20.0
BD16953	Cobalt, Total	mg/L	-0.0000086	0.000147	0.100	0.105	0.102	0.104	0.0850 to 0.115	105	70.0 to 130	2.90	20.0
BD16953	Fluoride	mg/L	0.0296	0.125	2.50	2.81	2.78	2.66	2.25 to 2.75	106	80.0 to 120	1.07	20.0
BD16953	Iron, Total	mg/L	0.000008	0.0176	0.2	0.221	0.217	0.204	0.170 to 0.230	101	70.0 to 130	1.83	20.0
BD16953	Lead, Total	mg/L	0.0000077	0.000147	0.100	0.103	0.103	0.100	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BD16953	Lithium, Total	mg/L	0.00122	0.0154	0.200	0.253	0.248	0.203	0.170 to 0.230	103	70.0 to 130	2.00	20.0
BD16953	Magnesium, Total	mg/L	-0.00376	0.0462	5.00	5.65	5.63	5.24	4.25 to 5.75	104	70.0 to 130	0.355	20.0
BD16953	Manganese, Total	mg/L	0.0000036	0.00033	0.100	0.104	0.102	0.102	0.0850 to 0.115	101	70.0 to 130	1.94	20.0
BD16953	Mercury, Total by CVAA	mg/L	4.000E-05	0.000500	0.004	0.004	0.00405	0.00404	0.00340 to 0.00460	100	70.0 to 130	1.24	20.0
BD16953	Molybdenum, Total	mg/L	0.001	0.0100	0.2	0.208	0.208	0.201	0.170 to 0.230	104	70.0 to 130	0.00	20.0
BD16953	Potassium, Total	mg/L	-0.0155	0.367	10.0	11.3	11.0	10.2	8.50 to 11.5	99.5	70.0 to 130	2.69	20.0
BD16953	Selenium, Total	mg/L	0.0000913	0.00100	0.100	0.0648	0.0609	0.102	0.0850 to 0.115	64.8	70.0 to 130	6.21	20.0
BD16953	Silicon, Total	mg/L	0.000006	0.0440	1.00	6.18	6.20	1.04	0.850 to 1.15	107	70.0 to 130	0.323	20.0
BD16953	Sodium, Total	mg/L	0.00810	0.0880	5.00	221	209	5.21	4.25 to 5.75	-300	70.0 to 130	5.58	20.0
BD16953	Sulfate	mg/L	0.179	2.0	20.0	44.5	44.6	20.7	18.0 to 22.0	95.0	80.0 to 120	0.224	20.0

Comments:

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAPEB
Sample Date: 9/5/23 08:45
Customer ID:
Delivery Date: 9/5/23 14:35

Description: Gorgas Ash Pond Equipment Blank-1

Laboratory ID Number: BD16951

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD16953	Thallium, Total	mg/L	-0.0000016	0.000147	0.100	0.107	0.105	0.108	0.0850 to 0.115	107	70.0 to 130	1.89	20.0
BD16953	Total Organic Carbon	mg/L	0.148	1.00	10.0	10.8	11.3	8.80		92.6	80.0 to 120	4.52	20.0

Comments:

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAPEB
Sample Date: 9/5/23 08:45
Customer ID:
Delivery Date: 9/5/23 14:35

Description: Gorgas Ash Pond Equipment Blank-1

Laboratory ID Number: BD16951

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD17109	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.05	0.200	2.00	2.24	0.199	1.94	1.80 to 2.20	99.8	90.0 to 110	20.7	15.0
BD16953	Solids, Dissolved	mg/L	1.00	25.0			504	52.0	40.0 to 60.0			1.57	10.0

Comments:

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-44HO

Location Code: WMWGORAP
Collected: 9/5/23 10:25
Customer ID:
Submittal Date: 9/5/23 14:35

Laboratory ID Number: BD16952

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	9/6/23 14:57	9/14/23 13:42		1.015	0.0455	mg/L	0.030000	0.1015	J
* Calcium, Total	9/6/23 14:57	9/14/23 13:42		1.015	2.00	mg/L	0.070035	0.406	
* Iron, Total	9/6/23 14:57	9/14/23 13:42		1.015	0.0164	mg/L	0.008120	0.0406	J
* Lithium, Total	9/6/23 14:57	9/14/23 13:42		1.015	0.0475	mg/L	0.007105	0.01999956	
* Magnesium, Total	9/6/23 14:57	9/14/23 13:42		1.015	0.454	mg/L	0.021315	0.406	
* Molybdenum, Total	9/6/23 14:57	9/14/23 13:42		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Total (calc.)	9/6/23 14:57	9/14/23 13:42		1	10.9	mg/L			
* Silicon, Total	9/6/23 14:57	9/14/23 13:42		1.015	5.10	mg/L	0.02030	0.25375	
* Sodium, Total	9/6/23 14:57	9/14/23 17:17		10.15	210	mg/L	0.4060	4.06	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	9/6/23 13:09	9/14/23 13:17		1.015	0.0452	mg/L	0.030000	0.1015	J
* Calcium, Dissolved	9/6/23 13:09	9/14/23 13:17		1.015	1.72	mg/L	0.070035	0.406	
* Iron, Dissolved	9/6/23 13:09	9/14/23 13:17		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Dissolved	9/6/23 13:09	9/14/23 13:17		1.015	0.0476	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	9/6/23 13:09	9/14/23 13:17		1.015	0.383	mg/L	0.021315	0.406	J
* Molybdenum, Dissolved	9/6/23 13:09	9/14/23 13:17		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Dissolved (calc.)	9/6/23 13:09	9/14/23 13:17		1	10.9	mg/L			
* Silicon, Dissolved	9/6/23 13:09	9/14/23 13:17		1.015	5.10	mg/L	0.02030	0.25375	
* Sodium, Dissolved	9/6/23 13:09	9/14/23 17:05		10.15	208	mg/L	0.4060	4.06	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	9/6/23 14:57	9/6/23 16:20		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Total	9/6/23 14:57	9/6/23 16:20		1.015	0.0372	mg/L	0.009135	0.05075	J
* Arsenic, Total	9/6/23 14:57	9/6/23 16:20		1.015	0.000527	mg/L	0.000112	0.000203	
* Barium, Total	9/6/23 14:57	9/6/23 16:20		1.015	0.0867	mg/L	0.000508	0.001015	
* Beryllium, Total	9/6/23 14:57	9/6/23 16:20		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	9/6/23 14:57	9/6/23 16:20		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	9/6/23 14:57	9/6/23 16:20		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	9/6/23 14:57	9/6/23 16:20		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	9/6/23 14:57	9/6/23 16:20		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	9/6/23 14:57	9/6/23 16:20		1.015	0.00268	mg/L	0.000152	0.001015	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-44HO

Location Code: WMWGORAP
Collected: 9/5/23 10:25
Customer ID:
Submittal Date: 9/5/23 14:35

Laboratory ID Number: BD16952

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	9/6/23 14:57	9/6/23 16:20		1.015	1.30	mg/L	0.169505	0.5075	
* Selenium, Total	9/6/23 14:57	9/6/23 16:20		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	9/6/23 14:57	9/6/23 16:20		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	9/6/23 13:09	9/6/23 13:38		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	9/6/23 13:09	9/6/23 13:38		1.015	0.0105	mg/L	0.009135	0.05075	J
* Arsenic, Dissolved	9/6/23 13:09	9/6/23 13:38		1.015	0.000494	mg/L	0.000112	0.000203	
* Barium, Dissolved	9/6/23 13:09	9/6/23 13:38		1.015	0.0791	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	9/6/23 13:09	9/6/23 13:38		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	9/6/23 13:09	9/6/23 13:38		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	9/6/23 13:09	9/6/23 13:38		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	9/6/23 13:09	9/6/23 13:38		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Dissolved	9/6/23 13:09	9/6/23 13:38		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	9/6/23 13:09	9/6/23 13:38		1.015	0.00230	mg/L	0.000152	0.001015	
* Potassium, Dissolved	9/6/23 13:09	9/6/23 13:38		1.015	1.29	mg/L	0.169505	0.5075	
* Selenium, Dissolved	9/27/23 15:10	9/27/23 16:22		1.015	0.00187	mg/L	0.000508	0.001015	
* Thallium, Dissolved	9/6/23 13:09	9/6/23 13:38		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	9/7/23 16:09	9/7/23 20:13		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	9/11/23 08:41	9/11/23 08:41		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: DHC***								
* Alkalinity	9/18/23 10:30	9/18/23 11:02		1	370	mg CaCO3/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	9/6/23 11:00	9/7/23 13:20		1	500	mg/L		50	
Analytical Method: SM 4500CO2 D	***Analyst: DHC***								
* Bicarbonate Alkalinity, (calc.)	9/18/23 10:30	9/18/23 11:02		1	344	mg CaCO3/L		1	
* Carbonate Alkalinity, (calc.)	9/18/23 10:30	9/18/23 11:02		1	25.1	mg CaCO3/L		0.5	
Analytical Method: SM 4500H+ B	***Analyst: DHC***								
Alkalinity pH Endpoint	9/18/23 10:30	9/18/23 11:02		1	4.51	SU		2	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-44HO

Location Code: WMWGORAP
Collected: 9/5/23 10:25
Customer ID:
Submittal Date: 9/5/23 14:35

Laboratory ID Number: BD16952

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	9/6/23 22:12	9/6/23 22:12		1	1.38	mg/L	1.00	2	J
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	9/11/23 11:30	9/11/23 11:30		4	33.8	mg/L	2.00	4	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	9/11/23 15:14	9/11/23 15:14		1	0.158	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	9/7/23 14:20	9/7/23 14:20		1	24.4	mg/L	0.6	2	
Analytical Method: Field Measurements	***Analyst: AWG***								
Conductivity	9/5/23 10:21	9/5/23 10:21			803.80	uS/cm			FA
pH	9/5/23 10:21	9/5/23 10:21			8.88	SU			FA
Temperature	9/5/23 10:21	9/5/23 10:21			19.15	C			FA
Turbidity	9/5/23 10:21	9/5/23 10:21			1.54	NTU			FA
Sulfide	9/5/23 10:21	9/5/23 10:21			5	mg/L			FA

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/5/23 10:25
Customer ID:
Delivery Date: 9/5/23 14:35

Description: Gorgas Ash Pond - MW-44HO

Laboratory ID Number: BD16952

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD16953	Aluminum, Dissolved	mg/L	-0.0000181	0.0198	0.100	0.110	0.110	0.104	0.0850 to 0.115	100	70.0 to 130	0.00	20.0
BD16953	Aluminum, Total	mg/L	0.000753	0.0198	0.100	0.139	0.137	0.103	0.0850 to 0.115	101	70.0 to 130	1.45	20.0
BD16953	Antimony, Dissolved	mg/L	0.000217	0.00100	0.100	0.101	0.103	0.0886	0.0850 to 0.115	101	70.0 to 130	1.96	20.0
BD16953	Antimony, Total	mg/L	0.000352	0.00100	0.100	0.0997	0.101	0.0947	0.0850 to 0.115	99.7	70.0 to 130	1.30	20.0
BD16953	Arsenic, Dissolved	mg/L	0.0000106	0.000200	0.100	0.0988	0.0988	0.102	0.0850 to 0.115	98.3	70.0 to 130	0.00	20.0
BD16953	Arsenic, Total	mg/L	0.0000145	0.000200	0.100	0.0990	0.0978	0.0993	0.0850 to 0.115	98.5	70.0 to 130	1.22	20.0
BD16953	Barium, Dissolved	mg/L	0.0000048	0.00100	0.100	0.199	0.203	0.0967	0.0850 to 0.115	107	70.0 to 130	1.99	20.0
BD16953	Barium, Total	mg/L	-0.0000030	0.00100	0.100	0.179	0.184	0.0994	0.0850 to 0.115	95.2	70.0 to 130	2.75	20.0
BD16953	Beryllium, Dissolved	mg/L	0.0000200	0.000880	0.100	0.102	0.0916	0.0967	0.0850 to 0.115	102	70.0 to 130	10.7	20.0
BD16953	Beryllium, Total	mg/L	0.0000301	0.000880	0.100	0.0956	0.0926	0.0947	0.0850 to 0.115	95.6	70.0 to 130	3.19	20.0
BD16953	Boron, Dissolved	mg/L	-0.000500	0.0650	1.00	1.06	1.05	1.01	0.850 to 1.15	101	70.0 to 130	0.948	20.0
BD16953	Boron, Total	mg/L	-0.000029	0.0650	1.00	1.07	1.08	1.01	0.850 to 1.15	102	70.0 to 130	0.930	20.0
BD16953	Cadmium, Dissolved	mg/L	0.0000024	0.000147	0.100	0.0986	0.0991	0.0982	0.0850 to 0.115	98.6	70.0 to 130	0.506	20.0
BD16953	Cadmium, Total	mg/L	0.0000024	0.000147	0.100	0.0954	0.0957	0.0977	0.0850 to 0.115	95.4	70.0 to 130	0.314	20.0
BD16953	Calcium, Dissolved	mg/L	-0.00220	0.152	5.00	7.08	6.93	5.20	4.25 to 5.75	102	70.0 to 130	2.14	20.0
BD16953	Calcium, Total	mg/L	-0.0118	0.152	5.00	7.09	7.12	5.04	4.25 to 5.75	101	70.0 to 130	0.422	20.0
BD16953	Chloride	mg/L	-0.0538	1.00	40.0	72.4	73.2	10.2	9.00 to 11.0	102	80.0 to 120	1.10	20.0
BD16953	Chromium, Dissolved	mg/L	-0.0000572	0.000440	0.100	0.101	0.102	0.102	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BD16953	Chromium, Total	mg/L	-0.0000767	0.000440	0.100	0.100	0.0971	0.0996	0.0850 to 0.115	100	70.0 to 130	2.94	20.0
BD16953	Cobalt, Dissolved	mg/L	-0.0000104	0.000147	0.100	0.106	0.105	0.106	0.0850 to 0.115	106	70.0 to 130	0.948	20.0
BD16953	Cobalt, Total	mg/L	-0.0000086	0.000147	0.100	0.105	0.102	0.104	0.0850 to 0.115	105	70.0 to 130	2.90	20.0
BD16953	Fluoride	mg/L	0.0296	0.125	2.50	2.81	2.78	2.66	2.25 to 2.75	106	80.0 to 120	1.07	20.0
BD16953	Iron, Dissolved	mg/L	0.000944	0.0176	0.2	0.205	0.202	0.204	0.170 to 0.230	102	70.0 to 130	1.47	20.0
BD16953	Iron, Total	mg/L	0.000008	0.0176	0.2	0.221	0.217	0.204	0.170 to 0.230	101	70.0 to 130	1.83	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/5/23 10:25
Customer ID:
Delivery Date: 9/5/23 14:35

Description: Gorgas Ash Pond - MW-44HO

Laboratory ID Number: BD16952

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD16953	Lead, Dissolved	mg/L	0.0000030	0.000147	0.100	0.101	0.103	0.101	0.0850 to 0.115	101	70.0 to 130	1.96	20.0
BD16953	Lead, Total	mg/L	0.0000077	0.000147	0.100	0.103	0.103	0.100	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BD16953	Lithium, Dissolved	mg/L	0.000424	0.0154	0.200	0.247	0.247	0.202	0.170 to 0.230	99.6	70.0 to 130	0.00	20.0
BD16953	Lithium, Total	mg/L	0.00122	0.0154	0.200	0.253	0.248	0.203	0.170 to 0.230	103	70.0 to 130	2.00	20.0
BD16953	Magnesium, Dissolved	mg/L	0.00204	0.0462	5.00	5.60	5.53	5.26	4.25 to 5.75	103	70.0 to 130	1.26	20.0
BD16953	Magnesium, Total	mg/L	-0.00376	0.0462	5.00	5.65	5.63	5.24	4.25 to 5.75	104	70.0 to 130	0.355	20.0
BD16953	Manganese, Dissolved	mg/L	0.0000034	0.00033	0.100	0.105	0.106	0.105	0.0850 to 0.115	102	70.0 to 130	0.948	20.0
BD16953	Manganese, Total	mg/L	0.0000036	0.00033	0.100	0.104	0.102	0.102	0.0850 to 0.115	101	70.0 to 130	1.94	20.0
BD16953	Mercury, Total by CVAA	mg/L	4.000E-05	0.000500	0.004	0.004	0.00405	0.00404	0.00340 to 0.00460	100	70.0 to 130	1.24	20.0
BD16953	Molybdenum, Dissolved	mg/L	0.000726	0.0100	0.2	0.204	0.204	0.201	0.170 to 0.230	102	70.0 to 130	0.00	20.0
BD16953	Molybdenum, Total	mg/L	0.001	0.0100	0.2	0.208	0.208	0.201	0.170 to 0.230	104	70.0 to 130	0.00	20.0
BD16953	Potassium, Dissolved	mg/L	-0.0116	0.367	10.0	11.0	11.1	10.0	8.50 to 11.5	97.7	70.0 to 130	0.905	20.0
BD16953	Potassium, Total	mg/L	-0.0155	0.367	10.0	11.3	11.0	10.2	8.50 to 11.5	99.5	70.0 to 130	2.69	20.0
BD16952	Selenium, Dissolved	mg/L	0.0000802	0.00100	0.100	0.111	0.112	0.106	0.0850 to 0.115	109	70.0 to 130	0.897	20.0
BD16953	Selenium, Total	mg/L	0.0000913	0.00100	0.100	0.0648	0.0609	0.102	0.0850 to 0.115	64.8	70.0 to 130	6.21	20.0
BD16953	Silicon, Dissolved	mg/L	0.000637	0.0440	1.00	6.15	6.15	1.04	0.850 to 1.15	105	70.0 to 130	0.00	20.0
BD16953	Silicon, Total	mg/L	0.000006	0.0440	1.00	6.18	6.20	1.04	0.850 to 1.15	107	70.0 to 130	0.323	20.0
BD16953	Sodium, Dissolved	mg/L	0.00860	0.0880	5.00	210	213	5.10	4.25 to 5.75	-240	70.0 to 130	1.42	20.0
BD16953	Sodium, Total	mg/L	0.00810	0.0880	5.00	221	209	5.21	4.25 to 5.75	-300	70.0 to 130	5.58	20.0
BD16953	Sulfate	mg/L	0.179	2.0	20.0	44.5	44.6	20.7	18.0 to 22.0	95.0	80.0 to 120	0.224	20.0
BD16953	Thallium, Dissolved	mg/L	-0.0000063	0.000147	0.100	0.105	0.107	0.0967	0.0850 to 0.115	105	70.0 to 130	1.89	20.0
BD16953	Thallium, Total	mg/L	-0.0000016	0.000147	0.100	0.107	0.105	0.108	0.0850 to 0.115	107	70.0 to 130	1.89	20.0
BD16953	Total Organic Carbon	mg/L	0.148	1.00	10.0	10.8	11.3	8.80		92.6	80.0 to 120	4.52	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/5/23 10:25
Customer ID:
Delivery Date: 9/5/23 14:35

Description: Gorgas Ash Pond - MW-44HO

Laboratory ID Number: BD16952

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD16953	Alkalinity	mg CaCO3/L					375	51.1	45.0 to 55.0			0.00	10.0
BD17109	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.05	0.200	2.00	2.24	0.199	1.94	1.80 to 2.20	99.8	90.0 to 110	20.7	15.0
BD16953	Solids, Dissolved	mg/L	1.00	25.0			504	52.0	40.0 to 60.0			1.57	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-44HO Dup

Location Code: WMWGORAP
Collected: 9/5/23 10:25
Customer ID:
Submittal Date: 9/5/23 14:35

Laboratory ID Number: BD16953

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	9/6/23 14:57	9/14/23 13:45		1.015	0.0457	mg/L	0.030000	0.1015	J
* Calcium, Total	9/6/23 14:57	9/14/23 13:45		1.015	2.02	mg/L	0.070035	0.406	
* Iron, Total	9/6/23 14:57	9/14/23 13:45		1.015	0.0182	mg/L	0.008120	0.0406	J
* Lithium, Total	9/6/23 14:57	9/14/23 13:45		1.015	0.0474	mg/L	0.007105	0.01999956	
* Magnesium, Total	9/6/23 14:57	9/14/23 13:45		1.015	0.451	mg/L	0.021315	0.406	
* Molybdenum, Total	9/6/23 14:57	9/14/23 13:45		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Total (calc.)	9/6/23 14:57	9/14/23 13:45		1	10.9	mg/L			
* Silicon, Total	9/6/23 14:57	9/14/23 13:45		1.015	5.11	mg/L	0.02030	0.25375	
* Sodium, Total	9/6/23 14:57	9/14/23 17:21		10.15	236	mg/L	0.4060	4.06	RA
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	9/6/23 13:09	9/14/23 13:20		1.015	0.0453	mg/L	0.030000	0.1015	J
* Calcium, Dissolved	9/6/23 13:09	9/14/23 13:20		1.015	1.97	mg/L	0.070035	0.406	
* Iron, Dissolved	9/6/23 13:09	9/14/23 13:20		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Dissolved	9/6/23 13:09	9/14/23 13:20		1.015	0.0478	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	9/6/23 13:09	9/14/23 13:20		1.015	0.445	mg/L	0.021315	0.406	
* Molybdenum, Dissolved	9/6/23 13:09	9/14/23 13:20		1.015	Not Detected	mg/L	0.005075	0.01015	U
* Silica, Dissolved (calc.)	9/6/23 13:09	9/14/23 13:20		1	10.9	mg/L			
* Silicon, Dissolved	9/6/23 13:09	9/14/23 13:20		1.015	5.10	mg/L	0.02030	0.25375	
* Sodium, Dissolved	9/6/23 13:09	9/14/23 17:08		10.15	222	mg/L	0.4060	4.06	RA
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	9/6/23 14:57	9/6/23 16:24		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Total	9/6/23 14:57	9/6/23 16:24		1.015	0.0377	mg/L	0.009135	0.05075	J
* Arsenic, Total	9/6/23 14:57	9/6/23 16:24		1.015	0.000515	mg/L	0.000112	0.000203	
* Barium, Total	9/6/23 14:57	9/6/23 16:24		1.015	0.0838	mg/L	0.000508	0.001015	
* Beryllium, Total	9/6/23 14:57	9/6/23 16:24		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	9/6/23 14:57	9/6/23 16:24		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	9/6/23 14:57	9/6/23 16:24		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	9/6/23 14:57	9/6/23 16:24		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	9/6/23 14:57	9/6/23 16:24		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	9/6/23 14:57	9/6/23 16:24		1.015	0.00274	mg/L	0.000152	0.001015	

MDL’s and RL’s are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Certificate Of Analysis

Description: Gorgas Ash Pond - MW-44HO Dup

Location Code: WMWGORAP
Collected: 9/5/23 10:25
Customer ID:
Submittal Date: 9/5/23 14:35

Laboratory ID Number: BD16953

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Potassium, Total	9/6/23 14:57	9/6/23 16:24		1.015	1.35	mg/L	0.169505	0.5075	
* Selenium, Total	9/6/23 14:57	9/6/23 16:24		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	9/6/23 14:57	9/6/23 16:24		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	9/6/23 13:09	9/6/23 13:42		1.015	Not Detected	mg/L	0.000710	0.001015	U
* Aluminum, Dissolved	9/6/23 13:09	9/6/23 13:42		1.015	0.00962	mg/L	0.009135	0.05075	J
* Arsenic, Dissolved	9/6/23 13:09	9/6/23 13:42		1.015	0.000498	mg/L	0.000112	0.000203	
* Barium, Dissolved	9/6/23 13:09	9/6/23 13:42		1.015	0.0920	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	9/6/23 13:09	9/6/23 13:42		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	9/6/23 13:09	9/6/23 13:42		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	9/6/23 13:09	9/6/23 13:42		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	9/6/23 13:09	9/6/23 13:42		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Dissolved	9/6/23 13:09	9/6/23 13:42		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	9/6/23 13:09	9/6/23 13:42		1.015	0.00256	mg/L	0.000152	0.001015	
* Potassium, Dissolved	9/6/23 13:09	9/6/23 13:42		1.015	1.23	mg/L	0.169505	0.5075	
* Selenium, Dissolved	9/27/23 15:10	9/27/23 16:33		1.015	0.00191	mg/L	0.000508	0.001015	
* Thallium, Dissolved	9/6/23 13:09	9/6/23 13:42		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	9/7/23 16:09	9/7/23 20:17		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	9/11/23 08:43	9/11/23 08:43		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: DHC***								
* Alkalinity	9/18/23 10:30	9/18/23 11:02		1	375	mg CaCO3/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	9/6/23 11:00	9/7/23 13:20		1	512	mg/L		50	
Analytical Method: SM 4500CO2 D	***Analyst: DHC***								
* Bicarbonate Alkalinity, (calc.)	9/18/23 10:30	9/18/23 11:02		1	352	mg CaCO3/L		1	A
* Carbonate Alkalinity, (calc.)	9/18/23 10:30	9/18/23 11:02		1	22.4	mg CaCO3/L		0.5	A
Analytical Method: SM 4500H+ B	***Analyst: DHC***								
Alkalinity pH Endpoint	9/18/23 10:30	9/18/23 11:02		1	4.50	SU		2	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

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Certificate Of Analysis

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Customer ID:
Submittal Date: 9/5/23 14:35

Laboratory ID Number: BD16953

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	9/6/23 22:27	9/6/23 22:27		1	1.54	mg/L	1.00	2	J
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	9/11/23 11:31	9/11/23 11:31		4	31.5	mg/L	2.00	4	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	9/11/23 15:15	9/11/23 15:15		1	0.153	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	9/7/23 14:21	9/7/23 14:21		1	25.5	mg/L	0.6	2	
Analytical Method: Field Measurements	***Analyst: AWG***								
Conductivity	9/5/23 10:21	9/5/23 10:21			803.80	uS/cm			FA
pH	9/5/23 10:21	9/5/23 10:21			8.88	SU			FA
Temperature	9/5/23 10:21	9/5/23 10:21			19.15	C			FA
Turbidity	9/5/23 10:21	9/5/23 10:21			1.54	NTU			FA
Sulfide	9/5/23 10:21	9/5/23 10:21			5	mg/L			FA

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 10/2/2023
Version: 3.5
COA_CCR

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/5/23 10:25
Customer ID:
Delivery Date: 9/5/23 14:35

Description: Gorgas Ash Pond - MW-44HO Dup

Laboratory ID Number: BD16953

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD16953	Aluminum, Dissolved	mg/L	-0.0000181	0.0198	0.100	0.110	0.110	0.104	0.0850 to 0.115	100	70.0 to 130	0.00	20.0
BD16953	Aluminum, Total	mg/L	0.000753	0.0198	0.100	0.139	0.137	0.103	0.0850 to 0.115	101	70.0 to 130	1.45	20.0
BD16953	Antimony, Dissolved	mg/L	0.000217	0.00100	0.100	0.101	0.103	0.0886	0.0850 to 0.115	101	70.0 to 130	1.96	20.0
BD16953	Antimony, Total	mg/L	0.000352	0.00100	0.100	0.0997	0.101	0.0947	0.0850 to 0.115	99.7	70.0 to 130	1.30	20.0
BD16953	Arsenic, Dissolved	mg/L	0.0000106	0.000200	0.100	0.0988	0.0988	0.102	0.0850 to 0.115	98.3	70.0 to 130	0.00	20.0
BD16953	Arsenic, Total	mg/L	0.0000145	0.000200	0.100	0.0990	0.0978	0.0993	0.0850 to 0.115	98.5	70.0 to 130	1.22	20.0
BD16953	Barium, Dissolved	mg/L	0.0000048	0.00100	0.100	0.199	0.203	0.0967	0.0850 to 0.115	107	70.0 to 130	1.99	20.0
BD16953	Barium, Total	mg/L	-0.0000030	0.00100	0.100	0.179	0.184	0.0994	0.0850 to 0.115	95.2	70.0 to 130	2.75	20.0
BD16953	Beryllium, Dissolved	mg/L	0.0000200	0.000880	0.100	0.102	0.0916	0.0967	0.0850 to 0.115	102	70.0 to 130	10.7	20.0
BD16953	Beryllium, Total	mg/L	0.0000301	0.000880	0.100	0.0956	0.0926	0.0947	0.0850 to 0.115	95.6	70.0 to 130	3.19	20.0
BD16953	Boron, Dissolved	mg/L	-0.000500	0.0650	1.00	1.06	1.05	1.01	0.850 to 1.15	101	70.0 to 130	0.948	20.0
BD16953	Boron, Total	mg/L	-0.000029	0.0650	1.00	1.07	1.08	1.01	0.850 to 1.15	102	70.0 to 130	0.930	20.0
BD16953	Cadmium, Dissolved	mg/L	0.0000024	0.000147	0.100	0.0986	0.0991	0.0982	0.0850 to 0.115	98.6	70.0 to 130	0.506	20.0
BD16953	Cadmium, Total	mg/L	0.0000024	0.000147	0.100	0.0954	0.0957	0.0977	0.0850 to 0.115	95.4	70.0 to 130	0.314	20.0
BD16953	Calcium, Dissolved	mg/L	-0.00220	0.152	5.00	7.08	6.93	5.20	4.25 to 5.75	102	70.0 to 130	2.14	20.0
BD16953	Calcium, Total	mg/L	-0.0118	0.152	5.00	7.09	7.12	5.04	4.25 to 5.75	101	70.0 to 130	0.422	20.0
BD16953	Chloride	mg/L	-0.0538	1.00	40.0	72.4	73.2	10.2	9.00 to 11.0	102	80.0 to 120	1.10	20.0
BD16953	Chromium, Dissolved	mg/L	-0.0000572	0.000440	0.100	0.101	0.102	0.102	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BD16953	Chromium, Total	mg/L	-0.0000767	0.000440	0.100	0.100	0.0971	0.0996	0.0850 to 0.115	100	70.0 to 130	2.94	20.0
BD16953	Cobalt, Dissolved	mg/L	-0.0000104	0.000147	0.100	0.106	0.105	0.106	0.0850 to 0.115	106	70.0 to 130	0.948	20.0
BD16953	Cobalt, Total	mg/L	-0.0000086	0.000147	0.100	0.105	0.102	0.104	0.0850 to 0.115	105	70.0 to 130	2.90	20.0
BD16953	Fluoride	mg/L	0.0296	0.125	2.50	2.81	2.78	2.66	2.25 to 2.75	106	80.0 to 120	1.07	20.0
BD16953	Iron, Dissolved	mg/L	0.000944	0.0176	0.2	0.205	0.202	0.204	0.170 to 0.230	102	70.0 to 130	1.47	20.0
BD16953	Iron, Total	mg/L	0.000008	0.0176	0.2	0.221	0.217	0.204	0.170 to 0.230	101	70.0 to 130	1.83	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/5/23 10:25
Customer ID:
Delivery Date: 9/5/23 14:35

Description: Gorgas Ash Pond - MW-44HO Dup

Laboratory ID Number: BD16953

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD16953	Lead, Dissolved	mg/L	0.0000030	0.000147	0.100	0.101	0.103	0.101	0.0850 to 0.115	101	70.0 to 130	1.96	20.0
BD16953	Lead, Total	mg/L	0.0000077	0.000147	0.100	0.103	0.103	0.100	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BD16953	Lithium, Dissolved	mg/L	0.000424	0.0154	0.200	0.247	0.247	0.202	0.170 to 0.230	99.6	70.0 to 130	0.00	20.0
BD16953	Lithium, Total	mg/L	0.00122	0.0154	0.200	0.253	0.248	0.203	0.170 to 0.230	103	70.0 to 130	2.00	20.0
BD16953	Magnesium, Dissolved	mg/L	0.00204	0.0462	5.00	5.60	5.53	5.26	4.25 to 5.75	103	70.0 to 130	1.26	20.0
BD16953	Magnesium, Total	mg/L	-0.00376	0.0462	5.00	5.65	5.63	5.24	4.25 to 5.75	104	70.0 to 130	0.355	20.0
BD16953	Manganese, Dissolved	mg/L	0.0000034	0.00033	0.100	0.105	0.106	0.105	0.0850 to 0.115	102	70.0 to 130	0.948	20.0
BD16953	Manganese, Total	mg/L	0.0000036	0.00033	0.100	0.104	0.102	0.102	0.0850 to 0.115	101	70.0 to 130	1.94	20.0
BD16953	Mercury, Total by CVAA	mg/L	4.000E-05	0.000500	0.004	0.004	0.00405	0.00404	0.00340 to 0.00460	100	70.0 to 130	1.24	20.0
BD16953	Molybdenum, Dissolved	mg/L	0.000726	0.0100	0.2	0.204	0.204	0.201	0.170 to 0.230	102	70.0 to 130	0.00	20.0
BD16953	Molybdenum, Total	mg/L	0.001	0.0100	0.2	0.208	0.208	0.201	0.170 to 0.230	104	70.0 to 130	0.00	20.0
BD16953	Potassium, Dissolved	mg/L	-0.0116	0.367	10.0	11.0	11.1	10.0	8.50 to 11.5	97.7	70.0 to 130	0.905	20.0
BD16953	Potassium, Total	mg/L	-0.0155	0.367	10.0	11.3	11.0	10.2	8.50 to 11.5	99.5	70.0 to 130	2.69	20.0
BD16952	Selenium, Dissolved	mg/L	0.0000802	0.00100	0.100	0.111	0.112	0.106	0.0850 to 0.115	109	70.0 to 130	0.897	20.0
BD16953	Selenium, Total	mg/L	0.0000913	0.00100	0.100	0.0648	0.0609	0.102	0.0850 to 0.115	64.8	70.0 to 130	6.21	20.0
BD16953	Silicon, Dissolved	mg/L	0.000637	0.0440	1.00	6.15	6.15	1.04	0.850 to 1.15	105	70.0 to 130	0.00	20.0
BD16953	Silicon, Total	mg/L	0.000006	0.0440	1.00	6.18	6.20	1.04	0.850 to 1.15	107	70.0 to 130	0.323	20.0
BD16953	Sodium, Dissolved	mg/L	0.00860	0.0880	5.00	210	213	5.10	4.25 to 5.75	-240	70.0 to 130	1.42	20.0
BD16953	Sodium, Total	mg/L	0.00810	0.0880	5.00	221	209	5.21	4.25 to 5.75	-300	70.0 to 130	5.58	20.0
BD16953	Sulfate	mg/L	0.179	2.0	20.0	44.5	44.6	20.7	18.0 to 22.0	95.0	80.0 to 120	0.224	20.0
BD16953	Thallium, Dissolved	mg/L	-0.0000063	0.000147	0.100	0.105	0.107	0.0967	0.0850 to 0.115	105	70.0 to 130	1.89	20.0
BD16953	Thallium, Total	mg/L	-0.0000016	0.000147	0.100	0.107	0.105	0.108	0.0850 to 0.115	107	70.0 to 130	1.89	20.0
BD16953	Total Organic Carbon	mg/L	0.148	1.00	10.0	10.8	11.3	8.80		92.6	80.0 to 120	4.52	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Customer Account: WMWGORAP
Sample Date: 9/5/23 10:25
Customer ID:
Delivery Date: 9/5/23 14:35

Description: Gorgas Ash Pond - MW-44HO Dup

Laboratory ID Number: BD16953

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD16953	Alkalinity	mg CaCO3/L					375	51.1	45.0 to 55.0			0.00	10.0
BD17109	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.05	0.200	2.00	2.24	0.199	1.94	1.80 to 2.20	99.8	90.0 to 110	20.7	15.0
BD16953	Solids, Dissolved	mg/L	1.00	25.0			504	52.0	40.0 to 60.0			1.57	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Definitions

Project Number: WMWGORAP_1425

Abbreviation	Description
DF	Dilution Factor
LCS	Lab Control Sample
LFM	Lab Fortified Matrix
MB	Method Blank
MDL	Method Detection Limit; minimum concentration of an analyte that can be determined with 99% confidence that the concentration is greater than zero.
MS	Matrix Spike
MSD	Matrix Spike Duplicate
Prec	Precision (% RPD)
Q	Qualifier; comment used to note deviations or additional information associated with analytical results.
QC	Quality Control
Rec	Recovery of Matrix Spike
RL	Reporting Limit; lowest concentration at which an analyte can be quantitatively measured.
Vio Spec	Violation Specification; regulatory limit which has been exceeded by the sample analyzed.

Qualifier	Description
A	Bicarbonate alkalinity, carbonate alkalinity, hydroxide alkalinity, free carbon dioxide, and/or total carbon dioxide calculations are estimates due to pH>10SU and/or TDS>500mg/L.
FA	Field results were reviewed by the Water Field Group. Refer to APC Field Case Narrative.
J	Reported value is an estimate because concentration is less than reporting limit.
RA	Matrix spike is invalid due to sample concentration.
U	Compound was analyzed, but not detected.

Alabama Power Lab & Field SERVICES

Chain of Custody Groundwater

APC General Testing Laboratory

☑ Field Complete ☐ Outside Lab

☑ Lab Complete

Lab ETA

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Budd
Collector	Anthony Goggins	Requested By	Greg Budd
		Location	Gorgas Ash Pond

Bottles

1	Metals	500 mL	3	Hg	250 mL	5	TDS/Alkalinity	500 mL	7	N/A	N/A
2	Dissolved Metals	500 mL	4	Nitrite, Nitrate; TOC	250 mL	6	Anions	500 mL	8	N/A	N/A

Comments: Samples relinquished to biology shipping lab 090523 1330

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id	pH Check
FB-1	09/05/2023	08:35	5	Field Blank		BD16950	☑
EB-1	09/05/2023	08:45	5	Equipment Blank		BD16951	☑
MW-44HO	09/05/2023	10:25	6	Groundwater		BD16952	☑
MW-44HO Dup	09/05/2023	10:25	6	Sample Duplicate		BD16953	☑
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Relinquished By	Received By	Date/Time
Digitally signed by Anthony Goggins Date: 2023.09.05 13:32:47 -05'00'	Brooke Caton Digitally signed by Brooke Caton Date: 2023.09.05 14:24:38 -05'00'	09/05/2023 14:24

SmarTroll ID	7586-41446-5-5	Cooler Temp	1.6 °C
Turbidity ID	9830-57039-1-1	Thermometer ID	10614-61208-2-1
Sample Event	1425	pH Strip ID	10853-62410-10-9

Bottles/Pre-Preserved Bottles are provided by the GTL

Total Metals and Alkalinity are not performed on Dissolved Sets

Dissolved Metals and Alkalinity are not performed on blanks i.e. Field Blanks or Equipment Blanks

Alabama Power Lab & Field Services

Chain of Custody Groundwater

APC General Testing Laboratory

☑ Field Complete ☑ Outside Lab

☑ Lab Complete

Lab ETA

Requested Complete Date: Routine

Collector: Anthony Goggins

Results To: Dustin Brooks, Greg Budd

Requested By: Greg Budd

Location: Gorgas Ash Pond

Bottles

1	Radium	1 L	3	N/A	N/A	5	N/A	N/A	7	N/A	N/A
2	N/A	N/A	4	N/A	N/A	6	N/A	N/A	8	N/A	N/A

Comments: MS/MSD collected @ MW-44HO; Samples relinquished to biology shipping lab 090523 1330

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id	pH Check
FB-1	09/05/2023	08:35	1	Field Blank		BD16954	☑
EB-1	09/05/2023	08:45	1	Equipment Blank		BD16955	☑
MW-44HO	09/05/2023	10:25	3	Groundwater		BD16956	☑
MW-44HO Dup	09/05/2023	10:25	1	Sample Duplicate		BD16957	☑
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Relinquished By	Received By	Date/Time
Digitally signed by Anthony Goggins Date: 2023.09.05 13:32:47 -05'00'	Brooke Caton Digitally signed by Brooke Caton Date: 2023.09.05 14:24:55 -05'00'	09/05/2023 14:24

SmarTroll ID: 7586-41446-5-5

Turbidity ID: 9830-57039-1-1

Sample Event: 1425

Cooler Temp: N/A

Thermometer ID: N/A

pH Strip ID: 10853-62410-10-9

Bottles/Pre-Preserved Bottles are provided by the GTL

Total Metals and Alkalinity are not performed on Dissolved Sets

Dissolved Metals and Alkalinity are not performed on blanks i.e. Field Blanks or Equipment Blanks

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

October 30, 2023

Brooke Caton
Alabama Power
744 Highway 87
Calera, AL 35040

RE: Project: WMWGORAP_1423
Pace Project No.: 30626589

Dear Brooke Caton:

Enclosed are the analytical results for sample(s) received by the laboratory on September 29, 2023. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Greensburg

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Skyler C. Richmond
skyler.richmond@pacelabs.com
(724)850-5600
Project Manager

Enclosures

cc: Blaine Denton, Alabama Power
Renee Jernigan, Alabama Power

CERTIFICATIONS

Project: WMWGORAP_1423
Pace Project No.: 30626589

Pace Analytical Services Pennsylvania

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417
ANABISO/IEC 17025:2017 Rad Cert#: L24170
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 2950
Colorado Certification #: PA01547
Connecticut Certification #: PH-0694
EPA Region 4 DW Rad
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas Certification #: E-10358
Kentucky Certification #: KY90133
KY WW Permit #: KY0098221
KY WW Permit #: KY0000221
Louisiana DHH/TNI Certification #: LA010
Louisiana DEQ/TNI Certification #: 04086
Maine Certification #: 2023021
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification #: 9991
Missouri Certification #: 235
Montana Certification #: Cert0082
Nebraska Certification #: NE-OS-29-14
Nevada Certification #: PA014572023-03
New Hampshire/TNI Certification #: 297622
New Jersey/TNI Certification #: PA051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Ohio EPA Rad Approval: #41249
Oregon/TNI Certification #: PA200002-015
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: TN02867
Texas/TNI Certification #: T104704188-22-18
Utah/TNI Certification #: PA014572223-14
USDA Soil Permit #: 525-23-67-77263
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Approve List for Rad

SAMPLE SUMMARY

Project: WMWGORAP_1423
Pace Project No.: 30626589

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30626589001	**BD16846 MW-41HD**	Water	08/30/23 10:53	09/29/23 10:50
30626589002	**BD16847 MW-41HD Dup**	Water	08/30/23 10:53	09/29/23 10:50
30626589003	**BD16848 MW-41 HS**	Water	08/30/23 12:22	09/29/23 10:50
30626589004	**BD16849 FB-1**	Water	08/30/23 13:20	09/29/23 10:50
30626589005	**BD17117 MW-21**	Water	09/05/23 10:24	09/29/23 10:50
30626589006	**BD17118 MW-21V**	Water	09/05/23 12:54	09/29/23 10:50
30626589007	**BD17119 MW-30HA**	Water	09/05/23 15:34	09/29/23 10:50
30626589008	**BD17120 FB-2**	Water	09/05/23 16:30	09/29/23 10:50
30626589009	**BD17121 MW-27HR**	Water	09/06/23 08:52	09/29/23 10:50
30626589010	**BD17122 MW-36V**	Water	09/06/23 11:45	09/29/23 10:50
30626589011	**BD17123 MW-36H**	Water	09/06/23 15:22	09/29/23 10:50
30626589012	**BD17124 MW-6S**	Water	09/05/23 13:17	09/29/23 10:50
30626589013	**BD17125 MW-6S Dup**	Water	09/05/23 13:17	09/29/23 10:50
30626589014	**BD17126 MW-6D**	Water	09/05/23 14:28	09/29/23 10:50
30626589015	**BD17127 MW-23H**	Water	09/06/23 11:15	09/29/23 10:50
30626589016	**BD17128 MW-23V**	Water	09/06/23 12:15	09/29/23 10:50
30626589017	**BD17128 MW-23V MS**	Water	09/06/23 12:15	09/29/23 10:50
30626589018	**BD17128 MW-23V MSD**	Water	09/06/23 12:15	09/29/23 10:50
30626589019	**BD17129 MW-24H**	Water	09/06/23 14:05	09/29/23 10:50
30626589020	**BD17525 MW-17V**	Water	09/11/23 13:10	09/29/23 10:50
30626589021	**BD17526 MW-17**	Water	09/11/23 14:08	09/29/23 10:50
30626589022	**BD17527 PZ-22**	Water	09/11/23 15:10	09/29/23 10:50
30626589023	**BD17528 PZ-22 Dup**	Water	09/11/23 15:10	09/29/23 10:50
30626589024	**BD17529 FB-6**	Water	09/11/23 15:50	09/29/23 10:50
30626589025	**BD17530 MW-28H**	Water	09/11/23 16:45	09/29/23 10:50
30626589026	**BD17530 MW-28H MS**	Water	09/11/23 16:45	09/29/23 10:50
30626589027	**BD17530 MW-28H MSD**	Water	09/11/23 16:45	09/29/23 10:50
30626589028	**BD17531 MW-29H**	Water	09/13/23 10:15	09/29/23 10:50
30626589029	**BD17532 MW-29H Dup**	Water	09/13/23 10:15	09/29/23 10:50
30626589030	**BD17533 MW-32H**	Water	09/13/23 11:45	09/29/23 10:50
30626589031	**BD17534 MW-15**	Water	09/11/23 11:43	09/29/23 10:50
30626589032	**BD17535 MW-15V**	Water	09/11/23 13:11	09/29/23 10:50
30626589033	**BD17536 MW-37HR**	Water	09/11/23 14:55	09/29/23 10:50
30626589034	**BD17537 FB-5**	Water	09/11/23 15:50	09/29/23 10:50
30626589035	**BD17538 MW-16S**	Water	09/12/23 09:46	09/29/23 10:50
30626589036	**BD17538 MW-16S MS**	Water	09/12/23 09:46	09/29/23 10:50
30626589037	**BD17538 MW-16S MSD**	Water	09/12/23 09:46	09/29/23 10:50

SAMPLE SUMMARY

Project: WMWGORAP_1423
Pace Project No.: 30626589

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30626589038	**BD17539 MW-16D**	Water	09/12/23 10:57	09/29/23 10:50
30626589039	**BD17540 PZ-16**	Water	09/12/23 11:56	09/29/23 10:50
30626589040	**BD17541 MW-14R**	Water	09/12/23 13:31	09/29/23 10:50
30626589041	**BD17542 MW-47**	Water	09/12/23 14:32	09/29/23 10:50
30626589042	**BD17543 MW-31H**	Water	09/13/23 10:22	09/29/23 10:50
30626589043	**BD17544 MW-31V**	Water	09/13/23 12:10	09/29/23 10:50
30626589044	**BD17545 MW-01R**	Water	09/13/23 14:26	09/29/23 10:50
30626589045	**BD17546 MW-7**	Water	09/11/23 11:10	09/29/23 10:50
30626589046	**BD17547 MW-6V**	Water	09/11/23 16:22	09/29/23 10:50
30626589047	**BD17548 MW-6V Dis**	Water	09/11/23 16:22	09/29/23 10:50
30626589048	**BD17549 MW-3**	Water	09/12/23 10:10	09/29/23 10:50
30626589049	**BD17550 MW-03V**	Water	09/12/23 12:10	09/29/23 10:50
30626589050	**BD17551 MW-05R**	Water	09/12/23 14:30	09/29/23 10:50
30626589051	**BD17552 MW-12V**	Water	09/13/23 11:27	09/29/23 10:50
30626589052	**BD17553 MW-12**	Water	09/13/23 13:30	09/29/23 10:50
30626589053	**BD17554 MW-09R**	Water	09/13/23 15:25	09/29/23 10:50
30626589054	**BD17555 MW-09R Dup**	Water	09/13/23 15:25	09/29/23 10:50
30626589055	**BD17556 MW-9V**	Water	09/13/23 17:55	09/29/23 10:50
30626589056	**BD17557 FB-4**	Water	09/13/23 18:30	09/29/23 10:50
30626589057	**BD17837 MW-46**	Water	09/18/23 15:58	09/29/23 10:50
30626589058	**BD17838 MW-46 Dup**	Water	09/18/23 15:58	09/29/23 10:50
30626589059	**BD17839 MW-2**	Water	09/18/23 17:10	09/29/23 10:50
30626589060	**BD17840 MW-19**	Water	09/19/23 07:53	09/29/23 10:50
30626589061	**BD17841 MW-18VR**	Water	09/19/23 09:00	09/29/23 10:50
30626589062	**BD17842 MW-43H**	Water	09/19/23 10:39	09/29/23 10:50
30626589063	**BD17843 MW-25HA**	Water	09/18/23 13:52	09/29/23 10:50
30626589064	**BD17844 MW-45V**	Water	09/18/23 15:50	09/29/23 10:50
30626589065	**BD17845 MW-10R**	Water	09/19/23 09:51	09/29/23 10:50
30626589066	**BD17845 MW-10R MS**	Water	09/19/23 09:51	09/29/23 10:50
30626589067	**BD17845 MW-10R MSD**	Water	09/19/23 09:51	09/29/23 10:50
30626589068	**BD17846 MW-13R**	Water	09/19/23 11:02	09/29/23 10:50
30626589069	**BD17847 EB-1**	Water	09/19/23 11:45	09/29/23 10:50
30626589070	**BD17848 MW-40H**	Water	09/18/23 12:04	09/29/23 10:50
30626589071	**BD17849 MW-26H**	Water	09/18/23 14:35	09/29/23 10:50
30626589072	**BD17850 MW-8**	Water	09/18/23 16:22	09/29/23 10:50
30626589073	**BD17851 MW-11R**	Water	09/19/23 12:00	09/29/23 10:50
30626589074	**BD17852 MW-38H**	Water	09/19/23 14:00	09/29/23 10:50

SAMPLE SUMMARY

Project: WMWGORAP_1423
Pace Project No.: 30626589

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30626589075	**BD17853 MW-42H**	Water	09/19/23 15:30	09/29/23 10:50
30626589076	**BD17854 MW-18R**	Water	09/19/23 16:45	09/29/23 10:50
30626589077	**BD17855 FB-3**	Water	09/19/23 17:15	09/29/23 10:50
30626589078	**BD17856 PZ-18R**	Water	09/19/23 17:45	09/29/23 10:50

SAMPLE ANALYTE COUNT

Project: WMWGORAP_1423
Pace Project No.: 30626589

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30626589001	**BD16846 MW-41HD**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30626589002	**BD16847 MW-41HD Dup**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30626589003	**BD16848 MW-41 HS**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30626589004	**BD16849 FB-1**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30626589005	**BD17117 MW-21**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30626589006	**BD17118 MW-21V**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30626589007	**BD17119 MW-30HA**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30626589008	**BD17120 FB-2**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30626589009	**BD17121 MW-27HR**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30626589010	**BD17122 MW-36V**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30626589011	**BD17123 MW-36H**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30626589012	**BD17124 MW-6S**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30626589013	**BD17125 MW-6S Dup**	EPA 9315	SLC	1	PASI-PA

SAMPLE ANALYTE COUNT

Project: WMWGORAP_1423
Pace Project No.: 30626589

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30626589014	**BD17126 MW-6D**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30626589015	**BD17127 MW-23H**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30626589016	**BD17128 MW-23V**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30626589017	**BD17128 MW-23V MS**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
30626589018	**BD17128 MW-23V MSD**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
30626589019	**BD17129 MW-24H**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30626589020	**BD17525 MW-17V**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	ZPC	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30626589021	**BD17526 MW-17**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA
30626589022	**BD17527 PZ-22**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA
30626589023	**BD17528 PZ-22 Dup**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA
30626589024	**BD17529 FB-6**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA
30626589025	**BD17530 MW-28H**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA
30626589026	**BD17530 MW-28H MS**	EPA 9315	SLC	1	PASI-PA

SAMPLE ANALYTE COUNT

Project: WMWGORAP_1423
Pace Project No.: 30626589

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 9320	VAL	1	PASI-PA
30626589027	**BD17530 MW-28H MSD**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
30626589028	**BD17531 MW-29H**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA
30626589029	**BD17532 MW-29H Dup**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA
30626589030	**BD17533 MW-32H**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA
30626589031	**BD17534 MW-15**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA
30626589032	**BD17535 MW-15V**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA
30626589033	**BD17536 MW-37HR**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA
30626589034	**BD17537 FB-5**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA
30626589035	**BD17538 MW-16S**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA
30626589036	**BD17538 MW-16S MS**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
30626589037	**BD17538 MW-16S MSD**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
30626589038	**BD17539 MW-16D**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA
30626589039	**BD17540 PZ-16**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA

SAMPLE ANALYTE COUNT

Project: WMWGORAP_1423
Pace Project No.: 30626589

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30626589040	**BD17541 MW-14R**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA
30626589041	**BD17542 MW-47**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA
30626589042	**BD17543 MW-31H**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA
30626589043	**BD17544 MW-31V**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA
30626589044	**BD17545 MW-01R**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA
30626589045	**BD17546 MW-7**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA
30626589046	**BD17547 MW-6V**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA
30626589047	**BD17548 MW-6V Dis**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA
30626589048	**BD17549 MW-3**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA
30626589049	**BD17550 MW-03V**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA
30626589050	**BD17551 MW-05R**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA
30626589051	**BD17552 MW-12V**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA
30626589052	**BD17553 MW-12**	EPA 9315	SLC	1	PASI-PA

SAMPLE ANALYTE COUNT

Project: WMWGORAP_1423
Pace Project No.: 30626589

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA
30626589053	**BD17554 MW-09R**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA
30626589054	**BD17555 MW-09R Dup**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA
30626589055	**BD17556 MW-9V**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA
30626589056	**BD17557 FB-4**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA
30626589057	**BD17837 MW-46**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA
30626589058	**BD17838 MW-46 Dup**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA
30626589059	**BD17839 MW-2**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA
30626589060	**BD17840 MW-19**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA
30626589061	**BD17841 MW-18VR**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA
30626589062	**BD17842 MW-43H**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA
30626589063	**BD17843 MW-25HA**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA
30626589064	**BD17844 MW-45V**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA

SAMPLE ANALYTE COUNT

Project: WMWGORAP_1423
Pace Project No.: 30626589

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		Total Radium Calculation	LAL	1	PASI-PA
30626589065	**BD17845 MW-10R**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA
30626589066	**BD17845 MW-10R MS**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
30626589067	**BD17845 MW-10R MSD**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
30626589068	**BD17846 MW-13R**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA
30626589069	**BD17847 EB-1**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA
30626589070	**BD17848 MW-40H**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA
30626589071	**BD17849 MW-26H**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA
30626589072	**BD17850 MW-8**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA
30626589073	**BD17851 MW-11R**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA
30626589074	**BD17852 MW-38H**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA
30626589075	**BD17853 MW-42H**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA
30626589076	**BD17854 MW-18R**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA
30626589077	**BD17855 FB-3**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA

SAMPLE ANALYTE COUNT

Project:	WMWGORAP_1423
Pace Project No.:	30626589

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30626589078	**BD17856 PZ-18R**	Total Radium Calculation	LAL	1	PASI-PA
		EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	LAL	1	PASI-PA

PASI-PA = Pace Analytical Services - Greensburg

PROJECT NARRATIVE

Project:	WMWGORAP_1423
Pace Project No.:	30626589

Method: **EPA 9315**
Description: 9315 Total Radium
Client: Alabama Power
Date: October 30, 2023

General Information:
78 samples were analyzed for EPA 9315 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

PROJECT NARRATIVE

Project:	WMWGORAP_1423
Pace Project No.:	30626589

Method: **EPA 9320**
Description: 9320 Radium 228
Client: Alabama Power
Date: October 30, 2023

General Information:
78 samples were analyzed for EPA 9320 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

PROJECT NARRATIVE

Project:	WMWGORAP_1423
Pace Project No.:	30626589

Method: **Total Radium Calculation**
Description: Total Radium 228+226
Client: Alabama Power
Date: October 30, 2023

General Information:
70 samples were analyzed for Total Radium Calculation by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORAP_1423
Pace Project No.: 30626589

Sample: BD16846 MW-41HD **Lab ID: 30626589001** Collected: 08/30/23 10:53 Received: 09/29/23 10:50 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.176U ± 0.227 (0.480)** **C:90% T:NA**	pCi/L	10/24/23 18:33	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.00701U ± 0.324 (0.773)** **C:76% T:75%**	pCi/L	10/17/23 11:11	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.183U ± 0.551 (1.25)**	pCi/L	10/27/23 11:36	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORAP_1423
Pace Project No.: 30626589

Sample: BD16847 MW-41HD Dup **Lab ID: 30626589002** Collected: 08/30/23 10:53 Received: 09/29/23 10:50 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.116U ± 0.259 (0.607)** **C:88% T:NA**	pCi/L	10/24/23 18:35	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.219U ± 0.361 (0.784)** **C:75% T:78%**	pCi/L	10/17/23 11:11	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.335U ± 0.620 (1.39)**	pCi/L	10/27/23 11:36	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORAP_1423
Pace Project No.: 30626589

Sample: BD16848 MW-41 HS **Lab ID: 30626589003** Collected: 08/30/23 12:22 Received: 09/29/23 10:50 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.0622U ± 0.201 (0.494)** **C:88% T:NA**	pCi/L	10/24/23 18:35	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.554U ± 0.389 (0.744)** **C:77% T:79%**	pCi/L	10/17/23 11:12	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.616U ± 0.590 (1.24)**	pCi/L	10/27/23 11:36	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORAP_1423
Pace Project No.: 30626589

Sample: BD16849 FB-1 **Lab ID: 30626589004** Collected: 08/30/23 13:20 Received: 09/29/23 10:50 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.117U ± 0.235 (0.543)** **C:95% T:NA**	pCi/L	10/24/23 18:35	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.244U ± 0.352 (0.757)** **C:82% T:79%**	pCi/L	10/17/23 11:12	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.361U ± 0.587 (1.30)**	pCi/L	10/27/23 11:36	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORAP_1423
Pace Project No.: 30626589

Sample: BD17117 MW-21 **Lab ID: 30626589005** Collected: 09/05/23 10:24 Received: 09/29/23 10:50 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.00258U ± 0.176 (0.476)** **C:95% T:NA**	pCi/L	10/25/23 08:21	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.196U ± 0.325 (0.708)** **C:80% T:80%**	pCi/L	10/17/23 11:12	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.199U ± 0.501 (1.18)**	pCi/L	10/27/23 11:36	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORAP_1423
Pace Project No.: 30626589

Sample: BD17118 MW-21V **Lab ID: 30626589006** Collected: 09/05/23 12:54 Received: 09/29/23 10:50 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.277U ± 0.221 (0.381)** **C:93% T:NA**	pCi/L	10/25/23 08:22	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.583U ± 0.398 (0.752)** **C:77% T:75%**	pCi/L	10/17/23 11:12	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.860U ± 0.619 (1.13)**	pCi/L	10/27/23 11:36	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORAP_1423
Pace Project No.: 30626589

Sample: BD17119 MW-30HA **Lab ID: 30626589007** Collected: 09/05/23 15:34 Received: 09/29/23 10:50 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.193U ± 0.266 (0.581)** **C:92% T:NA**	pCi/L	10/25/23 08:22	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.805U ± 0.453 (0.824)** **C:78% T:78%**	pCi/L	10/17/23 11:12	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.998U ± 0.719 (1.41)**	pCi/L	10/27/23 11:36	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORAP_1423
Pace Project No.: 30626589

Sample: BD17120 FB-2 **Lab ID: 30626589008** Collected: 09/05/23 16:30 Received: 09/29/23 10:50 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.171U ± 0.221 (0.467)** **C:93% T:NA**	pCi/L	10/25/23 08:22	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**-0.202U ± 0.293 (0.746)** **C:75% T:80%**	pCi/L	10/17/23 11:12	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.171U ± 0.514 (1.21)**	pCi/L	10/27/23 11:36	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORAP_1423
Pace Project No.: 30626589

Sample: BD17121 MW-27HR **Lab ID: 30626589009** Collected: 09/06/23 08:52 Received: 09/29/23 10:50 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.116U ± 0.194 (0.434)** **C:85% T:NA**	pCi/L	10/26/23 08:11	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.489U ± 0.406 (0.806)** **C:79% T:70%**	pCi/L	10/17/23 11:12	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.605U ± 0.600 (1.24)**	pCi/L	10/27/23 11:36	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORAP_1423
Pace Project No.: 30626589

Sample: BD17122 MW-36V **Lab ID: 30626589010** Collected: 09/06/23 11:45 Received: 09/29/23 10:50 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.177U ± 0.241 (0.515)** **C:83% T:NA**	pCi/L	10/26/23 08:11	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.340U ± 0.444 (0.945)** **C:72% T:72%**	pCi/L	10/17/23 11:12	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.517U ± 0.685 (1.46)**	pCi/L	10/27/23 11:36	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORAP_1423
Pace Project No.: 30626589

Sample: BD17123 MW-36H **Lab ID: 30626589011** Collected: 09/06/23 15:22 Received: 09/29/23 10:50 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.217U ± 0.246 (0.501)** **C:85% T:NA**	pCi/L	10/26/23 08:11	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.234U ± 0.367 (0.794)** **C:81% T:73%**	pCi/L	10/17/23 11:12	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.451U ± 0.613 (1.30)**	pCi/L	10/27/23 11:36	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORAP_1423
Pace Project No.: 30626589

Sample: BD17124 MW-6S **Lab ID: 30626589012** Collected: 09/05/23 13:17 Received: 09/29/23 10:50 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.382U ± 0.254 (0.387)** **C:88% T:NA**	pCi/L	10/26/23 08:11	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**-0.0214U ± 0.313 (0.741)** **C:86% T:71%**	pCi/L	10/17/23 11:12	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.382U ± 0.567 (1.13)**	pCi/L	10/27/23 11:36	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORAP_1423
Pace Project No.: 30626589

Sample: BD17125 MW-6S Dup **Lab ID: 30626589013** Collected: 09/05/23 13:17 Received: 09/29/23 10:50 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
		Pace Analytical Services - Greensburg				
Radium-226	EPA 9315	**0.545 ± 0.309 (0.464)** **C:92% T:NA**	pCi/L	10/26/23 08:11	13982-63-3	
		Pace Analytical Services - Greensburg				
Radium-228	EPA 9320	**0.890 ± 0.425 (0.700)** **C:80% T:80%**	pCi/L	10/17/23 11:13	15262-20-1	
		Pace Analytical Services - Greensburg				
Total Radium	Total Radium Calculation	**1.44 ± 0.734 (1.16)**	pCi/L	10/27/23 11:36	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORAP_1423
Pace Project No.: 30626589

Sample: BD17126 MW-6D **Lab ID: 30626589014** Collected: 09/05/23 14:28 Received: 09/29/23 10:50 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.108U ± 0.229 (0.535)** **C:74% T:NA**	pCi/L	10/26/23 08:12	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.161U ± 0.319 (0.704)** **C:79% T:81%**	pCi/L	10/17/23 11:13	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.269U ± 0.548 (1.24)**	pCi/L	10/27/23 11:36	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORAP_1423
Pace Project No.: 30626589

Sample: BD17127 MW-23H **Lab ID: 30626589015** Collected: 09/06/23 11:15 Received: 09/29/23 10:50 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**-0.0876U ± 0.116 (0.416)** **C:95% T:NA**	pCi/L	10/26/23 08:12	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.446U ± 0.414 (0.844)** **C:78% T:79%**	pCi/L	10/17/23 11:13	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.446U ± 0.530 (1.26)**	pCi/L	10/27/23 11:36	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORAP_1423
Pace Project No.: 30626589

Sample: BD17128 MW-23V **Lab ID: 30626589016** Collected: 09/06/23 12:15 Received: 09/29/23 10:50 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.0841U ± 0.215 (0.517)** **C:88% T:NA**	pCi/L	10/26/23 08:12	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.534U ± 0.411 (0.804)** **C:81% T:77%**	pCi/L	10/17/23 11:13	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.618U ± 0.626 (1.32)**	pCi/L	10/27/23 11:36	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORAP_1423
Pace Project No.: 30626589

Sample: BD17128 MW-23V MS **Lab ID: 30626589017** Collected: 09/06/23 12:15 Received: 09/29/23 10:50 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**107.75 %REC ± NA (NA)** **C:NA T:NA**	pCi/L	10/26/23 08:12	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**86.81 %REC ± NA (NA)** **C:NA T:NA**	pCi/L	10/17/23 11:13	15262-20-1	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORAP_1423
Pace Project No.: 30626589

Sample: BD17128 MW-23V MSD **Lab ID: 30626589018** Collected: 09/06/23 12:15 Received: 09/29/23 10:50 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**99.29 %REC 8.17RPD ± NA (NA)** **C:NA T:NA**	pCi/L	10/26/23 08:13	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**92.75 %REC 6.61RPD ± NA (NA)** **C:NA T:NA**	pCi/L	10/17/23 11:13	15262-20-1	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORAP_1423
Pace Project No.: 30626589

Sample: BD17129 MW-24H **Lab ID: 30626589019** Collected: 09/06/23 14:05 Received: 09/29/23 10:50 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.556 ± 0.307 (0.459)** **C:94% T:NA**	pCi/L	10/26/23 08:13	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.391U ± 0.333 (0.664)** **C:83% T:84%**	pCi/L	10/17/23 11:14	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.947U ± 0.640 (1.12)**	pCi/L	10/27/23 11:36	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORAP_1423
Pace Project No.: 30626589

Sample: BD17525 MW-17V **Lab ID: 30626589020** Collected: 09/11/23 13:10 Received: 09/29/23 10:50 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.0895U ± 0.192 (0.450)** **C:98% T:NA**	pCi/L	10/26/23 08:13	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.218U ± 0.319 (0.687)** **C:82% T:83%**	pCi/L	10/17/23 11:14	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.308U ± 0.511 (1.14)**	pCi/L	10/27/23 11:36	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORAP_1423
Pace Project No.: 30626589

Sample: BD17526 MW-17 **Lab ID: 30626589021** Collected: 09/11/23 14:08 Received: 09/29/23 10:50 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.149U ± 0.141 (0.272)** **C:90% T:NA**	pCi/L	10/26/23 08:14	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.281U ± 0.369 (0.786)** **C:79% T:79%**	pCi/L	10/17/23 14:40	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.430U ± 0.510 (1.06)**	pCi/L	10/27/23 15:19	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORAP_1423
Pace Project No.: 30626589

Sample: BD17527 PZ-22 **Lab ID: 30626589022** Collected: 09/11/23 15:10 Received: 09/29/23 10:50 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.224U ± 0.180 (0.341)** **C:91% T:NA**	pCi/L	10/26/23 08:14	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.503U ± 0.374 (0.726)** **C:79% T:84%**	pCi/L	10/17/23 14:40	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.727U ± 0.554 (1.07)**	pCi/L	10/27/23 15:19	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORAP_1423
Pace Project No.: 30626589

Sample: BD17528 PZ-22 Dup **Lab ID: 30626589023** Collected: 09/11/23 15:10 Received: 09/29/23 10:50 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.155U ± 0.186 (0.388)** **C:88% T:NA**	pCi/L	10/26/23 08:14	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.369U ± 0.344 (0.694)** **C:82% T:82%**	pCi/L	10/17/23 14:40	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.524U ± 0.530 (1.08)**	pCi/L	10/27/23 15:19	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORAP_1423
Pace Project No.: 30626589

Sample: BD17529 FB-6 **Lab ID: 30626589024** Collected: 09/11/23 15:50 Received: 09/29/23 10:50 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.0412U ± 0.118 (0.292)** **C:88% T:NA**	pCi/L	10/26/23 08:14	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**-0.108U ± 0.344 (0.830)** **C:79% T:79%**	pCi/L	10/17/23 14:39	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.0412U ± 0.462 (1.12)**	pCi/L	10/27/23 15:19	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORAP_1423
Pace Project No.: 30626589

Sample: BD17530 MW-28H **Lab ID: 30626589025** Collected: 09/11/23 16:45 Received: 09/29/23 10:50 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.130U ± 0.172 (0.369)** **C:93% T:NA**	pCi/L	10/26/23 08:14	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.652U ± 0.399 (0.731)** **C:82% T:80%**	pCi/L	10/17/23 14:39	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.755U ± 0.571 (1.10)**	pCi/L	10/27/23 15:19	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORAP_1423
Pace Project No.: 30626589

Sample: BD17530 MW-28H MS **Lab ID: 30626589026** Collected: 09/11/23 16:45 Received: 09/29/23 10:50 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**103.76 %REC ± NA (NA) C:NA T:NA**	pCi/L	10/26/23 08:14	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**99.54 %REC ± NA (NA) C:NA T:NA**	pCi/L	10/17/23 14:40	15262-20-1	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORAP_1423
Pace Project No.: 30626589

Sample: BD17530 MW-28H MSD **Lab ID: 30626589027** Collected: 09/11/23 16:45 Received: 09/29/23 10:50 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**102.80 %REC 0.93RPD ± NA (NA)** **C:NA T:NA**	pCi/L	10/26/23 08:15	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**95.93 %REC 3.7RPD ± NA (NA)** **C:NA T:NA**	pCi/L	10/17/23 14:40	15262-20-1	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORAP_1423
Pace Project No.: 30626589

Sample: BD17531 MW-29H **Lab ID: 30626589028** Collected: 09/13/23 10:15 Received: 09/29/23 10:50 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.182U ± 0.210 (0.439)** **C:94% T:NA**	pCi/L	10/26/23 08:16	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.0413U ± 0.328 (0.762)** **C:78% T:81%**	pCi/L	10/17/23 14:40	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.223U ± 0.538 (1.20)**	pCi/L	10/27/23 15:19	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORAP_1423
Pace Project No.: 30626589

Sample: BD17532 MW-29H Dup **Lab ID: 30626589029** Collected: 09/13/23 10:15 Received: 09/29/23 10:50 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.245U ± 0.205 (0.369)** **C:74% T:NA**	pCi/L	10/26/23 08:17	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**-0.140U ± 0.289 (0.716)** **C:78% T:85%**	pCi/L	10/17/23 14:40	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.245U ± 0.494 (1.09)**	pCi/L	10/27/23 15:19	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project:	WMWGORAP_1423
Pace Project No.:	30626589

Sample: BD17533 MW-32H **Lab ID: 30626589030** Collected: 09/13/23 11:45 Received: 09/29/23 10:50 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.162U ± 0.201 (0.420)** **C:90% T:NA**	pCi/L	10/26/23 08:17	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.529U ± 0.413 (0.816)** **C:79% T:81%**	pCi/L	10/17/23 14:40	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.691U ± 0.614 (1.24)**	pCi/L	10/27/23 15:19	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORAP_1423
Pace Project No.: 30626589

Sample: BD17534 MW-15 **Lab ID: 30626589031** Collected: 09/11/23 11:43 Received: 09/29/23 10:50 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.180U ± 0.155 (0.287)** **C:96% T:NA**	pCi/L	10/26/23 08:17	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.317U ± 0.361 (0.757)** **C:79% T:84%**	pCi/L	10/17/23 14:41	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.497U ± 0.516 (1.04)**	pCi/L	10/27/23 15:19	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORAP_1423
Pace Project No.: 30626589

Sample: BD17535 MW-15V **Lab ID: 30626589032** Collected: 09/11/23 13:11 Received: 09/29/23 10:50 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.183U ± 0.165 (0.306)** **C:86% T:NA**	pCi/L	10/26/23 08:17	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.257U ± 0.361 (0.773)** **C:77% T:82%**	pCi/L	10/17/23 14:41	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.440U ± 0.526 (1.08)**	pCi/L	10/27/23 15:19	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORAP_1423
Pace Project No.: 30626589

Sample: BD17536 MW-37HR **Lab ID: 30626589033** Collected: 09/11/23 14:55 Received: 09/29/23 10:50 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.110U ± 0.136 (0.276)** **C:88% T:NA**	pCi/L	10/26/23 08:18	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.0596U ± 0.319 (0.735)** **C:78% T:84%**	pCi/L	10/17/23 14:41	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.170U ± 0.455 (1.01)**	pCi/L	10/27/23 15:19	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORAP_1423
Pace Project No.: 30626589

Sample: BD17537 FB-5 **Lab ID: 30626589034** Collected: 09/11/23 15:50 Received: 09/29/23 10:50 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.0374U ± 0.124 (0.313)** **C:74% T:NA**	pCi/L	10/26/23 08:18	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**-0.0208U ± 0.305 (0.721)** **C:79% T:86%**	pCi/L	10/17/23 14:42	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.0374U ± 0.429 (1.03)**	pCi/L	10/27/23 15:19	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORAP_1423
Pace Project No.: 30626589

Sample: BD17538 MW-16S **Lab ID: 30626589035** Collected: 09/12/23 09:46 Received: 09/29/23 10:50 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.245U ± 0.167 (0.251)** **C:96% T:NA**	pCi/L	10/27/23 08:30	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.613U ± 0.426 (0.826)** **C:81% T:78%**	pCi/L	10/18/23 14:52	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.858U ± 0.593 (1.08)**	pCi/L	10/27/23 15:21	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORAP_1423
Pace Project No.: 30626589

Sample: BD17538 MW-16S MS **Lab ID: 30626589036** Collected: 09/12/23 09:46 Received: 09/29/23 10:50 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**99.76 %REC ± NA (NA)** **C:NA T:NA**	pCi/L	10/27/23 08:30	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**74.38 %REC ± NA (NA)** **C:NA T:NA**	pCi/L	10/18/23 14:52	15262-20-1	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORAP_1423
Pace Project No.: 30626589

Sample: BD17538 MW-16S MSD **Lab ID: 30626589037** Collected: 09/12/23 09:46 Received: 09/29/23 10:50 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**104.44 %REC 4.58RPD ± NA (NA) C:NA T:NA**	pCi/L	10/27/23 08:31	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**97.38 %REC 26.78RPD ± NA (NA) C:NA T:NA**	pCi/L	10/18/23 14:52	15262-20-1	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORAP_1423
Pace Project No.: 30626589

Sample: BD17539 MW-16D **Lab ID: 30626589038** Collected: 09/12/23 10:57 Received: 09/29/23 10:50 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.206U ± 0.168 (0.290)** **C:95% T:NA**	pCi/L	10/27/23 08:27	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.868U ± 0.482 (0.874)** **C:80% T:79%**	pCi/L	10/17/23 14:42	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.07U ± 0.650 (1.16)**	pCi/L	10/27/23 15:19	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORAP_1423
Pace Project No.: 30626589

Sample: BD17540 PZ-16 **Lab ID: 30626589039** Collected: 09/12/23 11:56 Received: 09/29/23 10:50 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.138U ± 0.139 (0.261)** **C:88% T:NA**	pCi/L	10/27/23 08:28	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.250U ± 0.378 (0.815)** **C:81% T:81%**	pCi/L	10/17/23 14:42	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.388U ± 0.517 (1.08)**	pCi/L	10/27/23 15:19	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORAP_1423
Pace Project No.: 30626589

Sample: BD17541 MW-14R **Lab ID: 30626589040** Collected: 09/12/23 13:31 Received: 09/29/23 10:50 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.0731U ± 0.135 (0.308)** **C:91% T:NA**	pCi/L	10/27/23 08:28	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.272U ± 0.367 (0.783)** **C:82% T:80%**	pCi/L	10/17/23 14:42	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.345U ± 0.502 (1.09)**	pCi/L	10/27/23 15:19	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORAP_1423
Pace Project No.: 30626589

Sample: BD17542 MW-47 **Lab ID: 30626589041** Collected: 09/12/23 14:32 Received: 09/29/23 10:50 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**-0.0539U ± 0.0896 (0.300)** **C:88% T:NA**	pCi/L	10/27/23 08:28	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.193U ± 0.365 (0.802)** **C:83% T:75%**	pCi/L	10/17/23 14:42	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.193U ± 0.455 (1.10)**	pCi/L	10/27/23 15:19	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORAP_1423
Pace Project No.: 30626589

Sample: BD17543 MW-31H **Lab ID: 30626589042** Collected: 09/13/23 10:22 Received: 09/29/23 10:50 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.0165U ± 0.119 (0.313)** **C:88% T:NA**	pCi/L	10/27/23 08:28	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.350U ± 0.368 (0.761)** **C:82% T:79%**	pCi/L	10/17/23 14:42	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.367U ± 0.487 (1.07)**	pCi/L	10/27/23 15:19	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORAP_1423
Pace Project No.: 30626589

Sample: BD17544 MW-31V **Lab ID: 30626589043** Collected: 09/13/23 12:10 Received: 09/29/23 10:50 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.176U ± 0.192 (0.390)** **C:93% T:NA**	pCi/L	10/27/23 08:29	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.0491U ± 0.342 (0.789)** **C:79% T:81%**	pCi/L	10/17/23 14:42	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.225U ± 0.534 (1.18)**	pCi/L	10/27/23 15:19	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORAP_1423
Pace Project No.: 30626589

Sample: BD17545 MW-01R **Lab ID: 30626589044** Collected: 09/13/23 14:26 Received: 09/29/23 10:50 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.0804U ± 0.150 (0.344)** **C:91% T:NA**	pCi/L	10/27/23 08:31	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**-0.00597U ± 0.278 (0.660)** **C:77% T:83%**	pCi/L	10/18/23 14:53	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.0804U ± 0.428 (1.00)**	pCi/L	10/27/23 15:21	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORAP_1423
Pace Project No.: 30626589

Sample: BD17546 MW-7 **Lab ID: 30626589045** Collected: 09/11/23 11:10 Received: 09/29/23 10:50 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.120U ± 0.122 (0.232)** **C:100% T:NA**	pCi/L	10/27/23 08:31	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.435U ± 0.302 (0.565)** **C:79% T:85%**	pCi/L	10/18/23 14:53	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.555U ± 0.424 (0.797)**	pCi/L	10/27/23 15:21	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORAP_1423
Pace Project No.: 30626589

Sample: BD17547 MW-6V **Lab ID: 30626589046** Collected: 09/11/23 16:22 Received: 09/29/23 10:50 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.183U ± 0.164 (0.314)** **C:91% T:NA**	pCi/L	10/27/23 08:31	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.579U ± 0.347 (0.628)** **C:80% T:83%**	pCi/L	10/18/23 14:53	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.762U ± 0.511 (0.942)**	pCi/L	10/27/23 15:21	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORAP_1423
Pace Project No.: 30626589

Sample: BD17548 MW-6V Dis **Lab ID: 30626589047** Collected: 09/11/23 16:22 Received: 09/29/23 10:50 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
		Pace Analytical Services - Greensburg				
Radium-226	EPA 9315	**0.0288U ± 0.109 (0.276)** **C:96% T:NA**	pCi/L	10/27/23 08:32	13982-63-3	
		Pace Analytical Services - Greensburg				
Radium-228	EPA 9320	**0.417U ± 0.417 (0.863)** **C:78% T:84%**	pCi/L	10/18/23 14:53	15262-20-1	
		Pace Analytical Services - Greensburg				
Total Radium	Total Radium Calculation	**0.446U ± 0.526 (1.14)**	pCi/L	10/27/23 15:21	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORAP_1423
Pace Project No.: 30626589

Sample: BD17549 MW-3 **Lab ID: 30626589048** Collected: 09/12/23 10:10 Received: 09/29/23 10:50 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.270U ± 0.204 (0.374)** **C:95% T:NA**	pCi/L	10/27/23 08:34	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.127U ± 0.393 (0.881)** **C:79% T:83%**	pCi/L	10/18/23 14:53	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.397U ± 0.597 (1.26)**	pCi/L	10/27/23 15:21	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORAP_1423
Pace Project No.: 30626589

Sample: BD17550 MW-03V **Lab ID: 30626589049** Collected: 09/12/23 12:10 Received: 09/29/23 10:50 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.0776U ± 0.131 (0.293)** **C:91% T:NA**	pCi/L	10/27/23 08:34	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.489U ± 0.475 (0.983)** **C:79% T:76%**	pCi/L	10/18/23 14:53	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.567U ± 0.606 (1.28)**	pCi/L	10/27/23 15:21	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORAP_1423
Pace Project No.: 30626589

Sample: BD17551 MW-05R **Lab ID: 30626589050** Collected: 09/12/23 14:30 Received: 09/29/23 10:50 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.171U ± 0.158 (0.298)** **C:88% T:NA**	pCi/L	10/27/23 08:34	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.592U ± 0.402 (0.775)** **C:80% T:83%**	pCi/L	10/18/23 14:53	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.763U ± 0.560 (1.07)**	pCi/L	10/27/23 15:21	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORAP_1423
Pace Project No.: 30626589

Sample: BD17552 MW-12V **Lab ID: 30626589051** Collected: 09/13/23 11:27 Received: 09/29/23 10:50 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.275 ± 0.169 (0.259)** **C:93% T:NA**	pCi/L	10/27/23 08:34	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.152U ± 0.283 (0.621)** **C:83% T:84%**	pCi/L	10/18/23 14:53	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.427U ± 0.452 (0.880)**	pCi/L	10/27/23 15:21	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORAP_1423
Pace Project No.: 30626589

Sample: BD17553 MW-12 **Lab ID: 30626589052** Collected: 09/13/23 13:30 Received: 09/29/23 10:50 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.223U ± 0.179 (0.321)** **C:88% T:NA**	pCi/L	10/27/23 08:34	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.272U ± 0.315 (0.661)** **C:81% T:82%**	pCi/L	10/18/23 14:53	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.495U ± 0.494 (0.982)**	pCi/L	10/27/23 15:21	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORAP_1423
Pace Project No.: 30626589

Sample: BD17554 MW-09R **Lab ID: 30626589053** Collected: 09/13/23 15:25 Received: 09/29/23 10:50 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
		Pace Analytical Services - Greensburg				
Radium-226	EPA 9315	**0.0705U ± 0.115 (0.253)** **C:87% T:NA**	pCi/L	10/27/23 08:35	13982-63-3	
		Pace Analytical Services - Greensburg				
Radium-228	EPA 9320	**0.520U ± 0.361 (0.690)** **C:81% T:83%**	pCi/L	10/18/23 14:53	15262-20-1	
		Pace Analytical Services - Greensburg				
Total Radium	Total Radium Calculation	**0.591U ± 0.476 (0.943)**	pCi/L	10/27/23 15:21	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORAP_1423
Pace Project No.: 30626589

Sample: BD17555 MW-09R Dup **Lab ID: 30626589054** Collected: 09/13/23 15:25 Received: 09/29/23 10:50 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.0122U ± 0.102 (0.276)** **C:87% T:NA**	pCi/L	10/27/23 10:04	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**-0.0189U ± 0.349 (0.816)** **C:78% T:79%**	pCi/L	10/18/23 14:53	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.0122U ± 0.451 (1.09)**	pCi/L	10/27/23 15:21	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORAP_1423
Pace Project No.: 30626589

Sample: BD17556 MW-9V **Lab ID: 30626589055** Collected: 09/13/23 17:55 Received: 09/29/23 10:50 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.226U ± 0.188 (0.340)** **C:83% T:NA**	pCi/L	10/27/23 10:04	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.122U ± 0.321 (0.719)** **C:75% T:80%**	pCi/L	10/18/23 14:53	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.348U ± 0.509 (1.06)**	pCi/L	10/27/23 15:21	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORAP_1423
Pace Project No.: 30626589

Sample: BD17557 FB-4 **Lab ID: 30626589056** Collected: 09/13/23 18:30 Received: 09/29/23 10:50 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.0192U ± 0.130 (0.339)** **C:92% T:NA**	pCi/L	10/27/23 10:04	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.546U ± 0.373 (0.710)** **C:82% T:77%**	pCi/L	10/18/23 14:54	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.565U ± 0.503 (1.05)**	pCi/L	10/27/23 15:21	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORAP_1423
Pace Project No.: 30626589

Sample: BD17837 MW-46 **Lab ID: 30626589057** Collected: 09/18/23 15:58 Received: 09/29/23 10:50 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.130U ± 0.198 (0.431)** **C:87% T:NA**	pCi/L	10/27/23 10:05	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.0702U ± 0.328 (0.748)** **C:81% T:83%**	pCi/L	10/18/23 14:54	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.200U ± 0.526 (1.18)**	pCi/L	10/27/23 15:21	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORAP_1423
Pace Project No.: 30626589

Sample: BD17838 MW-46 Dup **Lab ID: 30626589058** Collected: 09/18/23 15:58 Received: 09/29/23 10:50 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**-0.0763U ± 0.178 (0.558) C:62% T:NA**	pCi/L	10/27/23 10:05	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.371U ± 0.465 (0.989) C:78% T:75%**	pCi/L	10/18/23 14:54	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.371U ± 0.643 (1.55)**	pCi/L	10/27/23 15:21	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORAP_1423
Pace Project No.: 30626589

Sample: BD17839 MW-2 **Lab ID: 30626589059** Collected: 09/18/23 17:10 Received: 09/29/23 10:50 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.114U ± 0.160 (0.345)** **C:94% T:NA**	pCi/L	10/27/23 10:05	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.239U ± 0.396 (0.861)** **C:80% T:83%**	pCi/L	10/18/23 14:54	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.353U ± 0.556 (1.21)**	pCi/L	10/27/23 15:21	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORAP_1423
Pace Project No.: 30626589

Sample: BD17840 MW-19 **Lab ID: 30626589060** Collected: 09/19/23 07:53 Received: 09/29/23 10:50 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.255U ± 0.204 (0.359)** **C:86% T:NA**	pCi/L	10/27/23 10:05	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.407U ± 0.450 (0.943)** **C:79% T:80%**	pCi/L	10/18/23 14:54	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.662U ± 0.654 (1.30)**	pCi/L	10/27/23 15:21	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORAP_1423
Pace Project No.: 30626589

Sample: BD17841 MW-18VR **Lab ID: 30626589061** Collected: 09/19/23 09:00 Received: 09/29/23 10:50 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.315U ± 0.236 (0.394)** **C:84% T:NA**	pCi/L	10/27/23 10:06	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.485U ± 0.336 (0.641)** **C:82% T:87%**	pCi/L	10/10/23 14:45	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.800U ± 0.572 (1.04)**	pCi/L	10/27/23 15:23	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORAP_1423
Pace Project No.: 30626589

Sample: BD17842 MW-43H **Lab ID: 30626589062** Collected: 09/19/23 10:39 Received: 09/29/23 10:50 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.113U ± 0.166 (0.355)** **C:86% T:NA**	pCi/L	10/27/23 10:06	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.283U ± 0.230 (0.441)** **C:80% T:87%**	pCi/L	10/10/23 14:45	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.396U ± 0.396 (0.796)**	pCi/L	10/27/23 15:23	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORAP_1423
Pace Project No.: 30626589

Sample: BD17843 MW-25HA **Lab ID: 30626589063** Collected: 09/18/23 13:52 Received: 09/29/23 10:50 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.127U ± 0.234 (0.534)** **C:94% T:NA**	pCi/L	10/27/23 10:06	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.100U ± 0.206 (0.457)** **C:79% T:88%**	pCi/L	10/10/23 14:45	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.227U ± 0.440 (0.991)**	pCi/L	10/27/23 15:23	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORAP_1423
Pace Project No.: 30626589

Sample: BD17844 MW-45V **Lab ID: 30626589064** Collected: 09/18/23 15:50 Received: 09/29/23 10:50 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.395U ± 0.288 (0.500)** **C:86% T:NA**	pCi/L	10/27/23 10:06	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.346U ± 0.394 (0.824)** **C:76% T:72%**	pCi/L	10/10/23 14:45	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.741U ± 0.682 (1.32)**	pCi/L	10/27/23 15:23	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORAP_1423
Pace Project No.: 30626589

Sample: BD17845 MW-10R **Lab ID: 30626589065** Collected: 09/19/23 09:51 Received: 09/29/23 10:50 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.134U ± 0.269 (0.622)** **C:85% T:NA**	pCi/L	10/27/23 10:06	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.141U ± 0.302 (0.669)** **C:73% T:88%**	pCi/L	10/10/23 15:04	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.275U ± 0.571 (1.29)**	pCi/L	10/27/23 15:23	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORAP_1423
Pace Project No.: 30626589

Sample: BD17845 MW-10R MS **Lab ID: 30626589066** Collected: 09/19/23 09:51 Received: 09/29/23 10:50 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**86.18 %REC ± NA (NA)** **C:NA T:NA**	pCi/L	10/27/23 10:07	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**92.24 %REC ± NA (NA)** **C:NA T:NA**	pCi/L	10/10/23 15:05	15262-20-1	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORAP_1423
Pace Project No.: 30626589

Sample: BD17845 MW-10R MSD **Lab ID: 30626589067** Collected: 09/19/23 09:51 Received: 09/29/23 10:50 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
		Pace Analytical Services - Greensburg				
Radium-226	EPA 9315	**98.41 %REC 13.25RPD ± NA (NA) C:NA T:NA**	pCi/L	10/27/23 10:07	13982-63-3	
		Pace Analytical Services - Greensburg				
Radium-228	EPA 9320	**120.03 %REC 26.18RPD ± NA (NA) C:NA T:NA**	pCi/L	10/10/23 15:05	15262-20-1	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORAP_1423
Pace Project No.: 30626589

Sample: BD17846 MW-13R **Lab ID: 30626589068** Collected: 09/19/23 11:02 Received: 09/29/23 10:50 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.237U ± 0.278 (0.578)** **C:77% T:NA**	pCi/L	10/27/23 10:08	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.474U ± 0.353 (0.679)** **C:73% T:84%**	pCi/L	10/10/23 15:10	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.711U ± 0.631 (1.26)**	pCi/L	10/27/23 15:23	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORAP_1423
Pace Project No.: 30626589

Sample: BD17847 EB-1 **Lab ID: 30626589069** Collected: 09/19/23 11:45 Received: 09/29/23 10:50 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**-0.0346U ± 0.0893 (0.330)** **C:91% T:NA**	pCi/L	10/27/23 10:08	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.292U ± 0.321 (0.666)** **C:75% T:84%**	pCi/L	10/10/23 15:10	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.292U ± 0.410 (0.996)**	pCi/L	10/27/23 15:23	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORAP_1423
Pace Project No.: 30626589

Sample: BD17848 MW-40H **Lab ID: 30626589070** Collected: 09/18/23 12:04 Received: 09/29/23 10:50 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.159U ± 0.198 (0.410)** **C:92% T:NA**	pCi/L	10/27/23 10:08	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.725 ± 0.377 (0.642)** **C:72% T:86%**	pCi/L	10/10/23 15:10	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.884U ± 0.575 (1.05)**	pCi/L	10/27/23 15:23	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORAP_1423
Pace Project No.: 30626589

Sample: BD17849 MW-26H **Lab ID: 30626589071** Collected: 09/18/23 14:35 Received: 09/29/23 10:50 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.236U ± 0.203 (0.336)** **C:90% T:NA**	pCi/L	10/27/23 10:35	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.0400U ± 0.302 (0.698)** **C:71% T:93%**	pCi/L	10/10/23 15:10	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.276U ± 0.505 (1.03)**	pCi/L	10/27/23 15:23	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORAP_1423
Pace Project No.: 30626589

Sample: BD17850 MW-8 **Lab ID: 30626589072** Collected: 09/18/23 16:22 Received: 09/29/23 10:50 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.212U ± 0.214 (0.411)** **C:88% T:NA**	pCi/L	10/27/23 10:08	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.528U ± 0.422 (0.840)** **C:73% T:83%**	pCi/L	10/10/23 15:10	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.740U ± 0.636 (1.25)**	pCi/L	10/27/23 15:23	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORAP_1423
Pace Project No.: 30626589

Sample: BD17851 MW-11R **Lab ID: 30626589073** Collected: 09/19/23 12:00 Received: 09/29/23 10:50 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.468U ± 0.321 (0.567)** **C:91% T:NA**	pCi/L	10/27/23 10:09	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.655U ± 0.401 (0.730)** **C:71% T:80%**	pCi/L	10/10/23 15:10	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.12U ± 0.722 (1.30)**	pCi/L	10/27/23 15:23	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project:	WMWGORAP_1423
Pace Project No.:	30626589

Sample: BD17852 MW-38H **Lab ID: 30626589074** Collected: 09/19/23 14:00 Received: 09/29/23 10:50 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.176U ± 0.215 (0.444)** **C:92% T:NA**	pCi/L	10/27/23 10:09	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.949 ± 0.423 (0.668)** **C:72% T:83%**	pCi/L	10/10/23 15:10	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.13 ± 0.638 (1.11)**	pCi/L	10/27/23 15:23	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORAP_1423
Pace Project No.: 30626589

Sample: BD17853 MW-42H **Lab ID: 30626589075** Collected: 09/19/23 15:30 Received: 09/29/23 10:50 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.290U ± 0.267 (0.505)** **C:83% T:NA**	pCi/L	10/27/23 10:09	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.762 ± 0.400 (0.701)** **C:71% T:92%**	pCi/L	10/10/23 15:10	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.05U ± 0.667 (1.21)**	pCi/L	10/27/23 15:23	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project:	WMWGORAP_1423
Pace Project No.:	30626589

Sample: BD17854 MW-18R **Lab ID: 30626589076** Collected: 09/19/23 16:45 Received: 09/29/23 10:50 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**-0.0295U ± 0.159 (0.463)** **C:94% T:NA**	pCi/L	10/27/23 10:10	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.478U ± 0.382 (0.754)** **C:73% T:82%**	pCi/L	10/10/23 15:10	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.478U ± 0.541 (1.22)**	pCi/L	10/27/23 15:23	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORAP_1423
Pace Project No.: 30626589

Sample: BD17855 FB-3 **Lab ID: 30626589077** Collected: 09/19/23 17:15 Received: 09/29/23 10:50 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**-0.0582U ± 0.134 (0.433)** **C:97% T:NA**	pCi/L	10/27/23 10:10	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.152U ± 0.305 (0.673)** **C:77% T:83%**	pCi/L	10/10/23 15:11	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.152U ± 0.439 (1.11)**	pCi/L	10/27/23 15:23	7440-14-4	

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORAP_1423
Pace Project No.: 30626589

Sample: BD17856 PZ-18R **Lab ID: 30626589078** Collected: 09/19/23 17:45 Received: 09/29/23 10:50 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.377U ± 0.260 (0.403)** **C:87% T:NA**	pCi/L	10/27/23 10:10	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.161U ± 0.341 (0.754)** **C:72% T:84%**	pCi/L	10/10/23 15:11	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.538U ± 0.601 (1.16)**	pCi/L	10/27/23 15:23	7440-14-4	

QUALITY CONTROL - RADIOCHEMISTRY

Project: WMWGORAP_1423
Pace Project No.: 30626589

QC Batch:	619425	Analysis Method:	EPA 9315
QC Batch Method:	EPA 9315	Analysis Description:	9315 Total Radium
		Laboratory:	Pace Analytical Services - Greensburg

Associated Lab Samples: 30626589061, 30626589062, 30626589063, 30626589064, 30626589065, 30626589066, 30626589067, 30626589068, 30626589069, 30626589070, 30626589071, 30626589072, 30626589073, 30626589074, 30626589075, 30626589076, 30626589077, 30626589078

METHOD BLANK: 3017636 Matrix: Water

Associated Lab Samples: 30626589061, 30626589062, 30626589063, 30626589064, 30626589065, 30626589066, 30626589067, 30626589068, 30626589069, 30626589070, 30626589071, 30626589072, 30626589073, 30626589074, 30626589075, 30626589076, 30626589077, 30626589078

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	-0.0197 ± 0.0622 (0.187) C:94% T:NA	pCi/L	10/27/23 10:06	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

QUALITY CONTROL - RADIOCHEMISTRY

Project:	WMWGORAP_1423
Pace Project No.:	30626589

QC Batch:	620307	Analysis Method:	EPA 9320
QC Batch Method:	EPA 9320	Analysis Description:	9320 Radium 228
		Laboratory:	Pace Analytical Services - Greensburg

Associated Lab Samples: 30626589061, 30626589062, 30626589063, 30626589064, 30626589065, 30626589066, 30626589067, 30626589068, 30626589069, 30626589070, 30626589071, 30626589072, 30626589073, 30626589074, 30626589075, 30626589076, 30626589077, 30626589078

METHOD BLANK: 3022445 Matrix: Water

Associated Lab Samples: 30626589061, 30626589062, 30626589063, 30626589064, 30626589065, 30626589066, 30626589067, 30626589068, 30626589069, 30626589070, 30626589071, 30626589072, 30626589073, 30626589074, 30626589075, 30626589076, 30626589077, 30626589078

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.410 ± 0.294 (0.559) C:79% T:92%	pCi/L	10/10/23 14:45	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

QUALITY CONTROL - RADIOCHEMISTRY

Project:	WMWGORAP_1423
Pace Project No.:	30626589

QC Batch:	619417	Analysis Method:	EPA 9315
QC Batch Method:	EPA 9315	Analysis Description:	9315 Total Radium
		Laboratory:	Pace Analytical Services - Greensburg

Associated Lab Samples: 30626589001, 30626589002, 30626589003, 30626589004, 30626589005, 30626589006, 30626589007, 30626589008, 30626589009, 30626589010, 30626589011, 30626589012, 30626589013, 30626589014, 30626589015, 30626589016, 30626589017, 30626589018, 30626589019, 30626589020

METHOD BLANK: 3017606 Matrix: Water

Associated Lab Samples: 30626589001, 30626589002, 30626589003, 30626589004, 30626589005, 30626589006, 30626589007, 30626589008, 30626589009, 30626589010, 30626589011, 30626589012, 30626589013, 30626589014, 30626589015, 30626589016, 30626589017, 30626589018, 30626589019, 30626589020

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.0175 ± 0.0842 (0.212) C:92% T:NA	pCi/L	10/25/23 08:21	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

QUALITY CONTROL - RADIOCHEMISTRY

Project: WMWGORAP_1423
Pace Project No.: 30626589

QC Batch: 619421
QC Batch Method: EPA 9315
Analysis Method: EPA 9315
Analysis Description: 9315 Total Radium
Laboratory: Pace Analytical Services - Greensburg

Associated Lab Samples: 30626589021, 30626589022, 30626589023, 30626589024, 30626589025, 30626589026, 30626589027, 30626589028, 30626589029, 30626589030, 30626589031, 30626589032, 30626589033, 30626589034, 30626589038, 30626589039, 30626589040, 30626589041, 30626589042, 30626589043

METHOD BLANK: 3017622
Matrix: Water

Associated Lab Samples: 30626589021, 30626589022, 30626589023, 30626589024, 30626589025, 30626589026, 30626589027, 30626589028, 30626589029, 30626589030, 30626589031, 30626589032, 30626589033, 30626589034, 30626589038, 30626589039, 30626589040, 30626589041, 30626589042, 30626589043

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.0448 ± 0.100 (0.234) C:96% T:NA	pCi/L	10/26/23 08:14	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

QUALITY CONTROL - RADIOCHEMISTRY

Project: WMWGORAP_1423
Pace Project No.: 30626589

QC Batch: 619423
QC Batch Method: EPA 9315
Analysis Method: EPA 9315
Analysis Description: 9315 Total Radium
Laboratory: Pace Analytical Services - Greensburg

Associated Lab Samples: 30626589035, 30626589036, 30626589037, 30626589044, 30626589045, 30626589046, 30626589047, 30626589048, 30626589049, 30626589050, 30626589051, 30626589052, 30626589053, 30626589054, 30626589055, 30626589056, 30626589057, 30626589058, 30626589059, 30626589060

METHOD BLANK: 3017634
Matrix: Water

Associated Lab Samples: 30626589035, 30626589036, 30626589037, 30626589044, 30626589045, 30626589046, 30626589047, 30626589048, 30626589049, 30626589050, 30626589051, 30626589052, 30626589053, 30626589054, 30626589055, 30626589056, 30626589057, 30626589058, 30626589059, 30626589060

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.0492 ± 0.0842 (0.190) C:95% T:NA	pCi/L	10/27/23 08:30	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

QUALITY CONTROL - RADIOCHEMISTRY

Project: WMWGORAP_1423
Pace Project No.: 30626589

QC Batch:	619688	Analysis Method:	EPA 9320
QC Batch Method:	EPA 9320	Analysis Description:	9320 Radium 228
		Laboratory:	Pace Analytical Services - Greensburg

Associated Lab Samples: 30626589001, 30626589002, 30626589003, 30626589004, 30626589005, 30626589006, 30626589007, 30626589008, 30626589009, 30626589010, 30626589011, 30626589012, 30626589013, 30626589014, 30626589015, 30626589016, 30626589017, 30626589018, 30626589019, 30626589020

METHOD BLANK: 3018978 Matrix: Water

Associated Lab Samples: 30626589001, 30626589002, 30626589003, 30626589004, 30626589005, 30626589006, 30626589007, 30626589008, 30626589009, 30626589010, 30626589011, 30626589012, 30626589013, 30626589014, 30626589015, 30626589016, 30626589017, 30626589018, 30626589019, 30626589020

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.110 ± 0.346 (0.783) C:80% T:70%	pCi/L	10/17/23 11:22	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

QUALITY CONTROL - RADIOCHEMISTRY

Project: WMWGORAP_1423
Pace Project No.: 30626589

QC Batch: 619691
QC Batch Method: EPA 9320
Analysis Method: EPA 9320
Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg

Associated Lab Samples: 30626589021, 30626589022, 30626589023, 30626589024, 30626589025, 30626589026, 30626589027, 30626589028, 30626589029, 30626589030, 30626589031, 30626589032, 30626589033, 30626589034, 30626589038, 30626589039, 30626589040, 30626589041, 30626589042, 30626589043

METHOD BLANK: 3018981
Matrix: Water

Associated Lab Samples: 30626589021, 30626589022, 30626589023, 30626589024, 30626589025, 30626589026, 30626589027, 30626589028, 30626589029, 30626589030, 30626589031, 30626589032, 30626589033, 30626589034, 30626589038, 30626589039, 30626589040, 30626589041, 30626589042, 30626589043

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.220 ± 0.340 (0.733) C:87% T:72%	pCi/L	10/17/23 14:40	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

QUALITY CONTROL - RADIOCHEMISTRY

Project:	WMWGORAP_1423
Pace Project No.:	30626589

QC Batch:	619693	Analysis Method:	EPA 9320
QC Batch Method:	EPA 9320	Analysis Description:	9320 Radium 228
		Laboratory:	Pace Analytical Services - Greensburg

Associated Lab Samples: 30626589035, 30626589036, 30626589037, 30626589044, 30626589045, 30626589046, 30626589047, 30626589048, 30626589049, 30626589050, 30626589051, 30626589052, 30626589053, 30626589054, 30626589055, 30626589056, 30626589057, 30626589058, 30626589059, 30626589060

METHOD BLANK: 3018986 Matrix: Water

Associated Lab Samples: 30626589035, 30626589036, 30626589037, 30626589044, 30626589045, 30626589046, 30626589047, 30626589048, 30626589049, 30626589050, 30626589051, 30626589052, 30626589053, 30626589054, 30626589055, 30626589056, 30626589057, 30626589058, 30626589059, 30626589060

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.515 ± 0.403 (0.799) C:81% T:75%	pCi/L	10/18/23 14:52	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

QUALIFIERS

Project: WMWGORAP_1423
Pace Project No.: 30626589

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Act - Activity

Unc - Uncertainty: For Safe Drinking Water Act (SDWA) analyses, the reported Unc. Is the calculated Count Uncertainty (95% confidence interval) using a coverage factor of 1.96. For all other matrices (non-SDWA), the reported Unc. is the calculated Expanded Uncertainty (aka Combined Standard Uncertainty, CSU), reported at the 95% confidence interval using a coverage factor of 1.96.

Gamma Spec: The Unc. reported for all gamma-spectroscopy analyses (EPA 901.1), is the calculated Expanded Uncertainty (CSU) at the 95.4% confidence interval, using a coverage factor of 2.0.

(MDC) - Minimum Detectable Concentration

Trac - Tracer Recovery (%)

Carr - Carrier Recovery (%)

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: WMWGORAP_1423
Pace Project No.: 30626589

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30626589001	**BD16846 MW-41HD**	EPA 9315	619417		
30626589002	**BD16847 MW-41HD Dup**	EPA 9315	619417		
30626589003	**BD16848 MW-41 HS**	EPA 9315	619417		
30626589004	**BD16849 FB-1**	EPA 9315	619417		
30626589005	**BD17117 MW-21**	EPA 9315	619417		
30626589006	**BD17118 MW-21V**	EPA 9315	619417		
30626589007	**BD17119 MW-30HA**	EPA 9315	619417		
30626589008	**BD17120 FB-2**	EPA 9315	619417		
30626589009	**BD17121 MW-27HR**	EPA 9315	619417		
30626589010	**BD17122 MW-36V**	EPA 9315	619417		
30626589011	**BD17123 MW-36H**	EPA 9315	619417		
30626589012	**BD17124 MW-6S**	EPA 9315	619417		
30626589013	**BD17125 MW-6S Dup**	EPA 9315	619417		
30626589014	**BD17126 MW-6D**	EPA 9315	619417		
30626589015	**BD17127 MW-23H**	EPA 9315	619417		
30626589016	**BD17128 MW-23V**	EPA 9315	619417		
30626589017	**BD17128 MW-23V MS**	EPA 9315	619417		
30626589018	**BD17128 MW-23V MSD**	EPA 9315	619417		
30626589019	**BD17129 MW-24H**	EPA 9315	619417		
30626589020	**BD17525 MW-17V**	EPA 9315	619417		
30626589021	**BD17526 MW-17**	EPA 9315	619421		
30626589022	**BD17527 PZ-22**	EPA 9315	619421		
30626589023	**BD17528 PZ-22 Dup**	EPA 9315	619421		
30626589024	**BD17529 FB-6**	EPA 9315	619421		
30626589025	**BD17530 MW-28H**	EPA 9315	619421		
30626589026	**BD17530 MW-28H MS**	EPA 9315	619421		
30626589027	**BD17530 MW-28H MSD**	EPA 9315	619421		
30626589028	**BD17531 MW-29H**	EPA 9315	619421		
30626589029	**BD17532 MW-29H Dup**	EPA 9315	619421		
30626589030	**BD17533 MW-32H**	EPA 9315	619421		
30626589031	**BD17534 MW-15**	EPA 9315	619421		
30626589032	**BD17535 MW-15V**	EPA 9315	619421		
30626589033	**BD17536 MW-37HR**	EPA 9315	619421		
30626589034	**BD17537 FB-5**	EPA 9315	619421		
30626589035	**BD17538 MW-16S**	EPA 9315	619423		
30626589036	**BD17538 MW-16S MS**	EPA 9315	619423		
30626589037	**BD17538 MW-16S MSD**	EPA 9315	619423		
30626589038	**BD17539 MW-16D**	EPA 9315	619421		
30626589039	**BD17540 PZ-16**	EPA 9315	619421		
30626589040	**BD17541 MW-14R**	EPA 9315	619421		
30626589041	**BD17542 MW-47**	EPA 9315	619421		
30626589042	**BD17543 MW-31H**	EPA 9315	619421		
30626589043	**BD17544 MW-31V**	EPA 9315	619421		
30626589044	**BD17545 MW-01R**	EPA 9315	619423		
30626589045	**BD17546 MW-7**	EPA 9315	619423		
30626589046	**BD17547 MW-6V**	EPA 9315	619423		
30626589047	**BD17548 MW-6V Dis**	EPA 9315	619423		

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project:	WMWGORAP_1423
Pace Project No.:	30626589

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30626589048	**BD17549 MW-3**	EPA 9315	619423		
30626589049	**BD17550 MW-03V**	EPA 9315	619423		
30626589050	**BD17551 MW-05R**	EPA 9315	619423		
30626589051	**BD17552 MW-12V**	EPA 9315	619423		
30626589052	**BD17553 MW-12**	EPA 9315	619423		
30626589053	**BD17554 MW-09R**	EPA 9315	619423		
30626589054	**BD17555 MW-09R Dup**	EPA 9315	619423		
30626589055	**BD17556 MW-9V**	EPA 9315	619423		
30626589056	**BD17557 FB-4**	EPA 9315	619423		
30626589057	**BD17837 MW-46**	EPA 9315	619423		
30626589058	**BD17838 MW-46 Dup**	EPA 9315	619423		
30626589059	**BD17839 MW-2**	EPA 9315	619423		
30626589060	**BD17840 MW-19**	EPA 9315	619423		
30626589061	**BD17841 MW-18VR**	EPA 9315	619425		
30626589062	**BD17842 MW-43H**	EPA 9315	619425		
30626589063	**BD17843 MW-25HA**	EPA 9315	619425		
30626589064	**BD17844 MW-45V**	EPA 9315	619425		
30626589065	**BD17845 MW-10R**	EPA 9315	619425		
30626589066	**BD17845 MW-10R MS**	EPA 9315	619425		
30626589067	**BD17845 MW-10R MSD**	EPA 9315	619425		
30626589068	**BD17846 MW-13R**	EPA 9315	619425		
30626589069	**BD17847 EB-1**	EPA 9315	619425		
30626589070	**BD17848 MW-40H**	EPA 9315	619425		
30626589071	**BD17849 MW-26H**	EPA 9315	619425		
30626589072	**BD17850 MW-8**	EPA 9315	619425		
30626589073	**BD17851 MW-11R**	EPA 9315	619425		
30626589074	**BD17852 MW-38H**	EPA 9315	619425		
30626589075	**BD17853 MW-42H**	EPA 9315	619425		
30626589076	**BD17854 MW-18R**	EPA 9315	619425		
30626589077	**BD17855 FB-3**	EPA 9315	619425		
30626589078	**BD17856 PZ-18R**	EPA 9315	619425		
30626589001	**BD16846 MW-41HD**	EPA 9320	619688		
30626589002	**BD16847 MW-41HD Dup**	EPA 9320	619688		
30626589003	**BD16848 MW-41 HS**	EPA 9320	619688		
30626589004	**BD16849 FB-1**	EPA 9320	619688		
30626589005	**BD17117 MW-21**	EPA 9320	619688		
30626589006	**BD17118 MW-21V**	EPA 9320	619688		
30626589007	**BD17119 MW-30HA**	EPA 9320	619688		
30626589008	**BD17120 FB-2**	EPA 9320	619688		
30626589009	**BD17121 MW-27HR**	EPA 9320	619688		
30626589010	**BD17122 MW-36V**	EPA 9320	619688		
30626589011	**BD17123 MW-36H**	EPA 9320	619688		
30626589012	**BD17124 MW-6S**	EPA 9320	619688		
30626589013	**BD17125 MW-6S Dup**	EPA 9320	619688		
30626589014	**BD17126 MW-6D**	EPA 9320	619688		
30626589015	**BD17127 MW-23H**	EPA 9320	619688		
30626589016	**BD17128 MW-23V**	EPA 9320	619688		
30626589017	**BD17128 MW-23V MS**	EPA 9320	619688		

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project:	WMWGORAP_1423
Pace Project No.:	30626589

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30626589018	**BD17128 MW-23V MSD**	EPA 9320	619688		
30626589019	**BD17129 MW-24H**	EPA 9320	619688		
30626589020	**BD17525 MW-17V**	EPA 9320	619688		
30626589021	**BD17526 MW-17**	EPA 9320	619691		
30626589022	**BD17527 PZ-22**	EPA 9320	619691		
30626589023	**BD17528 PZ-22 Dup**	EPA 9320	619691		
30626589024	**BD17529 FB-6**	EPA 9320	619691		
30626589025	**BD17530 MW-28H**	EPA 9320	619691		
30626589026	**BD17530 MW-28H MS**	EPA 9320	619691		
30626589027	**BD17530 MW-28H MSD**	EPA 9320	619691		
30626589028	**BD17531 MW-29H**	EPA 9320	619691		
30626589029	**BD17532 MW-29H Dup**	EPA 9320	619691		
30626589030	**BD17533 MW-32H**	EPA 9320	619691		
30626589031	**BD17534 MW-15**	EPA 9320	619691		
30626589032	**BD17535 MW-15V**	EPA 9320	619691		
30626589033	**BD17536 MW-37HR**	EPA 9320	619691		
30626589034	**BD17537 FB-5**	EPA 9320	619691		
30626589035	**BD17538 MW-16S**	EPA 9320	619693		
30626589036	**BD17538 MW-16S MS**	EPA 9320	619693		
30626589037	**BD17538 MW-16S MSD**	EPA 9320	619693		
30626589038	**BD17539 MW-16D**	EPA 9320	619691		
30626589039	**BD17540 PZ-16**	EPA 9320	619691		
30626589040	**BD17541 MW-14R**	EPA 9320	619691		
30626589041	**BD17542 MW-47**	EPA 9320	619691		
30626589042	**BD17543 MW-31H**	EPA 9320	619691		
30626589043	**BD17544 MW-31V**	EPA 9320	619691		
30626589044	**BD17545 MW-01R**	EPA 9320	619693		
30626589045	**BD17546 MW-7**	EPA 9320	619693		
30626589046	**BD17547 MW-6V**	EPA 9320	619693		
30626589047	**BD17548 MW-6V Dis**	EPA 9320	619693		
30626589048	**BD17549 MW-3**	EPA 9320	619693		
30626589049	**BD17550 MW-03V**	EPA 9320	619693		
30626589050	**BD17551 MW-05R**	EPA 9320	619693		
30626589051	**BD17552 MW-12V**	EPA 9320	619693		
30626589052	**BD17553 MW-12**	EPA 9320	619693		
30626589053	**BD17554 MW-09R**	EPA 9320	619693		
30626589054	**BD17555 MW-09R Dup**	EPA 9320	619693		
30626589055	**BD17556 MW-9V**	EPA 9320	619693		
30626589056	**BD17557 FB-4**	EPA 9320	619693		
30626589057	**BD17837 MW-46**	EPA 9320	619693		
30626589058	**BD17838 MW-46 Dup**	EPA 9320	619693		
30626589059	**BD17839 MW-2**	EPA 9320	619693		
30626589060	**BD17840 MW-19**	EPA 9320	619693		
30626589061	**BD17841 MW-18VR**	EPA 9320	620307		
30626589062	**BD17842 MW-43H**	EPA 9320	620307		
30626589063	**BD17843 MW-25HA**	EPA 9320	620307		

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: WMWGORAP_1423
Pace Project No.: 30626589

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30626589064	**BD17844 MW-45V**	EPA 9320	620307		
30626589065	**BD17845 MW-10R**	EPA 9320	620307		
30626589066	**BD17845 MW-10R MS**	EPA 9320	620307		
30626589067	**BD17845 MW-10R MSD**	EPA 9320	620307		
30626589068	**BD17846 MW-13R**	EPA 9320	620307		
30626589069	**BD17847 EB-1**	EPA 9320	620307		
30626589070	**BD17848 MW-40H**	EPA 9320	620307		
30626589071	**BD17849 MW-26H**	EPA 9320	620307		
30626589072	**BD17850 MW-8**	EPA 9320	620307		
30626589073	**BD17851 MW-11R**	EPA 9320	620307		
30626589074	**BD17852 MW-38H**	EPA 9320	620307		
30626589075	**BD17853 MW-42H**	EPA 9320	620307		
30626589076	**BD17854 MW-18R**	EPA 9320	620307		
30626589077	**BD17855 FB-3**	EPA 9320	620307		
30626589078	**BD17856 PZ-18R**	EPA 9320	620307		
30626589001	**BD16846 MW-41HD**	Total Radium Calculation	625371		
30626589002	**BD16847 MW-41HD Dup**	Total Radium Calculation	625371		
30626589003	**BD16848 MW-41 HS**	Total Radium Calculation	625371		
30626589004	**BD16849 FB-1**	Total Radium Calculation	625371		
30626589005	**BD17117 MW-21**	Total Radium Calculation	625371		
30626589006	**BD17118 MW-21V**	Total Radium Calculation	625371		
30626589007	**BD17119 MW-30HA**	Total Radium Calculation	625371		
30626589008	**BD17120 FB-2**	Total Radium Calculation	625371		
30626589009	**BD17121 MW-27HR**	Total Radium Calculation	625371		
30626589010	**BD17122 MW-36V**	Total Radium Calculation	625371		
30626589011	**BD17123 MW-36H**	Total Radium Calculation	625371		
30626589012	**BD17124 MW-6S**	Total Radium Calculation	625371		
30626589013	**BD17125 MW-6S Dup**	Total Radium Calculation	625371		
30626589014	**BD17126 MW-6D**	Total Radium Calculation	625371		
30626589015	**BD17127 MW-23H**	Total Radium Calculation	625371		
30626589016	**BD17128 MW-23V**	Total Radium Calculation	625371		
30626589019	**BD17129 MW-24H**	Total Radium Calculation	625371		
30626589020	**BD17525 MW-17V**	Total Radium Calculation	625371		
30626589021	**BD17526 MW-17**	Total Radium Calculation	625430		
30626589022	**BD17527 PZ-22**	Total Radium Calculation	625430		
30626589023	**BD17528 PZ-22 Dup**	Total Radium Calculation	625430		
30626589024	**BD17529 FB-6**	Total Radium Calculation	625430		
30626589025	**BD17530 MW-28H**	Total Radium Calculation	625430		
30626589028	**BD17531 MW-29H**	Total Radium Calculation	625430		
30626589029	**BD17532 MW-29H Dup**	Total Radium Calculation	625430		
30626589030	**BD17533 MW-32H**	Total Radium Calculation	625430		
30626589031	**BD17534 MW-15**	Total Radium Calculation	625430		
30626589032	**BD17535 MW-15V**	Total Radium Calculation	625430		
30626589033	**BD17536 MW-37HR**	Total Radium Calculation	625430		
30626589034	**BD17537 FB-5**	Total Radium Calculation	625430		
30626589035	**BD17538 MW-16S**	Total Radium Calculation	625431		
30626589038	**BD17539 MW-16D**	Total Radium Calculation	625430		

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: WMWGORAP_1423
Pace Project No.: 30626589

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30626589039	**BD17540 PZ-16**	Total Radium Calculation	625430		
30626589040	**BD17541 MW-14R**	Total Radium Calculation	625430		
30626589041	**BD17542 MW-47**	Total Radium Calculation	625430		
30626589042	**BD17543 MW-31H**	Total Radium Calculation	625430		
30626589043	**BD17544 MW-31V**	Total Radium Calculation	625430		
30626589044	**BD17545 MW-01R**	Total Radium Calculation	625431		
30626589045	**BD17546 MW-7**	Total Radium Calculation	625431		
30626589046	**BD17547 MW-6V**	Total Radium Calculation	625431		
30626589047	**BD17548 MW-6V Dis**	Total Radium Calculation	625431		
30626589048	**BD17549 MW-3**	Total Radium Calculation	625431		
30626589049	**BD17550 MW-03V**	Total Radium Calculation	625431		
30626589050	**BD17551 MW-05R**	Total Radium Calculation	625431		
30626589051	**BD17552 MW-12V**	Total Radium Calculation	625431		
30626589052	**BD17553 MW-12**	Total Radium Calculation	625431		
30626589053	**BD17554 MW-09R**	Total Radium Calculation	625431		
30626589054	**BD17555 MW-09R Dup**	Total Radium Calculation	625431		
30626589055	**BD17556 MW-9V**	Total Radium Calculation	625431		
30626589056	**BD17557 FB-4**	Total Radium Calculation	625431		
30626589057	**BD17837 MW-46**	Total Radium Calculation	625431		
30626589058	**BD17838 MW-46 Dup**	Total Radium Calculation	625431		
30626589059	**BD17839 MW-2**	Total Radium Calculation	625431		
30626589060	**BD17840 MW-19**	Total Radium Calculation	625431		
30626589061	**BD17841 MW-18VR**	Total Radium Calculation	625432		
30626589062	**BD17842 MW-43H**	Total Radium Calculation	625432		
30626589063	**BD17843 MW-25HA**	Total Radium Calculation	625432		
30626589064	**BD17844 MW-45V**	Total Radium Calculation	625432		
30626589065	**BD17845 MW-10R**	Total Radium Calculation	625432		
30626589068	**BD17846 MW-13R**	Total Radium Calculation	625432		
30626589069	**BD17847 EB-1**	Total Radium Calculation	625432		
30626589070	**BD17848 MW-40H**	Total Radium Calculation	625432		
30626589071	**BD17849 MW-26H**	Total Radium Calculation	625432		
30626589072	**BD17850 MW-8**	Total Radium Calculation	625432		
30626589073	**BD17851 MW-11R**	Total Radium Calculation	625432		
30626589074	**BD17852 MW-38H**	Total Radium Calculation	625432		
30626589075	**BD17853 MW-42H**	Total Radium Calculation	625432		
30626589076	**BD17854 MW-18R**	Total Radium Calculation	625432		
30626589077	**BD17855 FB-3**	Total Radium Calculation	625432		
30626589078	**BD17856 PZ-18R**	Total Radium Calculation	625432		

CHAIN-OF-CUSTODY / Analytical Request Document

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Page : 1 Of 6

Section A
Required Client Information:

Company: Alabama Power Company
Address: 744 Highway 87 GSC Bldg #8
Calera, AL 35040
Email To: tbwill@southernco.com
Phone: 205-664-6101 Fax:
Requested Due Date: Normal

Section B
Required Project Information:

Report To: Brooke Caton
Copy To: Renee Jernigan & Blaine Denton
Purchase Order #: **APC87119-0001**
Project Name: Plant Gorgas Ash Pond
Project Number: WMWGORAP_1423

Section C
Invoice Information:

Attention: Brooke Caton
Company Name: Alabama Power Co.
Address: 744 Highway 87 GSC Bldg #8
Pace Quote: CCR
Pace Project Manager: Skyler Richmond
Pace Profile #: 16788

Regulatory Agency

State / Location
AL

SAMPLE ID
One Character per box.
(A-Z, 0-9 / , -)
Sample Ids must be unique

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	Description	Station Name Location_Code	Site Name Facility_ID	Sample Duplicate	Matrix Spike/Matrix Spike Duplicate	Field Filtered	MATRIX CODE	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	# OF CONTAINERS	Preservatives: Unpreserved	Preservatives: NaOH+ZnAcetate	Preservatives: HNO3			Y/N Analyses Test	EPA 9315	EPA 9320	Total Radium Sum	Total Sulfide	Residual Chlorine (Y/N)	
1	BD16846	MW-41HD	APCO-GS-AP-MW-41HD	APCO_Gorgas_AshPond				GW	G	8/30/2023	10:53	1			X				X	X	X			001
2	BD16847	MW-41HD Dup	APCO-GS-AP-MW-41HD	APCO_Gorgas_AshPond	x			GW	G	8/30/2023	10:53	1			X				X	X	X			002
3	BD16848	MW-41HS	APCO-GS-AP-MW-41HS	APCO_Gorgas_AshPond				GW	G	8/30/2023	12:22	1			X				X	X	X			003
4	BD16849	FB-1	APCO-GS-AP-FB-01	APCO_Gorgas_AshPond				GW	G	8/30/2023	13:20	1			X				X	X	X			004
5	BD17117	MW-21	APCO-GS-AP-MW-21	APCO_Gorgas_AshPond				GW	G	9/5/2023	10:24	1			X				X	X	X			005
6	BD17118	MW-21V	APCO-GS-AP-MW-21V	APCO_Gorgas_AshPond				GW	G	9/5/2023	12:54	1			X				X	X	X			006
7	BD17119	MW-30HA	APCO-GS-AP-MW-30HA	APCO_Gorgas_AshPond				GW	G	9/5/2023	15:34	1			X				X	X	X			007
8	BD17120	FB-2	APCO-GS-AP-FB-02	APCO_Gorgas_AshPond				GW	G	9/5/2023	16:30	1			X				X	X	X			008
9	BD17121	MW-27HR	APCO-GS-AP-MW-27HR	APCO_Gorgas_AshPond				GW	G	9/6/2023	8:52	1			X				X	X	X			009
10	BD17122	MW-36V	APCO-GS-AP-MW-36V	APCO_Gorgas_AshPond				GW	G	9/6/2023	11:45	1			X				X	X	X			010
11	BD17123	MW-36H	APCO-GS-AP-MW-36H	APCO_Gorgas_AshPond				GW	G	9/6/2023	15:22	1			X				X	X	X			011
12	BD17124	MW-6S	APCO-GS-AP-MW-6S	APCO_Gorgas_AshPond				GW	G	9/5/2023	13:17	1			X				X	X	X			012

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS: TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
	Brooke Caton/ APC GTL	9/26/2023	14:44		9/29/23	1050	—	N	Y	Y

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER:
SIGNATURE of SAMPLER:
DATE Signed:

WO#: 30626589
30626589

CHAIN-OF-CUSTODY / Analytical Request Document

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Page : 2 Of 6

Section A
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Address: 744 Highway 87 GSC Bldg #8
Calera, AL 35040
Email To: tbwill@southernco.com
Phone: 205-664-6101 Fax:
Requested Due Date: Normal

Section B
Required Project Information:

Report To: Brooke Caton
Copy To: Renee Jernigan & Blaine Denton
Purchase Order #: **APC87119-0001**
Project Name: Plant Gorgas Ash Pond
Project Number: WMWGORAP_1423

Section C
Invoice Information:

Attention: Brooke Caton
Company Name: Alabama Power Co.
Address: 744 Highway 87 GSC Bldg #8
Pace Quote: CCR
Pace Project Manager: Skyler Richmond
Pace Profile #: 16788

Regulatory Agency

State / Location
AL

SAMPLE ID
One Character per box.
(A-Z, 0-9 / , -)
Sample Ids must be unique

ITEM #	SAMPLE ID	Description	Station Name Location_Code	Site Name Facility_ID	Sample Duplicate	Matrix Spike/Matrix Spike Duplicate	Field Filtered	MATRIX CODE	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	# OF CONTAINERS	Preservatives: Unpreserved	Preservatives: NaOH+ZnAcetate	Preservatives: HNO3	Y/N Analyses Test	EPA 9315	EPA 9320	Total Radium Sum	Total Sulfide	Residual Chlorine (Y/N)	
1	BD17125	MW-6S Dup	APCO-GS-AP-MW-6S	APCO_Gorgas_AshPond	x			GW	G	9/5/2023	13:17	1			X		X	X	X			013
2	BD17126	MW-6D	APCO-GS-AP-MW-6D	APCO_Gorgas_AshPond				GW	G	9/5/2023	14:28	1			X		X	X	X			014
3	BD17127	MW-23H	APCO-GS-AP-MW-23H	APCO_Gorgas_AshPond				GW	G	9/6/2023	11:15	1			X		X	X	X			015
4	BD17128	MW-23V	APCO-GS-AP-MW-23V	APCO_Gorgas_AshPond		x		GW	G	9/6/2023	12:15	3			X		X	X	X			016, 017, 018
5	BD17129	MW-24H	APCO-GS-AP-MW-24H	APCO_Gorgas_AshPond				GW	G	9/6/2023	14:05	1			X		X	X	X			019
6	BD17525	MW-17V	APCO-GS-AP-MW-17V	APCO_Gorgas_AshPond				GW	G	9/11/2023	13:10	1			X		X	X	X			020
7	BD17526	MW-17	APCO-GS-AP-MW-17	APCO_Gorgas_AshPond				GW	G	9/11/2023	14:08	1			X		X	X	X			021
8	BD17527	PZ-22	APCO-GS-AP-PZ-22	APCO_Gorgas_AshPond				GW	G	9/11/2023	15:10	1			X		X	X	X			022
9	BD17528	PZ-22 Dup	APCO-GS-AP-PZ-22	APCO_Gorgas_AshPond	x			GW	G	9/11/2023	15:10	1			X		X	X	X			023
10	BD17529	FB-6	APCO-GS-AP-FB-06	APCO_Gorgas_AshPond				GW	G	9/11/2023	15:50	1			X		X	X	X			024
11	BD17530	MW-28H	APCO-GS-AP-MW-28H	APCO_Gorgas_AshPond		x		GW	G	9/11/2023	16:45	3			X		X	X	X			025, 026, 027
12	BD17531	MW-29H	APCO-GS-AP-MW-29H	APCO_Gorgas_AshPond				GW	G	9/13/2023	10:15	1			X		X	X	X			028

Requested Analysis Filtered (Y/N)

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	Brooke Caton/ APC GTL	9/26/2023	14:44		9/29/23	1050				

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER:
SIGNATURE of SAMPLER:
DATE Signed:

TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

WO#:30626589
PM: SCR Due Date: 10/27/23
CLIENT: ALABAMA PWR

CHAIN-OF-CUSTODY / Analytical Request Document

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Page : 3 **Of** 6

Section A
Required Client Information:

Company:	Alabama Power Company
Address:	744 Highway 87 GSC Bldg #8 Calera, AL 35040
Email To:	tbwill@southernco.com
Phone:	205-664-6101 Fax:
Requested Due Date:	Normal

Section B
Required Project Information:

Report To:	Brooke Caton
Copy To:	Renee Jernigan & Blaine Denton
Purchase Order #:	APC87119-0001
Project Name:	Plant Gorgas Ash Pond
Project Number:	WMWGORAP_1423

Section C
Invoice Information:

Attention:	Brooke Caton
Company Name:	Alabama Power Co.
Address:	744 Highway 87 GSC Bldg #8
Pace Quote:	CCR
Pace Project Manager:	Skyler Richmond
Pace Profile #:	16788

Regulatory Agency

State / Location
AL

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique	Description	Station Name Location_Code	Site Name Facility_ID	Sample Duplicate	Matrix Spike/Matrix Spike Duplicate	Field Filtered	MATRIX CODE	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	# OF CONTAINERS	Preservatives Unpreserved	Preservatives NaOH+ZnAcetate	Preservatives HNO3	Y/N Analyses Test	EPA 9315	EPA 9320	Total Radium Sum	Total Sulfide	Residual Chlorine (Y/N)	
1	BD17532	MW-29H Dup	APCO-GS-AP-MW-29H	APCO_Gorgas_AshPond	x			GW	G	9/13/2023	10:15	1			X		X	X	X			029
2	BD17533	MW-32H	APCO-GS-AP-MW-32H	APCO_Gorgas_AshPond				GW	G	9/13/2023	11:45	1			X		X	X	X			030
3	BD17534	MW-15	APCO-GS-AP-MW-15	APCO_Gorgas_AshPond				GW	G	9/11/2023	11:43	1			X		X	X	X			031
4	BD17535	MW-15V	APCO-GS-AP-MW-15V	APCO_Gorgas_AshPond				GW	G	9/11/2023	13:11	1			X		X	X	X			032
5	BD17536	MW-37HR	APCO-GS-AP-MW-37HR	APCO_Gorgas_AshPond				GW	G	9/11/2023	14:55	1			X		X	X	X			033
6	BD17537	FB-5	APCO-GS-AP-FB-05	APCO_Gorgas_AshPond				GW	G	9/11/2023	15:50	1			X		X	X	X			034
7	BD17538	MW-16S	APCO-GS-AP-MW-16S	APCO_Gorgas_AshPond		x		GW	G	9/12/2023	9:46	3			X		X	X	X			035, 036, 037
8	BD17539	MW-16D	APCO-GS-AP-MW-16D	APCO_Gorgas_AshPond				GW	G	9/12/2023	10:57	1			X		X	X	X			038
9	BD17540	PZ-16	APCO-GS-AP-PZ-16	APCO_Gorgas_AshPond				GW	G	9/12/2023	11:56	1			X		X	X	X			039
10	BD17541	MW-14R	APCO-GS-AP-MW-14R	APCO_Gorgas_AshPond				GW	G	9/12/2023	13:31	1			X		X	X	X			040
11	BD17542	MW-47	APCO-GS-AP-MW-47	APCO_Gorgas_AshPond				GW	G	9/12/2023	14:32	1			X		X	X	X			041
12	BD17543	MW-31H	APCO-GS-AP-MW-31H	APCO_Gorgas_AshPond				GW	G	9/13/2023	10:22	1			X		X	X	X			042

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	Brooke Caton/ APC GTL	9/26/2023	14:44		9/29/23	1050	

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER:

SIGNATURE of SAMPLER:

DATE Signed:

TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

WO#:30626589
PM: SCR Due Date: 10/27/23
CLIENT: ALABAMA PWR

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Calera, AL 35040
Email To: tbwill@southernco.com
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Requested Due Date: Normal

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Required Project Information:

Report To: Brooke Caton
Copy To: Renee Jernigan & Blaine Denton
Purchase Order #: APC87119-0001
Project Name: Plant Gorgas Ash Pond
Project Number: WMWGORAP_1423

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Company Name: Alabama Power Co.
Address: 744 Highway 87 GSC Bldg #8
Pace Quote: CCR
Pace Project Manager: Skyler Richmond
Pace Profile #: 16788

Regulatory Agency:
State / Location: AL

Requested Analysis Filtered (Y/N)

SAMPLE ID
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1	BD17544	MW-31V	APCO-GS-AP-MW-31V	APCO_Gorgas_AshPond				GW	G	9/13/2023	12:10	1			X		X	X	X			043
2	BD17545	MW-01R	APCO-GS-AP-MW-01R	APCO_Gorgas_AshPond				GW	G	9/13/2023	14:26	1			X		X	X	X			044
3	BD17546	MW-7	APCO-GS-AP-MW-7	APCO_Gorgas_AshPond				GW	G	9/11/2023	11:10	1			X		X	X	X			045
4	BD17547	MW-6V	APCO-GS-AP-MW-6V	APCO_Gorgas_AshPond				GW	G	9/11/2023	16:22	1			X		X	X	X			046
5	BD17548	MW-6V Dis	APCO-GS-AP-MW-6V	APCO_Gorgas_AshPond			x	GW	G	9/11/2023	16:22	1			X		X	X	X			047
6	BD17549	MW-3	APCO-GS-AP-MW-3	APCO_Gorgas_AshPond				GW	G	9/12/2023	10:10	1			X		X	X	X			048
7	BD17550	MW-03V	APCO-GS-AP-MW-03V	APCO_Gorgas_AshPond				GW	G	9/12/2023	12:10	1			X		X	X	X			049
8	BD17551	MW-05R	APCO-GS-AP-MW-05R	APCO_Gorgas_AshPond				GW	G	9/12/2023	14:30	1			X		X	X	X			050
9	BD17552	MW-12V	APCO-GS-AP-MW-12V	APCO_Gorgas_AshPond				GW	G	9/13/2023	11:27	1			X		X	X	X			051
10	BD17553	MW-12	APCO-GS-AP-MW-12	APCO_Gorgas_AshPond				GW	G	9/13/2023	13:30	1			X		X	X	X			052
11	BD17554	MW-09R	APCO-GS-AP-MW-09R	APCO_Gorgas_AshPond				GW	G	9/13/2023	15:25	1			X		X	X	X			053
12	BD17555	MW-09R Dup	APCO-GS-AP-MW-09R	APCO_Gorgas_AshPond	x			GW	G	9/13/2023	15:25	1			X		X	X	X			054

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	Brooke Caton/ APC GTL	9/26/2023	14:44		9/29/23	1050	

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER:
SIGNATURE of SAMPLER:
DATE Signed:

TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

WO#: 30626589
PM: SCR Due Date: 10/27/23
CLIENT: ALABAMA PWR

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Purchase Order #:	APC87119-0001
Project Name:	Plant Gorgas Ash Pond
Project Number:	WMWGORAP_1423

Section C
Invoice Information:

Attention:	Brooke Caton
Company Name:	Alabama Power Co.
Address:	744 Highway 87 GSC Bldg #8
Pace Quote:	CCR
Pace Project Manager:	Skyler Richmond
Pace Profile #:	16788

Regulatory Agency
State / Location
AL

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique	Description	Station Name Location_Code	Site Name Facility_ID	Sample Duplicate	Matrix Spike/Matrix Spike Duplicate	Field Filtered	MATRIX CODE	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	# OF CONTAINERS	Preservatives: Unpreserved	Preservatives: NaOH+ZnAcetate	Preservatives: HNO3	Y/N Analyses Test	EPA 9315	EPA 9320	Total Radium Sum	Total Sulfide	Residual Chlorine (Y/N)	
1	BD17556	MW-9V	APCO-GS-AP-MW-9V	APCO_Gorgas_AshPond				GW	G	9/13/2023	17:55	1			X		X	X	X			055
2	BD17557	FB-4	APCO-GS-AP-FB-04	APCO_Gorgas_AshPond				GW	G	9/13/2023	18:30	1			X		X	X	X			056
3	BD17837	MW-46	APCO-GS-AP-MW-46	APCO_Gorgas_AshPond				GW	G	9/18/2023	15:58	1			X		X	X	X			057
4	BD17838	MW-46 Dup	APCO-GS-AP-MW-46	APCO_Gorgas_AshPond	x			GW	G	9/18/2023	15:58	1			X		X	X	X			058
5	BD17839	MW-2	APCO-GS-AP-MW-2	APCO_Gorgas_AshPond				GW	G	9/18/2023	17:10	1			X		X	X	X			059
6	BD17840	MW-19	APCO-GS-AP-MW-19	APCO_Gorgas_AshPond				GW	G	9/19/2023	7:53	1			X		X	X	X			060
7	BD17841	MW-18VR	APCO-GS-AP-MW-18VR	APCO_Gorgas_AshPond				GW	G	9/19/2023	9:00	1			X		X	X	X			061
8	BD17842	MW-43H	APCO-GS-AP-MW-43H	APCO_Gorgas_AshPond				GW	G	9/19/2023	10:39	1			X		X	X	X			062
9	BD17843	MW-25HA	APCO-GS-AP-MW-12V	APCO_Gorgas_AshPond				GW	G	9/18/2023	13:52	1			X		X	X	X			063
10	BD17844	MW-45V	APCO-GS-AP-MW-12	APCO_Gorgas_AshPond				GW	G	9/18/2023	15:50	1			X		X	X	X			064
11	BD17845	MW-10R	APCO-GS-AP-MW-09R	APCO_Gorgas_AshPond		x		GW	G	9/19/2023	9:51	3			X		X	X	X			065, 066, 067
12	BD17846	MW-13R	APCO-GS-AP-MW-09R	APCO_Gorgas_AshPond				GW	G	9/19/2023	11:02	1			X		X	X	X			068

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	Brooke Caton/ APC GTL	9/26/2023	14:44		9/29/23	1050				
							TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER:

SIGNATURE of SAMPLER:

DATE Signed:

WO#:30626589
PM: SCR Due Date: 10/27/23
CLIENT: ALABAMA PWR

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page : 6 Of 6

Section A
Required Client Information:

Company:	Alabama Power Company
Address:	744 Highway 87 GSC Bldg #8 Calera, AL 35040
Email To:	tbwill@southernco.com
Phone:	205-664-6101 Fax:
Requested Due Date:	Normal

Section B
Required Project Information:

Report To:	Brooke Caton
Copy To:	Renee Jernigan & Blaine Denton
Purchase Order #:	APC87119-0001
Project Name:	Plant Gorgas Ash Pond
Project Number:	WMWGORAP_1423

Section C
Invoice Information:

Attention:	Brooke Caton
Company Name:	Alabama Power Co.
Address:	744 Highway 87 GSC Bldg #8
Pace Quote:	CCR
Pace Project Manager:	Skyler Richmond
Pace Profile #:	16788

Regulatory Agency	
State / Location	AL

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique	Description	Station Name Location_Code	Site Name Facility_ID	Sample Duplicate	Matrix Spike/Matrix Spike Duplicate	Field Filtered	MATRIX CODE	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	# OF CONTAINERS	Preservatives: Unpreserved	Preservatives: NaOH+ZnAcetate	Preservatives: HNO3	Y/N Analyses Test	EPA 9315	EPA 9320	Total Radium Sum	Total Sulfide	Residual Chlorine (Y/N)	
1	BD17847	EB-1	APCO-GS-AP-EB-01	APCO_Gorgas_AshPond				GW	G	9/19/2023	11:45	1			X		X	X	X			069
2	BD17848	MW-40H	APCO-GS-AP-MW-40H	APCO_Gorgas_AshPond				GW	G	9/18/2023	12:04	1			X		X	X	X			070
3	BD17849	MW-26H	APCO-GS-AP-MW-26H	APCO_Gorgas_AshPond				GW	G	9/18/2023	14:35	1			X		X	X	X			071
4	BD17850	MW-8	APCO-GS-AP-MW-8	APCO_Gorgas_AshPond				GW	G	9/18/2023	16:22	1			X		X	X	X			072
5	BD17851	MW-11R	APCO-GS-AP-MW-11R	APCO_Gorgas_AshPond				GW	G	9/19/2023	12:00	1			X		X	X	X			073
6	BD17852	MW-38H	APCO-GS-AP-MW-38H	APCO_Gorgas_AshPond				GW	G	9/19/2023	14:00	1			X		X	X	X			074
7	BD17853	MW-42H	APCO-GS-AP-MW-42H	APCO_Gorgas_AshPond				GW	G	9/19/2023	15:30	1			X		X	X	X			075
8	BD17854	MW-18R	APCO-GS-AP-MW-18R	APCO_Gorgas_AshPond				GW	G	9/19/2023	16:45	1			X		X	X	X			076
9	BD17855	FB-3	APCO-GS-AP-FB-03	APCO_Gorgas_AshPond				GW	G	9/18/2023	17:15	1			X		X	X	X			077
10	BD17856	PZ-18R	APCO-GS-AP-PZ-18R	APCO_Gorgas_AshPond				GW	G	9/18/2023	17:45	1			X		X	X	X			078
11																						
12																						

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	Brooke Caton/ APC GTL	9/26/2023	14:44		9/29/23	1056	

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER:

SIGNATURE of SAMPLER:

DATE Signed:

TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

WO#:30626589
PM: SCR Due Date: 10/27/23
CLIENT: ALABAMA PWR

Pace ANALYTICAL SERVICES

DC#_Title: ENV-FRM-GBUR-0088 v06_Sample Condition Upon Receipt-Pittsburgh

Effective Date: 09/20/2023

WO# : 30626589
PM: SCR Due Date: 10/27/23
CLIENT: ALABAMA PWR

Client Name: Alabama Power

Courier: ☑ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace ☐ Other

Tracking Number: 7017 6814 4757 / 7017 6814 4735 / 7017 6814 4746
7017 6814 4768

Custody Seal on Cooler/Box Present: ☑ Yes ☐ No **Seals Intact:** ☑ Yes ☐ No

Thermometer Used: —— **Type of Ice:** Wet Blue [✓ None]

Cooler Temperature: Observed Temp —— °C Correction Factor: —— °C Final Temp: —— °C

Temp should be above freezing to 6°C

	Initial / Date
Examined By:	PS 10/1/23
Labeled By:	PS 10/2/23
Temped By:	——

pH paper Lot#	D.P.D. Residual Chlorine Lot #
1000831	——

Comments:	**Yes**	**No**	**NA**	
Chain of Custody Present	✓			1.
Chain of Custody Filled Out:	✓			2.
-Were client corrections present on COC		✓		
Chain of Custody Relinquished	✓			3.
Sampler Name & Signature on COC:		✓		4.
Sample Labels match COC:	✓			5.
-Includes date/time/ID				
Matrix:	WT			
Samples Arrived within Hold Time:	✓			6.
Short Hold Time Analysis (<72hr remaining):		✓		7.
Rush Turn Around Time Requested:		✓		8.
Sufficient Volume:	✓			9.
Correct Containers Used:	✓			10.
-Pace Containers Used	✓			
Containers Intact:	✓			11.
Orthophosphate field filtered:			✓	12.
Hex Cr Aqueous samples field filtered:			✓	13.
Organic Samples checked for dechlorination			✓	14:
Filtered volume received for dissolved tests:			✓	15:
All containers checked for preservation:	✓			16.
exceptions: VOA, coliform, TOC, O&G, Phenolics, Radon, non-aqueous matrix				pH<2
All containers meet method preservation requirements:	✓			Initial when completed PS Date/Time of Preservation Lot# of added Preservative
8260C/D: Headspace in VOA Vials (> 6mm)			✓	17.
624.1: Headspace in VOA Vials (0mm)			✓	18.
Trip Blank Present:			✓	Trip blank custody seal present? YES or NO
Rad Samples Screened <.05 mrem/hr.	✓			Initial when completed PS Date: 9/29/23 Survey Meter SN: 1563

Comments:

Note: For NC compliance samples with discrepancies, a copy of this form must be sent to the DEHNR Certification office.
PM Review is documented electronically in LIMS through the SRF Review schedule in the Workorder Edit Screen.

Appendix D

GROUNDWATER STATS
CONSULTING

May 25, 2023

Southern Company Services
Attn: Mr. Greg Dyer
3535 Colonnade Parkway
Birmingham, AL 35243

Re: Plant Gorgas Ash Pond
1st Semi-Annual Statistical Analysis – March 2023 Sample Event

Dear Mr. Dyer,

Groundwater Stats Consulting, formerly the statistical consulting division of Sanitas Technologies, is pleased to provide the statistical analysis of groundwater data for the 1st Semi-Annual March 2023 sample event for Alabama Power Company's Plant Gorgas Ash Pond. The analysis complies with the federal rule for the Disposal of Coal Combustion Residuals (CCR) from Electric Utilities (CCR Rule, 2015) as well as with the United States Environmental Protection Agency Unified Guidance (2009).

Sampling began at site for the CCR program in 2016. The monitoring well network, as provided by Southern Company Services, consists of the following:

- **Upgradient wells:** GS-AP-MW-8, GS-AP-MW-13, and GS-AP-MW-17V
- **Downgradient wells:** GS-AP-MW-1R, GS-AP-MW-2, GS-AP-MW-3, GS-AP-MW-3V, GS-AP-MW-5R, GS-AP-MW-6S, GS-AP-MW-6D, GS-AP-MW-7, GSA-AP-MW-9V, GS-AP-MW-9R, GS-AP-MW-10R, GS-AP-MW-11R, GS-AP-MW-12, GS-AP-MW-12V, GS-AP-MW-13R, GS-AP-MW-14R, GS-AP-MW-15, GS-AP-MW-15V, GS-AP-MW-16D, GS-AP-MW-17, GS-AP-MW-18R, GS-AP-MW-18VR, GS-AP-MW-19, GS-AP-MW-21, GS-AP-MW-21V, GS-AP-MW-45V, GS-AP-MW-46, and GS-AP-MW-47
- **Delineation wells:** GS-AP-PZ-16, GS-AP-PZ-18R, GS-AP-PZ-22, GS-AP-MW-23H, GS-AP-MW-23V, GS-AP-MW-24H, GS-AP-MW-25HA, GS-AP-MW-26H, GS-AP-MW-27HR, GS-AP-MW-28H, GS-AP-MW-29H, GS-AP-MW-30HA, GS-AP-MW-31H, GS-AP-MW-31V, GS-AP-MW-32H, GS-AP-MW-33HO,

GS-AP-MW-34HO, GS-AP-MW-35HO, GS-AP-MW-36H, GS-AP-MW-36V, GS-AP-MW-37HR, GS-AP-MW-38H, GS-AP-MW-39H, GS-AP-MW-40HO, GS-AP-MW-41HD, GS-AP-MW-41HS, GS-AP-MW-42H, GS-AP-MW-43HO, GS-AP-MW-44HO, and GS-AP-MW-6V

- **Piezometers:** GS-AP-MW-1, GS-AP-MW-4, GS-AP-MW-7V, GS-AP-MW-7VR, GS-AP-MW-16S, GS-AP-MW-20, GS-AP-MW-25H, GS-AP-MW-27H, GS-AP-MW-30H, and GS-AP-MW-30HS

Note that data from delineation wells were plotted on time series graphs and box plots, but do not require formal statistics. GS-AP-MW-39H did not produce enough water to be sampled during this event. Additionally, the list of piezometers is included above for recordkeeping purposes, but data are not analyzed in this analysis.

New downgradient wells GS-AP-MW-1R, GS-AP-MW-3V, GS-AP-MW-5R, GS-AP-MW-9R, GS-AP-MW-10R, GS-AP-MW-11R, GS-AP-MW-13R, GS-AP-MW-18R, GS-AP-MW-18VR, GS-AP-MW-45V, GS-AP-MW-46, and GS-AP-MW-47 and new delineation wells GS-AP-PZ-18R, GS-AP-MW-23V, GS-AP-MW-27HR, GS-AP-MW-31V, GS-AP-MW-36V, and GS-AP-MW-37HR were installed in late 2021. Data from these wells, along with well GS-AP-MW-3, are plotted on the time series graphs and box plots. Statistical analyses for new downgradient wells are performed for Appendix III constituents when the minimum required 8 samples are available and for Appendix IV constituents when the minimum 4 samples are available.

Upgradient well GS-AP-MW-13 was abandoned in April 2019; however, data from this well is used for constructing interwell statistical limits as historical concentrations represent the groundwater quality upgradient of the facility. Data from this well are plotted on the time series graphs and box plots, but are not yet used for the purpose of constructing statistical limits.

Data were sent electronically to Groundwater Stats Consulting, and the statistical analysis was prepared according to the Statistical Analysis Plan approved by Dr. Kirk Cameron, PhD Statistician with MacStat Consulting, primary author of the USEPA Unified Guidance, and Senior Advisor to Groundwater Stats Consulting. The analysis was reviewed by Kristina Rayner, Founder and Senior Statistician to Groundwater Stats Consulting.

The CCR program consists of the following constituents:

Appendix III (Detection Monitoring) - boron, calcium, chloride, fluoride, pH, sulfate, and TDS

Appendix IV (Assessment Monitoring) - antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, combined radium 226 + 228, fluoride, lead, lithium, mercury, molybdenum, selenium, and thallium

Note that when there are no detections present in downgradient wells for a given constituent, statistical analyses are not required. A list of Appendix IV downgradient well/constituent pairs containing 100% non-detects follows this letter.

Time series plots for Appendix III and IV parameters at all wells are provided for the purpose of screening data at these wells (Figure A). A substitution of the most recent reporting limit is used for non-detect data. Additionally, a separate section of box plots is included for all constituents at upgradient and downgradient wells (Figure B). The time series plots are used to initially screen for suspected outliers and trends, while the box plots provide visual representation of variation within individual wells and between all wells.

In earlier analyses, data at all wells were evaluated for the following: 1) outliers; 2) trends; 3) most appropriate statistical method for Appendix III parameters based on analysis of the spatial variability of groundwater quality data among wells upgradient of the facility; and 4) eligibility of downgradient wells when intrawell statistical methods are recommended. Power curves are provided in this report to demonstrate that the selected statistical methods for Appendix III parameters comply with the USEPA Unified Guidance. The EPA suggests that the selected statistical method should provide at least 55% power at 3 standard deviations or at least 80% power at 4 standard deviations. Power curves are based on the following statistical methods and site/data characteristics:

- Semi-Annual Sampling
- Interwell Prediction Limits with 1-of-2 resample plan
- # Background Samples: 41
- # Constituents: 7
- # Downgradient wells: 11

Summary of Statistical Methods – Appendix III Parameters

Based on the earlier evaluation described above, the following statistical methods were selected:

- Interwell prediction limits, combined with a 1-of-2 resample plan for boron, calcium, chloride, fluoride, pH, sulfate, and TDS

Parametric prediction limits are utilized when the screened historical data follow a normal or transformed-normal distribution. When data cannot be normalized or the majority of data are non-detects, a nonparametric test is utilized. While the annual false positive rate associated with parametric limits is fixed at 10% as recommended by the EPA Unified Guidance (2009), the false positive rate associated with nonparametric limits is not fixed and depends upon the available background sample size, number of future comparisons, and verification resample plan. The distribution of data is tested using the Shapiro-Wilk/Shapiro-Francia test for normality. After testing for normality and performing any adjustments as discussed below (US EPA, 2009), data are analyzed using either parametric or non-parametric prediction limits as appropriate.

- No statistical analyses are required on wells and analytes containing 100% non-detects (USEPA Unified Guidance, 2009, Chapter 6).
- When data contain <15% non-detects, simple substitution of one-half the reporting limit is utilized in the statistical analysis. The reporting limit utilized for non-detects is the most recent practical quantification limit (PQL) as reported by the laboratory.
- When data contain between 15-50% non-detects, the Kaplan-Meier non-detect adjustment is applied to the background data. This technique adjusts the mean and standard deviation of the historical concentrations to account for concentrations below the reporting limit.
- Nonparametric prediction limits are used on data containing greater than 50% non-detects.

Natural systems continuously evolve due to physical changes made to the environment. Examples include capping a landfill, paving areas near a well, or lining a drainage channel to prevent erosion. Periodic updating of background statistical limits is necessary to accommodate these types of changes. In the interwell case, prediction limits are updated with upgradient well data following each sampling event after screening for any new outliers. While not required for this report, in some cases, deselecting the earlier portion of data may be necessary prior to construction of limits so that resulting statistical limits are conservative (lower) from a regulatory perspective and capable of rapidly detecting changes in groundwater quality. Even though the data are excluded from the calculation, the values will continue to be reported and shown in tables and graphs.

Background Update Summary – Conducted in September 2019

Interwell prediction limits, which compare the most recent sample from each downgradient well to statistical limits constructed from pooled upgradient well data, are updated during each sample event. Data from upgradient wells are periodically re-screened for newly developing trends, which may require adjustment of the background period to eliminate the trend, as well as for outliers over the entire record. The formal screening which was last conducted in 2019 is described below. As discussed in the Statistical Analysis Plan (August 2020), interwell prediction limits are used to evaluate boron, calcium, chloride, fluoride, sulfate, pH, and TDS.

Prior to performing prediction limits, proposed background data through April 2019 were reviewed to identify any newly suspected outliers at upgradient wells for boron, calcium, chloride, fluoride, pH, sulfate, and TDS. Both Tukey's Test and visual screening are used to identify potential outliers. When identified, values were flagged with "o" and excluded to reduce variation, better represent background conditions, and provide limits that are conservative from a regulatory perspective. Potential outliers that were identified by Tukey's test but are not greatly different from the rest of the data were not flagged. Also, outliers that are not identified as important by Tukey's test may be identified visually. As mentioned above, flagged data are displayed in a lighter font and as a disconnected symbol on the time series reports, as well as in a lighter font on the accompanying data pages. A summary of Tukey's test results was included with the September 2019 screening.

The Sen's Slope/Mann Kendall trend test was used to evaluate the entire record of data from upgradient wells for all parameters which utilize interwell prediction limits. When statistically significant increasing trends are identified in upgradient wells, the earlier portion of data is deselected prior to construction of interwell statistical limits if the trending data would result in statistical limits that are not conservative from a regulatory perspective. Statistically significant trends were noted in upgradient wells. No adjustments were required, however, because the period of record was short and the magnitudes of the trends were low relative to the average concentrations in background. A summary of the results was included with the September 2019 screening.

Evaluation of Appendix III Parameters – March 2023

Background (upgradient) well data were re-assessed for potential outliers during this analysis and no new values were flagged. Values in background which have been flagged as outliers may be seen in a lighter font and as a disconnected symbol on the graphs. A summary of previously flagged outliers follows this report (Figure C).

Interwell Prediction Limits

Interwell prediction limits combined with a 1-of-2 verification strategy were constructed for boron, calcium, chloride, fluoride, sulfate, pH, and TDS (Figure D). Interwell prediction limits pool upgradient well data through March 2023 to establish a background limit for an individual constituent. The March 2023 sample from each downgradient well is compared to the background limits to determine whether initial exceedances are present.

In the event of an initial exceedance of compliance well data, the 1-of-2 resample plan allows for collection of one additional sample to determine whether the initial exceedance is confirmed. When the resample confirms the initial exceedance, a statistically significant increase (SSI) is identified, and further research is required to identify the cause of the exceedance (i.e., impact from the site, natural variation, or an off-site source). If a resample falls within the statistical limit, the initial exceedance is considered to be a false positive result; therefore, no further action is necessary. A summary of the prediction limit results may be found in the Prediction Limit Summary tables following this letter (pages 12-14). Exceedances for interwell prediction limits were identified for several well/constituent pairs:

- Boron: GS-AP-MW-6D, GS-AP-MW-6S, GS-AP-MW-7, and GS-AP-MW-21
- Calcium: GS-AP-MW-6D and GS-AP-MW-6S
- Chloride: GS-AP-MW-6D, GS-AP-MW-6S, GS-AP-MW-7, GS-AP-MW-15, GS-AP-MW-17, GS-AP-MW-19, and GS-AP-MW-21
- Fluoride: GS-AP-MW-2 and GS-AP-MW-15
- pH: GS-AP-MW-2, GS-AP-MW-12, GS-AP-MW-12V, GS-AP-MW-15, GS-AP-MW-17, GS-AP-MW-19, and GS-AP-MW-21
- Sulfate: GS-AP-MW-6D, GS-AP-MW-6S, GS-AP-MW-7, GS-AP-MW-12, GS-AP-MW-19, and GS-AP-MW-21
- TDS: GS-AP-MW-15, GS-AP-MW-17, and GS-AP-MW-21

Trend Test Evaluation

When prediction limit exceedances are identified in downgradient wells, data are further evaluated using the Sen's Slope/Mann Kendall trend test to determine whether concentrations are statistically increasing, decreasing, or stable at the 99% confidence level (Figure E). Upgradient wells are included in the trend analyses for all parameters found to exceed their prediction limit in downgradient wells to identify whether similar patterns exist upgradient of the site. The existence of similar trends in both upgradient and downgradient wells is an indication of natural variability in groundwater that is unrelated to practices at the site. A summary of the trend test results follows this letter (pages 15 and 16). Statistically significant trends were identified for the following well/constituent pairs:

Increasing:

- Boron: GS-AP-MW-6D and GS-AP-MW-7
- Calcium: GS-AP-MW-6D
- Chloride: GS-AP-MW-6D, GS-AP-MW-7, GS-AP-MW-8 (upgradient) and GS-AP-MW-21
- Fluoride: GS-AP-MW-13 (upgradient)
- pH: GS-AP-MW-2, GS-AP-MW-12, and GS-AP-MW-15
- Sulfate: GS-AP-MW-12 and GS-AP-MW-21
- TDS: GS-AP-MW-21

Decreasing:

- Boron: GS-AP-MW-6S
- Chloride: GS-AP-MW-19
- Fluoride: GS-AP-MW-2
- pH: GS-AP-MW-19
- Sulfate: GS-AP-MW-6S

As mentioned above, upgradient well GS-AP-MW-13 has been abandoned since 2019 but is included as a reference for historic upgradient concentrations.

Evaluation of Appendix IV Parameters – March 2023

Data from upgradient wells for Appendix IV parameters were assessed for outliers during previous analyses. A summary of flagged outliers follows this report (Figure C).

In accordance with Alabama Department of Environmental Management (ADEM), the Groundwater Protections Standards (GWPS) were updated during the 2021 2nd semi-annual statistical analysis. The GWPS will be updated again during the 2023 2nd semi-annual statistical analysis. The methodology used to create these GWPS is described below.

Interwell Upper Tolerance Limits

First, background limits were determined using upper tolerance limits (UTLs) constructed from pooled upgradient well data through August 2021. The tolerance limits contain a known fraction (coverage) of the background population with a known level of confidence. The tolerance limits contain a known fraction (coverage) of the background population with a known level of confidence. As requested by ADEM to eliminate variation among upgradient well data, nonparametric tolerance limits, which use the highest value in background as the statistical limit, were constructed (Figure F). A summary of the upper tolerance limits follows this report (page 17). The confidence and coverage levels for nonparametric tolerance limits are dependent upon the number of background samples.

Groundwater Protection Standards

These background limits were then compared to the Maximum Contaminant Levels (MCLs) for each parameter, and the higher of the two was used as the GWPS (Figure G, page 18) in the confidence interval comparisons described below.

Confidence Intervals

Confidence intervals were then constructed on downgradient wells using a maximum of the most recent 8 samples through February 2023 for each of the Appendix IV parameters. Confidence intervals were included for newer wells with a minimum of 4 samples (Figure I). These intervals were constructed as either parametric or nonparametric confidence intervals depending on the data distribution and percentage of non-detects. When data followed a normal or transformed-normal distribution, parametric confidence intervals were used for Appendix IV parameters. Nonparametric confidence intervals were constructed when data did not follow a normal or transformed-normal distribution or when there were greater than 50% non-detects. The lower confidence limit, which is constructed with 99% confidence for parametric confidence intervals, is compared to the GWPS prepared as described above. The confidence level associated with nonparametric confidence intervals is dependent upon the number samples available.

As mentioned above, well/constituent pairs containing 100% non-detects for the most recent 8 samples did not require statistics; therefore, they were deselected prior to construction of confidence intervals. A list of those deselected well/constituent pairs follows this report. Each confidence interval was compared with the corresponding GWPS. Only when the entire confidence interval is above the GWPS is the well/constituent pair considered to exceed its respective standard. Both a tabular summary and graphical presentation of the confidence interval results follow this letter (pages 19-21). Exceedances were noted for the following well/constituent pairs:

Arsenic:	GS-AP-MW-6D and GS-AP-MW-7
Lithium:	GS-AP-MW-6D, GS-AP-MW-7, GS-AP-MW-15, and GS-AP-MW-21
Molybdenum:	GS-AP-MW-7

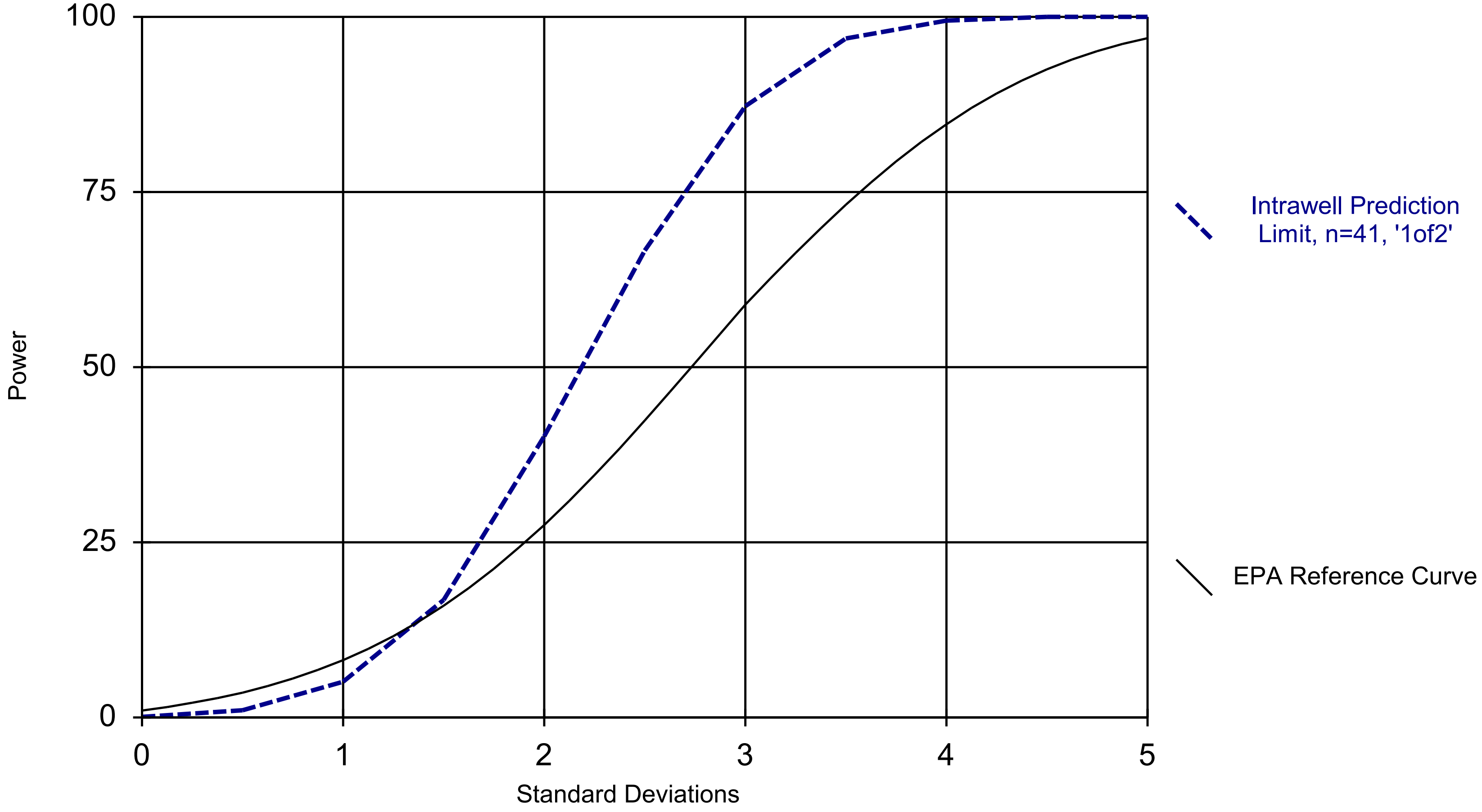
Thank you for the opportunity to assist you in the statistical analysis of groundwater quality for Gorgas Ash Pond. If you have any questions or comments, please feel free to contact us.

For Groundwater Stats Consulting,

A Collins
Andrew Collins
Project Manager

Kristina Rayner
Kristina Rayner
Senior Statistician

Interwell Power Curve



Kappa = 2.093, based on 11 compliance wells and 7 constituents, evaluated semi-annually (this report reflects annual total).

Analysis Run 5/23/2023 4:46 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

100% Non-Detects: Appendix IV Downgradient

Analysis Run 5/23/2023 4:43 PM View: Appendix IV - Confidence Intervals
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Antimony (mg/L)
GS-AP-MW-16D, GS-AP-MW-17, GS-AP-MW-19, GS-AP-MW-2, GS-AP-MW-21, GS-AP-MW-3, GS-AP-MW-6D, GS-AP-MW-7, GS-AP-MW-9V

Beryllium (mg/L)
GS-AP-MW-12, GS-AP-MW-12V, GS-AP-MW-15, GS-AP-MW-15V, GS-AP-MW-16D, GS-AP-MW-17, GS-AP-MW-19, GS-AP-MW-2, GS-AP-MW-21, GS-AP-MW-21V, GS-AP-MW-3, GS-AP-MW-6D, GS-AP-MW-7, GS-AP-MW-9V

Cadmium (mg/L)
GS-AP-MW-12, GS-AP-MW-12V, GS-AP-MW-15, GS-AP-MW-15V, GS-AP-MW-16D, GS-AP-MW-17, GS-AP-MW-19, GS-AP-MW-2, GS-AP-MW-21, GS-AP-MW-21V, GS-AP-MW-3, GS-AP-MW-6D, GS-AP-MW-7, GS-AP-MW-9V

Cobalt (mg/L)
GS-AP-MW-12, GS-AP-MW-15V, GS-AP-MW-19, GS-AP-MW-2, GS-AP-MW-21, GS-AP-MW-21V, GS-AP-MW-3, GS-AP-MW-6D, GS-AP-MW-9V

Lead (mg/L)
GS-AP-MW-12, GS-AP-MW-15V, GS-AP-MW-19, GS-AP-MW-2, GS-AP-MW-21, GS-AP-MW-21V, GS-AP-MW-3, GS-AP-MW-9V

Mercury (mg/L)
GS-AP-MW-12, GS-AP-MW-12V, GS-AP-MW-15, GS-AP-MW-15V, GS-AP-MW-16D, GS-AP-MW-17, GS-AP-MW-19, GS-AP-MW-2, GS-AP-MW-21, GS-AP-MW-21V, GS-AP-MW-3, GS-AP-MW-6D, GS-AP-MW-7, GS-AP-MW-9V

Selenium (mg/L)
GS-AP-MW-12, GS-AP-MW-12V, GS-AP-MW-15, GS-AP-MW-15V, GS-AP-MW-16D, GS-AP-MW-17, GS-AP-MW-19, GS-AP-MW-2, GS-AP-MW-21, GS-AP-MW-21V, GS-AP-MW-3, GS-AP-MW-6D, GS-AP-MW-7, GS-AP-MW-9V

Thallium (mg/L)
GS-AP-MW-12, GS-AP-MW-12V, GS-AP-MW-15, GS-AP-MW-15V, GS-AP-MW-16D, GS-AP-MW-17, GS-AP-MW-19, GS-AP-MW-2, GS-AP-MW-21, GS-AP-MW-21V, GS-AP-MW-3, GS-AP-MW-6D, GS-AP-MW-7, GS-AP-MW-9V

Appendix III Interwell Prediction Limits - Significant Results

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond Printed 5/23/2023, 4:31 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	**GS-AP-MW-21**	**0.1015**	**n/a**	**3/21/2023**	**0.13**	**Yes**	**41**	**n/a**	**n/a**	**75.61**	**n/a**	**n/a**	**0.001065**	**NP Inter (NDs) 1 of 2**
Boron (mg/L)	**GS-AP-MW-6D**	**0.1015**	**n/a**	**3/14/2023**	**1.32**	**Yes**	**41**	**n/a**	**n/a**	**75.61**	**n/a**	**n/a**	**0.001065**	**NP Inter (NDs) 1 of 2**
Boron (mg/L)	**GS-AP-MW-6S**	**0.1015**	**n/a**	**3/14/2023**	**0.935**	**Yes**	**41**	**n/a**	**n/a**	**75.61**	**n/a**	**n/a**	**0.001065**	**NP Inter (NDs) 1 of 2**
Boron (mg/L)	**GS-AP-MW-7**	**0.1015**	**n/a**	**3/14/2023**	**1.64**	**Yes**	**41**	**n/a**	**n/a**	**75.61**	**n/a**	**n/a**	**0.001065**	**NP Inter (NDs) 1 of 2**
Calcium (mg/L)	**GS-AP-MW-6D**	**48.1**	**n/a**	**3/14/2023**	**52.4**	**Yes**	**41**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.001065**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**GS-AP-MW-6S**	**48.1**	**n/a**	**3/14/2023**	**50.9**	**Yes**	**41**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.001065**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	**GS-AP-MW-15**	**4.354**	**n/a**	**3/20/2023**	**5.41**	**Yes**	**41**	**3.392**	**0.4601**	**0**	**None**	**No**	**0.0006839**	**Param Inter 1 of 2**
Chloride (mg/L)	**GS-AP-MW-17**	**4.354**	**n/a**	**3/22/2023**	**5.96**	**Yes**	**41**	**3.392**	**0.4601**	**0**	**None**	**No**	**0.0006839**	**Param Inter 1 of 2**
Chloride (mg/L)	**GS-AP-MW-19**	**4.354**	**n/a**	**3/21/2023**	**5.22**	**Yes**	**41**	**3.392**	**0.4601**	**0**	**None**	**No**	**0.0006839**	**Param Inter 1 of 2**
Chloride (mg/L)	**GS-AP-MW-21**	**4.354**	**n/a**	**3/21/2023**	**38.5**	**Yes**	**41**	**3.392**	**0.4601**	**0**	**None**	**No**	**0.0006839**	**Param Inter 1 of 2**
Chloride (mg/L)	**GS-AP-MW-6D**	**4.354**	**n/a**	**3/14/2023**	**9.66**	**Yes**	**41**	**3.392**	**0.4601**	**0**	**None**	**No**	**0.0006839**	**Param Inter 1 of 2**
Chloride (mg/L)	**GS-AP-MW-6S**	**4.354**	**n/a**	**3/14/2023**	**18.5**	**Yes**	**41**	**3.392**	**0.4601**	**0**	**None**	**No**	**0.0006839**	**Param Inter 1 of 2**
Chloride (mg/L)	**GS-AP-MW-7**	**4.354**	**n/a**	**3/14/2023**	**7.98**	**Yes**	**41**	**3.392**	**0.4601**	**0**	**None**	**No**	**0.0006839**	**Param Inter 1 of 2**
Fluoride (mg/L)	**GS-AP-MW-15**	**0.2808**	**n/a**	**3/20/2023**	**0.333**	**Yes**	**43**	**0.1417**	**0.06675**	**0**	**None**	**No**	**0.0006839**	**Param Inter 1 of 2**
Fluoride (mg/L)	**GS-AP-MW-2**	**0.2808**	**n/a**	**3/22/2023**	**0.72**	**Yes**	**43**	**0.1417**	**0.06675**	**0**	**None**	**No**	**0.0006839**	**Param Inter 1 of 2**
pH (SU)	**GS-AP-MW-12**	**7.76**	**5.02**	**3/22/2023**	**8.15**	**Yes**	**43**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.00198**	**NP Inter (normality) 1 of 2**
pH (SU)	**GS-AP-MW-12V**	**7.76**	**5.02**	**3/22/2023**	**9**	**Yes**	**43**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.00198**	**NP Inter (normality) 1 of 2**
pH (SU)	**GS-AP-MW-15**	**7.76**	**5.02**	**3/20/2023**	**11.26**	**Yes**	**43**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.00198**	**NP Inter (normality) 1 of 2**
pH (SU)	**GS-AP-MW-17**	**7.76**	**5.02**	**3/22/2023**	**8.56**	**Yes**	**43**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.00198**	**NP Inter (normality) 1 of 2**
pH (SU)	**GS-AP-MW-19**	**7.76**	**5.02**	**3/21/2023**	**7.85**	**Yes**	**43**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.00198**	**NP Inter (normality) 1 of 2**
pH (SU)	**GS-AP-MW-2**	**7.76**	**5.02**	**3/22/2023**	**9.27**	**Yes**	**43**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.00198**	**NP Inter (normality) 1 of 2**
pH (SU)	**GS-AP-MW-21**	**7.76**	**5.02**	**3/21/2023**	**9.56**	**Yes**	**43**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.00198**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**GS-AP-MW-12**	**15.2**	**n/a**	**3/22/2023**	**18.3**	**Yes**	**41**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.001065**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**GS-AP-MW-19**	**15.2**	**n/a**	**3/21/2023**	**16.4**	**Yes**	**41**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.001065**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**GS-AP-MW-21**	**15.2**	**n/a**	**3/21/2023**	**238**	**Yes**	**41**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.001065**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**GS-AP-MW-6D**	**15.2**	**n/a**	**3/14/2023**	**57.5**	**Yes**	**41**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.001065**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**GS-AP-MW-6S**	**15.2**	**n/a**	**3/14/2023**	**96.1**	**Yes**	**41**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.001065**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**GS-AP-MW-7**	**15.2**	**n/a**	**3/14/2023**	**130**	**Yes**	**41**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.001065**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	**GS-AP-MW-15**	**368**	**n/a**	**3/20/2023**	**444**	**Yes**	**41**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.001065**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	**GS-AP-MW-17**	**368**	**n/a**	**3/22/2023**	**441**	**Yes**	**41**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.001065**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	**GS-AP-MW-21**	**368**	**n/a**	**3/21/2023**	**606**	**Yes**	**41**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.001065**	**NP Inter (normality) 1 of 2**

Appendix III Interwell Prediction Limits - All Results

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond Printed 5/23/2023, 4:31 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	GS-AP-MW-12	0.1015	n/a	3/22/2023	0.1015ND	No	41	n/a	n/a	75.61	n/a	n/a	0.001065	NP Inter (NDs) 1 of 2
Boron (mg/L)	GS-AP-MW-12V	0.1015	n/a	3/22/2023	0.1015ND	No	41	n/a	n/a	75.61	n/a	n/a	0.001065	NP Inter (NDs) 1 of 2
Boron (mg/L)	GS-AP-MW-15	0.1015	n/a	3/20/2023	0.0308J	No	41	n/a	n/a	75.61	n/a	n/a	0.001065	NP Inter (NDs) 1 of 2
Boron (mg/L)	GS-AP-MW-16D	0.1015	n/a	3/21/2023	0.1015ND	No	41	n/a	n/a	75.61	n/a	n/a	0.001065	NP Inter (NDs) 1 of 2
Boron (mg/L)	GS-AP-MW-17	0.1015	n/a	3/22/2023	0.0727J	No	41	n/a	n/a	75.61	n/a	n/a	0.001065	NP Inter (NDs) 1 of 2
Boron (mg/L)	GS-AP-MW-19	0.1015	n/a	3/21/2023	0.0334J	No	41	n/a	n/a	75.61	n/a	n/a	0.001065	NP Inter (NDs) 1 of 2
Boron (mg/L)	GS-AP-MW-2	0.1015	n/a	3/22/2023	0.0989J	No	41	n/a	n/a	75.61	n/a	n/a	0.001065	NP Inter (NDs) 1 of 2
Boron (mg/L)	**GS-AP-MW-21**	**0.1015**	**n/a**	**3/21/2023**	**0.13**	**Yes**	**41**	**n/a**	**n/a**	**75.61**	**n/a**	**n/a**	**0.001065**	**NP Inter (NDs) 1 of 2**
Boron (mg/L)	**GS-AP-MW-6D**	**0.1015**	**n/a**	**3/14/2023**	**1.32**	**Yes**	**41**	**n/a**	**n/a**	**75.61**	**n/a**	**n/a**	**0.001065**	**NP Inter (NDs) 1 of 2**
Boron (mg/L)	**GS-AP-MW-6S**	**0.1015**	**n/a**	**3/14/2023**	**0.935**	**Yes**	**41**	**n/a**	**n/a**	**75.61**	**n/a**	**n/a**	**0.001065**	**NP Inter (NDs) 1 of 2**
Boron (mg/L)	**GS-AP-MW-7**	**0.1015**	**n/a**	**3/14/2023**	**1.64**	**Yes**	**41**	**n/a**	**n/a**	**75.61**	**n/a**	**n/a**	**0.001065**	**NP Inter (NDs) 1 of 2**
Calcium (mg/L)	GS-AP-MW-12	48.1	n/a	3/22/2023	36.4	No	41	n/a	n/a	0	n/a	n/a	0.001065	NP Inter (normality) 1 of 2
Calcium (mg/L)	GS-AP-MW-12V	48.1	n/a	3/22/2023	38	No	41	n/a	n/a	0	n/a	n/a	0.001065	NP Inter (normality) 1 of 2
Calcium (mg/L)	GS-AP-MW-15	48.1	n/a	3/20/2023	6.6	No	41	n/a	n/a	0	n/a	n/a	0.001065	NP Inter (normality) 1 of 2
Calcium (mg/L)	GS-AP-MW-16D	48.1	n/a	3/21/2023	32	No	41	n/a	n/a	0	n/a	n/a	0.001065	NP Inter (normality) 1 of 2
Calcium (mg/L)	GS-AP-MW-17	48.1	n/a	3/22/2023	2.07	No	41	n/a	n/a	0	n/a	n/a	0.001065	NP Inter (normality) 1 of 2
Calcium (mg/L)	GS-AP-MW-19	48.1	n/a	3/21/2023	46.9	No	41	n/a	n/a	0	n/a	n/a	0.001065	NP Inter (normality) 1 of 2
Calcium (mg/L)	GS-AP-MW-2	48.1	n/a	3/22/2023	0.4J	No	41	n/a	n/a	0	n/a	n/a	0.001065	NP Inter (normality) 1 of 2
Calcium (mg/L)	GS-AP-MW-21	48.1	n/a	3/21/2023	2.74	No	41	n/a	n/a	0	n/a	n/a	0.001065	NP Inter (normality) 1 of 2
Calcium (mg/L)	**GS-AP-MW-6D**	**48.1**	**n/a**	**3/14/2023**	**52.4**	**Yes**	**41**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.001065**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**GS-AP-MW-6S**	**48.1**	**n/a**	**3/14/2023**	**50.9**	**Yes**	**41**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.001065**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	GS-AP-MW-7	48.1	n/a	3/14/2023	11	No	41	n/a	n/a	0	n/a	n/a	0.001065	NP Inter (normality) 1 of 2
Chloride (mg/L)	GS-AP-MW-12	4.354	n/a	3/22/2023	2.73	No	41	3.392	0.4601	0	None	No	0.0006839	Param Inter 1 of 2
Chloride (mg/L)	GS-AP-MW-12V	4.354	n/a	3/22/2023	3.77	No	41	3.392	0.4601	0	None	No	0.0006839	Param Inter 1 of 2
Chloride (mg/L)	**GS-AP-MW-15**	**4.354**	**n/a**	**3/20/2023**	**5.41**	**Yes**	**41**	**3.392**	**0.4601**	**0**	**None**	**No**	**0.0006839**	**Param Inter 1 of 2**
Chloride (mg/L)	GS-AP-MW-16D	4.354	n/a	3/21/2023	3.72	No	41	3.392	0.4601	0	None	No	0.0006839	Param Inter 1 of 2
Chloride (mg/L)	**GS-AP-MW-17**	**4.354**	**n/a**	**3/22/2023**	**5.96**	**Yes**	**41**	**3.392**	**0.4601**	**0**	**None**	**No**	**0.0006839**	**Param Inter 1 of 2**
Chloride (mg/L)	**GS-AP-MW-19**	**4.354**	**n/a**	**3/21/2023**	**5.22**	**Yes**	**41**	**3.392**	**0.4601**	**0**	**None**	**No**	**0.0006839**	**Param Inter 1 of 2**
Chloride (mg/L)	GS-AP-MW-2	4.354	n/a	3/22/2023	4.23	No	41	3.392	0.4601	0	None	No	0.0006839	Param Inter 1 of 2
Chloride (mg/L)	**GS-AP-MW-21**	**4.354**	**n/a**	**3/21/2023**	**38.5**	**Yes**	**41**	**3.392**	**0.4601**	**0**	**None**	**No**	**0.0006839**	**Param Inter 1 of 2**
Chloride (mg/L)	**GS-AP-MW-6D**	**4.354**	**n/a**	**3/14/2023**	**9.66**	**Yes**	**41**	**3.392**	**0.4601**	**0**	**None**	**No**	**0.0006839**	**Param Inter 1 of 2**
Chloride (mg/L)	**GS-AP-MW-6S**	**4.354**	**n/a**	**3/14/2023**	**18.5**	**Yes**	**41**	**3.392**	**0.4601**	**0**	**None**	**No**	**0.0006839**	**Param Inter 1 of 2**
Chloride (mg/L)	**GS-AP-MW-7**	**4.354**	**n/a**	**3/14/2023**	**7.98**	**Yes**	**41**	**3.392**	**0.4601**	**0**	**None**	**No**	**0.0006839**	**Param Inter 1 of 2**
Fluoride (mg/L)	GS-AP-MW-12	0.2808	n/a	3/22/2023	0.0941J	No	43	0.1417	0.06675	0	None	No	0.0006839	Param Inter 1 of 2
Fluoride (mg/L)	GS-AP-MW-12V	0.2808	n/a	3/22/2023	0.138	No	43	0.1417	0.06675	0	None	No	0.0006839	Param Inter 1 of 2
Fluoride (mg/L)	**GS-AP-MW-15**	**0.2808**	**n/a**	**3/20/2023**	**0.333**	**Yes**	**43**	**0.1417**	**0.06675**	**0**	**None**	**No**	**0.0006839**	**Param Inter 1 of 2**
Fluoride (mg/L)	GS-AP-MW-16D	0.2808	n/a	3/21/2023	0.0849J	No	43	0.1417	0.06675	0	None	No	0.0006839	Param Inter 1 of 2
Fluoride (mg/L)	GS-AP-MW-17	0.2808	n/a	3/22/2023	0.183	No	43	0.1417	0.06675	0	None	No	0.0006839	Param Inter 1 of 2
Fluoride (mg/L)	GS-AP-MW-19	0.2808	n/a	3/21/2023	0.24	No	43	0.1417	0.06675	0	None	No	0.0006839	Param Inter 1 of 2
Fluoride (mg/L)	**GS-AP-MW-2**	**0.2808**	**n/a**	**3/22/2023**	**0.72**	**Yes**	**43**	**0.1417**	**0.06675**	**0**	**None**	**No**	**0.0006839**	**Param Inter 1 of 2**
Fluoride (mg/L)	GS-AP-MW-21	0.2808	n/a	3/21/2023	0.194	No	43	0.1417	0.06675	0	None	No	0.0006839	Param Inter 1 of 2
Fluoride (mg/L)	GS-AP-MW-6D	0.2808	n/a	3/14/2023	0.122J	No	43	0.1417	0.06675	0	None	No	0.0006839	Param Inter 1 of 2
Fluoride (mg/L)	GS-AP-MW-6S	0.2808	n/a	3/14/2023	0.153	No	43	0.1417	0.06675	0	None	No	0.0006839	Param Inter 1 of 2
Fluoride (mg/L)	GS-AP-MW-7	0.2808	n/a	3/14/2023	0.177	No	43	0.1417	0.06675	0	None	No	0.0006839	Param Inter 1 of 2
pH (SU)	**GS-AP-MW-12**	**7.76**	**5.02**	**3/22/2023**	**8.15**	**Yes**	**43**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.00198**	**NP Inter (normality) 1 of 2**
pH (SU)	**GS-AP-MW-12V**	**7.76**	**5.02**	**3/22/2023**	**9**	**Yes**	**43**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.00198**	**NP Inter (normality) 1 of 2**
pH (SU)	**GS-AP-MW-15**	**7.76**	**5.02**	**3/20/2023**	**11.26**	**Yes**	**43**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.00198**	**NP Inter (normality) 1 of 2**
pH (SU)	GS-AP-MW-16D	7.76	5.02	3/21/2023	7.51	No	43	n/a	n/a	0	n/a	n/a	0.00198	NP Inter (normality) 1 of 2
pH (SU)	**GS-AP-MW-17**	**7.76**	**5.02**	**3/22/2023**	**8.56**	**Yes**	**43**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.00198**	**NP Inter (normality) 1 of 2**
pH (SU)	**GS-AP-MW-19**	**7.76**	**5.02**	**3/21/2023**	**7.85**	**Yes**	**43**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.00198**	**NP Inter (normality) 1 of 2**
pH (SU)	**GS-AP-MW-2**	**7.76**	**5.02**	**3/22/2023**	**9.27**	**Yes**	**43**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.00198**	**NP Inter (normality) 1 of 2**
pH (SU)	**GS-AP-MW-21**	**7.76**	**5.02**	**3/21/2023**	**9.56**	**Yes**	**43**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.00198**	**NP Inter (normality) 1 of 2**
pH (SU)	GS-AP-MW-6D	7.76	5.02	3/14/2023	7.33	No	43	n/a	n/a	0	n/a	n/a	0.00198	NP Inter (normality) 1 of 2
pH (SU)	GS-AP-MW-6S	7.76	5.02	3/14/2023	7.04	No	43	n/a	n/a	0	n/a	n/a	0.00198	NP Inter (normality) 1 of 2
pH (SU)	GS-AP-MW-7	7.76	5.02	3/14/2023	7.67	No	43	n/a	n/a	0	n/a	n/a	0.00198	NP Inter (normality) 1 of 2

Appendix III Interwell Prediction Limits - All Results

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond Printed 5/23/2023, 4:31 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Sulfate (mg/L)	**GS-AP-MW-12**	**15.2**	**n/a**	**3/22/2023**	**18.3**	**Yes**	**41**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.001065**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	GS-AP-MW-12V	15.2	n/a	3/22/2023	1.52J	No	41	n/a	n/a	0	n/a	n/a	0.001065	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GS-AP-MW-15	15.2	n/a	3/20/2023	6.57	No	41	n/a	n/a	0	n/a	n/a	0.001065	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GS-AP-MW-16D	15.2	n/a	3/21/2023	14.7	No	41	n/a	n/a	0	n/a	n/a	0.001065	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GS-AP-MW-17	15.2	n/a	3/22/2023	7	No	41	n/a	n/a	0	n/a	n/a	0.001065	NP Inter (normality) 1 of 2
Sulfate (mg/L)	**GS-AP-MW-19**	**15.2**	**n/a**	**3/21/2023**	**16.4**	**Yes**	**41**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.001065**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	GS-AP-MW-2	15.2	n/a	3/22/2023	8.17	No	41	n/a	n/a	0	n/a	n/a	0.001065	NP Inter (normality) 1 of 2
Sulfate (mg/L)	**GS-AP-MW-21**	**15.2**	**n/a**	**3/21/2023**	**238**	**Yes**	**41**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.001065**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**GS-AP-MW-6D**	**15.2**	**n/a**	**3/14/2023**	**57.5**	**Yes**	**41**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.001065**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**GS-AP-MW-6S**	**15.2**	**n/a**	**3/14/2023**	**96.1**	**Yes**	**41**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.001065**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**GS-AP-MW-7**	**15.2**	**n/a**	**3/14/2023**	**130**	**Yes**	**41**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.001065**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	GS-AP-MW-12	368	n/a	3/22/2023	203	No	41	n/a	n/a	0	n/a	n/a	0.001065	NP Inter (normality) 1 of 2
TDS (mg/L)	GS-AP-MW-12V	368	n/a	3/22/2023	182	No	41	n/a	n/a	0	n/a	n/a	0.001065	NP Inter (normality) 1 of 2
TDS (mg/L)	**GS-AP-MW-15**	**368**	**n/a**	**3/20/2023**	**444**	**Yes**	**41**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.001065**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	GS-AP-MW-16D	368	n/a	3/21/2023	221	No	41	n/a	n/a	0	n/a	n/a	0.001065	NP Inter (normality) 1 of 2
TDS (mg/L)	**GS-AP-MW-17**	**368**	**n/a**	**3/22/2023**	**441**	**Yes**	**41**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.001065**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	GS-AP-MW-19	368	n/a	3/21/2023	320	No	41	n/a	n/a	0	n/a	n/a	0.001065	NP Inter (normality) 1 of 2
TDS (mg/L)	GS-AP-MW-2	368	n/a	3/22/2023	297	No	41	n/a	n/a	0	n/a	n/a	0.001065	NP Inter (normality) 1 of 2
TDS (mg/L)	**GS-AP-MW-21**	**368**	**n/a**	**3/21/2023**	**606**	**Yes**	**41**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.001065**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	GS-AP-MW-6D	368	n/a	3/14/2023	300	No	41	n/a	n/a	0	n/a	n/a	0.001065	NP Inter (normality) 1 of 2
TDS (mg/L)	GS-AP-MW-6S	368	n/a	3/14/2023	298	No	41	n/a	n/a	0	n/a	n/a	0.001065	NP Inter (normality) 1 of 2
TDS (mg/L)	GS-AP-MW-7	368	n/a	3/14/2023	340	No	41	n/a	n/a	0	n/a	n/a	0.001065	NP Inter (normality) 1 of 2

Trend Tests - Prediction Limit Exceedances - Significant Results

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond Printed 5/23/2023, 4:36 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	**GS-AP-MW-6D**	**0.04647**	**132**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**GS-AP-MW-6S**	**-0.04856**	**-95**	**-81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**GS-AP-MW-7**	**0.04541**	**129**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**GS-AP-MW-6D**	**1.074**	**102**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**GS-AP-MW-19**	**-0.2304**	**-88**	**-81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**GS-AP-MW-21**	**3.053**	**122**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**GS-AP-MW-6D**	**1.136**	**136**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**GS-AP-MW-7**	**0.6751**	**177**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**GS-AP-MW-8 (bg)**	**0.1849**	**113**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Fluoride (mg/L)	**GS-AP-MW-13 (bg)**	**0.02914**	**48**	**43**	**Yes**	**13**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Fluoride (mg/L)	**GS-AP-MW-2**	**-0.1368**	**-177**	**-92**	**Yes**	**22**	**0**	**n/a**	**n/a**	**0.01**	**NP**
pH (SU)	**GS-AP-MW-12**	**0.1358**	**127**	**87**	**Yes**	**21**	**0**	**n/a**	**n/a**	**0.01**	**NP**
pH (SU)	**GS-AP-MW-15**	**0.2831**	**108**	**87**	**Yes**	**21**	**0**	**n/a**	**n/a**	**0.01**	**NP**
pH (SU)	**GS-AP-MW-19**	**-0.06565**	**-100**	**-87**	**Yes**	**21**	**0**	**n/a**	**n/a**	**0.01**	**NP**
pH (SU)	**GS-AP-MW-2**	**0.0442**	**110**	**92**	**Yes**	**22**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**GS-AP-MW-12**	**2.876**	**90**	**81**	**Yes**	**20**	**5**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**GS-AP-MW-21**	**44.45**	**168**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**GS-AP-MW-6S**	**-25.11**	**-117**	**-81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
TDS (mg/L)	**GS-AP-MW-21**	**47.98**	**124**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**

Trend Tests - Prediction Limit Exceedances - All Results

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond   Printed 5/23/2023, 4:36 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	GS-AP-MW-13 (bg)	0	0	38	No	12	100	n/a	n/a	0.01	NP
Boron (mg/L)	GS-AP-MW-17V (bg)	-0.002946	-10	-25	No	9	0	n/a	n/a	0.01	NP
Boron (mg/L)	GS-AP-MW-21	0.004489	74	74	No	19	0	n/a	n/a	0.01	NP
Boron (mg/L)	**GS-AP-MW-6D**	**0.04647**	**132**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**GS-AP-MW-6S**	**-0.04856**	**-95**	**-81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**GS-AP-MW-7**	**0.04541**	**129**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	GS-AP-MW-8 (bg)	0	19	81	No	20	95	n/a	n/a	0.01	NP
Calcium (mg/L)	GS-AP-MW-13 (bg)	-2.607	-32	-38	No	12	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GS-AP-MW-17V (bg)	0.1233	2	25	No	9	0	n/a	n/a	0.01	NP
Calcium (mg/L)	**GS-AP-MW-6D**	**1.074**	**102**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	GS-AP-MW-6S	-2.481	-62	-81	No	20	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GS-AP-MW-8 (bg)	-0.414	-55	-81	No	20	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GS-AP-MW-13 (bg)	0.1178	10	38	No	12	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GS-AP-MW-15	-0.2407	-44	-81	No	20	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GS-AP-MW-17	-0.008633	-3	-87	No	21	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GS-AP-MW-17V (bg)	-0.2328	-22	-25	No	9	0	n/a	n/a	0.01	NP
Chloride (mg/L)	**GS-AP-MW-19**	**-0.2304**	**-88**	**-81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**GS-AP-MW-21**	**3.053**	**122**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**GS-AP-MW-6D**	**1.136**	**136**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	GS-AP-MW-6S	-0.572	-57	-81	No	20	0	n/a	n/a	0.01	NP
Chloride (mg/L)	**GS-AP-MW-7**	**0.6751**	**177**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**GS-AP-MW-8 (bg)**	**0.1849**	**113**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Fluoride (mg/L)	**GS-AP-MW-13 (bg)**	**0.02914**	**48**	**43**	**Yes**	**13**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Fluoride (mg/L)	GS-AP-MW-15	-0.04036	-72	-87	No	21	0	n/a	n/a	0.01	NP
Fluoride (mg/L)	GS-AP-MW-17V (bg)	-0.001533	-5	-25	No	9	0	n/a	n/a	0.01	NP
Fluoride (mg/L)	**GS-AP-MW-2**	**-0.1368**	**-177**	**-92**	**Yes**	**22**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Fluoride (mg/L)	GS-AP-MW-8 (bg)	0.002916	39	87	No	21	0	n/a	n/a	0.01	NP
pH (SU)	**GS-AP-MW-12**	**0.1358**	**127**	**87**	**Yes**	**21**	**0**	**n/a**	**n/a**	**0.01**	**NP**
pH (SU)	GS-AP-MW-12V	0.116	4	25	No	9	0	n/a	n/a	0.01	NP
pH (SU)	GS-AP-MW-13 (bg)	-0.05825	-34	-43	No	13	0	n/a	n/a	0.01	NP
pH (SU)	**GS-AP-MW-15**	**0.2831**	**108**	**87**	**Yes**	**21**	**0**	**n/a**	**n/a**	**0.01**	**NP**
pH (SU)	GS-AP-MW-17	0	-5	-92	No	22	0	n/a	n/a	0.01	NP
pH (SU)	GS-AP-MW-17V (bg)	-0.03831	-15	-25	No	9	0	n/a	n/a	0.01	NP
pH (SU)	**GS-AP-MW-19**	**-0.06565**	**-100**	**-87**	**Yes**	**21**	**0**	**n/a**	**n/a**	**0.01**	**NP**
pH (SU)	**GS-AP-MW-2**	**0.0442**	**110**	**92**	**Yes**	**22**	**0**	**n/a**	**n/a**	**0.01**	**NP**
pH (SU)	GS-AP-MW-21	0.03279	10	87	No	21	0	n/a	n/a	0.01	NP
pH (SU)	GS-AP-MW-8 (bg)	-0.02608	-65	-87	No	21	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	**GS-AP-MW-12**	**2.876**	**90**	**81**	**Yes**	**20**	**5**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	GS-AP-MW-13 (bg)	0.01849	11	38	No	12	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GS-AP-MW-17V (bg)	-1.088	-18	-25	No	9	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GS-AP-MW-19	1.346	61	81	No	20	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	**GS-AP-MW-21**	**44.45**	**168**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	GS-AP-MW-6D	0.849	39	81	No	20	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	**GS-AP-MW-6S**	**-25.11**	**-117**	**-81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	GS-AP-MW-7	-1.43	-47	-81	No	20	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GS-AP-MW-8 (bg)	0.1674	43	81	No	20	0	n/a	n/a	0.01	NP
TDS (mg/L)	GS-AP-MW-13 (bg)	-7.182	-29	-38	No	12	0	n/a	n/a	0.01	NP
TDS (mg/L)	GS-AP-MW-15	25.05	62	81	No	20	0	n/a	n/a	0.01	NP
TDS (mg/L)	GS-AP-MW-17	11.59	61	87	No	21	0	n/a	n/a	0.01	NP
TDS (mg/L)	GS-AP-MW-17V (bg)	-3.729	-10	-25	No	9	0	n/a	n/a	0.01	NP
TDS (mg/L)	**GS-AP-MW-21**	**47.98**	**124**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
TDS (mg/L)	GS-AP-MW-8 (bg)	-1.48	-32	-81	No	20	0	n/a	n/a	0.01	NP

Upper Tolerance Limits

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond   Printed 1/3/2022, 11:49 PM

Constituent	Well	Upper Lim.	Date	Observ.	Sig.	Bg N	%NDs	Transform	Alpha	Method
Antimony (mg/L)	n/a	0.00115	n/a	n/a	n/a	35	94.29	n/a	0.1661	NP Inter
Arsenic (mg/L)	n/a	0.005	n/a	n/a	n/a	35	71.43	n/a	0.1661	NP Inter
Barium (mg/L)	n/a	0.353	n/a	n/a	n/a	35	0	n/a	0.1661	NP Inter
Beryllium (mg/L)	n/a	0.00102	n/a	n/a	n/a	35	100	n/a	0.1661	NP Inter
Cadmium (mg/L)	n/a	0.0002	n/a	n/a	n/a	35	100	n/a	0.1661	NP Inter
Chromium (mg/L)	n/a	0.01	n/a	n/a	n/a	35	77.14	n/a	0.1661	NP Inter
Cobalt (mg/L)	n/a	0.00362	n/a	n/a	n/a	35	80	n/a	0.1661	NP Inter
Combined Radium 226 + 228 (pCi/L)	n/a	1.25	n/a	n/a	n/a	35	0	n/a	0.1661	NP Inter
Fluoride (mg/L)	n/a	0.278	n/a	n/a	n/a	37	0	n/a	0.1499	NP Inter
Lead (mg/L)	n/a	0.00189	n/a	n/a	n/a	35	91.43	n/a	0.1661	NP Inter
Lithium (mg/L)	n/a	0.0809	n/a	n/a	n/a	35	54.29	n/a	0.1661	NP Inter
Mercury (mg/L)	n/a	0.0005	n/a	n/a	n/a	35	100	n/a	0.1661	NP Inter
Molybdenum (mg/L)	n/a	0.00906	n/a	n/a	n/a	35	82.86	n/a	0.1661	NP Inter
Selenium (mg/L)	n/a	0.00102	n/a	n/a	n/a	35	100	n/a	0.1661	NP Inter
Thallium (mg/L)	n/a	0.0002	n/a	n/a	n/a	35	100	n/a	0.1661	NP Inter

GORGAS ASH POND GWPS			
Analyte	**Units**	**Background**	**GWPS**
Antimony	mg/L	0.00115	0.006
Arsenic	mg/L	0.005	0.01
Barium	mg/L	0.353	2
Beryllium	mg/L	0.00102	0.004
Cadmium	mg/L	0.0002	0.005
Chromium	mg/L	0.01	0.1
Cobalt	mg/L	0.00362	0.006
Combined Radium-226/228	pCi/L	1.25	5
Fluoride	mg/L	0.278	4
Lead	mg/L	0.00189	0.015
Lithium	mg/L	0.0809	0.0809
Mercury	mg/L	0.0005	0.002
Molybdenum	mg/L	0.00906	0.1
Selenium	mg/L	0.00102	0.05
Thallium	mg/L	0.0002	0.002

Notes:

1. mg/L - Milligrams per liter
2. pCi/L - Picocuries per liter
3. The background limits were used as the groundwater protection standard (GWPS) when appropriate under 40 CFR §257.95(h), ADEM Rule 335-13-15-.06(h), and the ADEM Variance.
4. GWPS established during second semi-annual sampling event in 2021.

Confidence Intervals - Significant Results

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond   Printed 5/23/2023, 4:45 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Arsenic (mg/L)	**GS-AP-MW-6D**	**0.1159**	**0.09376**	**0.01**	**Yes**	**8**	**0.1048**	**0.01045**	**0**	**None**	**No**	**0.01**	**Param.**
Arsenic (mg/L)	**GS-AP-MW-7**	**0.285**	**0.233**	**0.01**	**Yes**	**8**	**0.2699**	**0.0188**	**0**	**None**	**No**	**0.004**	**NP (normality)**
Lithium (mg/L)	**GS-AP-MW-15**	**0.5314**	**0.3154**	**0.0809**	**Yes**	**8**	**0.4234**	**0.1019**	**0**	**None**	**No**	**0.01**	**Param.**
Lithium (mg/L)	**GS-AP-MW-21**	**0.3049**	**0.08531**	**0.0809**	**Yes**	**8**	**0.1951**	**0.1036**	**0**	**None**	**No**	**0.01**	**Param.**
Lithium (mg/L)	**GS-AP-MW-6D**	**0.3324**	**0.2803**	**0.0809**	**Yes**	**8**	**0.3064**	**0.02458**	**0**	**None**	**No**	**0.01**	**Param.**
Lithium (mg/L)	**GS-AP-MW-7**	**0.216**	**0.1595**	**0.0809**	**Yes**	**8**	**0.1878**	**0.02661**	**0**	**None**	**No**	**0.01**	**Param.**
Molybdenum (mg/L)	**GS-AP-MW-7**	**0.2207**	**0.1905**	**0.1**	**Yes**	**8**	**0.2056**	**0.01424**	**0**	**None**	**No**	**0.01**	**Param.**

Confidence Intervals - All Results

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond Printed 5/23/2023, 4:45 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	GS-AP-MW-12	0.00423	0.0008468	0.006	No	8	0.002539	0.001596	12.5	None	No	0.01	Param.
Antimony (mg/L)	GS-AP-MW-12V	0.001744	0.0004721	0.006	No	8	0.001086	0.0006756	12.5	None	sqrt(x)	0.01	Param.
Antimony (mg/L)	GS-AP-MW-15	0.0008948	0.0006595	0.006	No	8	0.0008366	0.0001506	25	Kaplan-Meier	No	0.01	Param.
Antimony (mg/L)	GS-AP-MW-15V	0.00278	0.000886	0.006	No	7	0.001833	0.0007972	0	None	No	0.01	Param.
Antimony (mg/L)	GS-AP-MW-21V	0.001015	0.000661	0.006	No	7	0.0009381	0.0001401	71.43	None	No	0.008	NP (NDs)
Arsenic (mg/L)	GS-AP-MW-12	0.00974	0.001757	0.01	No	8	0.005749	0.003766	0	None	No	0.01	Param.
Arsenic (mg/L)	GS-AP-MW-12V	0.001985	0.0008747	0.01	No	8	0.001417	0.0005776	0	None	sqrt(x)	0.01	Param.
Arsenic (mg/L)	GS-AP-MW-15	0.01827	0.006279	0.01	No	8	0.01227	0.005655	0	None	No	0.01	Param.
Arsenic (mg/L)	GS-AP-MW-15V	0.01621	0.004898	0.01	No	7	0.01055	0.004762	0	None	No	0.01	Param.
Arsenic (mg/L)	GS-AP-MW-16D	0.000491	0.0001	0.01	No	8	0.0002158	0.000119	62.5	None	No	0.004	NP (NDs)
Arsenic (mg/L)	GS-AP-MW-17	0.0055	0.00086	0.01	No	8	0.002497	0.001875	0	None	No	0.004	NP (normality)
Arsenic (mg/L)	GS-AP-MW-19	0.003047	0.001313	0.01	No	8	0.00218	0.0008175	0	None	No	0.01	Param.
Arsenic (mg/L)	GS-AP-MW-2	0.000203	0.000083	0.01	No	8	0.000188	0.00004243	87.5	None	No	0.004	NP (NDs)
Arsenic (mg/L)	GS-AP-MW-21	0.005	0.00046	0.01	No	8	0.002199	0.00232	37.5	None	No	0.004	NP (normality)
Arsenic (mg/L)	GS-AP-MW-21V	0.01245	0.001034	0.01	No	7	0.006744	0.004807	0	None	No	0.01	Param.
Arsenic (mg/L)	GS-AP-MW-3	0.000204	0.0001188	0.01	No	5	0.0001614	0.00002543	0	None	No	0.01	Param.
Arsenic (mg/L)	**GS-AP-MW-6D**	**0.1159**	**0.09376**	**0.01**	**Yes**	**8**	**0.1048**	**0.01045**	**0**	**None**	**No**	**0.01**	**Param.**
Arsenic (mg/L)	**GS-AP-MW-7**	**0.285**	**0.233**	**0.01**	**Yes**	**8**	**0.2699**	**0.0188**	**0**	**None**	**No**	**0.004**	**NP (normality)**
Arsenic (mg/L)	GS-AP-MW-9V	0.005	0.000101	0.01	No	7	0.001577	0.00234	28.57	None	No	0.008	NP (normality)
Barium (mg/L)	GS-AP-MW-12	0.2099	0.1816	2	No	8	0.1958	0.01333	0	None	No	0.01	Param.
Barium (mg/L)	GS-AP-MW-12V	1.469	1.086	2	No	8	1.278	0.1803	0	None	No	0.01	Param.
Barium (mg/L)	GS-AP-MW-15	0.276	0.0913	2	No	8	0.1612	0.07086	0	None	No	0.004	NP (normality)
Barium (mg/L)	GS-AP-MW-15V	0.2283	0.1508	2	No	7	0.1896	0.03264	0	None	No	0.01	Param.
Barium (mg/L)	GS-AP-MW-16D	0.3519	0.3226	2	No	8	0.3373	0.0138	0	None	No	0.01	Param.
Barium (mg/L)	GS-AP-MW-17	0.128	0.0835	2	No	8	0.09648	0.01458	0	None	No	0.004	NP (normality)
Barium (mg/L)	GS-AP-MW-19	0.3575	0.319	2	No	8	0.3383	0.01813	0	None	No	0.01	Param.
Barium (mg/L)	GS-AP-MW-2	0.06348	0.04662	2	No	8	0.05505	0.007951	0	None	No	0.01	Param.
Barium (mg/L)	GS-AP-MW-21	0.1545	0.1155	2	No	8	0.135	0.01843	0	None	No	0.01	Param.
Barium (mg/L)	GS-AP-MW-21V	0.06447	0.03625	2	No	7	0.05036	0.01188	0	None	No	0.01	Param.
Barium (mg/L)	GS-AP-MW-3	0.6444	0.4562	2	No	5	0.556	0.05641	0	None	x^2	0.01	Param.
Barium (mg/L)	GS-AP-MW-6D	0.7435	0.4057	2	No	8	0.5746	0.1593	0	None	No	0.01	Param.
Barium (mg/L)	GS-AP-MW-7	0.1383	0.05941	2	No	8	0.09888	0.03724	0	None	No	0.01	Param.
Barium (mg/L)	GS-AP-MW-9V	0.2016	0.1584	2	No	7	0.18	0.01817	0	None	No	0.01	Param.
Chromium (mg/L)	GS-AP-MW-12	0.001015	0.00031	0.1	No	8	0.0008403	0.0003236	75	None	No	0.004	NP (NDs)
Chromium (mg/L)	GS-AP-MW-12V	0.00475	0.0003803	0.1	No	8	0.00243	0.002462	0	None	sqrt(x)	0.01	Param.
Chromium (mg/L)	GS-AP-MW-15	0.01	0.000384	0.1	No	8	0.004162	0.004837	37.5	None	No	0.004	NP (normality)
Chromium (mg/L)	GS-AP-MW-15V	0.003733	0.0003099	0.1	No	7	0.001862	0.002443	14.29	None	ln(x)	0.01	Param.
Chromium (mg/L)	GS-AP-MW-16D	0.00107	0.00025	0.1	No	8	0.0008078	0.0003235	50	None	No	0.004	NP (normality)
Chromium (mg/L)	GS-AP-MW-17	0.0009186	0.0002299	0.1	No	8	0.0009618	0.000719	50	Kaplan-Meier	ln(x)	0.01	Param.
Chromium (mg/L)	GS-AP-MW-19	0.001015	0.000258	0.1	No	8	0.0007581	0.0003569	62.5	None	No	0.004	NP (NDs)
Chromium (mg/L)	GS-AP-MW-2	0.01	0.000254	0.1	No	8	0.004065	0.004918	37.5	None	No	0.004	NP (normality)
Chromium (mg/L)	GS-AP-MW-21	0.01	0.0004	0.1	No	8	0.004101	0.004887	37.5	None	No	0.004	NP (normality)
Chromium (mg/L)	GS-AP-MW-21V	0.01	0.000218	0.1	No	7	0.003224	0.004645	28.57	None	No	0.008	NP (normality)
Chromium (mg/L)	GS-AP-MW-3	0.0003441	0.0002239	0.1	No	5	0.000284	0.00003585	0	None	No	0.01	Param.
Chromium (mg/L)	GS-AP-MW-6D	0.001015	0.00024	0.1	No	8	0.0006381	0.0004033	50	None	No	0.004	NP (normality)
Chromium (mg/L)	GS-AP-MW-7	0.005988	0.0006755	0.1	No	8	0.003331	0.002506	12.5	None	No	0.01	Param.
Chromium (mg/L)	GS-AP-MW-9V	0.00102	0.000228	0.1	No	7	0.000591	0.0004026	42.86	None	No	0.008	NP (normality)
Cobalt (mg/L)	GS-AP-MW-12V	0.00277	0.00013	0.006	No	8	0.000679	0.000927	50	None	No	0.004	NP (normality)
Cobalt (mg/L)	GS-AP-MW-15	0.000203	0.00009	0.006	No	8	0.0001889	0.00003995	87.5	None	No	0.004	NP (NDs)
Cobalt (mg/L)	GS-AP-MW-16D	0.000252	0.00009	0.006	No	8	0.000195	0.00004576	75	None	No	0.004	NP (NDs)
Cobalt (mg/L)	GS-AP-MW-17	0.000203	0.000102	0.006	No	8	0.0001904	0.00003571	87.5	None	No	0.004	NP (NDs)
Cobalt (mg/L)	GS-AP-MW-7	0.003565	0.0001409	0.006	No	8	0.001853	0.001615	12.5	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-12	1.061	0.577	5	No	8	0.8188	0.2281	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-12V	1.313	0.7841	5	No	8	1.048	0.2493	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-15	1.007	0.3833	5	No	8	0.6953	0.2943	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-15V	0.9154	0.4046	5	No	7	0.6431	0.2519	0	None	ln(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-16D	0.9409	0.2246	5	No	8	0.5828	0.3379	0	None	No	0.01	Param.

Confidence Intervals - All Results

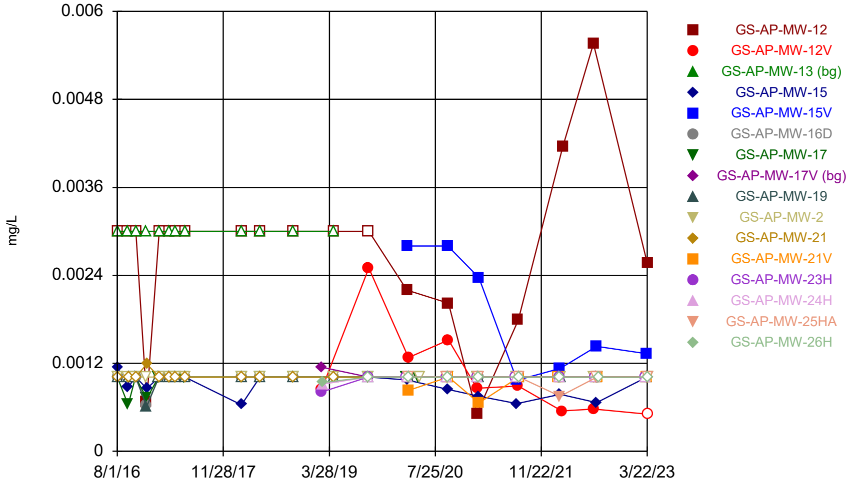
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond Printed 5/23/2023, 4:45 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-17	1.362	0.04652	5	No	8	0.6542	0.8035	0	None	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-19	1.563	0.3792	5	No	8	0.9709	0.5582	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-2	1.439	0.1208	5	No	8	0.8254	1.298	0	None	ln(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-21	0.8409	0.2643	5	No	8	0.5526	0.272	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-21V	1.037	0.446	5	No	7	0.7413	0.2486	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-3	1.235	0.1503	5	No	5	0.6926	0.3236	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-6D	0.9916	0.4087	5	No	8	0.7001	0.275	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-7	1.37	0.2806	5	No	8	0.8255	0.5141	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-9V	0.9114	0.03692	5	No	7	0.4741	0.3681	0	None	No	0.01	Param.
Fluoride (mg/L)	GS-AP-MW-12	0.148	0.09888	4	No	8	0.1234	0.02315	0	None	No	0.01	Param.
Fluoride (mg/L)	GS-AP-MW-12V	0.1865	0.1493	4	No	8	0.1679	0.01754	0	None	No	0.01	Param.
Fluoride (mg/L)	GS-AP-MW-15	0.647	0.333	4	No	8	0.4985	0.1355	0	None	No	0.004	NP (normality)
Fluoride (mg/L)	GS-AP-MW-15V	0.3431	0.1766	4	No	7	0.2599	0.07008	0	None	No	0.01	Param.
Fluoride (mg/L)	GS-AP-MW-16D	0.1279	0.09735	4	No	8	0.1126	0.0144	0	None	No	0.01	Param.
Fluoride (mg/L)	GS-AP-MW-17	0.3252	0.204	4	No	8	0.2646	0.05716	0	None	No	0.01	Param.
Fluoride (mg/L)	GS-AP-MW-19	0.3318	0.2445	4	No	8	0.2881	0.04117	0	None	No	0.01	Param.
Fluoride (mg/L)	GS-AP-MW-2	0.9119	0.7484	4	No	8	0.8301	0.07714	0	None	No	0.01	Param.
Fluoride (mg/L)	GS-AP-MW-21	0.2297	0.1825	4	No	8	0.2061	0.02225	0	None	No	0.01	Param.
Fluoride (mg/L)	GS-AP-MW-21V	0.5831	0.3529	4	No	7	0.468	0.09692	0	None	No	0.01	Param.
Fluoride (mg/L)	GS-AP-MW-3	0.1157	0.06491	4	No	5	0.1042	0.0231	40	Kaplan-Meier	No	0.01	Param.
Fluoride (mg/L)	GS-AP-MW-6D	0.1357	0.1108	4	No	8	0.1234	0.01353	0	None	x^4	0.01	Param.
Fluoride (mg/L)	GS-AP-MW-7	0.1446	0.08786	4	No	8	0.1159	0.02836	0	None	sqrt(x)	0.01	Param.
Fluoride (mg/L)	GS-AP-MW-9V	0.1851	0.1606	4	No	7	0.1729	0.01032	0	None	No	0.01	Param.
Lead (mg/L)	GS-AP-MW-12V	0.001616	0.00007196	0.015	No	8	0.000832	0.0009452	25	Kaplan-Meier	sqrt(x)	0.01	Param.
Lead (mg/L)	GS-AP-MW-15	0.000203	0.00008	0.015	No	8	0.0001732	0.00005526	75	Kaplan-Meier	No	0.004	NP (NDs)
Lead (mg/L)	GS-AP-MW-16D	0.000873	0.00016	0.015	No	8	0.0002814	0.0002395	75	Kaplan-Meier	No	0.004	NP (NDs)
Lead (mg/L)	GS-AP-MW-17	0.000203	0.000175	0.015	No	8	0.0001995	0.000009899	87.5	Kaplan-Meier	No	0.004	NP (NDs)
Lead (mg/L)	GS-AP-MW-6D	0.000203	0.000171	0.015	No	8	0.000199	0.00001131	87.5	Kaplan-Meier	No	0.004	NP (NDs)
Lead (mg/L)	GS-AP-MW-7	0.003199	0.0003887	0.015	No	8	0.001794	0.001325	12.5	None	No	0.01	Param.
Lithium (mg/L)	GS-AP-MW-12	0.05328	0.02374	0.0809	No	8	0.03851	0.01393	0	None	No	0.01	Param.
Lithium (mg/L)	GS-AP-MW-12V	0.05082	0.02808	0.0809	No	8	0.03945	0.01073	0	None	No	0.01	Param.
Lithium (mg/L)	**GS-AP-MW-15**	**0.5314**	**0.3154**	**0.0809**	**Yes**	**8**	**0.4234**	**0.1019**	**0**	**None**	**No**	**0.01**	**Param.**
Lithium (mg/L)	GS-AP-MW-15V	0.1628	0.06999	0.0809	No	7	0.114	0.04463	0	None	x^(1/3)	0.01	Param.
Lithium (mg/L)	GS-AP-MW-16D	0.03636	0.03289	0.0809	No	8	0.03463	0.001639	0	None	No	0.01	Param.
Lithium (mg/L)	GS-AP-MW-17	0.06643	0.05767	0.0809	No	8	0.06205	0.004133	0	None	No	0.01	Param.
Lithium (mg/L)	GS-AP-MW-19	0.04383	0.03119	0.0809	No	8	0.03751	0.005963	0	None	No	0.01	Param.
Lithium (mg/L)	GS-AP-MW-2	0.0443	0.03492	0.0809	No	8	0.03961	0.004426	0	None	No	0.01	Param.
Lithium (mg/L)	**GS-AP-MW-21**	**0.3049**	**0.08531**	**0.0809**	**Yes**	**8**	**0.1951**	**0.1036**	**0**	**None**	**No**	**0.01**	**Param.**
Lithium (mg/L)	GS-AP-MW-21V	0.1458	0.06199	0.0809	No	7	0.1039	0.0353	0	None	No	0.01	Param.
Lithium (mg/L)	GS-AP-MW-3	0.1018	0.06046	0.0809	No	5	0.08114	0.01234	0	None	No	0.01	Param.
Lithium (mg/L)	**GS-AP-MW-6D**	**0.3324**	**0.2803**	**0.0809**	**Yes**	**8**	**0.3064**	**0.02458**	**0**	**None**	**No**	**0.01**	**Param.**
Lithium (mg/L)	**GS-AP-MW-7**	**0.216**	**0.1595**	**0.0809**	**Yes**	**8**	**0.1878**	**0.02661**	**0**	**None**	**No**	**0.01**	**Param.**
Lithium (mg/L)	GS-AP-MW-9V	0.03082	0.02895	0.0809	No	7	0.02989	0.0007904	0	None	No	0.01	Param.
Molybdenum (mg/L)	GS-AP-MW-12	0.009159	0.004197	0.1	No	8	0.006625	0.002485	12.5	None	sqrt(x)	0.01	Param.
Molybdenum (mg/L)	GS-AP-MW-12V	0.006755	0.001196	0.1	No	8	0.003976	0.002622	12.5	None	No	0.01	Param.
Molybdenum (mg/L)	GS-AP-MW-15	0.07168	0.04393	0.1	No	8	0.0573	0.01671	0	None	x^3	0.01	Param.
Molybdenum (mg/L)	GS-AP-MW-15V	0.05048	0.0198	0.1	No	7	0.03514	0.01292	0	None	No	0.01	Param.
Molybdenum (mg/L)	GS-AP-MW-16D	0.01015	0.00014	0.1	No	8	0.005342	0.005146	50	None	No	0.004	NP (normality)
Molybdenum (mg/L)	GS-AP-MW-17	0.006435	0.001877	0.1	No	8	0.004156	0.00215	12.5	None	No	0.01	Param.
Molybdenum (mg/L)	GS-AP-MW-19	0.006026	0.002878	0.1	No	8	0.004452	0.001485	12.5	None	No	0.01	Param.
Molybdenum (mg/L)	GS-AP-MW-2	0.004382	0.001744	0.1	No	8	0.003063	0.001245	12.5	None	No	0.01	Param.
Molybdenum (mg/L)	GS-AP-MW-21	0.07228	0.006121	0.1	No	8	0.0392	0.03121	0	None	No	0.01	Param.
Molybdenum (mg/L)	GS-AP-MW-21V	0.1202	0.03513	0.1	No	7	0.07766	0.0358	0	None	No	0.01	Param.
Molybdenum (mg/L)	GS-AP-MW-3	0.01187	0.005476	0.1	No	5	0.008672	0.001908	0	None	No	0.01	Param.
Molybdenum (mg/L)	GS-AP-MW-6D	0.01114	0.008589	0.1	No	8	0.009864	0.001203	0	None	No	0.01	Param.
Molybdenum (mg/L)	**GS-AP-MW-7**	**0.2207**	**0.1905**	**0.1**	**Yes**	**8**	**0.2056**	**0.01424**	**0**	**None**	**No**	**0.01**	**Param.**
Molybdenum (mg/L)	GS-AP-MW-9V	0.002871	0.0007248	0.1	No	7	0.005334	0.004553	42.86	Kaplan-Meier	x^(1/3)	0.01	Param.

FIGURE A.

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series



Constituent: Antimony Analysis Run 5/23/2023 3:35 PM
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
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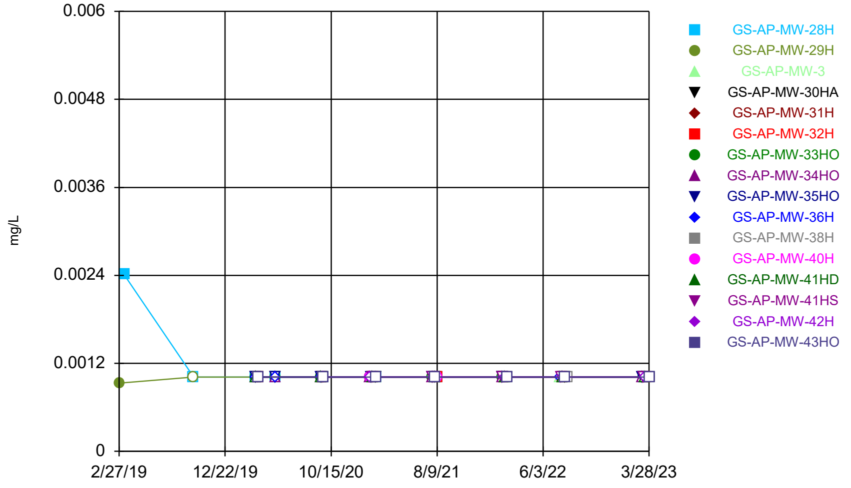
Time Series



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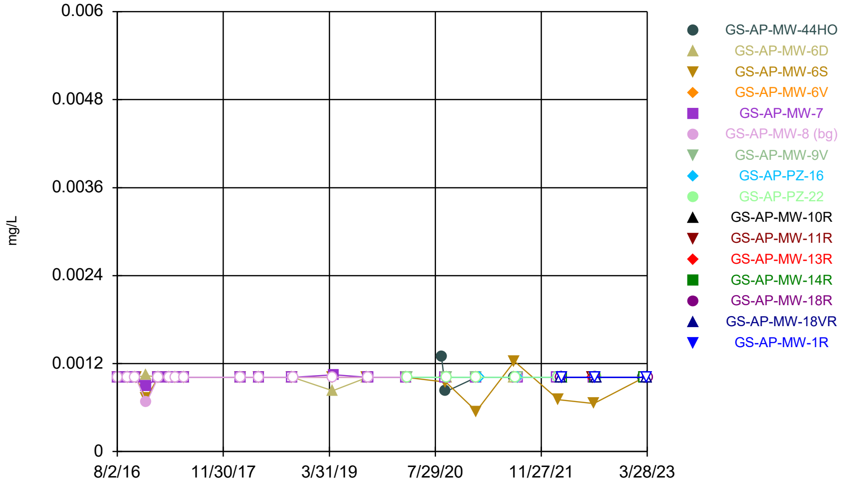

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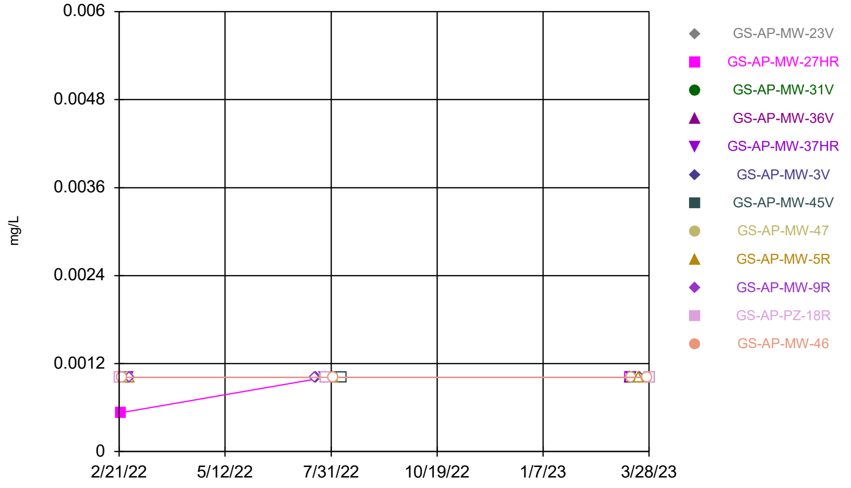

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Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

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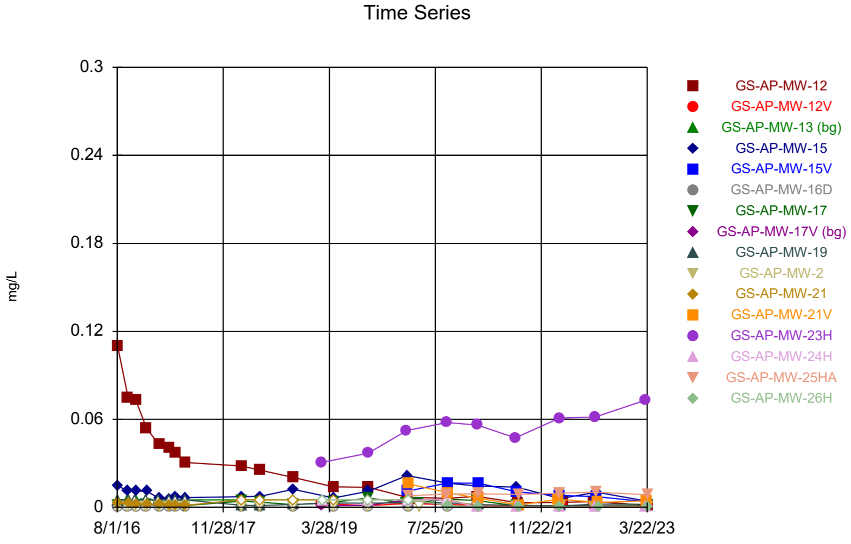

Constituent: Arsenic Analysis Run 5/23/2023 3:36 PM
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

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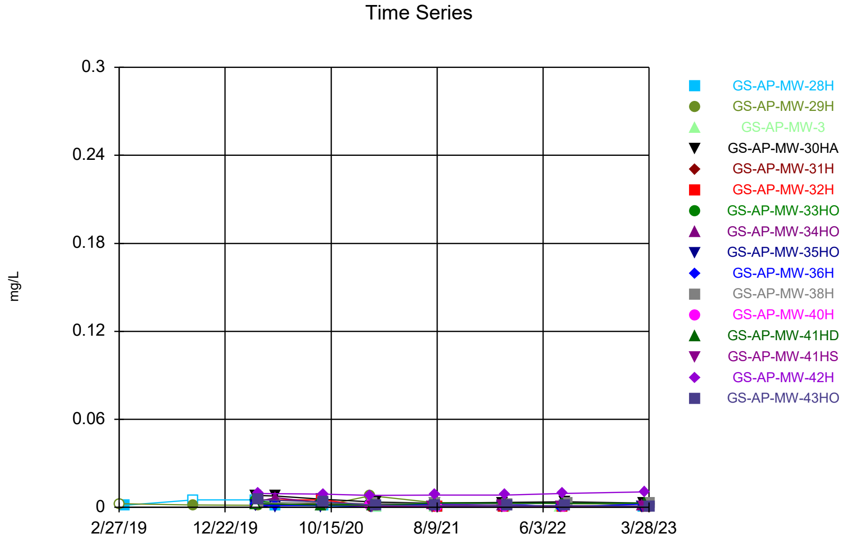

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Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

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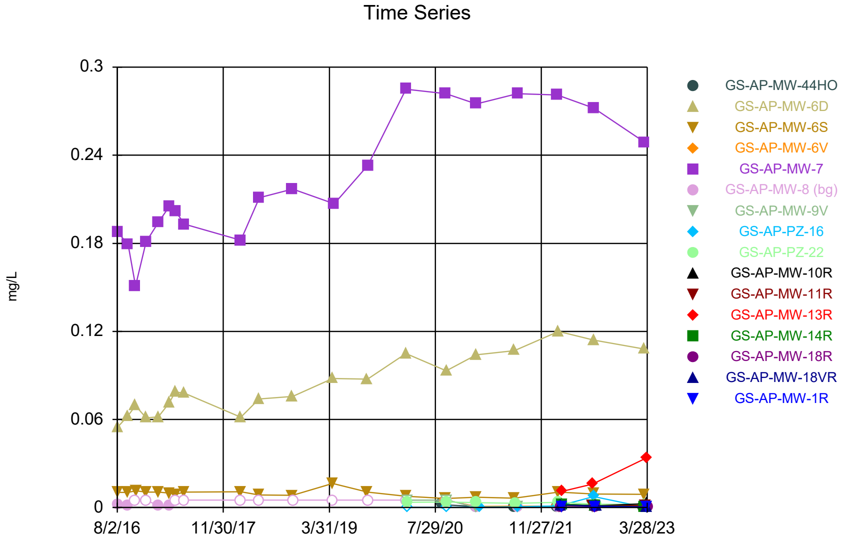

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Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

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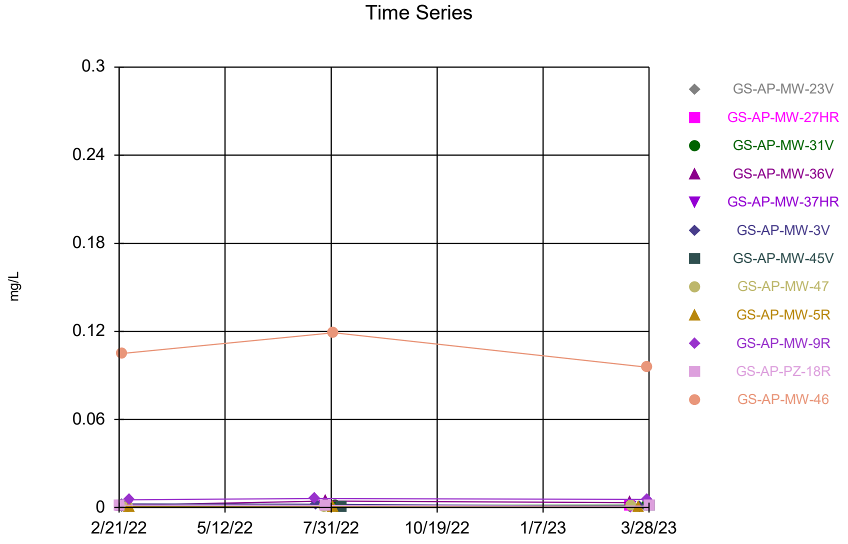
Hollow symbols indicate censored values.



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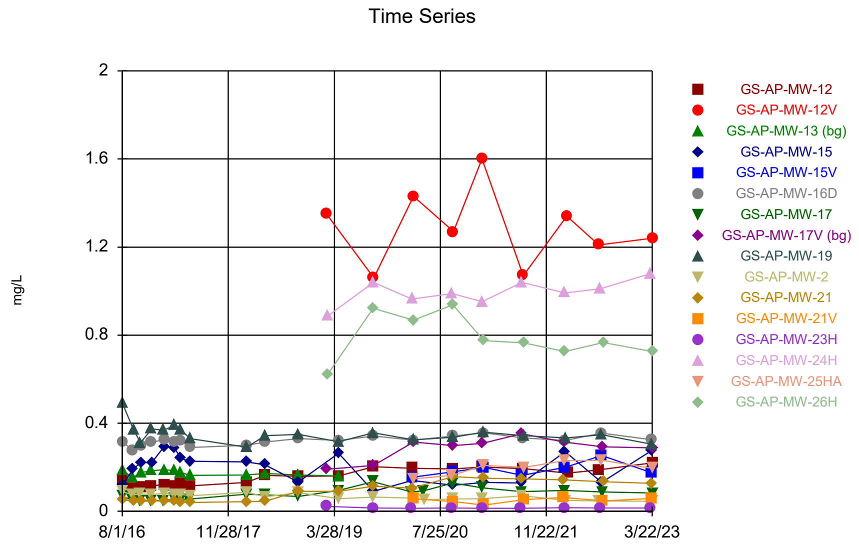

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Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

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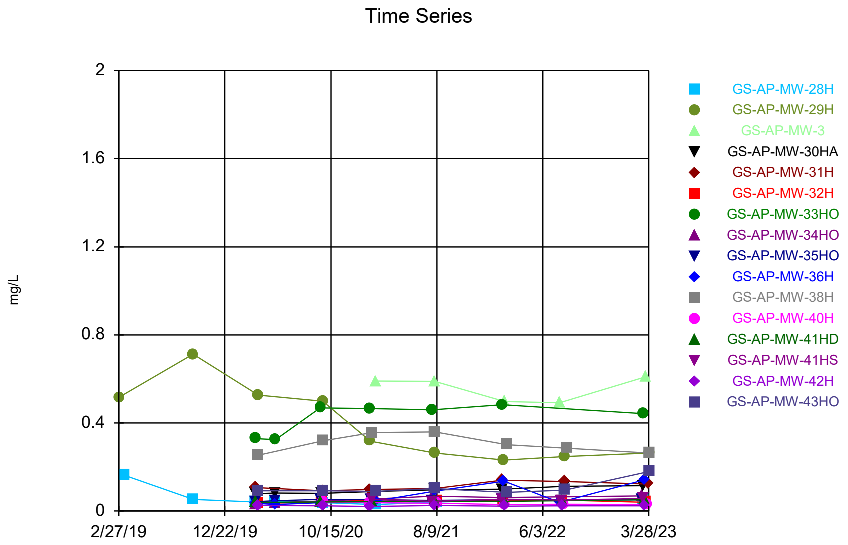

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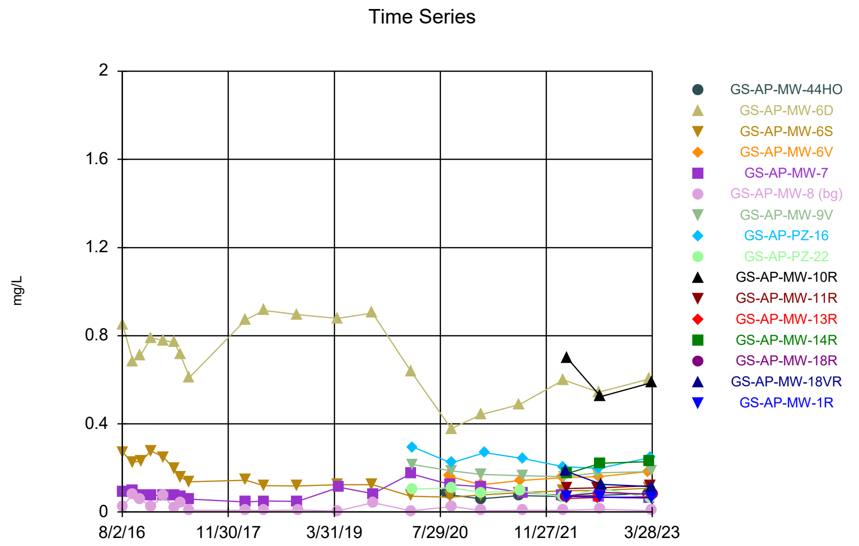
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG



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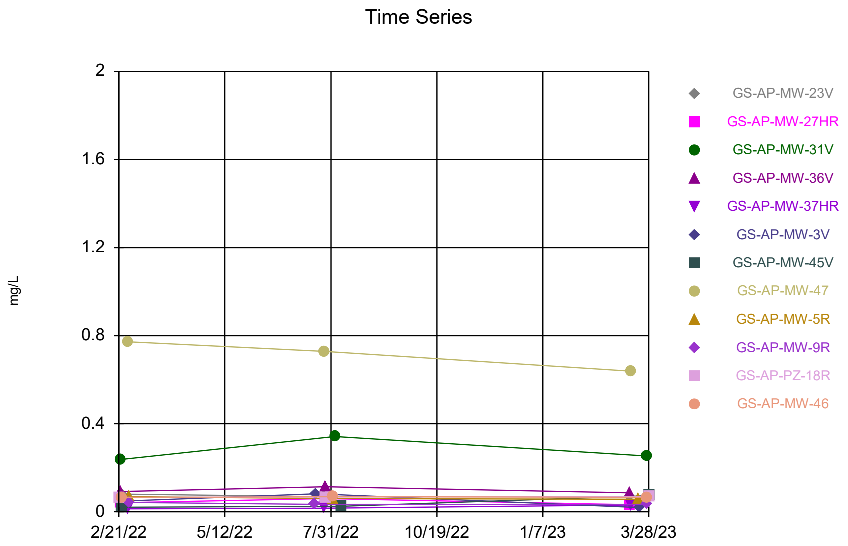
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG



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Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
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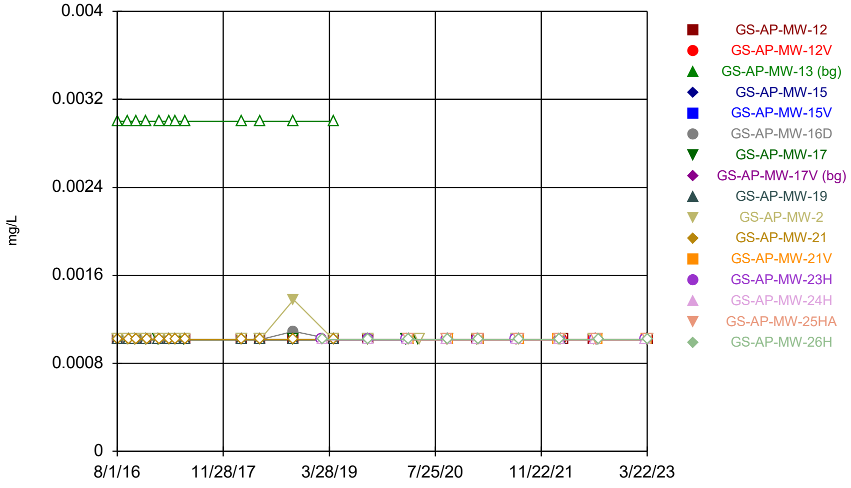
Time Series



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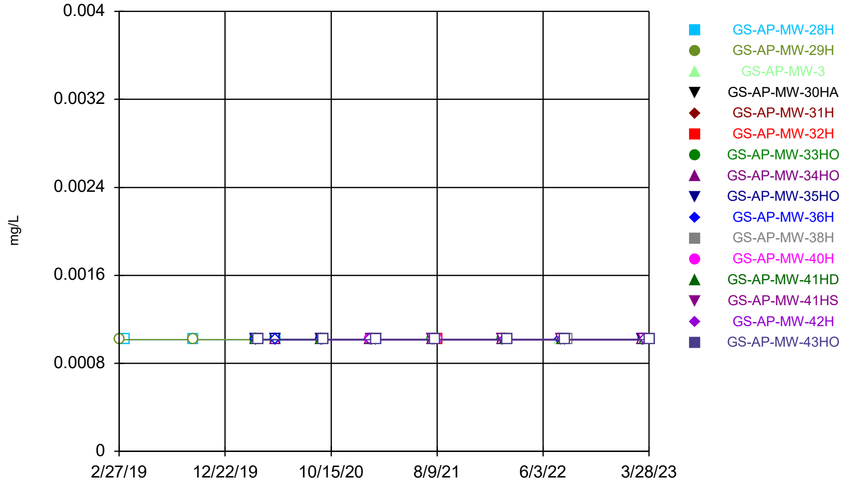
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series



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Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

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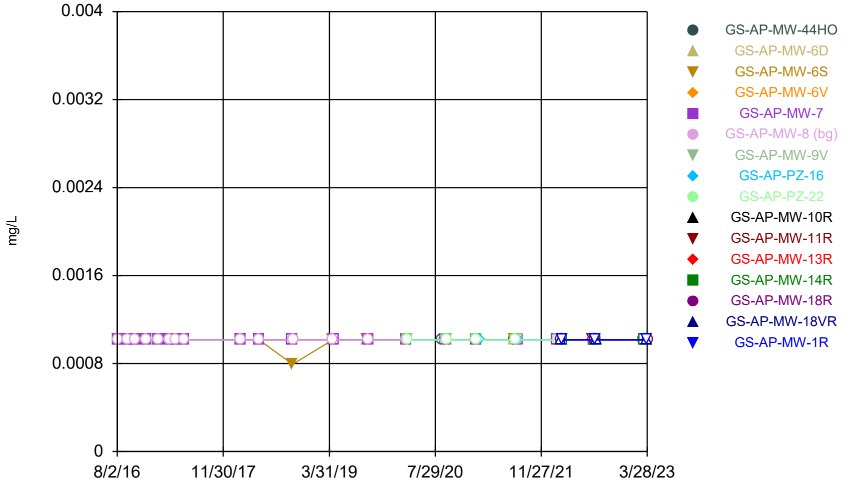
Time Series



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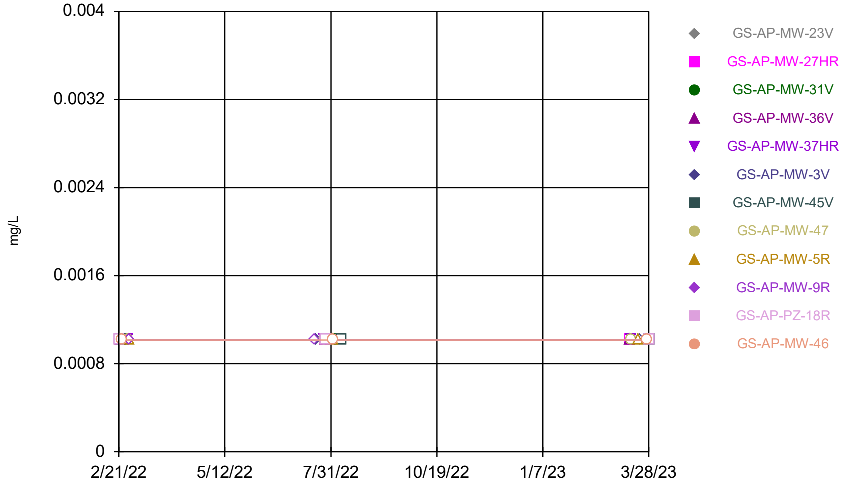
Time Series



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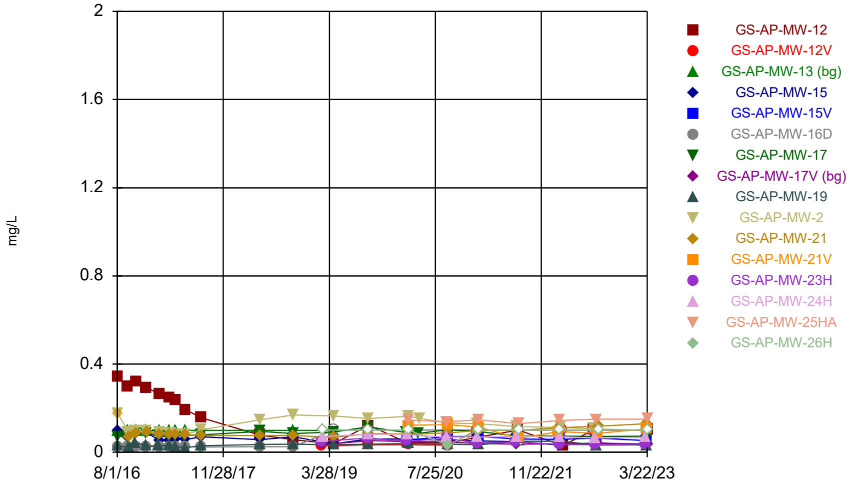

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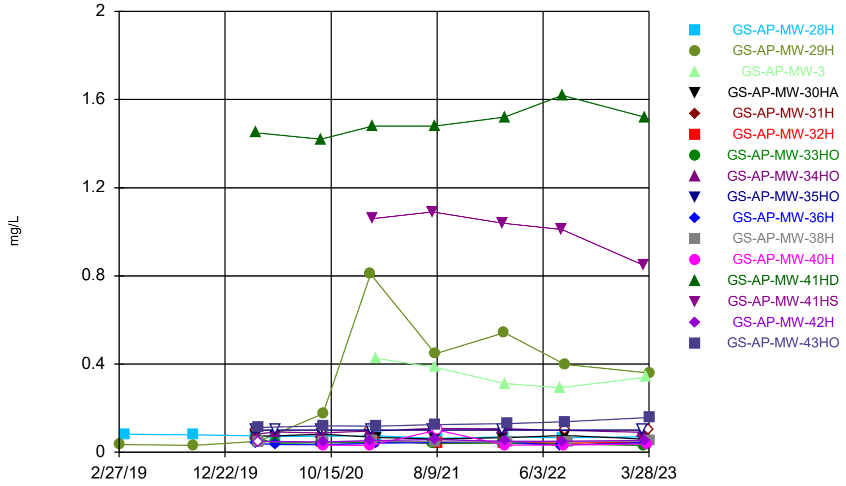

Constituent: Boron Analysis Run 5/23/2023 3:36 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

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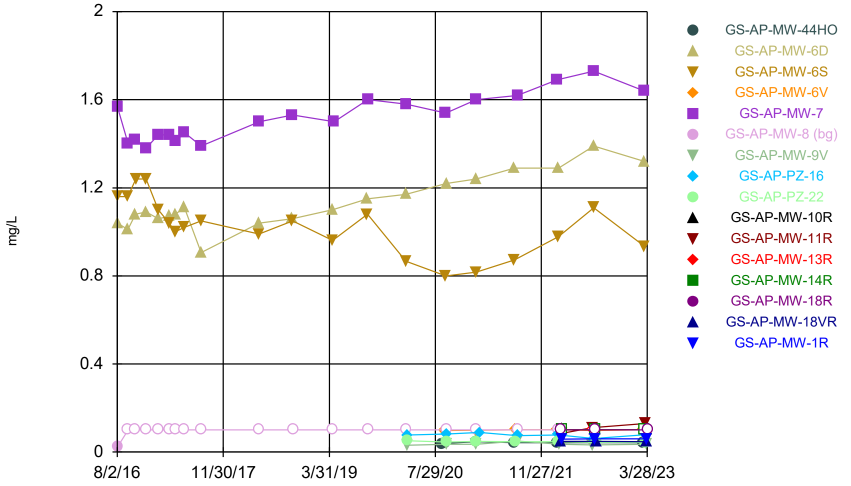
Time Series



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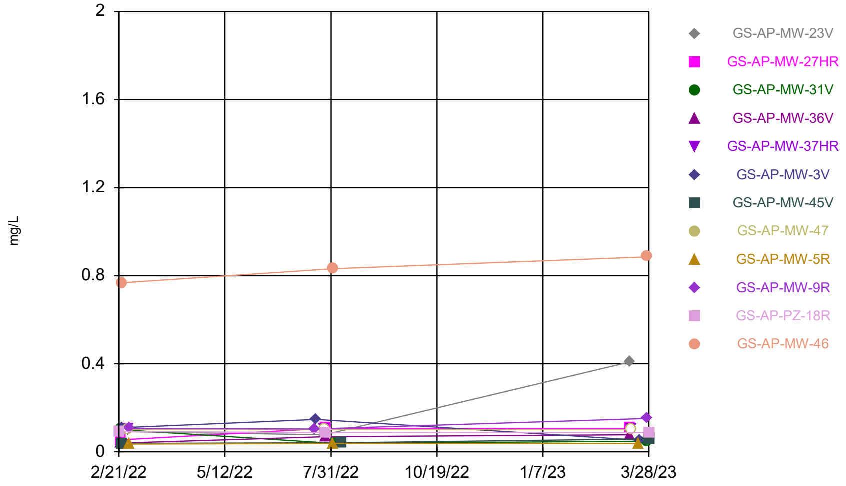
Time Series



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Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

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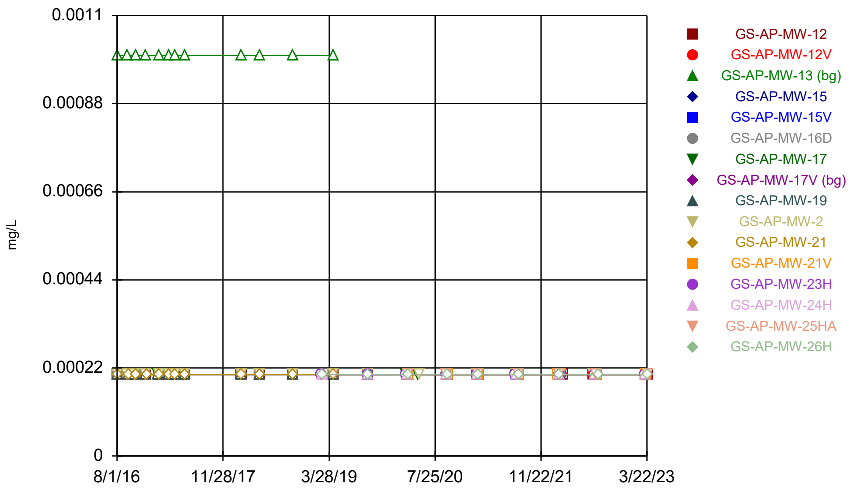
Time Series



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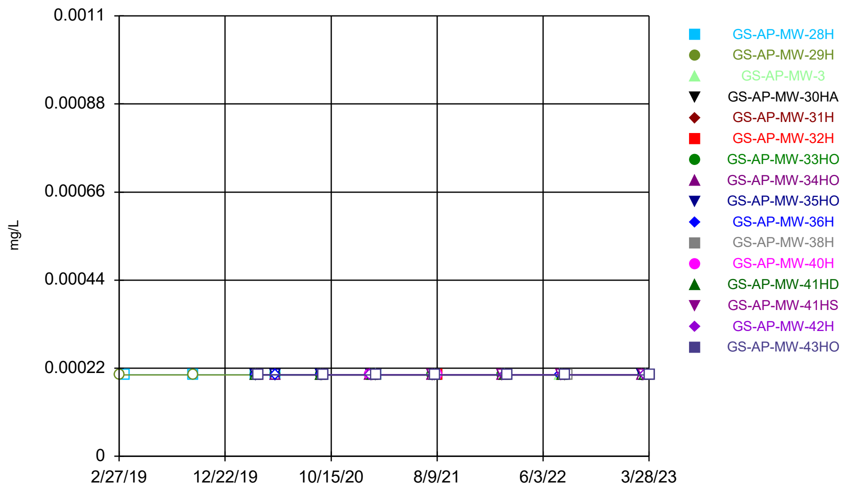

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Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

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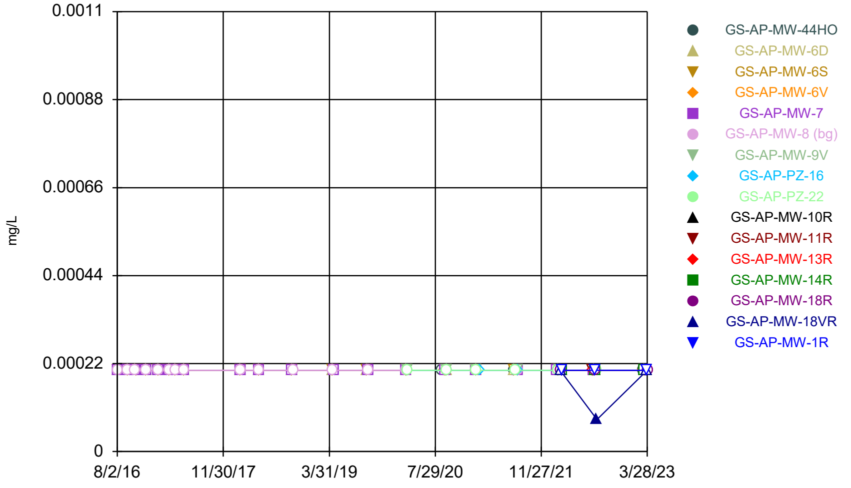

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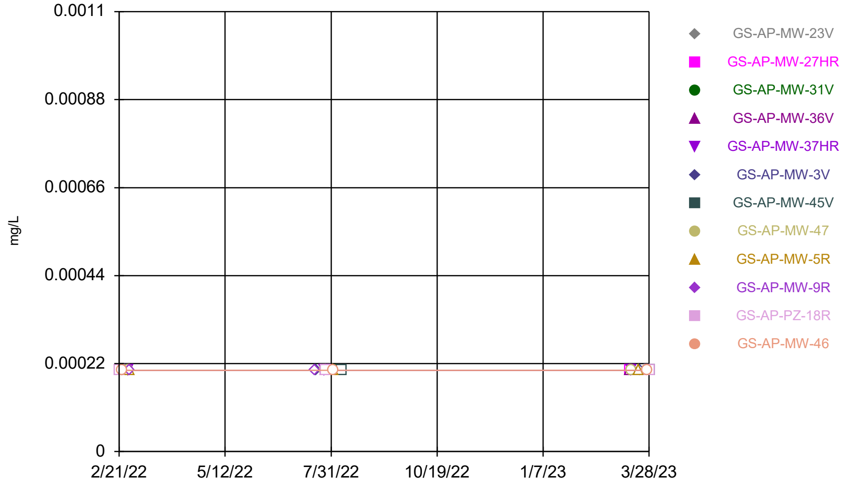

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Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

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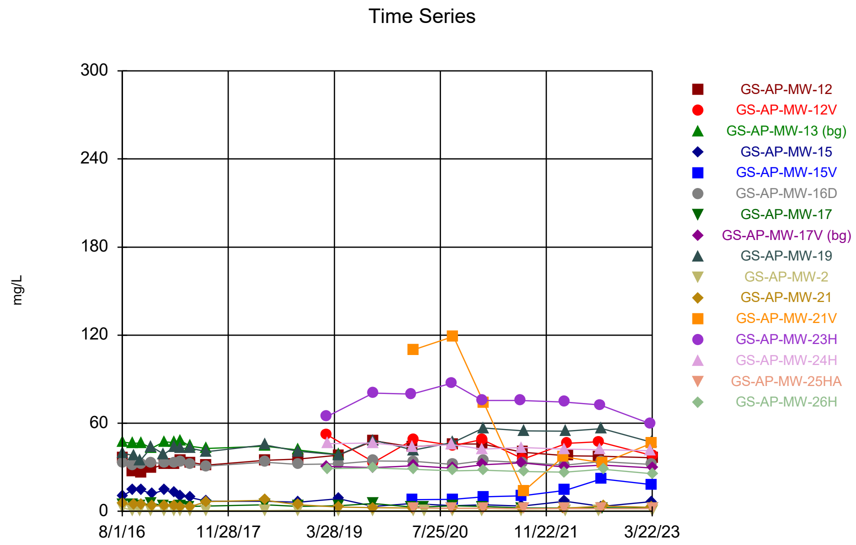
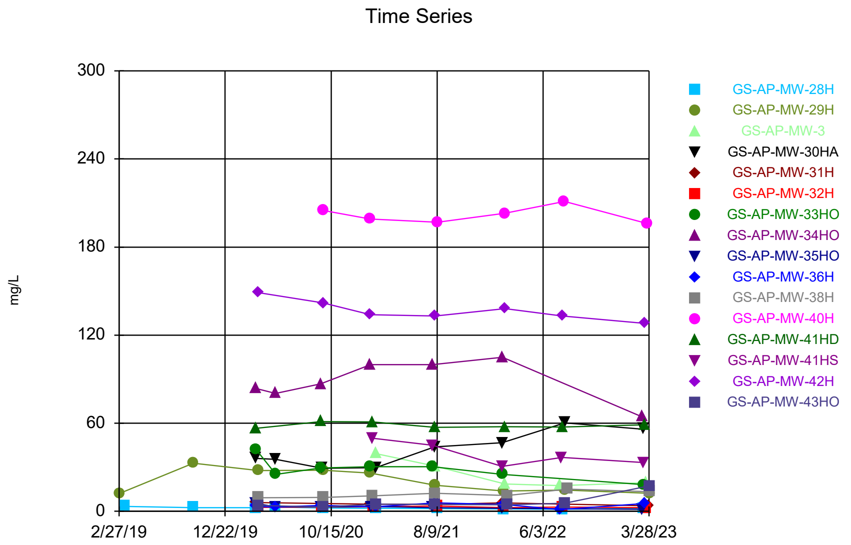


Constituent: Calcium   Analysis Run 5/23/2023 3:36 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

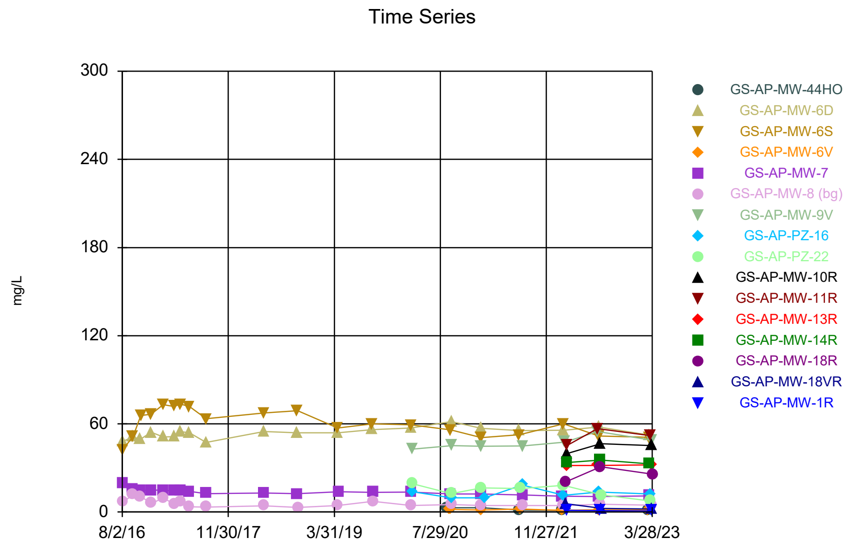
Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG



Constituent: Calcium   Analysis Run 5/23/2023 3:36 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG



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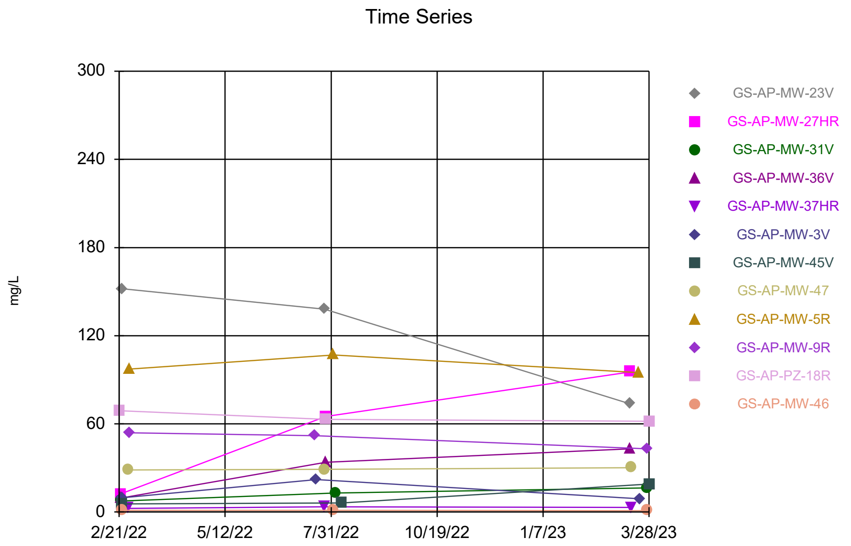
Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG



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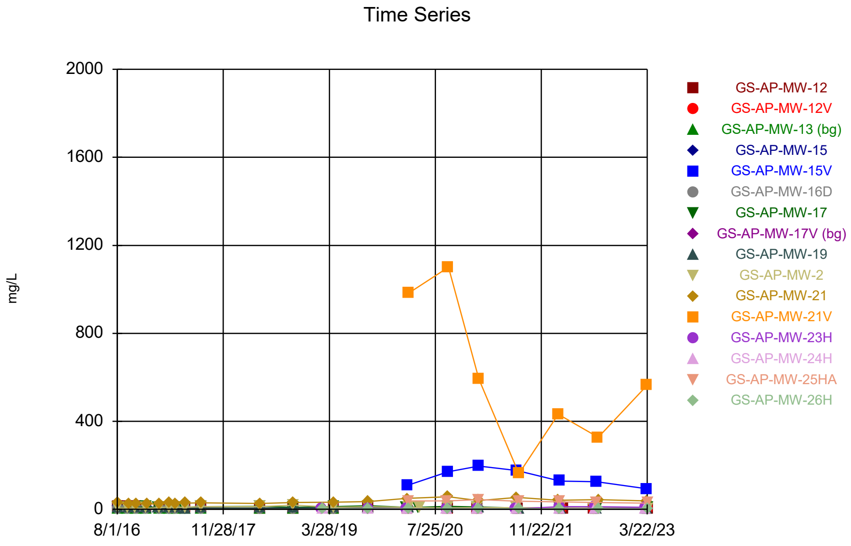
Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

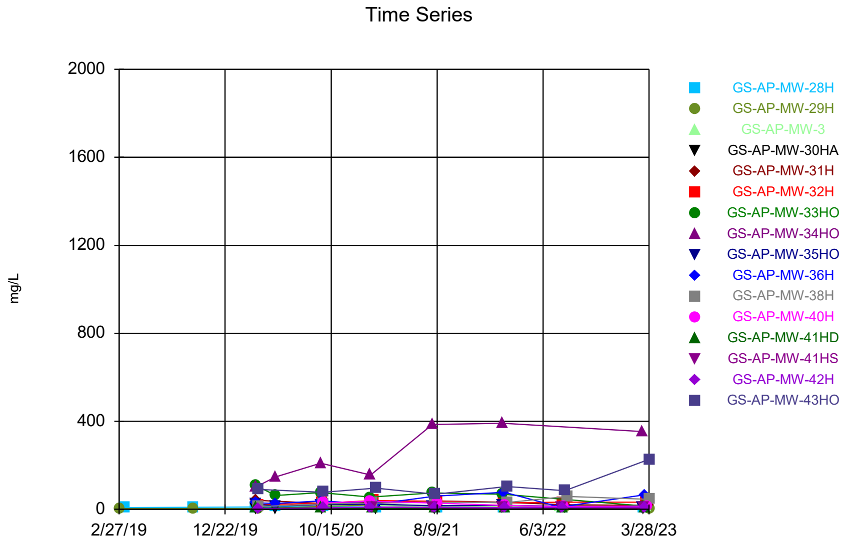
Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG



Constituent: Chloride Analysis Run 5/23/2023 3:36 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG



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Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

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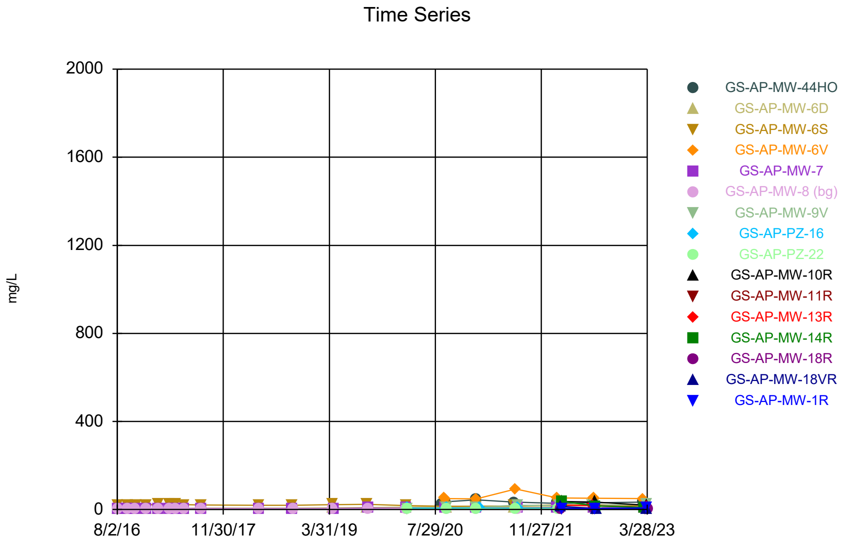

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Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

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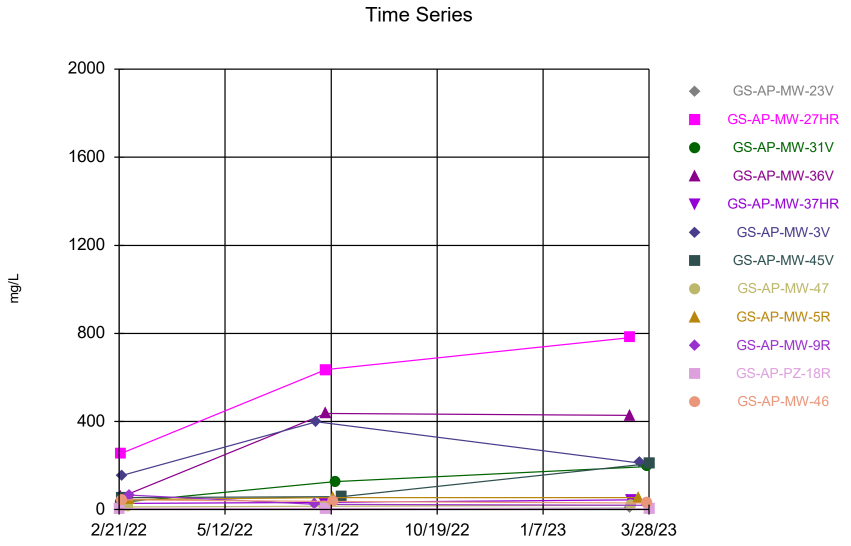

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Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

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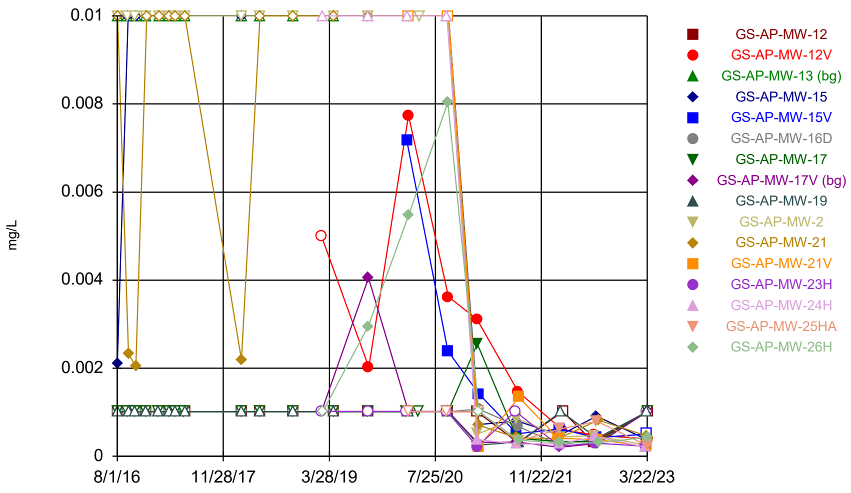
Time Series



Constituent: Chromium Analysis Run 5/23/2023 3:36 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

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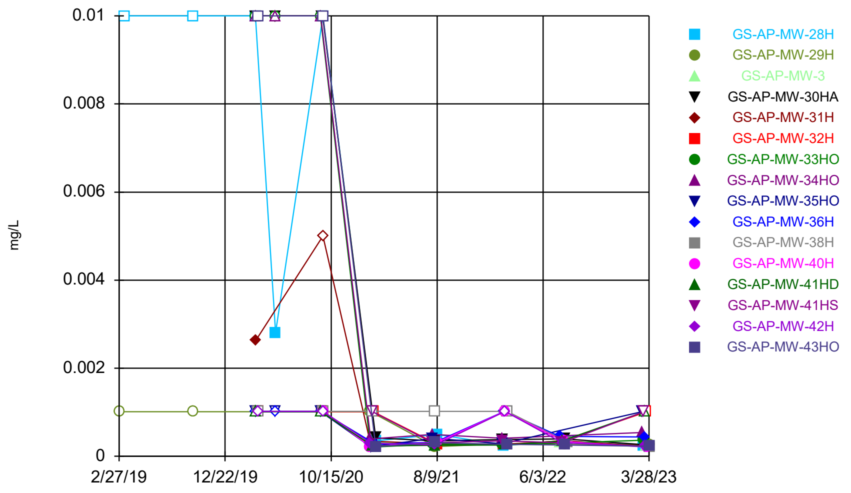
Hollow symbols indicate censored values.

Time Series



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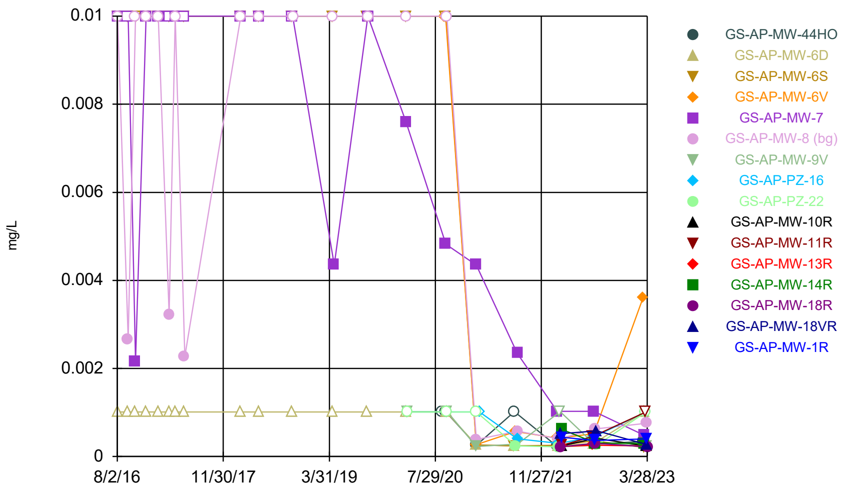
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series



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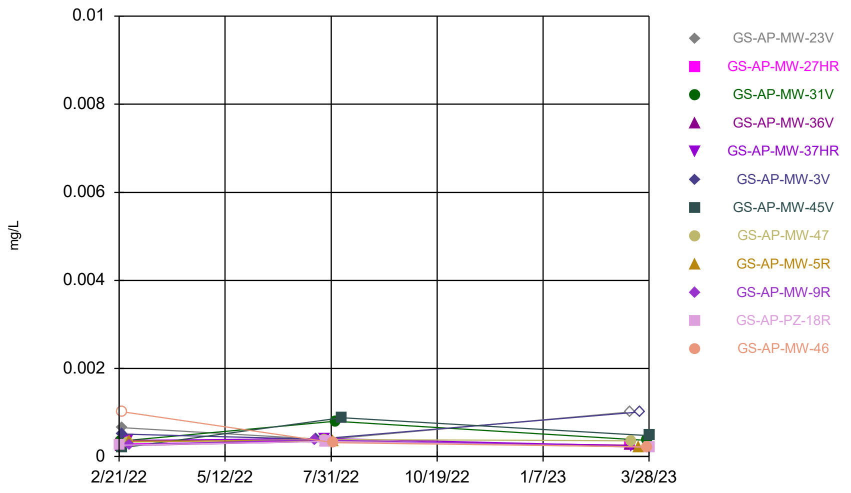
Time Series

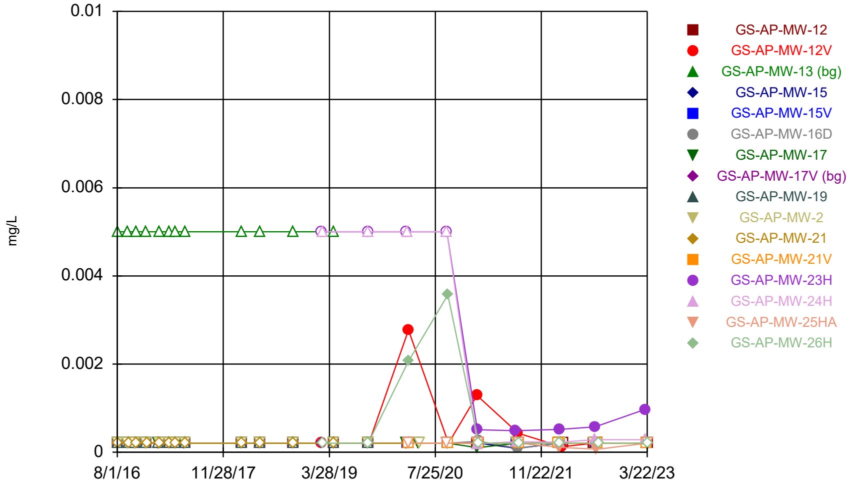


Constituent: Chromium Analysis Run 5/23/2023 3:36 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series

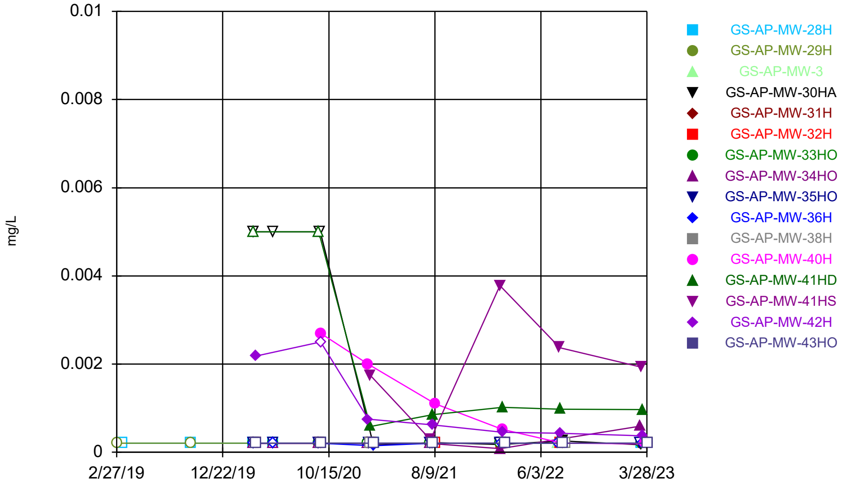


Constituent: Cobalt   Analysis Run 5/23/2023 3:36 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series

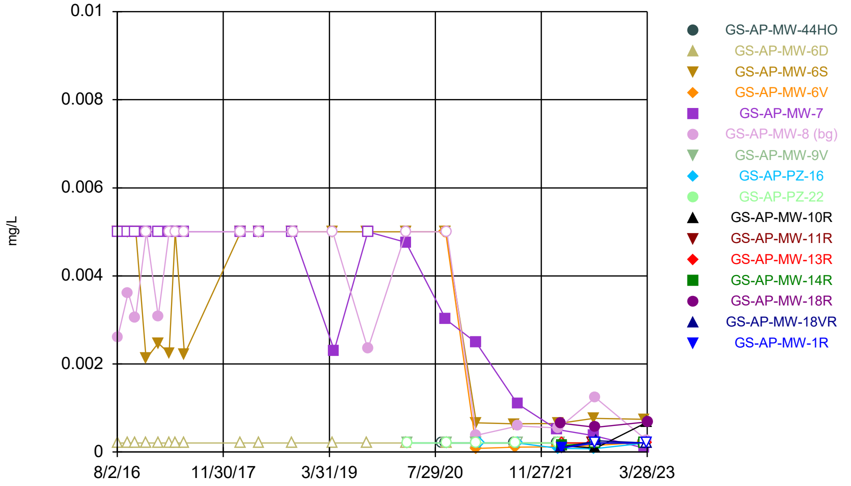


Constituent: Cobalt   Analysis Run 5/23/2023 3:36 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series



Constituent: Cobalt   Analysis Run 5/23/2023 3:36 PM

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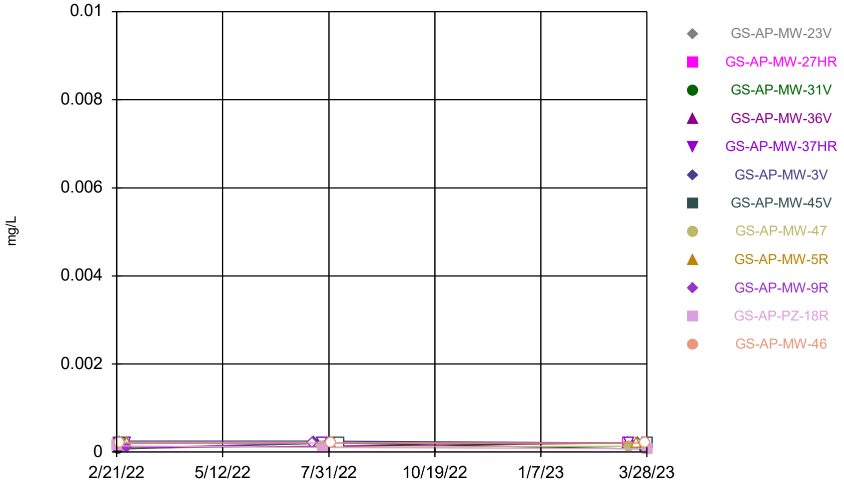
Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

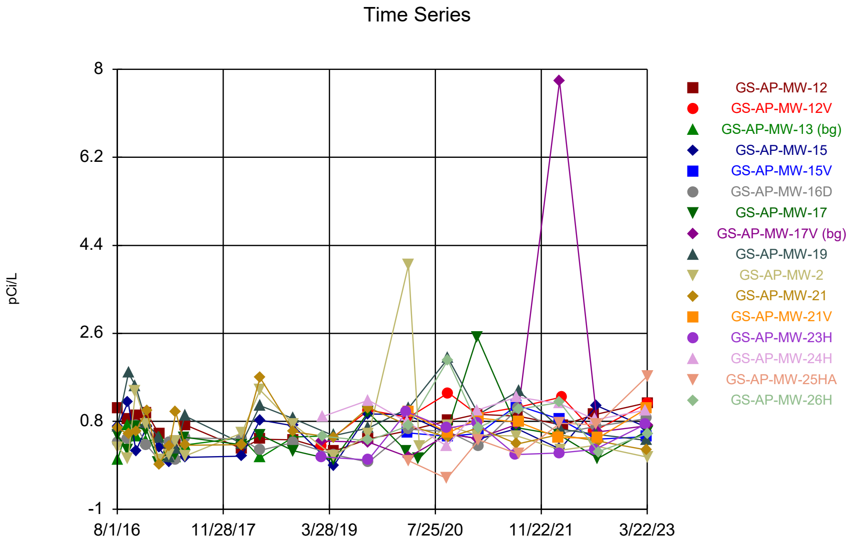
Time Series



Constituent: Cobalt   Analysis Run 5/23/2023 3:36 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

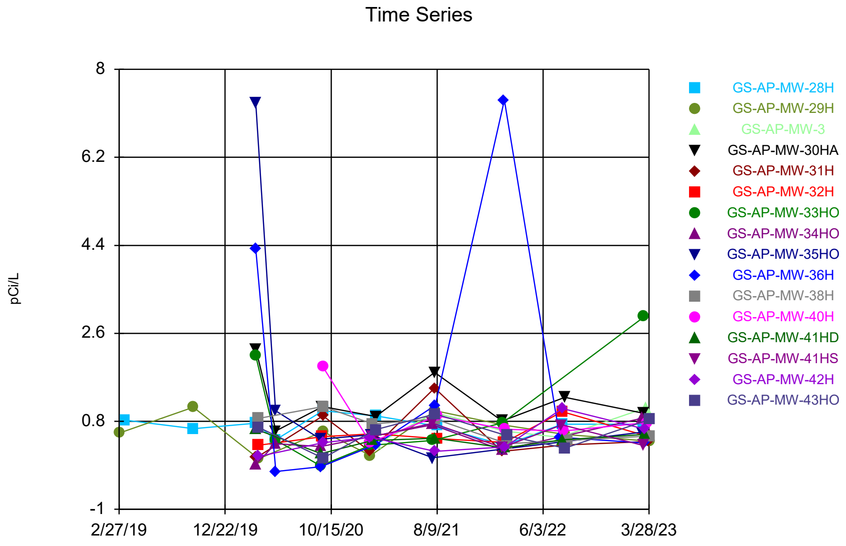
Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG



Constituent: Combined Radium 226 + 228 Analysis Run 5/23/2023 3:36 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

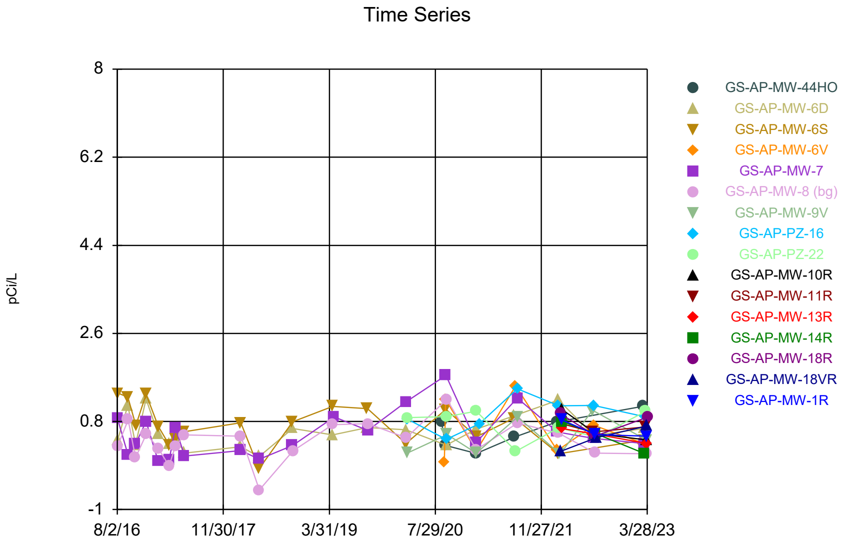
Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG



Constituent: Combined Radium 226 + 228 Analysis Run 5/23/2023 3:36 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

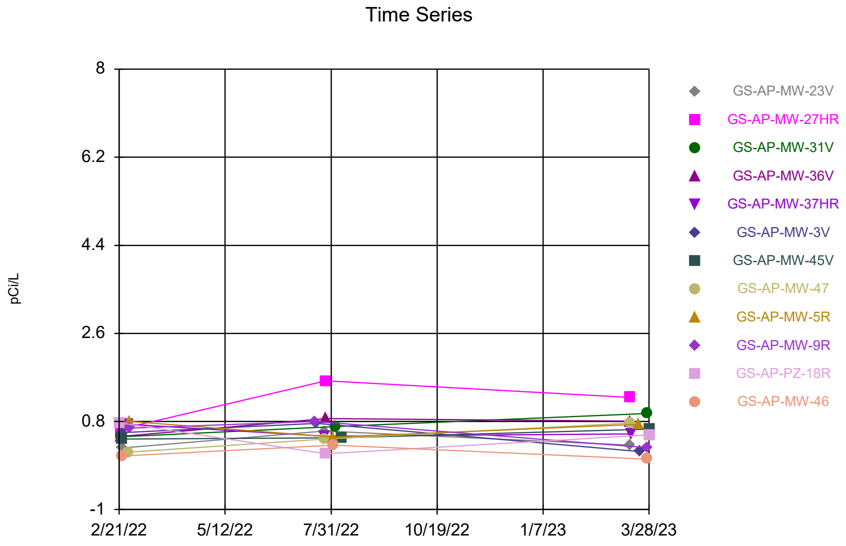
Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG



Constituent: Combined Radium 226 + 228 Analysis Run 5/23/2023 3:36 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

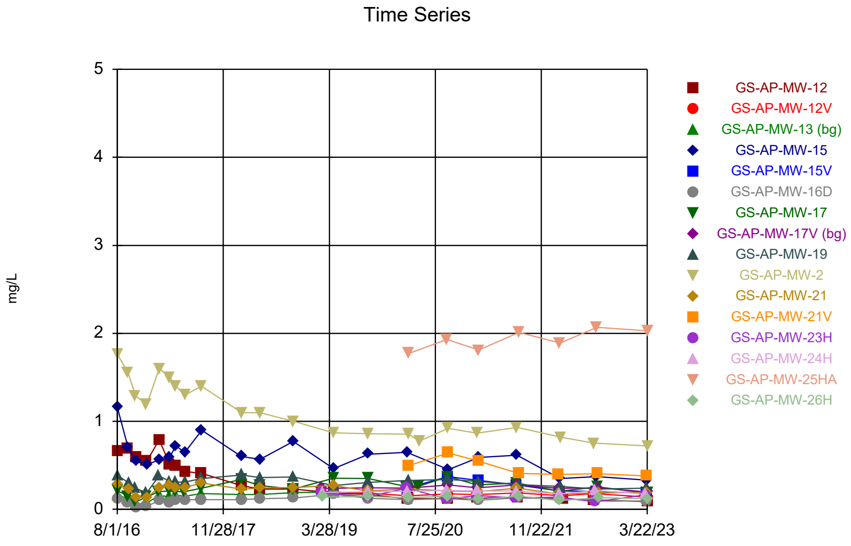
Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG



Constituent: Combined Radium 226 + 228 Analysis Run 5/23/2023 3:36 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

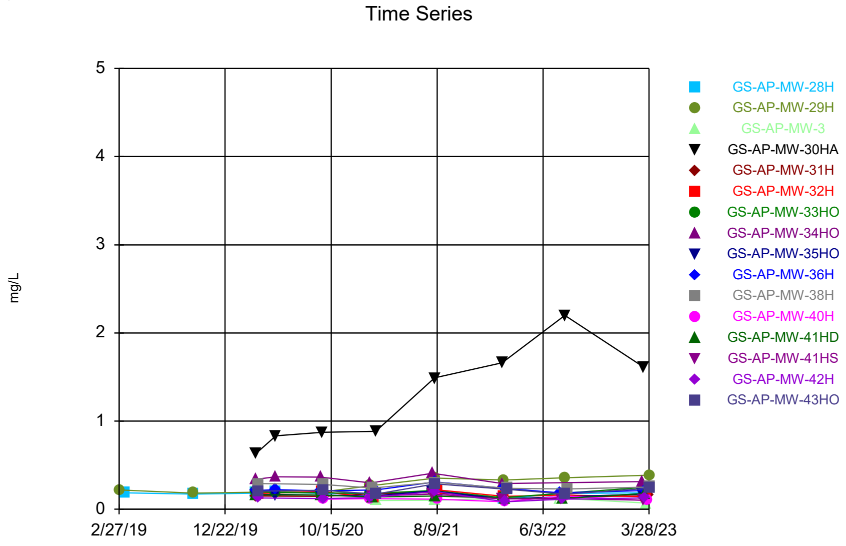
Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG



Constituent: Fluoride   Analysis Run 5/23/2023 3:36 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

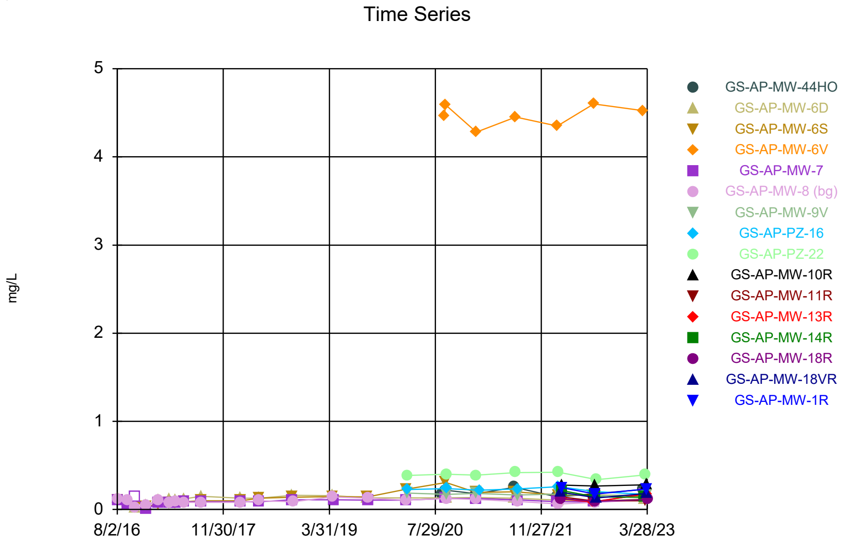
Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.



Constituent: Fluoride   Analysis Run 5/23/2023 3:36 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

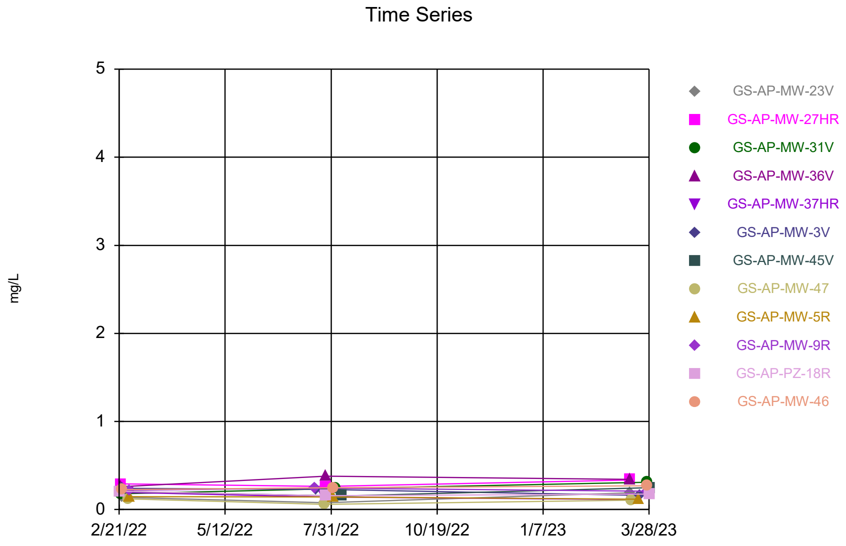
Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.



Constituent: Fluoride   Analysis Run 5/23/2023 3:36 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

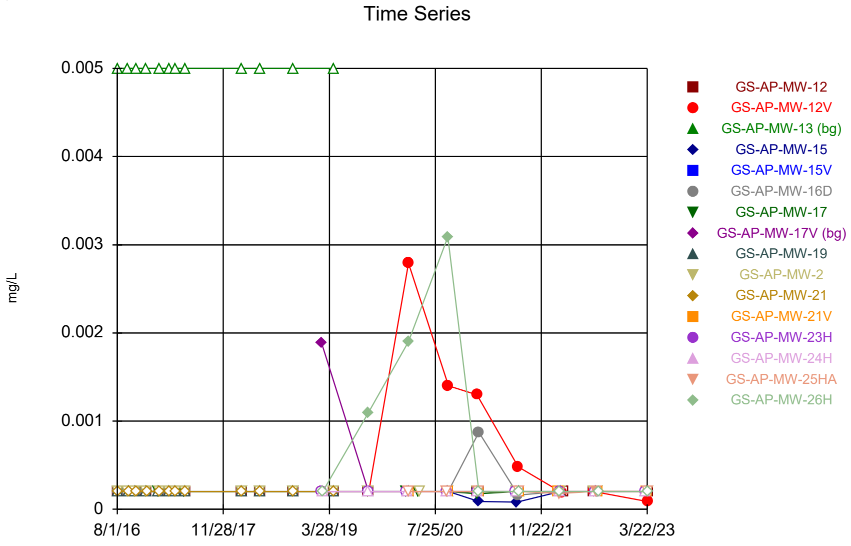
Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG



Constituent: Fluoride   Analysis Run 5/23/2023 3:36 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

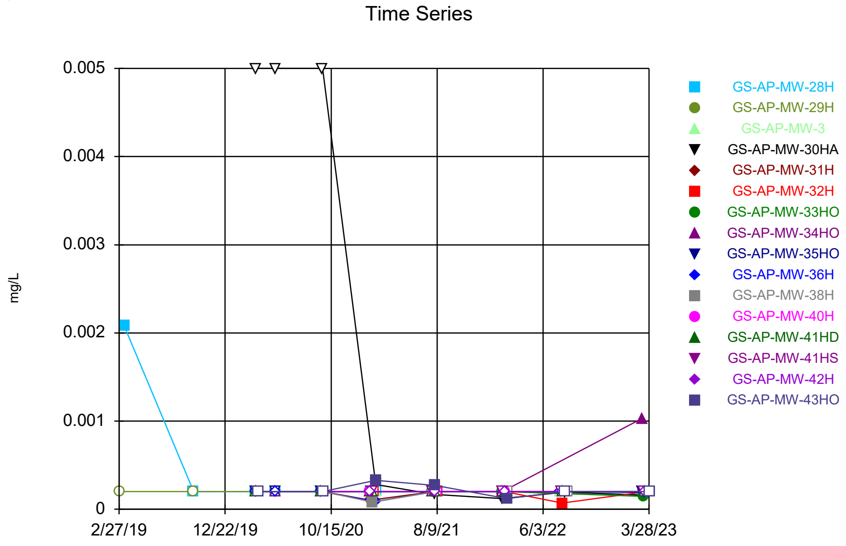
Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.



Constituent: Lead Analysis Run 5/23/2023 3:36 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

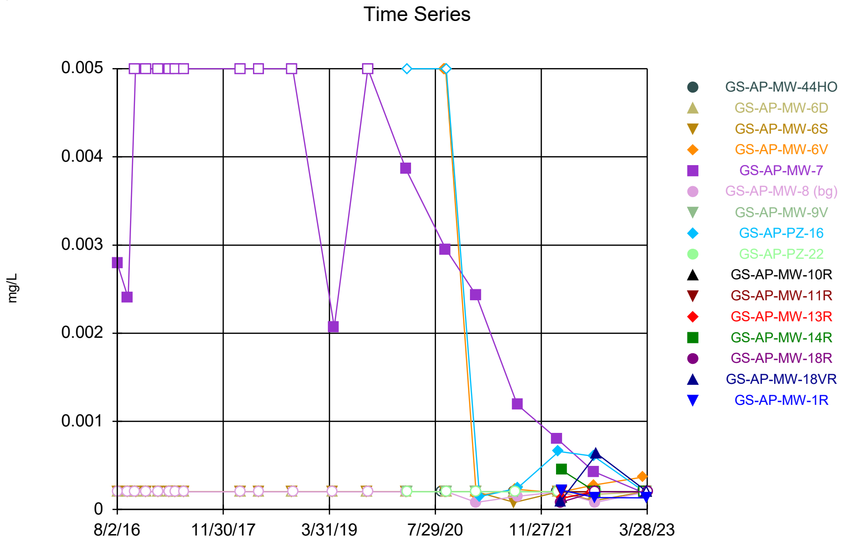
Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.



Constituent: Lead Analysis Run 5/23/2023 3:36 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

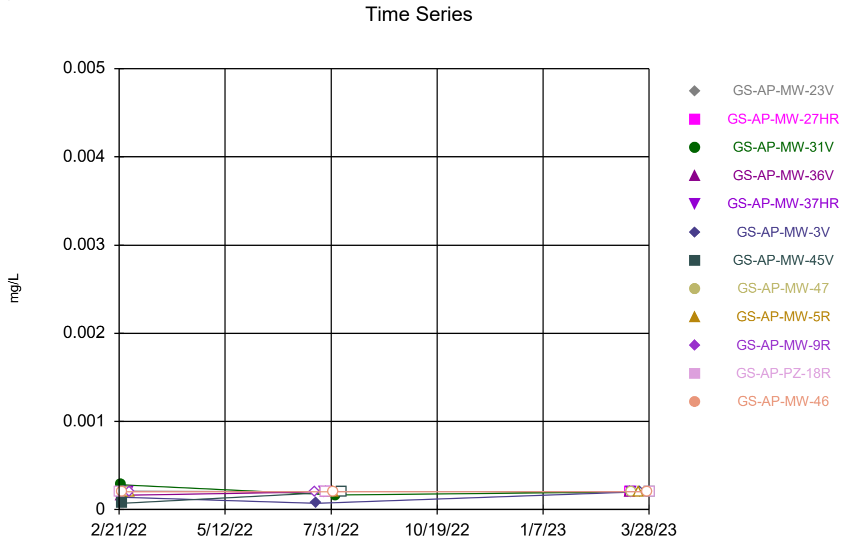
Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.



Constituent: Lead Analysis Run 5/23/2023 3:37 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

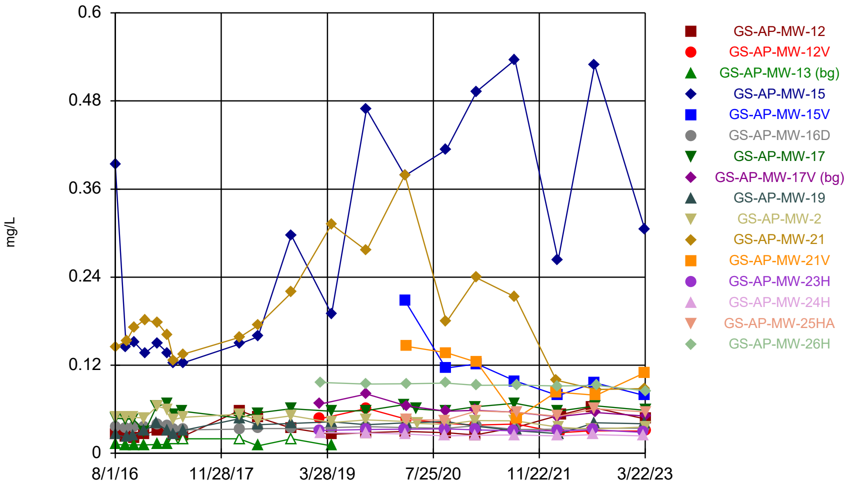


Constituent: Lead Analysis Run 5/23/2023 3:37 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series

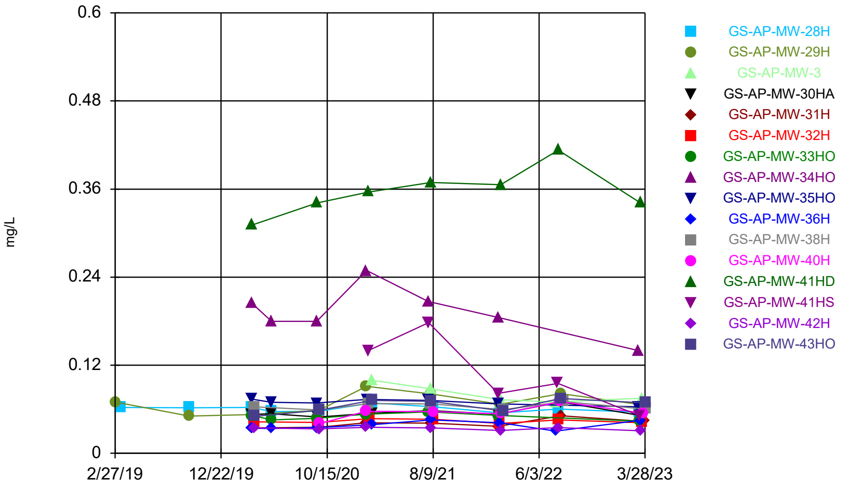


Constituent: Lithium Analysis Run 5/23/2023 3:37 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Time Series

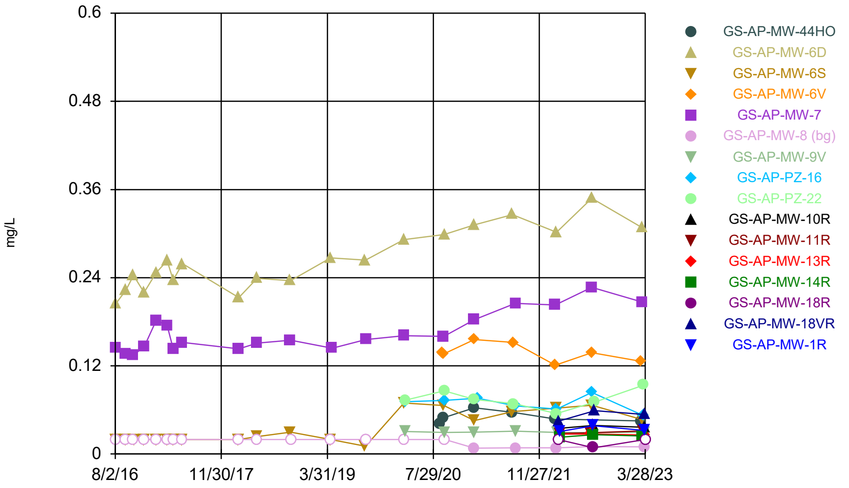


Constituent: Lithium Analysis Run 5/23/2023 3:37 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series

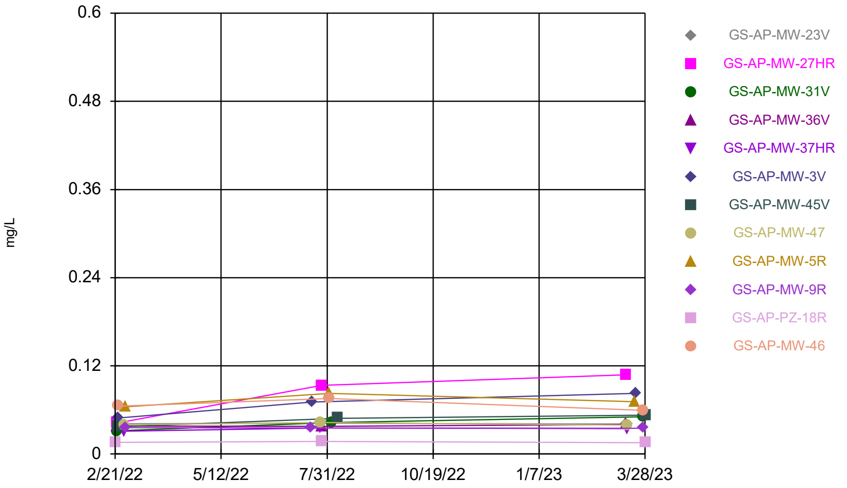


Constituent: Lithium Analysis Run 5/23/2023 3:37 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

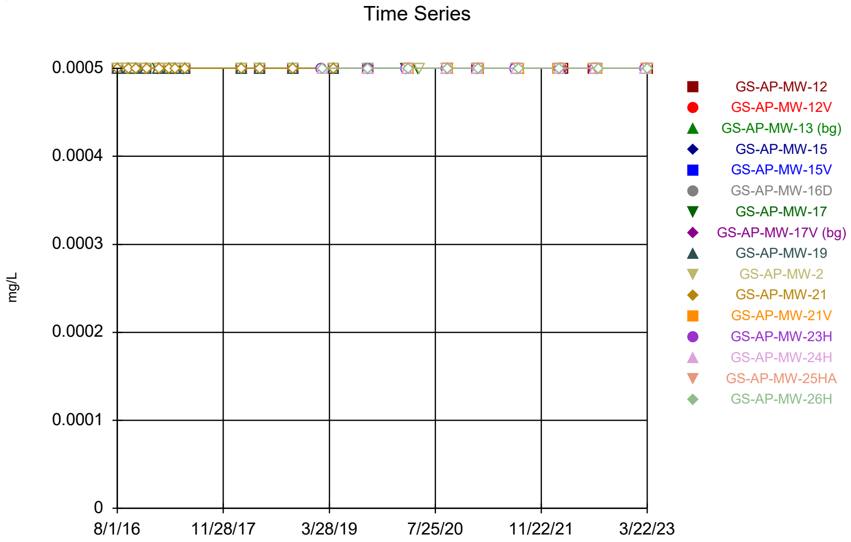
Time Series



Constituent: Lithium Analysis Run 5/23/2023 3:37 PM

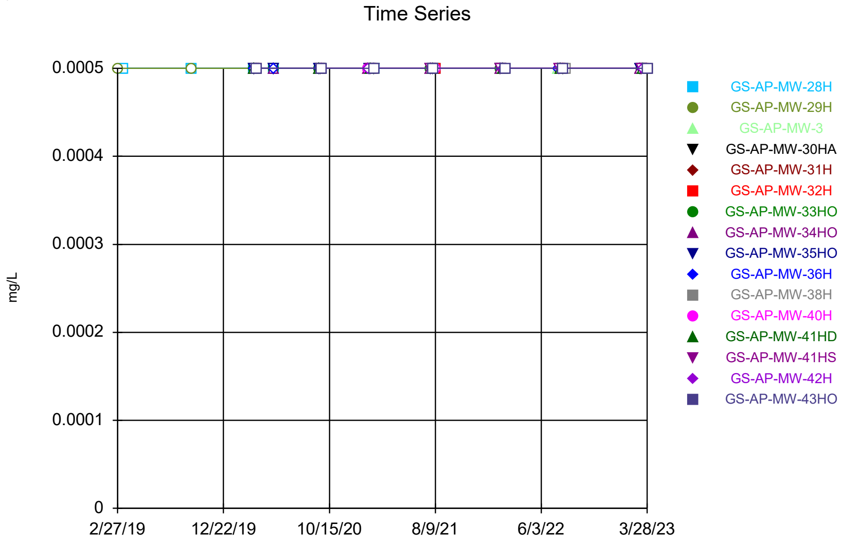
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.



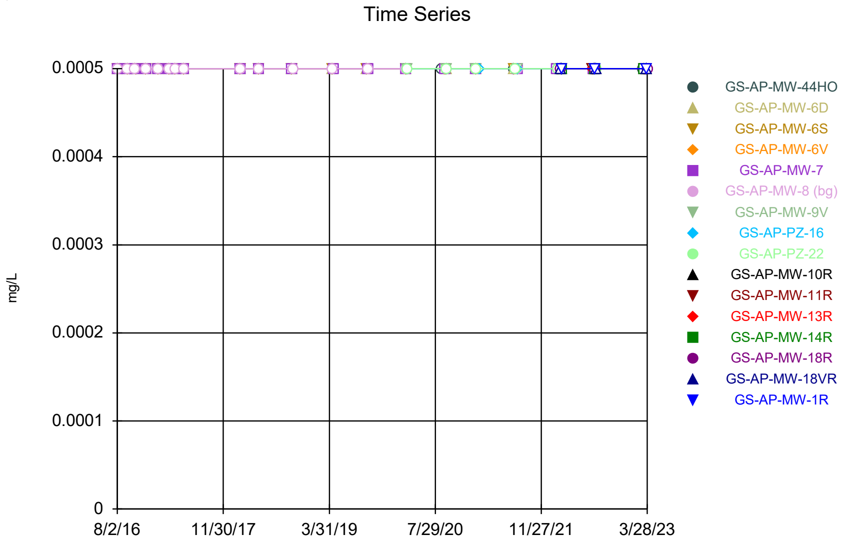
Constituent: Mercury Analysis Run 5/23/2023 3:37 PM
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.



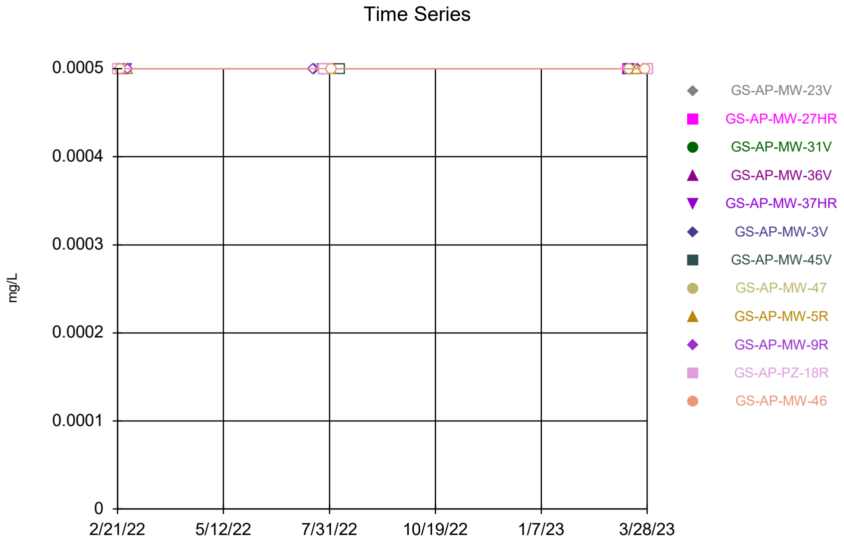
Constituent: Mercury Analysis Run 5/23/2023 3:37 PM
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.



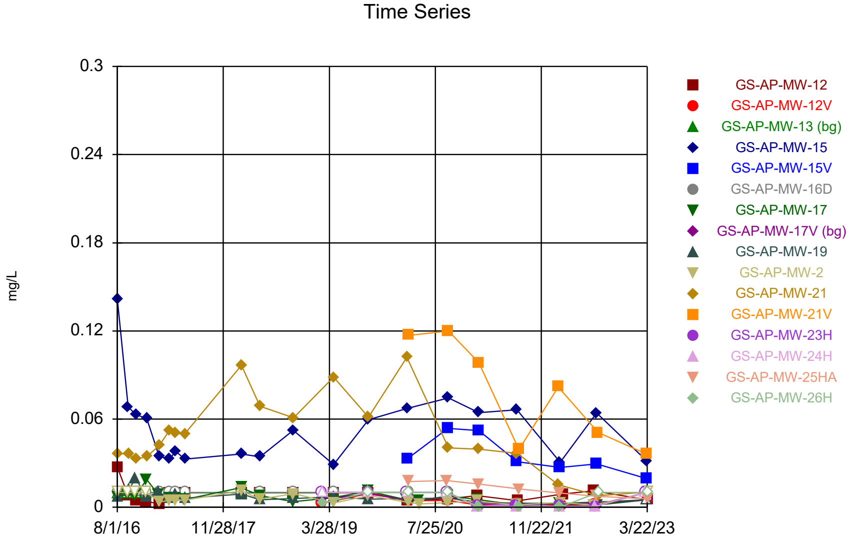
Constituent: Mercury Analysis Run 5/23/2023 3:37 PM
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.



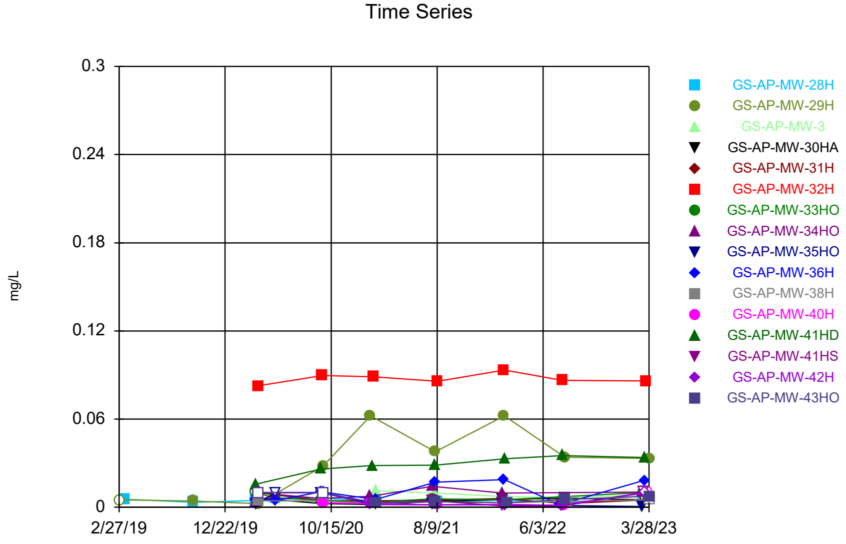
Constituent: Mercury Analysis Run 5/23/2023 3:37 PM
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.


Time Series

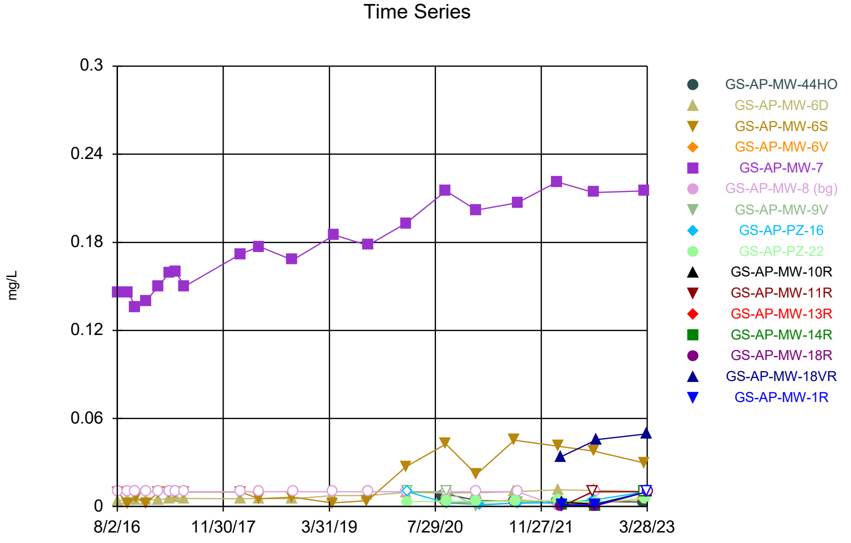
Constituent: Molybdenum Analysis Run 5/23/2023 3:37 PM
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.


Time Series

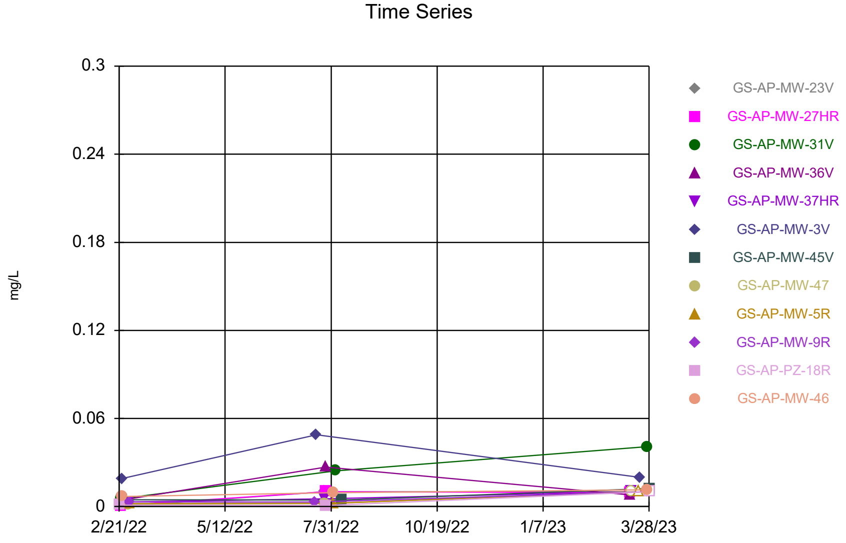
Constituent: Molybdenum Analysis Run 5/23/2023 3:37 PM
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.


Time Series

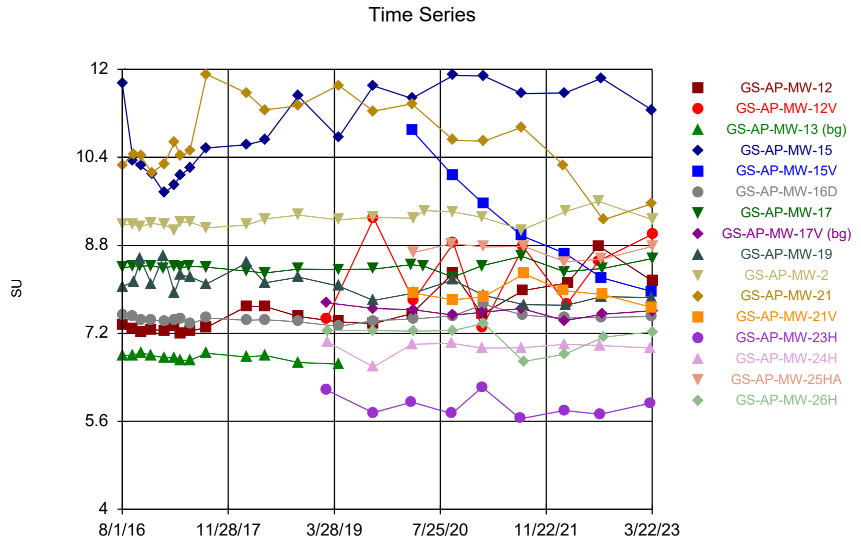
Constituent: Molybdenum Analysis Run 5/23/2023 3:37 PM
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.


Time Series

Constituent: Molybdenum Analysis Run 5/23/2023 3:37 PM
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

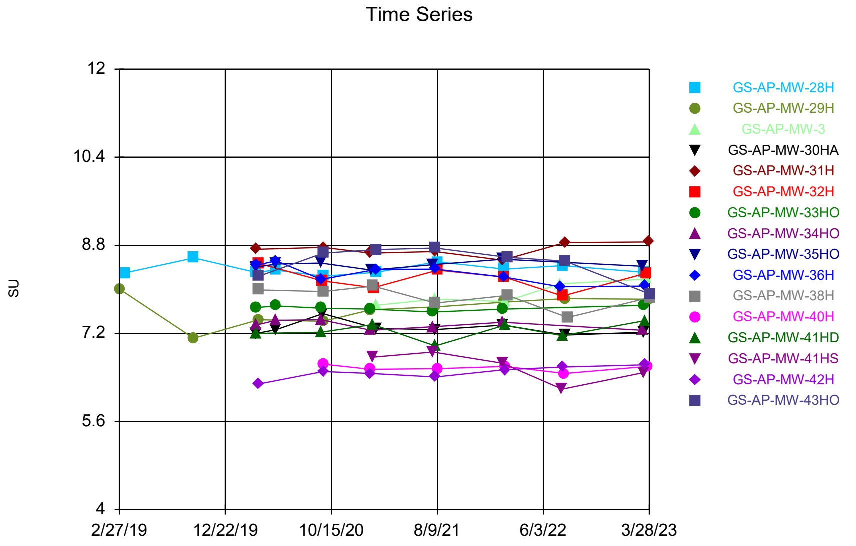
Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG



Constituent: pH Analysis Run 5/23/2023 3:37 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

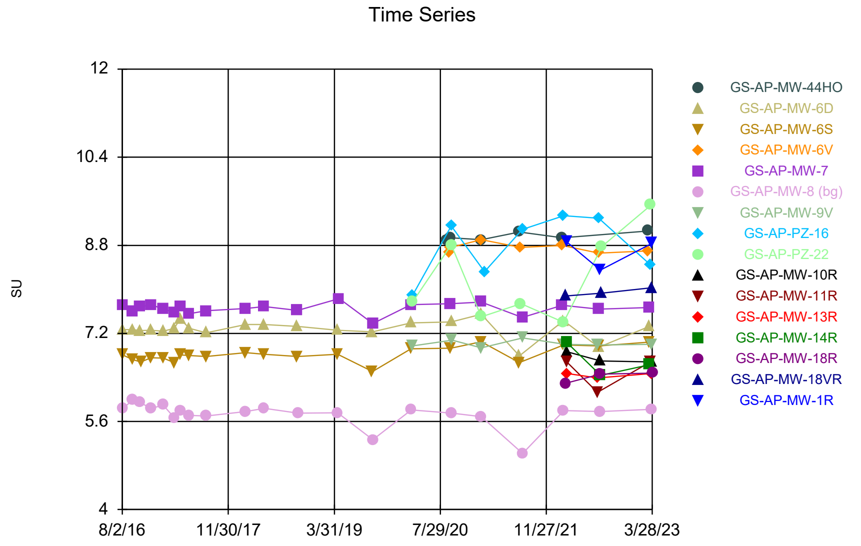
Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG



Constituent: pH Analysis Run 5/23/2023 3:37 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

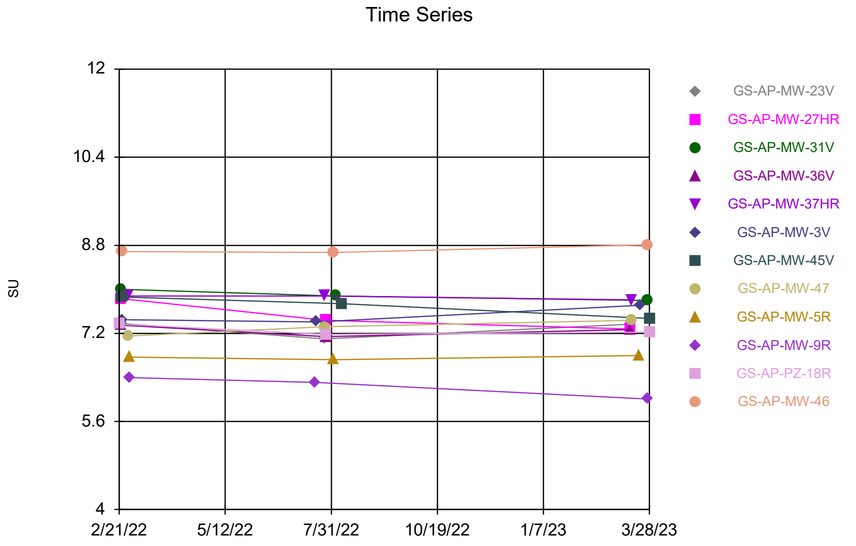
Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG



Constituent: pH Analysis Run 5/23/2023 3:37 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

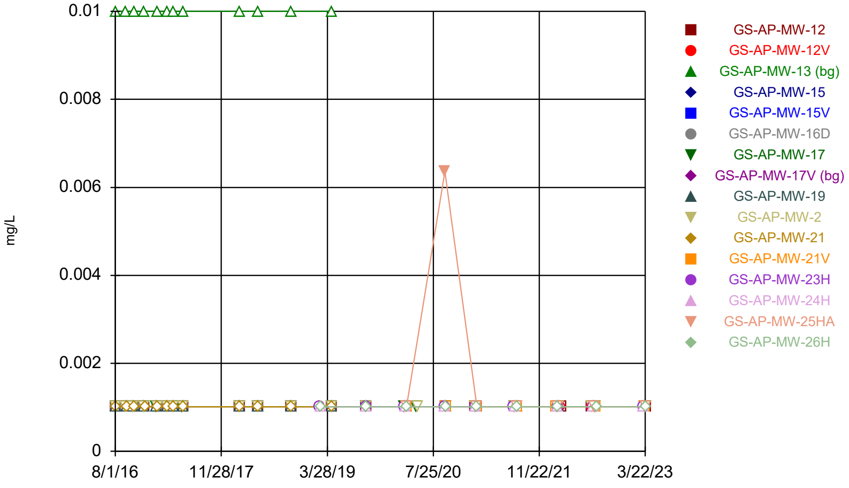


Constituent: pH Analysis Run 5/23/2023 3:37 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series

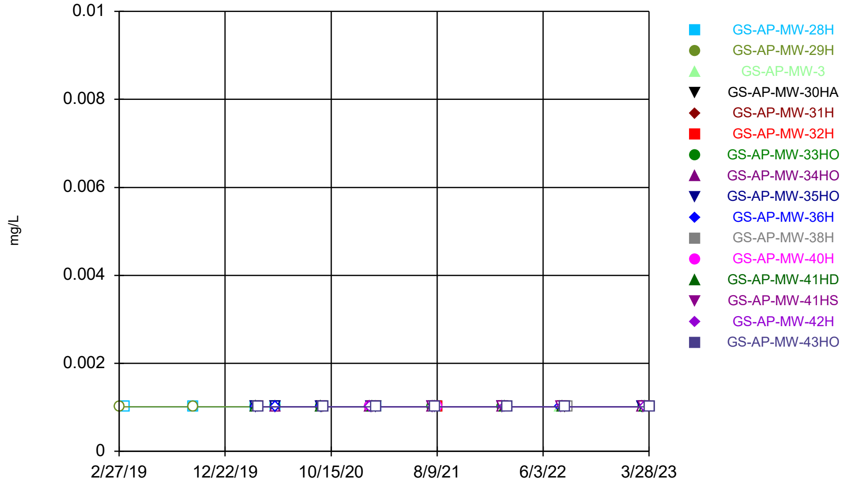


Constituent: Selenium Analysis Run 5/23/2023 3:37 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series

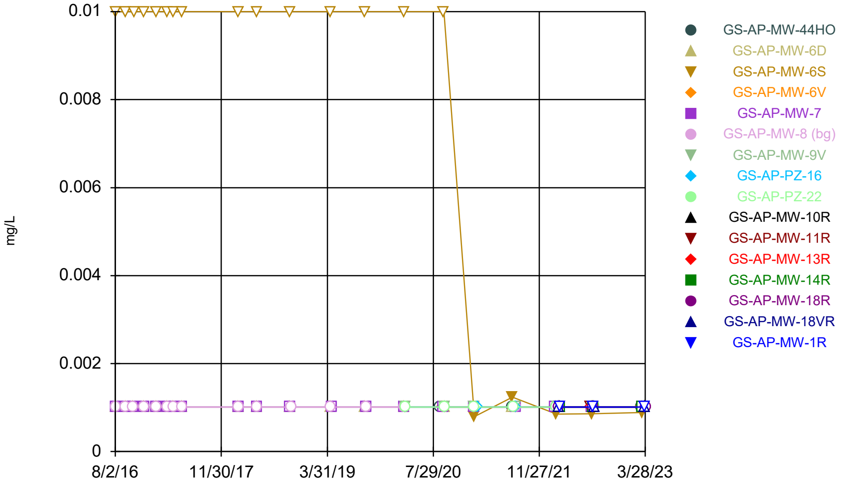


Constituent: Selenium Analysis Run 5/23/2023 3:37 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series

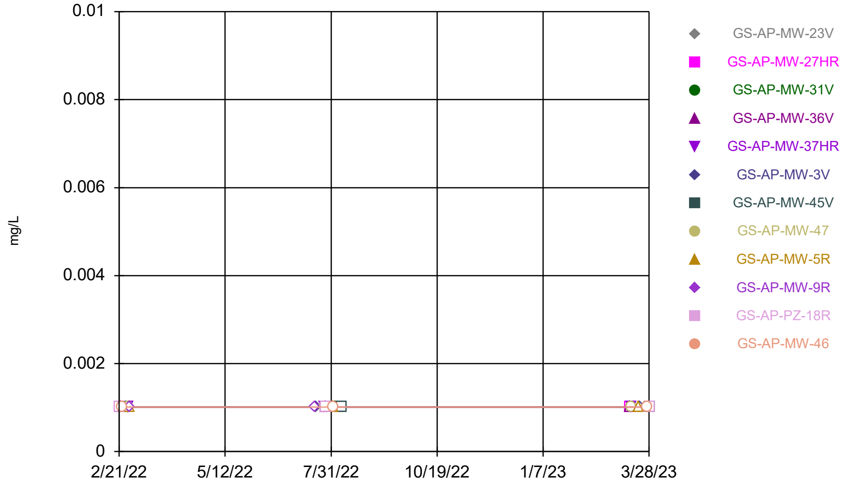


Constituent: Selenium Analysis Run 5/23/2023 3:37 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series

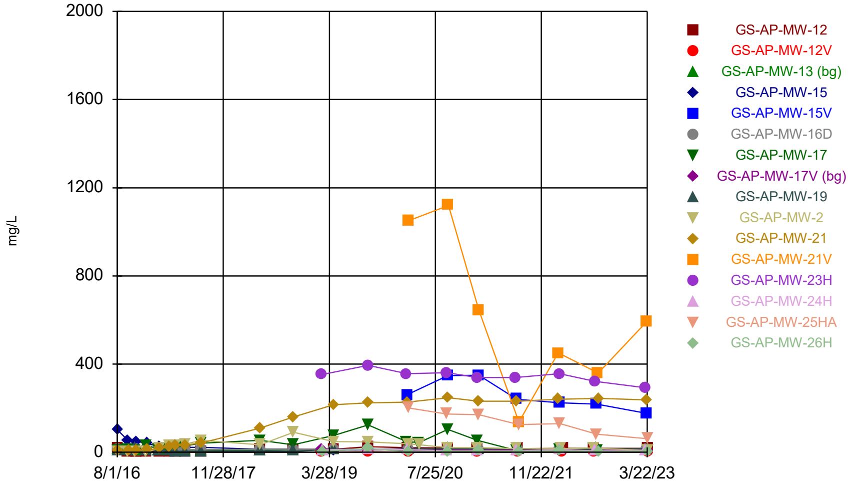


Constituent: Selenium Analysis Run 5/23/2023 3:37 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

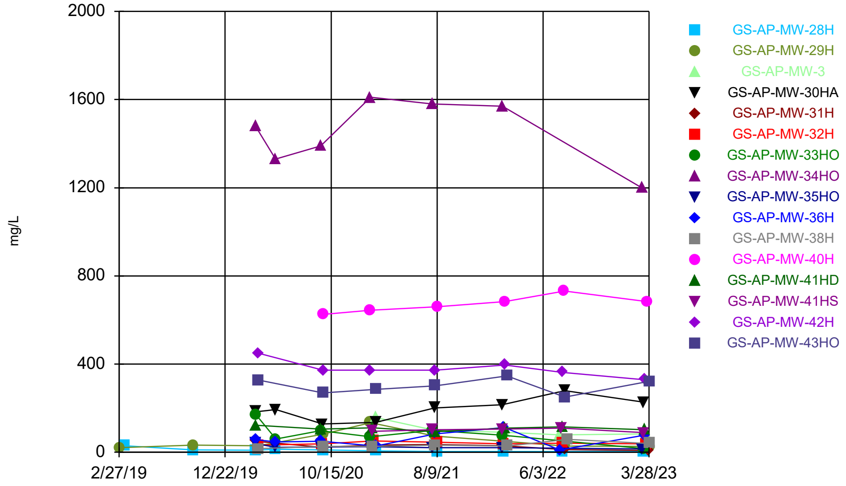
Time Series



Constituent: Sulfate Analysis Run 5/23/2023 3:37 PM
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

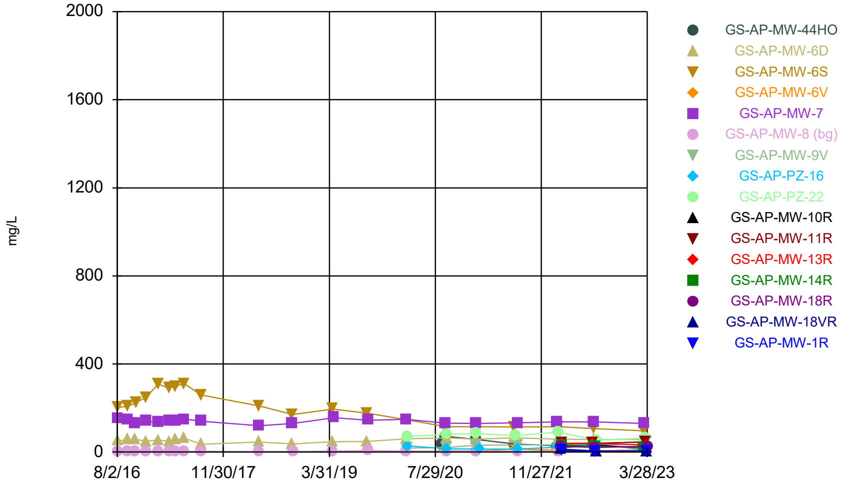
Time Series



Constituent: Sulfate Analysis Run 5/23/2023 3:37 PM
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

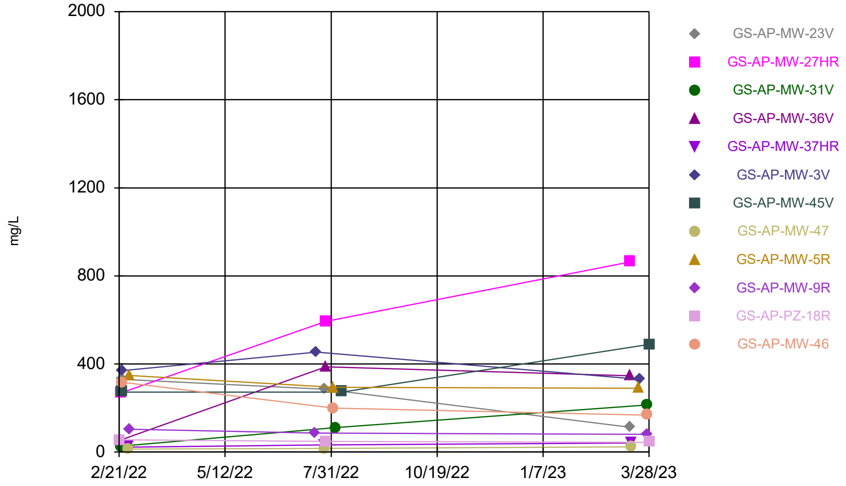
Time Series



Constituent: Sulfate Analysis Run 5/23/2023 3:37 PM
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

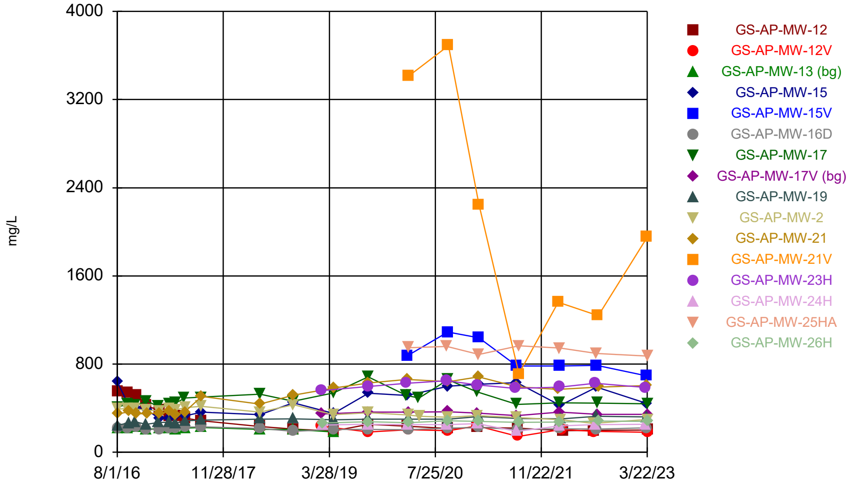
Time Series



Constituent: Sulfate Analysis Run 5/23/2023 3:37 PM
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Time Series

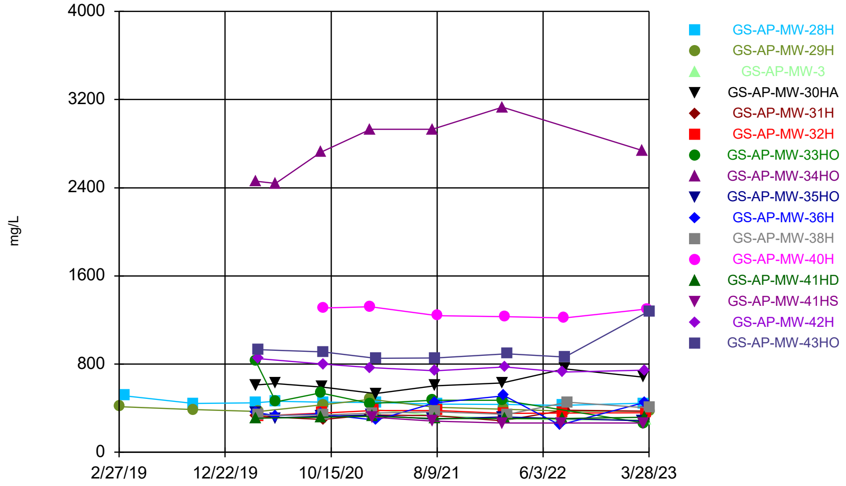


Constituent: TDS Analysis Run 5/23/2023 3:37 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Time Series

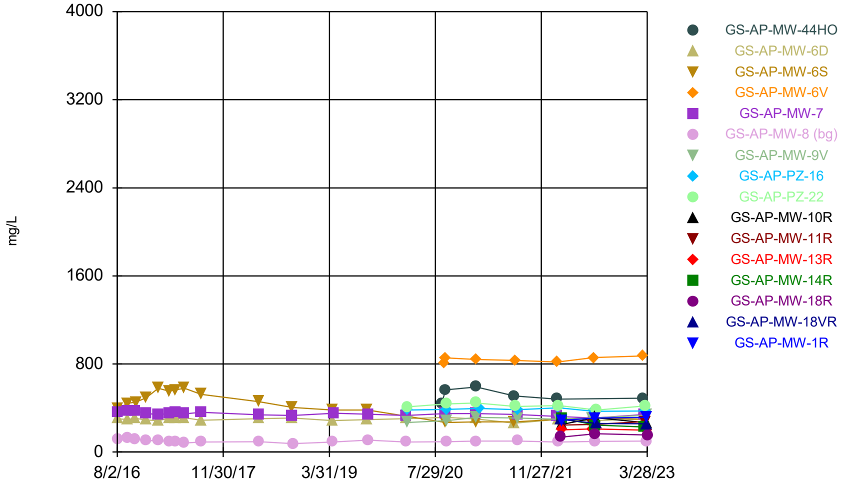


Constituent: TDS Analysis Run 5/23/2023 3:37 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Time Series

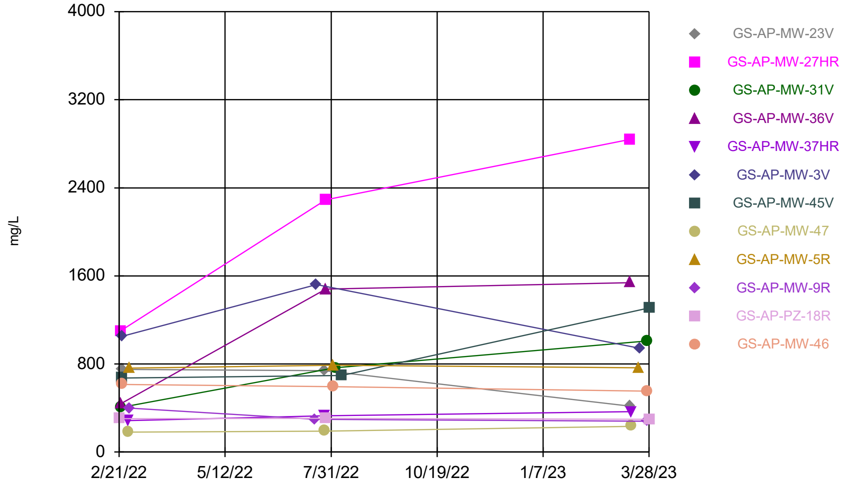


Constituent: TDS Analysis Run 5/23/2023 3:37 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Time Series

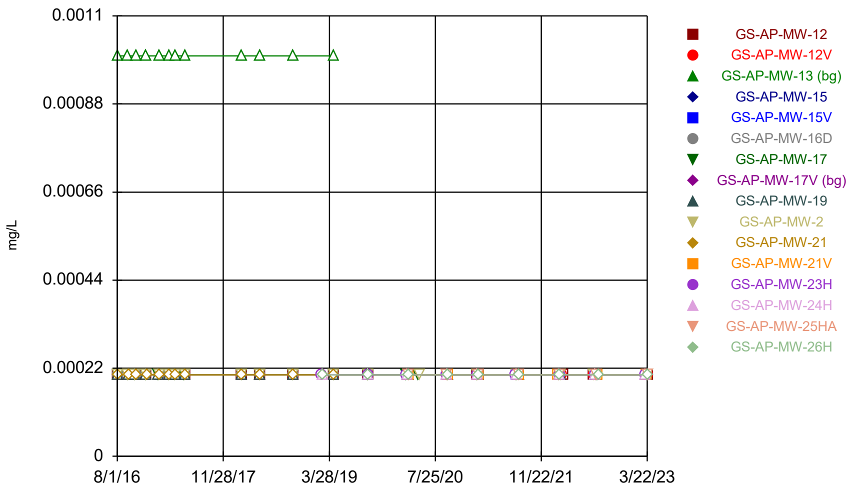


Constituent: TDS Analysis Run 5/23/2023 3:37 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series

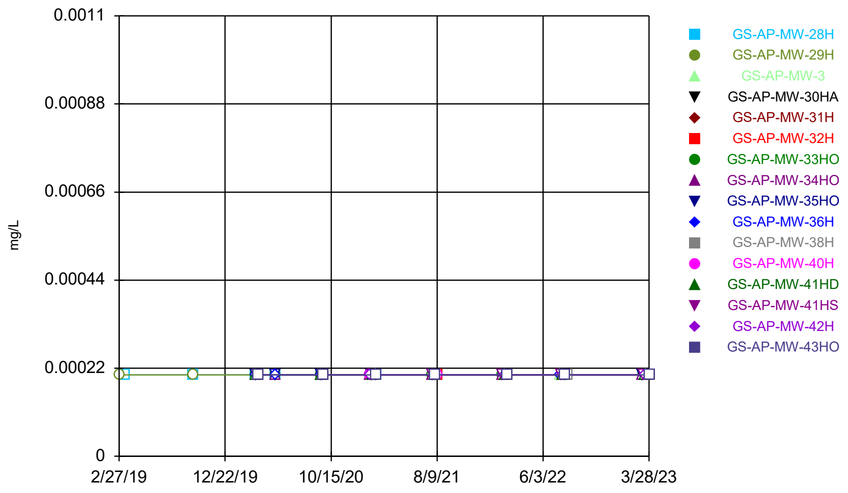


Constituent: Thallium Analysis Run 5/23/2023 3:37 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series

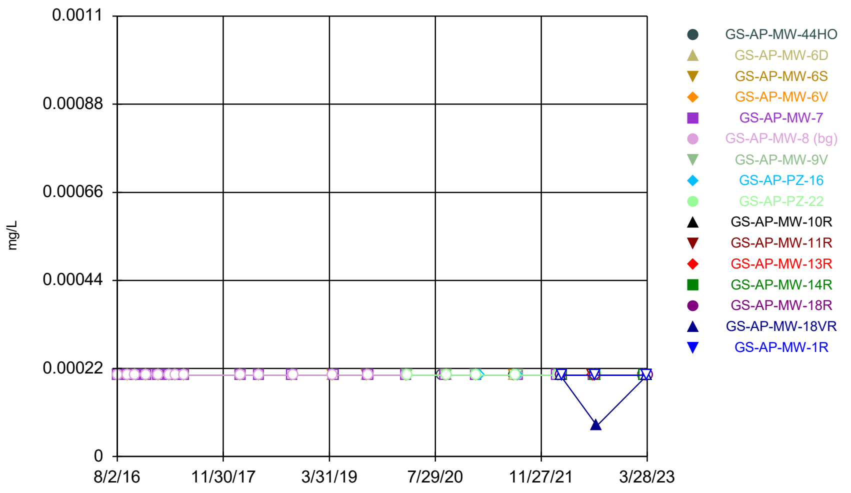


Constituent: Thallium Analysis Run 5/23/2023 3:37 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series

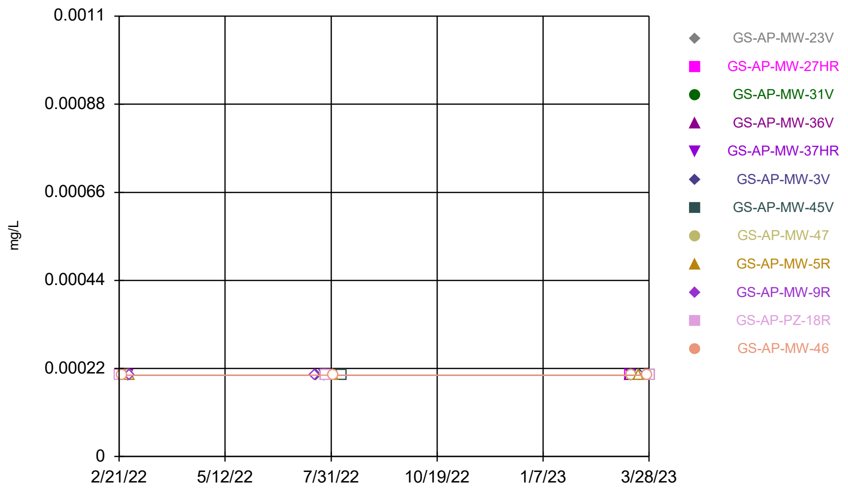


Constituent: Thallium Analysis Run 5/23/2023 3:37 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series



Constituent: Thallium Analysis Run 5/23/2023 3:37 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Time Series

Constituent: Antimony (mg/L) Analysis Run 5/23/2023 3:38 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-12	GS-AP-MW-12V	GS-AP-MW-13 (bg)	GS-AP-MW-15	GS-AP-MW-15V	GS-AP-MW-16D	GS-AP-MW-17	GS-AP-MW-17V ...	GS-AP-MW-19
8/1/2016				0.00115 (J)		<0.001015	<0.001015		<0.001015
8/2/2016			<0.003						
8/3/2016	<0.003								
9/19/2016						<0.001015	0.000636 (J)		
9/20/2016	<0.003		<0.003	0.000876 (J)					
9/21/2016									<0.001015
10/24/2016							<0.001015		<0.001015
10/25/2016	<0.003		<0.003	<0.001015		<0.001015			
12/13/2016	0.000681 (J)		<0.003			0.000633 (J)	0.00072 (J)		0.000613 (J)
12/14/2016				0.000858 (J)					
2/6/2017							<0.001015		
2/7/2017									<0.001015
2/8/2017	<0.003		<0.003	<0.001015		<0.001015			
3/27/2017							<0.001015		
3/28/2017				<0.001015					<0.001015
3/29/2017	<0.003		<0.003			<0.001015			
3/30/2017									
4/24/2017							<0.001015		
4/26/2017	<0.003		<0.003	<0.001015		<0.001015			<0.001015
6/5/2017							<0.001015		
6/6/2017				<0.001015		<0.001015			<0.001015
6/7/2017	<0.003		<0.003						
2/19/2018							<0.001015		
2/20/2018	<0.003		<0.003	0.000636 (J)					
2/21/2018						<0.001015			<0.001015
5/15/2018	<0.003		<0.003	<0.001015			<0.001015		
5/16/2018						<0.001015			<0.001015
10/15/2018				<0.001015			<0.001015		
10/16/2018	<0.003								<0.001015
10/17/2018			<0.003			<0.001015			
2/20/2019								0.00115 (J)	
2/21/2019		0.000841 (J)							
2/26/2019									
2/27/2019									
4/16/2019	<0.003		<0.003						
4/17/2019				<0.001015		<0.001015	<0.001015		<0.001015
9/23/2019							<0.001015		
9/24/2019				<0.001015		<0.001015		<0.001015	<0.001015
9/25/2019	<0.003	0.0025 (J)							
3/16/2020							<0.001015		
3/17/2020									
3/18/2020	0.0022 (J)			0.000976 (J)	0.0028 (J)				
3/23/2020									
3/24/2020		0.00128 (J)				<0.001015			<0.001015
3/25/2020								<0.001015	
5/12/2020							<0.001015		
5/13/2020									
9/17/2020									
9/21/2020					0.0028 (J)		<0.001015		
9/22/2020						<0.001015			<0.001015
9/23/2020	0.00202 (J)	0.00152 (J)		0.000844 (J)				<0.001015	
2/1/2021	0.000518 (J)	0.000861 (J)							

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Antimony (mg/L) Analysis Run 5/23/2023 3:38 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-12	GS-AP-MW-12V	GS-AP-MW-13 (bg)	GS-AP-MW-15	GS-AP-MW-15V	GS-AP-MW-16D	GS-AP-MW-17	GS-AP-MW-17V ...	GS-AP-MW-19
2/2/2021							<0.001015	<0.001015	
2/3/2021									
2/8/2021									<0.001015
2/9/2021				0.00075 (J)	0.00237				
2/10/2021						<0.001015			
7/27/2021									
8/2/2021								<0.001015	
8/3/2021				0.00065 (J)	0.00097 (J)		<0.001015		
8/4/2021									
8/9/2021	0.00179	0.00089 (J)				<0.001015			
8/10/2021									<0.001015
8/11/2021									
8/12/2021									
2/8/2022									
2/14/2022							<0.001015	<0.001015	
2/15/2022						<0.001015			
2/16/2022				0.00078 (J)	0.00113				
2/22/2022									<0.001015
2/23/2022		0.00055 (J)							
2/28/2022	0.00415								
7/19/2022	0.00556								
7/20/2022		0.000577 (J)							
7/26/2022									
7/27/2022									
8/2/2022				0.000663 (J)	0.00143	<0.001015			
8/3/2022									<0.001015
8/8/2022							<0.001015		
8/9/2022								<0.001015	
8/10/2022									
3/14/2023									
3/15/2023									
3/20/2023				<0.001015	0.00133				
3/21/2023						<0.001015			<0.001015
3/22/2023	0.00257	<0.001015					<0.001015	<0.001015	

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Antimony (mg/L) Analysis Run 5/23/2023 3:38 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-2	GS-AP-MW-21	GS-AP-MW-21V	GS-AP-MW-23H	GS-AP-MW-24H	GS-AP-MW-25HA	GS-AP-MW-26H
8/1/2016							
8/2/2016	<0.001015	<0.001015					
8/3/2016							
9/19/2016	<0.001015						
9/20/2016							
9/21/2016		<0.001015					
10/24/2016	<0.001015						
10/25/2016		<0.001015					
12/13/2016	<0.001015						
12/14/2016		0.00119 (J)					
2/6/2017							
2/7/2017							
2/8/2017	<0.001015	<0.001015					
3/27/2017							
3/28/2017		<0.001015					
3/29/2017							
3/30/2017	<0.001015						
4/24/2017							
4/26/2017	<0.001015	<0.001015					
6/5/2017							
6/6/2017	<0.001015	<0.001015					
6/7/2017							
2/19/2018							
2/20/2018		<0.001015					
2/21/2018	<0.001015						
5/15/2018		<0.001015					
5/16/2018	<0.001015						
10/15/2018							
10/16/2018	<0.001015	<0.001015					
10/17/2018							
2/20/2019				0.000809 (J)			
2/21/2019							
2/26/2019					0.000918 (J)		
2/27/2019							0.00094 (J)
4/16/2019							
4/17/2019	<0.001015	<0.001015					
9/23/2019				<0.001015			<0.001015
9/24/2019		<0.001015			<0.001015		
9/25/2019	<0.001015						
3/16/2020							
3/17/2020				<0.001015			
3/18/2020		<0.001015			<0.001015		
3/23/2020			0.000831 (J)				
3/24/2020						<0.001015	
3/25/2020	<0.001015						<0.001015
5/12/2020							
5/13/2020	<0.001015						
9/17/2020				<0.001015	<0.001015	<0.001015	
9/21/2020							<0.001015
9/22/2020	<0.001015						
9/23/2020		<0.001015	<0.001015				
2/1/2021	<0.001015						

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Antimony (mg/L) Analysis Run 5/23/2023 3:38 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-2	GS-AP-MW-21	GS-AP-MW-21V	GS-AP-MW-23H	GS-AP-MW-24H	GS-AP-MW-25HA	GS-AP-MW-26H
2/2/2021					<0.001015		
2/3/2021				<0.001015			
2/8/2021		<0.001015					
2/9/2021			0.000661 (J)				<0.001015
2/10/2021						<0.001015	
7/27/2021				<0.001015			
8/2/2021							
8/3/2021					<0.001015		
8/4/2021	<0.001015	<0.001015					
8/9/2021							
8/10/2021							<0.001015
8/11/2021			<0.001015				
8/12/2021						<0.001015	
2/8/2022		<0.001015	<0.001015				
2/14/2022				<0.001015			
2/15/2022					<0.001015		<0.001015
2/16/2022						0.00075 (J)	
2/22/2022	<0.001015						
2/23/2022							
2/28/2022							
7/19/2022	<0.001015						
7/20/2022							
7/26/2022				<0.001015			
7/27/2022					<0.001015		
8/2/2022							
8/3/2022						<0.001015	
8/8/2022							
8/9/2022			<0.001015				
8/10/2022		<0.001015					<0.001015
3/14/2023				<0.001015			
3/15/2023					<0.001015		
3/20/2023							
3/21/2023		<0.001015	<0.001015				
3/22/2023	<0.001015					<0.001015	<0.001015

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Antimony (mg/L) Analysis Run 5/23/2023 3:38 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-28H	GS-AP-MW-29H	GS-AP-MW-3	GS-AP-MW-30HA	GS-AP-MW-31H	GS-AP-MW-32H	GS-AP-MW-33HO	GS-AP-MW-34HO	GS-AP-MW-35HO
2/27/2019		0.000932 (J)							
3/13/2019	0.00241 (J)								
9/24/2019		<0.001015							
9/25/2019	<0.001015								
3/16/2020	<0.001015							<0.001015	
3/17/2020							<0.001015		<0.001015
3/18/2020				<0.001015	<0.001015				
3/24/2020						<0.001015			
3/25/2020		<0.001015							
5/12/2020	<0.001015							<0.001015	<0.001015
5/13/2020				<0.001015			<0.001015		
9/15/2020							<0.001015		
9/16/2020								<0.001015	<0.001015
9/17/2020									
9/21/2020				<0.001015		<0.001015			
9/22/2020	<0.001015	<0.001015			<0.001015				
2/1/2021					<0.001015				
2/2/2021									
2/3/2021		<0.001015					<0.001015	<0.001015	
2/4/2021									<0.001015
2/8/2021									
2/9/2021									
2/10/2021						<0.001015			
2/17/2021	<0.001015		<0.001015	<0.001015					
7/27/2021							<0.001015	<0.001015	
7/28/2021									<0.001015
8/2/2021				<0.001015	<0.001015				
8/3/2021			<0.001015						
8/4/2021		<0.001015							
8/9/2021	<0.001015								
8/10/2021						<0.001015			
2/8/2022				<0.001015	<0.001015				
2/9/2022							<0.001015	<0.001015	<0.001015
2/14/2022	<0.001015	<0.001015				<0.001015			
2/15/2022									
2/16/2022			<0.001015						
2/21/2022									
2/22/2022									
7/20/2022			<0.001015						
7/26/2022									
7/27/2022	<0.001015					<0.001015			
8/2/2022									
8/3/2022		<0.001015		<0.001015	<0.001015				
8/10/2022									
3/8/2023								<0.001015	<0.001015
3/13/2023				<0.001015					
3/14/2023	<0.001015						<0.001015		
3/15/2023									
3/21/2023			<0.001015			<0.001015			
3/22/2023									
3/27/2023					<0.001015				
3/28/2023		<0.001015							

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Antimony (mg/L) Analysis Run 5/23/2023 3:38 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-36H	GS-AP-MW-38H	GS-AP-MW-40H	GS-AP-MW-41HD	GS-AP-MW-41HS	GS-AP-MW-42H	GS-AP-MW-43HO
2/27/2019							
3/13/2019							
9/24/2019							
9/25/2019							
3/16/2020							
3/17/2020	<0.001015						
3/18/2020				<0.001015			
3/24/2020		<0.001015				<0.001015	
3/25/2020							<0.001015
5/12/2020							
5/13/2020	<0.001015						
9/15/2020							
9/16/2020							
9/17/2020	<0.001015			<0.001015			
9/21/2020							
9/22/2020		<0.001015	<0.001015			<0.001015	<0.001015
2/1/2021							
2/2/2021			<0.001015				
2/3/2021						<0.001015	
2/4/2021							
2/8/2021				<0.001015	<0.001015		
2/9/2021		<0.001015					
2/10/2021							
2/17/2021	<0.001015						<0.001015
7/27/2021							
7/28/2021					<0.001015		
8/2/2021							
8/3/2021				<0.001015			
8/4/2021	<0.001015	<0.001015				<0.001015	<0.001015
8/9/2021							
8/10/2021			<0.001015				
2/8/2022					<0.001015		
2/9/2022							
2/14/2022	<0.001015						
2/15/2022			<0.001015	<0.001015			
2/16/2022						<0.001015	
2/21/2022							<0.001015
2/22/2022		<0.001015					
7/20/2022	<0.001015						
7/26/2022					<0.001015		
7/27/2022				<0.001015		<0.001015	
8/2/2022			<0.001015				
8/3/2022							<0.001015
8/10/2022		<0.001015					
3/8/2023							
3/13/2023					<0.001015		
3/14/2023							
3/15/2023	<0.001015			<0.001015		<0.001015	
3/21/2023							
3/22/2023			<0.001015				
3/27/2023							
3/28/2023		<0.001015					<0.001015

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Antimony (mg/L)   Analysis Run 5/23/2023 3:38 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

	GS-AP-MW-44HO	GS-AP-MW-6D	GS-AP-MW-6S	GS-AP-MW-6V	GS-AP-MW-7	GS-AP-MW-8 (bg)	GS-AP-MW-9V	GS-AP-PZ-16	GS-AP-PZ-22
8/2/2016					<0.001015				
8/3/2016		<0.001015	<0.001015			<0.001015			
9/20/2016		<0.001015	<0.001015						
9/21/2016					<0.001015	<0.001015			
10/24/2016		<0.001015			<0.001015				
10/25/2016						<0.001015			
10/26/2016			<0.001015						
12/12/2016		0.00104 (J)	0.000727 (J)		0.000891 (J)				
12/13/2016						0.00067 (J)			
2/6/2017		<0.001015	<0.001015		<0.001015	<0.001015			
3/27/2017		<0.001015	<0.001015						
3/28/2017					<0.001015	<0.001015			
4/24/2017		<0.001015	<0.001015		<0.001015	<0.001015			
6/6/2017		<0.001015	<0.001015						
6/7/2017					<0.001015	<0.001015			
2/19/2018		<0.001015	<0.001015		<0.001015	<0.001015			
5/14/2018		<0.001015	<0.001015						
5/15/2018					<0.001015	<0.001015			
10/15/2018		<0.001015	<0.001015		<0.001015				
10/16/2018						<0.001015			
4/16/2019		0.000828 (J)	<0.001015			<0.001015			
4/23/2019					0.00105 (J)				
9/23/2019		<0.001015	<0.001015						
9/24/2019					<0.001015	<0.001015			
3/17/2020		<0.001015	<0.001015		<0.001015				
3/18/2020						<0.001015			
3/23/2020							<0.001015		
3/24/2020								<0.001015	<0.001015
8/27/2020	0.0013 (J)								
9/8/2020				<0.001015					
9/15/2020	0.000819 (J)			<0.001015					
9/16/2020			0.000948 (J)		<0.001015				
9/17/2020		<0.001015						<0.001015	<0.001015
9/21/2020						<0.001015			
9/22/2020							<0.001015		
2/2/2021					<0.001015	<0.001015	<0.001015		<0.001015
2/3/2021	<0.001015	<0.001015	0.00055 (J)	<0.001015					
2/17/2021								<0.001015	
7/27/2021	<0.001015	<0.001015	0.00123						
8/2/2021				<0.001015					
8/3/2021									<0.001015
8/9/2021					<0.001015			<0.001015	
8/10/2021						<0.001015	<0.001015		
2/8/2022					<0.001015				
2/9/2022	<0.001015			<0.001015					
2/14/2022		<0.001015	0.00071 (J)						<0.001015
2/15/2022								<0.001015	
2/16/2022						<0.001015			
2/21/2022							<0.001015		
2/22/2022									
2/28/2022									
3/1/2022									

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Antimony (mg/L) Analysis Run 5/23/2023 3:38 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-44HO	GS-AP-MW-6D	GS-AP-MW-6S	GS-AP-MW-6V	GS-AP-MW-7	GS-AP-MW-8 (bg)	GS-AP-MW-9V	GS-AP-PZ-16	GS-AP-PZ-22
7/19/2022							<0.001015		
7/20/2022									
7/25/2022		<0.001015		<0.001015	<0.001015				
7/26/2022			0.000656 (J)					<0.001015	
8/2/2022						<0.001015			
8/3/2022									
8/9/2022									<0.001015
3/6/2023	<0.001015								
3/8/2023				<0.001015					
3/14/2023		<0.001015	<0.001015		<0.001015				
3/15/2023									
3/21/2023								<0.001015	<0.001015
3/22/2023									
3/27/2023						<0.001015	<0.001015		
3/28/2023									

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Antimony (mg/L)   Analysis Run 5/23/2023 3:38 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

	GS-AP-MW-10R	GS-AP-MW-11R	GS-AP-MW-13R	GS-AP-MW-14R	GS-AP-MW-18R	GS-AP-MW-18VR	GS-AP-MW-1R
8/2/2016							
8/3/2016							
9/20/2016							
9/21/2016							
10/24/2016							
10/25/2016							
10/26/2016							
12/12/2016							
12/13/2016							
2/6/2017							
3/27/2017							
3/28/2017							
4/24/2017							
6/6/2017							
6/7/2017							
2/19/2018							
5/14/2018							
5/15/2018							
10/15/2018							
10/16/2018							
4/16/2019							
4/23/2019							
9/23/2019							
9/24/2019							
3/17/2020							
3/18/2020							
3/23/2020							
3/24/2020							
8/27/2020							
9/8/2020							
9/15/2020							
9/16/2020							
9/17/2020							
9/21/2020							
9/22/2020							
2/2/2021							
2/3/2021							
2/17/2021							
7/27/2021							
8/2/2021							
8/3/2021							
8/9/2021							
8/10/2021							
2/8/2022							
2/9/2022							
2/14/2022							
2/15/2022							
2/16/2022							
2/21/2022							
2/22/2022					<0.001015	<0.001015	
2/28/2022				<0.001015			
3/1/2022	<0.001015	<0.001015	<0.001015				<0.001015

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Antimony (mg/L) Analysis Run 5/23/2023 3:38 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-10R	GS-AP-MW-11R	GS-AP-MW-13R	GS-AP-MW-14R	GS-AP-MW-18R	GS-AP-MW-18VR	GS-AP-MW-1R
7/19/2022		<0.001015					
7/20/2022			<0.001015				
7/25/2022							
7/26/2022							
8/2/2022							<0.001015
8/3/2022	<0.001015			<0.001015	<0.001015		
8/9/2022						<0.001015	
3/6/2023							
3/8/2023							
3/14/2023							
3/15/2023				<0.001015			
3/21/2023							
3/22/2023		<0.001015					
3/27/2023	<0.001015		<0.001015			<0.001015	<0.001015
3/28/2023					<0.001015		

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Antimony (mg/L) Analysis Run 5/23/2023 3:38 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-23V	GS-AP-MW-27HR	GS-AP-MW-31V	GS-AP-MW-36V	GS-AP-MW-37HR	GS-AP-MW-3V	GS-AP-MW-45V	GS-AP-MW-47	GS-AP-MW-5R
2/21/2022									
2/22/2022		0.00053 (J)	<0.001015	<0.001015					
2/23/2022	<0.001015					<0.001015	<0.001015		
2/28/2022					<0.001015			<0.001015	
3/1/2022									<0.001015
7/19/2022									
7/20/2022						<0.001015			
7/26/2022	<0.001015				<0.001015			<0.001015	
7/27/2022		<0.001015		<0.001015					
8/2/2022									<0.001015
8/3/2022			<0.001015						
8/8/2022							<0.001015		
3/14/2023	<0.001015	<0.001015		<0.001015					
3/15/2023					<0.001015			<0.001015	
3/20/2023									<0.001015
3/21/2023						<0.001015			
3/27/2023			<0.001015						
3/28/2023							<0.001015		

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Antimony (mg/L)   Analysis Run 5/23/2023 3:38 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

	GS-AP-MW-9R	GS-AP-PZ-18R	GS-AP-MW-46
2/21/2022		<0.001015	
2/22/2022			
2/23/2022			<0.001015
2/28/2022			
3/1/2022	<0.001015		
7/19/2022	<0.001015		
7/20/2022			
7/26/2022			
7/27/2022		<0.001015	
8/2/2022			<0.001015
8/3/2022			
8/8/2022			
3/14/2023			
3/15/2023			
3/20/2023			
3/21/2023			
3/27/2023	<0.001015		<0.001015
3/28/2023		<0.001015	

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Arsenic (mg/L) Analysis Run 5/23/2023 3:38 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-12	GS-AP-MW-12V	GS-AP-MW-13 (bg)	GS-AP-MW-15	GS-AP-MW-15V	GS-AP-MW-16D	GS-AP-MW-17	GS-AP-MW-17V ...	GS-AP-MW-19
8/1/2016				0.015		<0.000203	0.00138 (J)		<0.005
8/2/2016			<0.005						
8/3/2016	0.11								
9/19/2016						<0.000203	0.00137 (J)		
9/20/2016	0.0746		<0.005	0.0111					
9/21/2016									<0.005
10/24/2016							0.00122 (J)		<0.005
10/25/2016	0.0728		<0.005	0.0109		<0.000203			
12/13/2016	0.0538		<0.005			<0.000203	0.00243 (J)		<0.005
12/14/2016				0.011					
2/6/2017							0.00158 (J)		
2/7/2017									<0.005
2/8/2017	0.0427		<0.005	0.00625		<0.000203			
3/27/2017							0.0011 (J)		
3/28/2017				0.00558					<0.005
3/29/2017	0.0404		<0.005			<0.000203			
3/30/2017									
4/24/2017							0.00133 (J)		
4/26/2017	0.0372		<0.005	0.007		<0.000203			<0.005
6/5/2017							0.00115 (J)		
6/6/2017				0.00663		<0.000203			<0.005
6/7/2017	0.0307		<0.005						
2/19/2018							0.00424 (J)		
2/20/2018	0.0282		<0.005	0.00724					
2/21/2018						<0.000203			0.00138 (J)
5/15/2018	0.0253		<0.005	0.00749			0.00352 (J)		
5/16/2018						<0.000203			0.00114 (J)
10/15/2018				0.0123			0.0018 (J)		
10/16/2018	0.0203								0.00216 (J)
10/17/2018			<0.005			<0.000203			
2/20/2019								0.0011 (J)	
2/21/2019		<0.005							
2/26/2019									
2/27/2019									
4/16/2019	0.014		<0.005						
4/17/2019				0.00633		<0.000203	0.00343 (J)		0.00302 (J)
9/23/2019							0.00631		
9/24/2019				0.011		<0.000203		0.00149 (J)	0.00289 (J)
9/25/2019	0.0135	0.00129 (J)							
3/16/2020							0.00268 (J)		
3/17/2020									
3/18/2020	0.00693			0.0217	0.011				
3/23/2020									
3/24/2020		0.00266 (J)				<0.000203			0.00313 (J)
3/25/2020								<0.005	
5/12/2020							0.00326 (J)		
5/13/2020									
9/17/2020									
9/21/2020					0.0167		0.0055		
9/22/2020						<0.000203			0.00313 (J)
9/23/2020	0.00616	0.00176 (J)		0.0165				<0.005	
2/1/2021	0.00747	0.00154							

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Arsenic (mg/L) Analysis Run 5/23/2023 3:38 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-12	GS-AP-MW-12V	GS-AP-MW-13 (bg)	GS-AP-MW-15	GS-AP-MW-15V	GS-AP-MW-16D	GS-AP-MW-17	GS-AP-MW-17V ...	GS-AP-MW-19
2/2/2021							0.00478	0.000243	
2/3/2021									
2/8/2021									0.00178
2/9/2021				0.0145	0.0165				
2/10/2021						0.000491			
7/27/2021									
8/2/2021								0.00013 (J)	
8/3/2021				0.0139	0.0105		0.00086		
8/4/2021									
8/9/2021	0.00308	0.00112				0.0001 (J)			
8/10/2021									0.00133
8/11/2021									
8/12/2021									
2/8/2022									
2/14/2022							0.00112	0.00047	
2/15/2022						0.00012 (J)			
2/16/2022				0.00592	0.0081				
2/22/2022									0.00098
2/23/2022		0.00102							
2/28/2022	0.00343								
7/19/2022	0.00407								
7/20/2022		0.00102							
7/26/2022									
7/27/2022									
8/2/2022				0.0104	0.00733	<0.000203			
8/3/2022									0.00223
8/8/2022							0.000878		
8/9/2022								0.000807	
8/10/2022									
3/14/2023									
3/15/2023									
3/20/2023				0.00427	0.00375				
3/21/2023						<0.000203			0.00197
3/22/2023	0.00135	0.000929					0.000896	0.000293	

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Arsenic (mg/L)   Analysis Run 5/23/2023 3:38 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

	GS-AP-MW-2	GS-AP-MW-21	GS-AP-MW-21V	GS-AP-MW-23H	GS-AP-MW-24H	GS-AP-MW-25HA	GS-AP-MW-26H
8/1/2016							
8/2/2016	<0.000203	0.0027 (J)					
8/3/2016							
9/19/2016	<0.000203						
9/20/2016							
9/21/2016		0.00258 (J)					
10/24/2016	<0.000203						
10/25/2016		0.00214 (J)					
12/13/2016	<0.000203						
12/14/2016		0.00193 (J)					
2/6/2017							
2/7/2017							
2/8/2017	<0.000203	0.00188 (J)					
3/27/2017							
3/28/2017		0.00153 (J)					
3/29/2017							
3/30/2017	<0.000203						
4/24/2017							
4/26/2017	<0.000203	0.00135 (J)					
6/5/2017							
6/6/2017	<0.000203	0.00131 (J)					
6/7/2017							
2/19/2018							
2/20/2018		<0.005					
2/21/2018	<0.000203						
5/15/2018		<0.005					
5/16/2018	<0.000203						
10/15/2018							
10/16/2018	<0.000203	<0.005					
10/17/2018							
2/20/2019				0.0306			
2/21/2019							
2/26/2019					<0.005		
2/27/2019							<0.005
4/16/2019							
4/17/2019	<0.000203	<0.005					
9/23/2019				0.0369			<0.005
9/24/2019		<0.005			<0.005		
9/25/2019	<0.000203						
3/16/2020							
3/17/2020				0.0524			
3/18/2020		<0.005			<0.005		
3/23/2020			0.0159				
3/24/2020						0.00798	
3/25/2020	<0.000203						<0.005
5/12/2020							
5/13/2020	<0.000203						
9/17/2020				0.0579	<0.005	0.00904	
9/21/2020							0.00143 (J)
9/22/2020	<0.000203						
9/23/2020		<0.005	0.01				
2/1/2021	<0.000203						

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Arsenic (mg/L) Analysis Run 5/23/2023 3:38 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-2	GS-AP-MW-21	GS-AP-MW-21V	GS-AP-MW-23H	GS-AP-MW-24H	GS-AP-MW-25HA	GS-AP-MW-26H
2/2/2021					0.000341		
2/3/2021				0.0562			
2/8/2021		0.000624					
2/9/2021			0.0063				0.000192 (J)
2/10/2021						0.00923	
7/27/2021				0.0474			
8/2/2021							
8/3/2021					0.00033		
8/4/2021	<0.000203	0.00054					
8/9/2021							
8/10/2021							0.00019 (J)
8/11/2021			0.00161				
8/12/2021						0.00888	
2/8/2022		0.00046	0.00551				
2/14/2022				0.061			
2/15/2022					0.00029		0.00025
2/16/2022						0.00968	
2/22/2022	<0.000203						
2/23/2022							
2/28/2022							
7/19/2022	8.3E-05 (J)						
7/20/2022							
7/26/2022				0.0616			
7/27/2022					0.00022		
8/2/2022							
8/3/2022						0.0103	
8/8/2022							
8/9/2022			0.00345				
8/10/2022		0.000495					0.000161 (J)
3/14/2023				0.0731			
3/15/2023					0.000211		
3/20/2023							
3/21/2023		0.000472	0.00444				
3/22/2023	<0.000203					0.00851	0.000149 (J)

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Arsenic (mg/L)   Analysis Run 5/23/2023 3:38 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

	GS-AP-MW-28H	GS-AP-MW-29H	GS-AP-MW-3	GS-AP-MW-30HA	GS-AP-MW-31H	GS-AP-MW-32H	GS-AP-MW-33HO	GS-AP-MW-34HO	GS-AP-MW-35HO
2/27/2019		<0.005							
3/13/2019	0.00142 (J)								
9/24/2019		0.00155 (J)							
9/25/2019	<0.005								
3/16/2020	<0.005							0.00351 (J)	
3/17/2020							0.0044 (J)		0.00105 (J)
3/18/2020				0.00813	0.0012 (J)				
3/24/2020						<0.005			
3/25/2020		0.00141 (J)							
5/12/2020	0.00135 (J)							0.00668	<0.000203
5/13/2020				0.00779			0.00308 (J)		
9/15/2020							0.00275 (J)		
9/16/2020								0.00308 (J)	<0.000203
9/17/2020									
9/21/2020				0.00551		<0.005			
9/22/2020	0.00112 (J)	0.00109 (J)			<0.005				
2/1/2021					0.000325				
2/2/2021									
2/3/2021		0.00794					0.00177	0.00257	
2/4/2021									0.000442
2/8/2021									
2/9/2021									
2/10/2021						0.000838			
2/17/2021	0.000796		0.000168 (J)	0.00354					
7/27/2021							0.00143	0.00179	
7/28/2021									0.00024
8/2/2021				0.003	0.00029				
8/3/2021			0.00014 (J)						
8/4/2021		0.00317							
8/9/2021	0.00063								
8/10/2021						0.00058			
2/8/2022				0.00331	0.00034				
2/9/2022							0.00087	0.00112	0.00019 (J)
2/14/2022	0.00058	0.00313				0.00062			
2/15/2022									
2/16/2022			0.0002 (J)						
2/21/2022									
2/22/2022									
7/20/2022			0.000137 (J)						
7/26/2022									
7/27/2022	0.000436					0.000353			
8/2/2022									
8/3/2022		0.00248		0.00387	0.000201 (J)				
8/10/2022									
3/8/2023								0.00105	<0.000203
3/13/2023				0.00298					
3/14/2023	0.000553						0.000523		
3/15/2023									
3/21/2023			0.000162 (J)			0.000407			
3/22/2023									
3/27/2023					0.00016 (J)				
3/28/2023		0.00221							

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Arsenic (mg/L) Analysis Run 5/23/2023 3:38 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-36H	GS-AP-MW-38H	GS-AP-MW-40H	GS-AP-MW-41HD	GS-AP-MW-41HS	GS-AP-MW-42H	GS-AP-MW-43HO
2/27/2019							
3/13/2019							
9/24/2019							
9/25/2019							
3/16/2020							
3/17/2020	0.00171 (J)						
3/18/2020				<0.005			
3/24/2020		0.00302 (J)				0.00944	
3/25/2020							0.00509
5/12/2020							
5/13/2020	0.00122 (J)						
9/15/2020							
9/16/2020							
9/17/2020	0.0013 (J)			0.0016 (J)			
9/21/2020							
9/22/2020		0.00304 (J)	0.00193 (J)			0.00912	0.0039 (J)
2/1/2021							
2/2/2021			0.000958				
2/3/2021						0.00806	
2/4/2021							
2/8/2021				0.00148	0.000551		
2/9/2021		0.0026					
2/10/2021							
2/17/2021	0.00102						0.00132
7/27/2021							
7/28/2021					0.00038		
8/2/2021							
8/3/2021				0.00289			
8/4/2021	0.00246	0.00287				0.00846	0.00125
8/9/2021							
8/10/2021			0.00046				
2/8/2022					0.00144		
2/9/2022							
2/14/2022	0.00235						
2/15/2022			0.0004	0.00284			
2/16/2022						0.00846	
2/21/2022							0.00089
2/22/2022		0.00221					
7/20/2022	0.0004						
7/26/2022					0.000471		
7/27/2022				0.00271		0.00938	
8/2/2022			0.000294				
8/3/2022							0.00109
8/10/2022		0.00294					
3/8/2023							
3/13/2023					0.000483		
3/14/2023							
3/15/2023	0.00235			0.00301		0.0105	
3/21/2023							
3/22/2023			0.00081				
3/27/2023							
3/28/2023		0.00303					0.000779

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Arsenic (mg/L) Analysis Run 5/23/2023 3:38 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-44HO	GS-AP-MW-6D	GS-AP-MW-6S	GS-AP-MW-6V	GS-AP-MW-7	GS-AP-MW-8 (bg)	GS-AP-MW-9V	GS-AP-PZ-16	GS-AP-PZ-22
8/2/2016					0.188				
8/3/2016		0.0547	0.0103			0.00214 (J)			
9/20/2016		0.0625	0.0103						
9/21/2016					0.179	0.00112 (J)			
10/24/2016		0.0695			0.151				
10/25/2016						<0.005			
10/26/2016			0.0115						
12/12/2016		0.0611	0.0106		0.181				
12/13/2016						<0.005			
2/6/2017		0.0618	0.0106		0.194	0.00111 (J)			
3/27/2017		0.0711	0.00989						
3/28/2017					0.205	0.00109 (J)			
4/24/2017		0.0787	0.00907		0.202	<0.005			
6/6/2017		0.0778	0.0105						
6/7/2017					0.193	<0.005			
2/19/2018		0.0616	0.0108		0.182	<0.005			
5/14/2018		0.074	0.00864						
5/15/2018					0.211	<0.005			
10/15/2018		0.0758	0.00832		0.217				
10/16/2018						<0.005			
4/16/2019		0.088	0.0164			<0.005			
4/23/2019					0.207				
9/23/2019		0.0876	0.0105						
9/24/2019					0.233	<0.005			
3/17/2020		0.105	0.00778		0.285				
3/18/2020						<0.005			
3/23/2020							<0.005		
3/24/2020								<0.000203	0.00367 (J)
8/27/2020	0.00321 (J)								
9/8/2020				<0.005					
9/15/2020	0.00184 (J)			<0.005					
9/16/2020			0.00611		0.282				
9/17/2020		0.0931						<0.000203	0.00387 (J)
9/21/2020						<0.005			
9/22/2020							<0.005		
2/2/2021					0.275	0.000228	0.000101 (J)		0.00338
2/3/2021	0.000795	0.104	0.0071	0.000767					
2/17/2021								0.000258	
7/27/2021	0.00034	0.107	0.00634						
8/2/2021				0.00094					
8/3/2021									0.00296
8/9/2021					0.282			0.00059	
8/10/2021						0.00039	0.00032		
2/8/2022					0.281				
2/9/2022	0.00035			0.0009					
2/14/2022		0.12	0.0106						0.00358
2/15/2022								0.00112	
2/16/2022						0.00028			
2/21/2022							0.00021		
2/22/2022									
2/28/2022									
3/1/2022									

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Arsenic (mg/L)   Analysis Run 5/23/2023 3:38 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

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	GS-AP-MW-44HO	GS-AP-MW-6D	GS-AP-MW-6S	GS-AP-MW-6V	GS-AP-MW-7	GS-AP-MW-8 (bg)	GS-AP-MW-9V	GS-AP-PZ-16	GS-AP-PZ-22
7/19/2022							0.000252		
7/20/2022									
7/25/2022		0.114		0.000844	0.272				
7/26/2022			0.00935					0.00761	
8/2/2022						0.00016 (J)			
8/3/2022									
8/9/2022									0.00231
3/6/2023	0.000275								
3/8/2023				0.00113					
3/14/2023		0.108	0.00908		0.249				
3/15/2023									
3/21/2023								<0.000203	0.00226
3/22/2023									
3/27/2023						0.000162 (J)	0.000153 (J)		
3/28/2023									

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Arsenic (mg/L) Analysis Run 5/23/2023 3:38 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-10R	GS-AP-MW-11R	GS-AP-MW-13R	GS-AP-MW-14R	GS-AP-MW-18R	GS-AP-MW-18VR	GS-AP-MW-1R
8/2/2016							
8/3/2016							
9/20/2016							
9/21/2016							
10/24/2016							
10/25/2016							
10/26/2016							
12/12/2016							
12/13/2016							
2/6/2017							
3/27/2017							
3/28/2017							
4/24/2017							
6/6/2017							
6/7/2017							
2/19/2018							
5/14/2018							
5/15/2018							
10/15/2018							
10/16/2018							
4/16/2019							
4/23/2019							
9/23/2019							
9/24/2019							
3/17/2020							
3/18/2020							
3/23/2020							
3/24/2020							
8/27/2020							
9/8/2020							
9/15/2020							
9/16/2020							
9/17/2020							
9/21/2020							
9/22/2020							
2/2/2021							
2/3/2021							
2/17/2021							
7/27/2021							
8/2/2021							
8/3/2021							
8/9/2021							
8/10/2021							
2/8/2022							
2/9/2022							
2/14/2022							
2/15/2022							
2/16/2022							
2/21/2022							
2/22/2022					0.00037	0.00164	
2/28/2022				0.00231			
3/1/2022	0.00209	0.00235	0.011				0.00038

Time Series

Constituent: Arsenic (mg/L) Analysis Run 5/23/2023 3:38 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-10R	GS-AP-MW-11R	GS-AP-MW-13R	GS-AP-MW-14R	GS-AP-MW-18R	GS-AP-MW-18VR	GS-AP-MW-1R
7/19/2022		0.00137					
7/20/2022			0.016				
7/25/2022							
7/26/2022							
8/2/2022							0.000259
8/3/2022	0.00109			0.00142	0.000429		
8/9/2022						0.00121	
3/6/2023							
3/8/2023							
3/14/2023							
3/15/2023				0.000553			
3/21/2023							
3/22/2023		0.00148					
3/27/2023	0.00277		0.034			0.000422	0.000248
3/28/2023					0.000433		

Time Series

Constituent: Arsenic (mg/L)   Analysis Run 5/23/2023 3:38 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

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	GS-AP-MW-23V	GS-AP-MW-27HR	GS-AP-MW-31V	GS-AP-MW-36V	GS-AP-MW-37HR	GS-AP-MW-3V	GS-AP-MW-45V	GS-AP-MW-47	GS-AP-MW-5R
2/21/2022									
2/22/2022		0.00102	0.0011	0.00167					
2/23/2022	0.00016 (J)					0.00249	0.00106		
2/28/2022					0.00094			0.00038	
3/1/2022									0.00048
7/19/2022									
7/20/2022						0.00228			
7/26/2022	<0.000203				0.00101			0.000423	
7/27/2022		0.00148		0.00447					
8/2/2022									0.000325
8/3/2022			0.0015						
8/8/2022							0.000618		
3/14/2023	<0.000203	0.00105		0.00337					
3/15/2023					0.000822			0.00102	
3/20/2023									0.000194 (J)
3/21/2023						0.000654			
3/27/2023			0.00166						
3/28/2023							0.0013		

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Arsenic (mg/L)   Analysis Run 5/23/2023 3:38 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

	GS-AP-MW-9R	GS-AP-PZ-18R	GS-AP-MW-46
2/21/2022		0.00167	
2/22/2022			
2/23/2022			0.105
2/28/2022			
3/1/2022	0.00529		
7/19/2022	0.00629		
7/20/2022			
7/26/2022			
7/27/2022		0.00143	
8/2/2022			0.119
8/3/2022			
8/8/2022			
3/14/2023			
3/15/2023			
3/20/2023			
3/21/2023			
3/27/2023	0.00564		0.0955
3/28/2023		0.00106	

Time Series

Constituent: Barium (mg/L) Analysis Run 5/23/2023 3:38 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-12	GS-AP-MW-12V	GS-AP-MW-13 (bg)	GS-AP-MW-15	GS-AP-MW-15V	GS-AP-MW-16D	GS-AP-MW-17	GS-AP-MW-17V ...	GS-AP-MW-19
8/1/2016				0.117		0.316	0.0696		0.492
8/2/2016			0.184						
8/3/2016	0.144								
9/19/2016						0.276	0.0503		
9/20/2016	0.102		0.153	0.193					
9/21/2016									0.371
10/24/2016							0.0468		0.311
10/25/2016	0.109		0.176	0.222		0.3			
12/13/2016	0.115		0.184			0.314	0.0472		0.374
12/14/2016				0.222					
2/6/2017							0.0498		
2/7/2017									0.368
2/8/2017	0.122		0.189	0.294		0.324			
3/27/2017							0.0559		
3/28/2017				0.288					0.391
3/29/2017	0.116		0.184			0.316			
3/30/2017									
4/24/2017							0.055		
4/26/2017	0.127		0.177	0.24		0.323			0.371
6/5/2017							0.0552		
6/6/2017				0.228		0.29			0.33
6/7/2017	0.115		0.164						
2/19/2018							0.077		
2/20/2018	0.132		0.165	0.224					
2/21/2018						0.3			0.291
5/15/2018	0.163		0.172	0.212			0.0751		
5/16/2018						0.315			0.343
10/15/2018				0.133			0.0682		
10/16/2018	0.159								0.35
10/17/2018			0.165			0.331			
2/20/2019								0.191	
2/21/2019		1.35							
2/26/2019									
2/27/2019									
4/16/2019	0.161		0.16						
4/17/2019				0.264		0.322	0.0946		0.316
9/23/2019							0.135		
9/24/2019				0.0913		0.342		0.208	0.356
9/25/2019	0.202	1.06							
3/16/2020							0.0883		
3/17/2020									
3/18/2020	0.195			0.14	0.155				
3/23/2020									
3/24/2020		1.43				0.323			0.324
3/25/2020								0.314	
5/12/2020							0.0941		
5/13/2020									
9/17/2020									
9/21/2020					0.18		0.128		
9/22/2020						0.342			0.337
9/23/2020	0.193	1.27		0.119				0.299	
2/1/2021	0.201	1.6							

Time Series

Constituent: Barium (mg/L) Analysis Run 5/23/2023 3:38 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-12	GS-AP-MW-12V	GS-AP-MW-13 (bg)	GS-AP-MW-15	GS-AP-MW-15V	GS-AP-MW-16D	GS-AP-MW-17	GS-AP-MW-17V ...	GS-AP-MW-19
2/2/2021							0.107	0.308	
2/3/2021									
2/8/2021									0.36
2/9/2021				0.132	0.2				
2/10/2021						0.356			
7/27/2021									
8/2/2021								0.353	
8/3/2021				0.129	0.164		0.0889		
8/4/2021									
8/9/2021	0.194	1.07				0.334			
8/10/2021									0.343
8/11/2021									
8/12/2021									
2/8/2022									
2/14/2022							0.0945	0.315	
2/15/2022						0.322			
2/16/2022				0.271	0.2				
2/22/2022									0.334
2/23/2022		1.34							
2/28/2022	0.173								
7/19/2022	0.188								
7/20/2022		1.21							
7/26/2022									
7/27/2022									
8/2/2022				0.131	0.253	0.355			
8/3/2022									0.348
8/8/2022							0.0875		
8/9/2022								0.292	
8/10/2022									
3/14/2023									
3/15/2023									
3/20/2023				0.276	0.175				
3/21/2023						0.324			0.304
3/22/2023	0.22	1.24					0.0835	0.289	

Time Series

Constituent: Barium (mg/L) Analysis Run 5/23/2023 3:38 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-2	GS-AP-MW-21	GS-AP-MW-21V	GS-AP-MW-23H	GS-AP-MW-24H	GS-AP-MW-25HA	GS-AP-MW-26H
8/1/2016							
8/2/2016	0.0895	0.0535					
8/3/2016							
9/19/2016	0.0744						
9/20/2016							
9/21/2016		0.0458					
10/24/2016	0.0787						
10/25/2016		0.0489					
12/13/2016	0.0758						
12/14/2016		0.0494					
2/6/2017							
2/7/2017							
2/8/2017	0.0823	0.0449					
3/27/2017							
3/28/2017		0.0446					
3/29/2017							
3/30/2017	0.0768						
4/24/2017							
4/26/2017	0.077	0.0424					
6/5/2017							
6/6/2017	0.0711	0.0402					
6/7/2017							
2/19/2018							
2/20/2018		0.0441					
2/21/2018	0.0864						
5/15/2018		0.0456					
5/16/2018	0.0658						
10/15/2018							
10/16/2018	0.0846	0.0909					
10/17/2018							
2/20/2019				0.0227			
2/21/2019							
2/26/2019					0.887		
2/27/2019							0.622
4/16/2019							
4/17/2019	0.0576	0.0914					
9/23/2019				0.0148			0.922
9/24/2019		0.114			1.04		
9/25/2019	0.065						
3/16/2020							
3/17/2020				0.0143			
3/18/2020		0.105			0.964		
3/23/2020			0.0574				
3/24/2020						0.147	
3/25/2020	0.0602						0.868
5/12/2020							
5/13/2020	0.0528						
9/17/2020				0.0146	0.988	0.164	
9/21/2020							0.938
9/22/2020	0.0563						
9/23/2020		0.157	0.0438				
2/1/2021	0.0578						

Time Series

Constituent: Barium (mg/L) Analysis Run 5/23/2023 3:38 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-2	GS-AP-MW-21	GS-AP-MW-21V	GS-AP-MW-23H	GS-AP-MW-24H	GS-AP-MW-25HA	GS-AP-MW-26H
2/2/2021					0.952		
2/3/2021				0.0138			
2/8/2021		0.151					
2/9/2021			0.028				0.775
2/10/2021						0.208	
7/27/2021				0.0133			
8/2/2021							
8/3/2021					1.04		
8/4/2021	0.0702	0.148					
8/9/2021							
8/10/2021							0.765
8/11/2021			0.0535				
8/12/2021						0.2	
2/8/2022		0.143	0.0631				
2/14/2022				0.0166			
2/15/2022					0.992		0.726
2/16/2022						0.23	
2/22/2022	0.0501						
2/23/2022							
2/28/2022							
7/19/2022	0.0474						
7/20/2022							
7/26/2022				0.0154			
7/27/2022					1.01		
8/2/2022							
8/3/2022						0.232	
8/8/2022							
8/9/2022			0.0477				
8/10/2022		0.135					0.766
3/14/2023				0.0155			
3/15/2023					1.08		
3/20/2023							
3/21/2023		0.127	0.059				
3/22/2023	0.0456					0.196	0.725

Time Series

Constituent: Barium (mg/L) Analysis Run 5/23/2023 3:38 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-28H	GS-AP-MW-29H	GS-AP-MW-3	GS-AP-MW-30HA	GS-AP-MW-31H	GS-AP-MW-32H	GS-AP-MW-33HO	GS-AP-MW-34HO	GS-AP-MW-35HO
2/27/2019		0.517							
3/13/2019	0.164								
9/24/2019		0.712							
9/25/2019	0.0528								
3/16/2020	0.0411							0.0309	
3/17/2020							0.329		0.0426
3/18/2020				0.0791	0.106				
3/24/2020						0.0362			
3/25/2020		0.527							
5/12/2020	0.0436							0.0379	0.0472
5/13/2020				0.0819			0.324		
9/15/2020							0.469		
9/16/2020								0.0451	0.0532
9/17/2020									
9/21/2020				0.0811		0.0396			
9/22/2020	0.0385	0.499			0.0916				
2/1/2021					0.0974				
2/2/2021									
2/3/2021		0.318					0.465	0.0543	
2/4/2021									0.052
2/8/2021									
2/9/2021									
2/10/2021						0.0511			
2/17/2021	0.0297		0.59	0.089					
7/27/2021							0.46	0.0668	
7/28/2021									0.0492
8/2/2021				0.0965	0.102				
8/3/2021			0.589						
8/4/2021		0.264							
8/9/2021	0.0407								
8/10/2021						0.0475			
2/8/2022				0.1	0.14				
2/9/2022							0.483	0.0615	0.0516
2/14/2022	0.0483	0.231				0.047			
2/15/2022									
2/16/2022			0.498						
2/21/2022									
2/22/2022									
7/20/2022			0.492						
7/26/2022									
7/27/2022	0.0482					0.0499			
8/2/2022									
8/3/2022		0.248		0.113	0.134				
8/10/2022									
3/8/2023								0.0695	0.0521
3/13/2023				0.115					
3/14/2023	0.052						0.443		
3/15/2023									
3/21/2023			0.611			0.0393			
3/22/2023									
3/27/2023					0.123				
3/28/2023		0.263							

Time Series

Constituent: Barium (mg/L) Analysis Run 5/23/2023 3:38 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-36H	GS-AP-MW-38H	GS-AP-MW-40H	GS-AP-MW-41HD	GS-AP-MW-41HS	GS-AP-MW-42H	GS-AP-MW-43HO
2/27/2019							
3/13/2019							
9/24/2019							
9/25/2019							
3/16/2020							
3/17/2020	0.0353						
3/18/2020				0.0393			
3/24/2020		0.253				0.0253	
3/25/2020							0.0927
5/12/2020							
5/13/2020	0.03						
9/15/2020							
9/16/2020							
9/17/2020	0.0378			0.0414			
9/21/2020							
9/22/2020		0.319	0.0417			0.0237	0.0921
2/1/2021							
2/2/2021			0.0384				
2/3/2021						0.0216	
2/4/2021							
2/8/2021				0.0434	0.0544		
2/9/2021		0.356					
2/10/2021							
2/17/2021	0.0463						0.0894
7/27/2021							
7/28/2021					0.0445		
8/2/2021							
8/3/2021				0.045			
8/4/2021	0.0905	0.359				0.0256	0.102
8/9/2021							
8/10/2021			0.0358				
2/8/2022					0.0542		
2/9/2022							
2/14/2022	0.136						
2/15/2022			0.0298	0.0441			
2/16/2022						0.0226	
2/21/2022							0.0849
2/22/2022		0.301					
7/20/2022	0.0393						
7/26/2022					0.0497		
7/27/2022				0.0475		0.0238	
8/2/2022			0.0306				
8/3/2022							0.0956
8/10/2022		0.286					
3/8/2023							
3/13/2023					0.0572		
3/14/2023							
3/15/2023	0.142			0.0511		0.0241	
3/21/2023							
3/22/2023			0.0302				
3/27/2023							
3/28/2023		0.264					0.18

Time Series

Constituent: Barium (mg/L)   Analysis Run 5/23/2023 3:38 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

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	GS-AP-MW-44HO	GS-AP-MW-6D	GS-AP-MW-6S	GS-AP-MW-6V	GS-AP-MW-7	GS-AP-MW-8 (bg)	GS-AP-MW-9V	GS-AP-PZ-16	GS-AP-PZ-22
8/2/2016					0.0927				
8/3/2016		0.852	0.27			0.0274			
9/20/2016		0.685	0.228						
9/21/2016					0.0979	0.0811			
10/24/2016		0.711			0.0751				
10/25/2016						0.0576			
10/26/2016			0.23						
12/12/2016		0.789	0.276		0.0737				
12/13/2016						0.0241			
2/6/2017		0.779	0.25		0.0773	0.0747			
3/27/2017		0.77	0.196						
3/28/2017					0.0728	0.0183			
4/24/2017		0.716	0.159		0.0724	0.04			
6/6/2017		0.611	0.137						
6/7/2017					0.0581	0.00769 (J)			
2/19/2018		0.872	0.145		0.0464	0.00762 (J)			
5/14/2018		0.914	0.12						
5/15/2018					0.0501	0.00701 (J)			
10/15/2018		0.896	0.118		0.049				
10/16/2018						0.0094 (J)			
4/16/2019		0.879	0.124			0.00459 (J)			
4/23/2019					0.113				
9/23/2019		0.903	0.124						
9/24/2019					0.0834	0.0434			
3/17/2020		0.638	0.0725		0.174				
3/18/2020						0.00507 (J)			
3/23/2020							0.215		
3/24/2020								0.295	0.104
8/27/2020	0.0867								
9/8/2020				0.164					
9/15/2020	0.0783			0.16					
9/16/2020			0.0682		0.124				
9/17/2020		0.378						0.223	0.109
9/21/2020						0.026			
9/22/2020							0.187		
2/2/2021					0.115	0.0068	0.17		0.0891
2/3/2021	0.0602	0.443	0.0779	0.124					
2/17/2021								0.27	
7/27/2021	0.0749	0.488	0.0876						
8/2/2021				0.143					
8/3/2021									0.0953
8/9/2021					0.0891			0.244	
8/10/2021						0.00805	0.165		
2/8/2022					0.0747				
2/9/2022	0.0711			0.156					
2/14/2022		0.599	0.097						0.0695
2/15/2022								0.205	
2/16/2022						0.00763			
2/21/2022							0.161		
2/22/2022									
2/28/2022									
3/1/2022									

Time Series

Constituent: Barium (mg/L) Analysis Run 5/23/2023 3:38 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-44HO	GS-AP-MW-6D	GS-AP-MW-6S	GS-AP-MW-6V	GS-AP-MW-7	GS-AP-MW-8 (bg)	GS-AP-MW-9V	GS-AP-PZ-16	GS-AP-PZ-22
7/19/2022							0.178		
7/20/2022									
7/25/2022		0.544		0.161	0.0677				
7/26/2022			0.0978					0.198	
8/2/2022						0.0116			
8/3/2022									
8/9/2022									0.106
3/6/2023	0.0835								
3/8/2023				0.183					
3/14/2023		0.604	0.108		0.0631				
3/15/2023									
3/21/2023								0.248	0.0615
3/22/2023									
3/27/2023						0.00644	0.184		
3/28/2023									

Time Series

Constituent: Barium (mg/L) Analysis Run 5/23/2023 3:38 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-10R	GS-AP-MW-11R	GS-AP-MW-13R	GS-AP-MW-14R	GS-AP-MW-18R	GS-AP-MW-18VR	GS-AP-MW-1R
8/2/2016							
8/3/2016							
9/20/2016							
9/21/2016							
10/24/2016							
10/25/2016							
10/26/2016							
12/12/2016							
12/13/2016							
2/6/2017							
3/27/2017							
3/28/2017							
4/24/2017							
6/6/2017							
6/7/2017							
2/19/2018							
5/14/2018							
5/15/2018							
10/15/2018							
10/16/2018							
4/16/2019							
4/23/2019							
9/23/2019							
9/24/2019							
3/17/2020							
3/18/2020							
3/23/2020							
3/24/2020							
8/27/2020							
9/8/2020							
9/15/2020							
9/16/2020							
9/17/2020							
9/21/2020							
9/22/2020							
2/2/2021							
2/3/2021							
2/17/2021							
7/27/2021							
8/2/2021							
8/3/2021							
8/9/2021							
8/10/2021							
2/8/2022							
2/9/2022							
2/14/2022							
2/15/2022							
2/16/2022							
2/21/2022							
2/22/2022					0.0716	0.187	
2/28/2022				0.174			
3/1/2022	0.701	0.107	0.0617				0.072

Time Series

Constituent: Barium (mg/L) Analysis Run 5/23/2023 3:38 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-10R	GS-AP-MW-11R	GS-AP-MW-13R	GS-AP-MW-14R	GS-AP-MW-18R	GS-AP-MW-18VR	GS-AP-MW-1R
7/19/2022		0.11					
7/20/2022			0.0667				
7/25/2022							
7/26/2022							
8/2/2022							0.0679
8/3/2022	0.524			0.221	0.0895		
8/9/2022						0.126	
3/6/2023							
3/8/2023							
3/14/2023							
3/15/2023				0.229			
3/21/2023							
3/22/2023		0.12					
3/27/2023	0.587		0.0685			0.115	0.0647
3/28/2023					0.0803		

Time Series

Constituent: Barium (mg/L) Analysis Run 5/23/2023 3:38 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-23V	GS-AP-MW-27HR	GS-AP-MW-31V	GS-AP-MW-36V	GS-AP-MW-37HR	GS-AP-MW-3V	GS-AP-MW-45V	GS-AP-MW-47	GS-AP-MW-5R
2/21/2022									
2/22/2022		0.0414	0.238	0.092					
2/23/2022	0.0812					0.0486	0.0207		
2/28/2022					0.0131			0.772	
3/1/2022									0.0695
7/19/2022									
7/20/2022						0.0815			
7/26/2022	0.0695				0.0171			0.728	
7/27/2022		0.0599		0.114					
8/2/2022									0.0605
8/3/2022			0.342						
8/8/2022							0.0257		
3/14/2023	0.0698	0.0327		0.0858					
3/15/2023					0.0314			0.638	
3/20/2023									0.0567
3/21/2023						0.0197			
3/27/2023			0.253						
3/28/2023							0.073		

Time Series

Constituent: Barium (mg/L) Analysis Run 5/23/2023 3:38 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-9R	GS-AP-PZ-18R	GS-AP-MW-46
2/21/2022		0.0662	
2/22/2022			
2/23/2022			0.0652
2/28/2022			
3/1/2022	0.0425		
7/19/2022	0.0339		
7/20/2022			
7/26/2022			
7/27/2022		0.0668	
8/2/2022			0.0696
8/3/2022			
8/8/2022			
3/14/2023			
3/15/2023			
3/20/2023			
3/21/2023			
3/27/2023	0.0344		0.0655
3/28/2023		0.0701	

Time Series

Constituent: Beryllium (mg/L) Analysis Run 5/23/2023 3:38 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-12	GS-AP-MW-12V	GS-AP-MW-13 (bg)	GS-AP-MW-15	GS-AP-MW-15V	GS-AP-MW-16D	GS-AP-MW-17	GS-AP-MW-17V ...	GS-AP-MW-19
8/1/2016				<0.001015		<0.001015	<0.001015		<0.001015
8/2/2016			<0.003						
8/3/2016	<0.001015								
9/19/2016						<0.001015	<0.001015		
9/20/2016	<0.001015		<0.003	<0.001015					
9/21/2016									<0.001015
10/24/2016							<0.001015		<0.001015
10/25/2016	<0.001015		<0.003	<0.001015		<0.001015			
12/13/2016	<0.001015		<0.003			<0.001015	<0.001015		<0.001015
12/14/2016				<0.001015					
2/6/2017							<0.001015		
2/7/2017									<0.001015
2/8/2017	<0.001015		<0.003	<0.001015		<0.001015			
3/27/2017							<0.001015		
3/28/2017				<0.001015					<0.001015
3/29/2017	<0.001015		<0.003			<0.001015			
3/30/2017									
4/24/2017							<0.001015		
4/26/2017	<0.001015		<0.003	<0.001015		<0.001015			<0.001015
6/5/2017							<0.001015		
6/6/2017				<0.001015		<0.001015			<0.001015
6/7/2017	<0.001015		<0.003						
2/19/2018							<0.001015		
2/20/2018	<0.001015		<0.003	<0.001015					
2/21/2018						<0.001015			<0.001015
5/15/2018	<0.001015		<0.003	<0.001015			<0.001015		
5/16/2018						<0.001015			<0.001015
10/15/2018				<0.001015			<0.001015		
10/16/2018	<0.001015								<0.001015
10/17/2018			<0.003			0.00109 (J)			
2/20/2019								<0.001015	
2/21/2019		<0.001015							
2/26/2019									
2/27/2019									
4/16/2019	<0.001015		<0.003						
4/17/2019				<0.001015		<0.001015	<0.001015		<0.001015
9/23/2019							<0.001015		
9/24/2019				<0.001015		<0.001015		<0.001015	<0.001015
9/25/2019	<0.001015	<0.001015							
3/16/2020							<0.001015		
3/17/2020									
3/18/2020	<0.001015			<0.001015	<0.001015				
3/23/2020									
3/24/2020		<0.001015				<0.001015			<0.001015
3/25/2020								<0.001015	
5/12/2020							<0.001015		
5/13/2020									
9/17/2020									
9/21/2020					<0.001015		<0.001015		
9/22/2020						<0.001015			<0.001015
9/23/2020	<0.001015	<0.001015		<0.001015				<0.001015	
2/1/2021	<0.001015	<0.001015							

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Beryllium (mg/L) Analysis Run 5/23/2023 3:38 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-12	GS-AP-MW-12V	GS-AP-MW-13 (bg)	GS-AP-MW-15	GS-AP-MW-15V	GS-AP-MW-16D	GS-AP-MW-17	GS-AP-MW-17V ...	GS-AP-MW-19
2/2/2021							<0.001015	<0.001015	
2/3/2021									
2/8/2021									<0.001015
2/9/2021				<0.001015	<0.001015				
2/10/2021						<0.001015			
7/27/2021									
8/2/2021								<0.001015	
8/3/2021				<0.001015	<0.001015		<0.001015		
8/4/2021									
8/9/2021	<0.001015	<0.001015				<0.001015			
8/10/2021									<0.001015
8/11/2021									
8/12/2021									
2/8/2022									
2/14/2022							<0.001015	<0.001015	
2/15/2022						<0.001015			
2/16/2022				<0.001015	<0.001015				
2/22/2022									<0.001015
2/23/2022		<0.001015							
2/28/2022	<0.001015								
7/19/2022	<0.001015								
7/20/2022		<0.001015							
7/26/2022									
7/27/2022									
8/2/2022				<0.001015	<0.001015	<0.001015			
8/3/2022									<0.001015
8/8/2022							<0.001015		
8/9/2022								<0.001015	
8/10/2022									
3/14/2023									
3/15/2023									
3/20/2023				<0.001015	<0.001015				
3/21/2023						<0.001015			<0.001015
3/22/2023	<0.001015	<0.001015					<0.001015	<0.001015	

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Beryllium (mg/L)   Analysis Run 5/23/2023 3:38 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

	GS-AP-MW-2	GS-AP-MW-21	GS-AP-MW-21V	GS-AP-MW-23H	GS-AP-MW-24H	GS-AP-MW-25HA	GS-AP-MW-26H
8/1/2016							
8/2/2016	<0.001015	<0.001015					
8/3/2016							
9/19/2016	<0.001015						
9/20/2016							
9/21/2016		<0.001015					
10/24/2016	<0.001015						
10/25/2016		<0.001015					
12/13/2016	<0.001015						
12/14/2016		<0.001015					
2/6/2017							
2/7/2017							
2/8/2017	<0.001015	<0.001015					
3/27/2017							
3/28/2017		<0.001015					
3/29/2017							
3/30/2017	<0.001015						
4/24/2017							
4/26/2017	<0.001015	<0.001015					
6/5/2017							
6/6/2017	<0.001015	<0.001015					
6/7/2017							
2/19/2018							
2/20/2018		<0.001015					
2/21/2018	<0.001015						
5/15/2018		<0.001015					
5/16/2018	<0.001015						
10/15/2018							
10/16/2018	0.00138 (J)	<0.001015					
10/17/2018							
2/20/2019				<0.001015			
2/21/2019							
2/26/2019					<0.001015		
2/27/2019							<0.001015
4/16/2019							
4/17/2019	<0.001015	<0.001015					
9/23/2019				<0.001015			<0.001015
9/24/2019		<0.001015			<0.001015		
9/25/2019	<0.001015						
3/16/2020							
3/17/2020				<0.001015			
3/18/2020		<0.001015			<0.001015		
3/23/2020			<0.001015				
3/24/2020						<0.001015	
3/25/2020	<0.001015						<0.001015
5/12/2020							
5/13/2020	<0.001015						
9/17/2020				<0.001015	<0.001015	<0.001015	
9/21/2020							<0.001015
9/22/2020	<0.001015						
9/23/2020		<0.001015	<0.001015				
2/1/2021	<0.001015						

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Beryllium (mg/L) Analysis Run 5/23/2023 3:38 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-2	GS-AP-MW-21	GS-AP-MW-21V	GS-AP-MW-23H	GS-AP-MW-24H	GS-AP-MW-25HA	GS-AP-MW-26H
2/2/2021					<0.001015		
2/3/2021				<0.001015			
2/8/2021		<0.001015					
2/9/2021			<0.001015				<0.001015
2/10/2021						<0.001015	
7/27/2021				<0.001015			
8/2/2021							
8/3/2021					<0.001015		
8/4/2021	<0.001015	<0.001015					
8/9/2021							
8/10/2021							<0.001015
8/11/2021			<0.001015				
8/12/2021						<0.001015	
2/8/2022		<0.001015	<0.001015				
2/14/2022				<0.001015			
2/15/2022					<0.001015		<0.001015
2/16/2022						<0.001015	
2/22/2022	<0.001015						
2/23/2022							
2/28/2022							
7/19/2022	<0.001015						
7/20/2022							
7/26/2022				<0.001015			
7/27/2022					<0.001015		
8/2/2022							
8/3/2022						<0.001015	
8/8/2022							
8/9/2022			<0.001015				
8/10/2022		<0.001015					<0.001015
3/14/2023				<0.001015			
3/15/2023					<0.001015		
3/20/2023							
3/21/2023		<0.001015	<0.001015				
3/22/2023	<0.001015					<0.001015	<0.001015

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Beryllium (mg/L) Analysis Run 5/23/2023 3:38 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-28H	GS-AP-MW-29H	GS-AP-MW-3	GS-AP-MW-30HA	GS-AP-MW-31H	GS-AP-MW-32H	GS-AP-MW-33HO	GS-AP-MW-34HO	GS-AP-MW-35HO
2/27/2019		<0.001015							
3/13/2019	<0.001015								
9/24/2019		<0.001015							
9/25/2019	<0.001015								
3/16/2020	<0.001015							<0.001015	
3/17/2020							<0.001015		<0.001015
3/18/2020				<0.001015	<0.001015				
3/24/2020						<0.001015			
3/25/2020		<0.001015							
5/12/2020	<0.001015							<0.001015	<0.001015
5/13/2020				<0.001015			<0.001015		
9/15/2020							<0.001015		
9/16/2020								<0.001015	<0.001015
9/17/2020									
9/21/2020				<0.001015		<0.001015			
9/22/2020	<0.001015	<0.001015			<0.001015				
2/1/2021					<0.001015				
2/2/2021									
2/3/2021		<0.001015					<0.001015	<0.001015	
2/4/2021									<0.001015
2/8/2021									
2/9/2021									
2/10/2021						<0.001015			
2/17/2021	<0.001015		<0.001015	<0.001015					
7/27/2021							<0.001015	<0.001015	
7/28/2021									<0.001015
8/2/2021				<0.001015	<0.001015				
8/3/2021			<0.001015						
8/4/2021		<0.001015							
8/9/2021	<0.001015								
8/10/2021						<0.001015			
2/8/2022				<0.001015	<0.001015				
2/9/2022							<0.001015	<0.001015	<0.001015
2/14/2022	<0.001015	<0.001015				<0.001015			
2/15/2022									
2/16/2022			<0.001015						
2/21/2022									
2/22/2022									
7/20/2022			<0.001015						
7/26/2022									
7/27/2022	<0.001015					<0.001015			
8/2/2022									
8/3/2022		<0.001015		<0.001015	<0.001015				
8/10/2022									
3/8/2023								<0.001015	<0.001015
3/13/2023				<0.001015					
3/14/2023	<0.001015						<0.001015		
3/15/2023									
3/21/2023			<0.001015			<0.001015			
3/22/2023									
3/27/2023					<0.001015				
3/28/2023		<0.001015							

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Beryllium (mg/L) Analysis Run 5/23/2023 3:38 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-36H	GS-AP-MW-38H	GS-AP-MW-40H	GS-AP-MW-41HD	GS-AP-MW-41HS	GS-AP-MW-42H	GS-AP-MW-43HO
2/27/2019							
3/13/2019							
9/24/2019							
9/25/2019							
3/16/2020							
3/17/2020	<0.001015						
3/18/2020				<0.001015			
3/24/2020		<0.001015				<0.001015	
3/25/2020							<0.001015
5/12/2020							
5/13/2020	<0.001015						
9/15/2020							
9/16/2020							
9/17/2020	<0.001015			<0.001015			
9/21/2020							
9/22/2020		<0.001015	<0.001015			<0.001015	<0.001015
2/1/2021							
2/2/2021			<0.001015				
2/3/2021						<0.001015	
2/4/2021							
2/8/2021				<0.001015	<0.001015		
2/9/2021		<0.001015					
2/10/2021							
2/17/2021	<0.001015						<0.001015
7/27/2021							
7/28/2021					<0.001015		
8/2/2021							
8/3/2021				<0.001015			
8/4/2021	<0.001015	<0.001015				<0.001015	<0.001015
8/9/2021							
8/10/2021			<0.001015				
2/8/2022					<0.001015		
2/9/2022							
2/14/2022	<0.001015						
2/15/2022			<0.001015	<0.001015			
2/16/2022						<0.001015	
2/21/2022							<0.001015
2/22/2022		<0.001015					
7/20/2022	<0.001015						
7/26/2022					<0.001015		
7/27/2022				<0.001015		<0.001015	
8/2/2022			<0.001015				
8/3/2022							<0.001015
8/10/2022		<0.001015					
3/8/2023							
3/13/2023					<0.001015		
3/14/2023							
3/15/2023	<0.001015			<0.001015		<0.001015	
3/21/2023							
3/22/2023			<0.001015				
3/27/2023							
3/28/2023		<0.001015					<0.001015

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Beryllium (mg/L) Analysis Run 5/23/2023 3:38 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-44HO	GS-AP-MW-6D	GS-AP-MW-6S	GS-AP-MW-6V	GS-AP-MW-7	GS-AP-MW-8 (bg)	GS-AP-MW-9V	GS-AP-PZ-16	GS-AP-PZ-22
8/2/2016					<0.001015				
8/3/2016		<0.001015	<0.001015			<0.001015			
9/20/2016		<0.001015	<0.001015						
9/21/2016					<0.001015	<0.001015			
10/24/2016		<0.001015			<0.001015				
10/25/2016						<0.001015			
10/26/2016			<0.001015						
12/12/2016		<0.001015	<0.001015		<0.001015				
12/13/2016						<0.001015			
2/6/2017		<0.001015	<0.001015		<0.001015	<0.001015			
3/27/2017		<0.001015	<0.001015						
3/28/2017					<0.001015	<0.001015			
4/24/2017		<0.001015	<0.001015		<0.001015	<0.001015			
6/6/2017		<0.001015	<0.001015						
6/7/2017					<0.001015	<0.001015			
2/19/2018		<0.001015	<0.001015		<0.001015	<0.001015			
5/14/2018		<0.001015	<0.001015						
5/15/2018					<0.001015	<0.001015			
10/15/2018		<0.001015	0.000794 (J)		<0.001015				
10/16/2018						<0.001015			
4/16/2019		<0.001015	<0.001015			<0.001015			
4/23/2019					<0.001015				
9/23/2019		<0.001015	<0.001015						
9/24/2019					<0.001015	<0.001015			
3/17/2020		<0.001015	<0.001015		<0.001015				
3/18/2020						<0.001015			
3/23/2020							<0.001015		
3/24/2020								<0.001015	<0.001015
8/27/2020	<0.001015								
9/8/2020				<0.001015					
9/15/2020	<0.001015			<0.001015					
9/16/2020			<0.001015		<0.001015				
9/17/2020		<0.001015						<0.001015	<0.001015
9/21/2020						<0.001015			
9/22/2020							<0.001015		
2/2/2021					<0.001015	<0.001015	<0.001015		<0.001015
2/3/2021	<0.001015	<0.001015	<0.001015	<0.001015					
2/17/2021								<0.001015	
7/27/2021	<0.001015	<0.001015	<0.001015						
8/2/2021				<0.001015					
8/3/2021									<0.001015
8/9/2021					<0.001015			<0.001015	
8/10/2021						<0.001015	<0.001015		
2/8/2022					<0.001015				
2/9/2022	<0.001015			<0.001015					
2/14/2022		<0.001015	<0.001015						<0.001015
2/15/2022								<0.001015	
2/16/2022						<0.001015			
2/21/2022							<0.001015		
2/22/2022									
2/28/2022									
3/1/2022									

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Beryllium (mg/L) Analysis Run 5/23/2023 3:38 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-44HO	GS-AP-MW-6D	GS-AP-MW-6S	GS-AP-MW-6V	GS-AP-MW-7	GS-AP-MW-8 (bg)	GS-AP-MW-9V	GS-AP-PZ-16	GS-AP-PZ-22
7/19/2022							<0.001015		
7/20/2022									
7/25/2022		<0.001015		<0.001015	<0.001015				
7/26/2022			<0.001015					<0.001015	
8/2/2022						<0.001015			
8/3/2022									
8/9/2022									<0.001015
3/6/2023	<0.001015								
3/8/2023				<0.001015					
3/14/2023		<0.001015	<0.001015		<0.001015				
3/15/2023									
3/21/2023								<0.001015	<0.001015
3/22/2023									
3/27/2023						<0.001015	<0.001015		
3/28/2023									

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Beryllium (mg/L) Analysis Run 5/23/2023 3:38 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-10R	GS-AP-MW-11R	GS-AP-MW-13R	GS-AP-MW-14R	GS-AP-MW-18R	GS-AP-MW-18VR	GS-AP-MW-1R
8/2/2016							
8/3/2016							
9/20/2016							
9/21/2016							
10/24/2016							
10/25/2016							
10/26/2016							
12/12/2016							
12/13/2016							
2/6/2017							
3/27/2017							
3/28/2017							
4/24/2017							
6/6/2017							
6/7/2017							
2/19/2018							
5/14/2018							
5/15/2018							
10/15/2018							
10/16/2018							
4/16/2019							
4/23/2019							
9/23/2019							
9/24/2019							
3/17/2020							
3/18/2020							
3/23/2020							
3/24/2020							
8/27/2020							
9/8/2020							
9/15/2020							
9/16/2020							
9/17/2020							
9/21/2020							
9/22/2020							
2/2/2021							
2/3/2021							
2/17/2021							
7/27/2021							
8/2/2021							
8/3/2021							
8/9/2021							
8/10/2021							
2/8/2022							
2/9/2022							
2/14/2022							
2/15/2022							
2/16/2022							
2/21/2022							
2/22/2022					<0.001015	<0.001015	
2/28/2022				<0.001015			
3/1/2022	<0.001015	<0.001015	<0.001015				<0.001015

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Beryllium (mg/L) Analysis Run 5/23/2023 3:38 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-10R	GS-AP-MW-11R	GS-AP-MW-13R	GS-AP-MW-14R	GS-AP-MW-18R	GS-AP-MW-18VR	GS-AP-MW-1R
7/19/2022		<0.001015					
7/20/2022			<0.001015				
7/25/2022							
7/26/2022							
8/2/2022							<0.001015
8/3/2022	<0.001015			<0.001015	<0.001015		
8/9/2022						<0.001015	
3/6/2023							
3/8/2023							
3/14/2023							
3/15/2023				<0.001015			
3/21/2023							
3/22/2023		<0.001015					
3/27/2023	<0.001015		<0.001015			<0.001015	<0.001015
3/28/2023					<0.001015		

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Beryllium (mg/L) Analysis Run 5/23/2023 3:38 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-23V	GS-AP-MW-27HR	GS-AP-MW-31V	GS-AP-MW-36V	GS-AP-MW-37HR	GS-AP-MW-3V	GS-AP-MW-45V	GS-AP-MW-47	GS-AP-MW-5R
2/21/2022									
2/22/2022		<0.001015	<0.001015	<0.001015					
2/23/2022	<0.001015					<0.001015	<0.001015		
2/28/2022					<0.001015			<0.001015	
3/1/2022									<0.001015
7/19/2022									
7/20/2022						<0.001015			
7/26/2022	<0.001015				<0.001015			<0.001015	
7/27/2022		<0.001015		<0.001015					
8/2/2022									<0.001015
8/3/2022			<0.001015						
8/8/2022							<0.001015		
3/14/2023	<0.001015	<0.001015		<0.001015					
3/15/2023					<0.001015			<0.001015	
3/20/2023									<0.001015
3/21/2023						<0.001015			
3/27/2023			<0.001015						
3/28/2023							<0.001015		

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Beryllium (mg/L) Analysis Run 5/23/2023 3:38 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-9R	GS-AP-PZ-18R	GS-AP-MW-46
2/21/2022		<0.001015	
2/22/2022			
2/23/2022			<0.001015
2/28/2022			
3/1/2022	<0.001015		
7/19/2022	<0.001015		
7/20/2022			
7/26/2022			
7/27/2022		<0.001015	
8/2/2022			<0.001015
8/3/2022			
8/8/2022			
3/14/2023			
3/15/2023			
3/20/2023			
3/21/2023			
3/27/2023	<0.001015		<0.001015
3/28/2023		<0.001015	

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Boron (mg/L) Analysis Run 5/23/2023 3:38 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-12	GS-AP-MW-12V	GS-AP-MW-13 (bg)	GS-AP-MW-15	GS-AP-MW-15V	GS-AP-MW-16D	GS-AP-MW-17	GS-AP-MW-17V ...	GS-AP-MW-19
8/1/2016				0.0955 (J)		0.0266 (J)	0.0712 (J)		0.0279 (J)
8/2/2016			<0.1						
8/3/2016	0.34								
9/19/2016						0.0262 (J)	0.0716 (J)		
9/20/2016	0.299		<0.1	0.0706 (J)					
9/21/2016									0.0235 (J)
10/24/2016							0.0858 (J)		0.0444 (J)
10/25/2016	0.323		<0.1	0.0849 (J)		0.0273 (J)			
12/13/2016	0.294		<0.1			0.0258 (J)	0.0875 (J)		0.0285 (J)
12/14/2016				0.0914 (J)					
2/6/2017							0.0729 (J)		
2/7/2017									0.03 (J)
2/8/2017	0.264		<0.1	0.0524 (J)		0.0249 (J)			
3/27/2017							0.0706 (J)		
3/28/2017				0.0532 (J)					0.0309 (J)
3/29/2017	0.246		<0.1			0.0247 (J)			
3/30/2017									
4/24/2017							0.0737 (J)		
4/26/2017	0.234		<0.1	0.0598 (J)		0.0264 (J)			0.0273 (J)
6/5/2017							0.0767 (J)		
6/6/2017				0.0576 (J)		0.0247 (J)			0.0212 (J)
6/7/2017	0.194		<0.1						
8/21/2017									
8/22/2017	0.156		<0.1	0.0702 (J)		0.0246 (J)	0.0786 (J)		0.0294 (J)
8/23/2017									
5/15/2018	0.0781 (J)		<0.1	0.0567 (J)			0.0953 (J)		
5/16/2018						0.0247 (J)			0.0356 (J)
10/15/2018				0.07 (J)			0.0842 (J)		
10/16/2018	0.057 (J)								0.0363 (J)
10/17/2018			<0.1			0.0251 (J)			
2/20/2019								0.0337 (J)	
2/21/2019		0.0303 (J)							
2/26/2019									
2/27/2019									
4/16/2019	0.0385 (J)		<0.1						
4/17/2019				0.0388 (J)		<0.1015	0.0916 (J)		0.0336 (J)
9/23/2019							0.116		
9/24/2019				0.0607 (J)		<0.1015		0.0532 (J)	0.0375 (J)
9/25/2019	0.122	0.0347 (J)							
3/16/2020							0.0894 (J)		
3/17/2020									
3/18/2020	0.0449 (J)			0.0596 (J)	0.0565 (J)				
3/23/2020									
3/24/2020		0.0343 (J)				<0.1015			0.0398 (J)
3/25/2020								0.0482 (J)	
5/12/2020							0.0862 (J)		
5/13/2020									
9/17/2020									
9/21/2020					0.0712 (J)		0.102		
9/22/2020						<0.1015			0.037 (J)
9/23/2020	0.0446 (J)	0.0322 (J)		0.0537 (J)				0.0478 (J)	
2/1/2021	0.0672 (J)	<0.1015							

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Boron (mg/L) Analysis Run 5/23/2023 3:38 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-12	GS-AP-MW-12V	GS-AP-MW-13 (bg)	GS-AP-MW-15	GS-AP-MW-15V	GS-AP-MW-16D	GS-AP-MW-17	GS-AP-MW-17V ...	GS-AP-MW-19
2/2/2021							0.0946 (J)	0.0396 (J)	
2/3/2021									
2/8/2021									0.0336 (J)
2/9/2021				0.0521 (J)	0.0722 (J)				
2/10/2021						<0.1015			
7/27/2021									
8/2/2021								0.0368 (J)	
8/3/2021				0.0491 (J)	0.0601 (J)		0.0729 (J)		
8/4/2021									
8/9/2021	<0.1015	<0.1015				<0.1015			
8/10/2021									<0.1015
8/11/2021									
8/12/2021									
2/8/2022									
2/14/2022							0.073 (J)	0.0386 (J)	
2/15/2022						<0.1015			
2/16/2022				0.0323 (J)	0.0594 (J)				
2/22/2022									<0.1015
2/23/2022		<0.1015							
2/28/2022	0.0305 (J)								
7/19/2022	<0.1015								
7/20/2022		<0.1015							
7/26/2022									
7/27/2022									
8/2/2022				0.0426 (J)	0.0649 (J)	<0.1015			
8/3/2022									0.0329 (J)
8/8/2022							0.0717 (J)		
8/9/2022								0.0418 (J)	
8/10/2022									
3/14/2023									
3/15/2023									
3/20/2023				0.0308 (J)	0.0536 (J)				
3/21/2023						<0.1015			0.0334 (J)
3/22/2023	<0.1015	<0.1015					0.0727 (J)	0.0379 (J)	

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Boron (mg/L) Analysis Run 5/23/2023 3:38 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-2	GS-AP-MW-21	GS-AP-MW-21V	GS-AP-MW-23H	GS-AP-MW-24H	GS-AP-MW-25HA	GS-AP-MW-26H
8/1/2016							
8/2/2016	0.178	0.176 (o)					
8/3/2016							
9/19/2016	0.0937 (J)						
9/20/2016							
9/21/2016		0.0723 (J)					
10/24/2016	0.0986 (J)						
10/25/2016		0.0867 (J)					
12/13/2016	0.0965 (J)						
12/14/2016		0.092 (J)					
2/6/2017							
2/7/2017							
2/8/2017	0.0896 (J)	0.0803 (J)					
3/27/2017							
3/28/2017		0.0804 (J)					
3/29/2017							
3/30/2017	0.0871 (J)						
4/24/2017							
4/26/2017	0.0818 (J)	0.0801 (J)					
6/5/2017							
6/6/2017	0.0805 (J)	0.0795 (J)					
6/7/2017							
8/21/2017	0.102						
8/22/2017							
8/23/2017		0.0764 (J)					
5/15/2018		0.0769 (J)					
5/16/2018	0.147						
10/15/2018							
10/16/2018	0.169	0.0764 (J)					
10/17/2018							
2/20/2019				0.0498 (J)			
2/21/2019							
2/26/2019					0.0719 (J)		
2/27/2019							<0.1015
4/16/2019							
4/17/2019	0.165	0.0675 (J)					
9/23/2019				0.0641 (J)			<0.1015
9/24/2019		0.0843 (J)			0.0821 (J)		
9/25/2019	0.153						
3/16/2020							
3/17/2020				0.0504 (J)			
3/18/2020		0.0824 (J)			0.0811 (J)		
3/23/2020			0.122				
3/24/2020						0.146	
3/25/2020	0.163						<0.1015
5/12/2020							
5/13/2020	0.154						
9/17/2020				0.0637 (J)	0.069 (J)	0.138	
9/21/2020							0.0334 (J)
9/22/2020	0.133						
9/23/2020		0.0871 (J)	0.126				
2/1/2021	0.13						

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Boron (mg/L) Analysis Run 5/23/2023 3:38 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-2	GS-AP-MW-21	GS-AP-MW-21V	GS-AP-MW-23H	GS-AP-MW-24H	GS-AP-MW-25HA	GS-AP-MW-26H
2/2/2021					0.0685 (J)		
2/3/2021				0.0425 (J)			
2/8/2021		0.0991 (J)					
2/9/2021			0.114				<0.1015
2/10/2021						0.147	
7/27/2021				0.0474 (J)			
8/2/2021							
8/3/2021					0.0721 (J)		
8/4/2021	0.117	0.0993 (J)					
8/9/2021							
8/10/2021							<0.1015
8/11/2021			0.0631 (J)				
8/12/2021						0.13	
2/8/2022		0.111	0.0938 (J)				
2/14/2022				0.035 (J)			
2/15/2022					0.0708 (J)		<0.1015
2/16/2022						0.145	
2/22/2022	0.112						
2/23/2022							
2/28/2022							
7/19/2022	0.106						
7/20/2022							
7/26/2022				0.0338 (J)			
7/27/2022					0.0641 (J)		
8/2/2022							
8/3/2022						0.15	
8/8/2022							
8/9/2022			0.0869 (J)				
8/10/2022		0.119					<0.1015
3/14/2023				0.0377 (J)			
3/15/2023					0.0674 (J)		
3/20/2023							
3/21/2023		0.13	0.106				
3/22/2023	0.0989 (J)					0.151	<0.1015

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Boron (mg/L) Analysis Run 5/23/2023 3:38 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-28H	GS-AP-MW-29H	GS-AP-MW-3	GS-AP-MW-30HA	GS-AP-MW-31H	GS-AP-MW-32H	GS-AP-MW-33HO	GS-AP-MW-34HO	GS-AP-MW-35HO
2/27/2019		0.0359 (J)							
3/13/2019	0.0819 (J)								
9/24/2019		0.0305 (J)							
9/25/2019	0.0784 (J)								
3/16/2020	0.0751 (J)							0.0827 (J)	
3/17/2020							0.066 (J)		<0.1015
3/18/2020				0.0734 (J)	<0.1015				
3/24/2020						0.0492 (J)			
3/25/2020		<0.1							
5/12/2020	0.0719 (J)							0.0929 (J)	<0.1015
5/13/2020				0.0747 (J)			0.0409 (J)		
9/15/2020							0.0425 (J)		
9/16/2020								0.0874 (J)	<0.1015
9/17/2020									
9/21/2020				0.0814 (J)		0.0455 (J)			
9/22/2020	0.0728 (J)	0.175			<0.1015				
2/1/2021					<0.1015				
2/2/2021									
2/3/2021		0.809					0.0453 (J)	0.0964 (J)	
2/4/2021									<0.1015
2/8/2021									
2/9/2021									
2/10/2021						0.0477 (J)			
2/17/2021	0.0748 (J)		0.426	0.0668 (J)					
7/27/2021							0.0417 (J)	0.108	
7/28/2021									<0.1015
8/2/2021				0.06 (J)	<0.1015				
8/3/2021			0.386						
8/4/2021		0.447							
8/9/2021	0.063 (J)								
8/10/2021						0.0393 (J)			
2/8/2022				0.0654 (J)	<0.1015				
2/9/2022							0.0416 (J)	0.106	<0.1015
2/14/2022	0.0706 (J)	0.542				0.0443 (J)			
2/15/2022									
2/16/2022			0.311						
2/21/2022									
2/22/2022									
7/20/2022			0.292						
7/26/2022									
7/27/2022	0.0663 (J)					0.0414 (J)			
8/2/2022									
8/3/2022		0.399		0.0761 (J)	<0.1015				
8/10/2022									
3/8/2023								0.0911 (J)	<0.1015
3/13/2023				0.0605 (J)					
3/14/2023	0.0699 (J)						0.0312 (J)		
3/15/2023									
3/21/2023			0.341			0.0455 (J)			
3/22/2023									
3/27/2023					<0.1015				
3/28/2023		0.36							

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Boron (mg/L) Analysis Run 5/23/2023 3:38 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-36H	GS-AP-MW-38H	GS-AP-MW-40H	GS-AP-MW-41HD	GS-AP-MW-41HS	GS-AP-MW-42H	GS-AP-MW-43HO
2/27/2019							
3/13/2019							
9/24/2019							
9/25/2019							
3/16/2020							
3/17/2020	0.0394 (J)						
3/18/2020				1.45			
3/24/2020		0.0468 (J)				<0.1	
3/25/2020							0.112
5/12/2020							
5/13/2020	0.0359 (J)						
9/15/2020							
9/16/2020							
9/17/2020	0.0345 (J)			1.42			
9/21/2020							
9/22/2020		0.0461 (J)	0.0326 (J)			0.0469 (J)	0.12
2/1/2021							
2/2/2021			0.0305 (J)				
2/3/2021						0.053 (J)	
2/4/2021							
2/8/2021				1.48	1.06		
2/9/2021		0.0504 (J)					
2/10/2021							
2/17/2021	0.0413 (J)						0.119
7/27/2021							
7/28/2021					1.09		
8/2/2021							
8/3/2021				1.48			
8/4/2021	0.0449 (J)	0.0479 (J)				0.0578 (J)	0.126
8/9/2021							
8/10/2021			<0.1015				
2/8/2022					1.04		
2/9/2022							
2/14/2022	0.0467 (J)						
2/15/2022			0.0321 (J)	1.52			
2/16/2022						0.0502 (J)	
2/21/2022							0.13
2/22/2022		0.0452 (J)					
7/20/2022	0.0316 (J)						
7/26/2022					1.01		
7/27/2022				1.62		0.05 (J)	
8/2/2022			0.0327 (J)				
8/3/2022							0.139
8/10/2022		0.0498 (J)					
3/8/2023							
3/13/2023					0.848		
3/14/2023							
3/15/2023	0.0446 (J)			1.52		0.055 (J)	
3/21/2023							
3/22/2023			0.0379 (J)				
3/27/2023							
3/28/2023		0.0503 (J)					0.157

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Boron (mg/L) Analysis Run 5/23/2023 3:38 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-44HO	GS-AP-MW-6D	GS-AP-MW-6S	GS-AP-MW-6V	GS-AP-MW-7	GS-AP-MW-8 (bg)	GS-AP-MW-9V	GS-AP-PZ-16	GS-AP-PZ-22
8/2/2016					1.57				
8/3/2016		1.04	1.16			0.0239 (J)			
9/20/2016		1.01	1.16						
9/21/2016					1.4	<0.1015			
10/24/2016		1.08			1.42				
10/25/2016						<0.1015			
10/26/2016			1.24						
12/12/2016		1.09	1.24		1.38				
12/13/2016						<0.1015			
2/6/2017		1.06	1.1		1.44	<0.1015			
3/27/2017		1.07	1.04						
3/28/2017					1.44	<0.1015			
4/24/2017		1.08	1		1.41	<0.1015			
6/6/2017		1.11	1.02						
6/7/2017					1.45	<0.1015			
8/21/2017		0.906	1.05		1.39	<0.1015			
5/14/2018		1.04	0.99						
5/15/2018					1.5	<0.1015			
10/15/2018		1.06	1.05		1.53				
10/16/2018						<0.1015			
4/16/2019		1.1	0.961			<0.1015			
4/23/2019					1.5				
9/23/2019		1.15	1.08						
9/24/2019					1.6	<0.1015			
3/17/2020		1.17	0.867		1.58				
3/18/2020						<0.1015			
3/23/2020							0.0316 (J)		
3/24/2020								0.0772 (J)	0.0521 (J)
8/27/2020	0.0366 (J)								
9/8/2020				0.0974 (J)					
9/15/2020	0.0404 (J)			0.0974 (J)					
9/16/2020			0.8		1.54				
9/17/2020		1.22						0.0824 (J)	0.0454 (J)
9/21/2020						<0.1015			
9/22/2020							0.0348 (J)		
2/2/2021					1.6	<0.1015	0.0358 (J)		0.0486 (J)
2/3/2021	0.0472 (J)	1.24	0.817	0.1 (J)					
2/17/2021								0.089 (J)	
7/27/2021	0.0429 (J)	1.29	0.873						
8/2/2021				0.101 (J)					
8/3/2021									0.0478 (J)
8/9/2021					1.62			0.0747 (J)	
8/10/2021						<0.1015	<0.1015		
2/8/2022					1.69				
2/9/2022	0.0429 (J)			0.101 (J)					
2/14/2022		1.29	0.978						0.047 (J)
2/15/2022								0.0781 (J)	
2/16/2022						<0.1015			
2/21/2022							0.0349 (J)		
2/22/2022									
2/28/2022									
3/1/2022									

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Boron (mg/L)   Analysis Run 5/23/2023 3:38 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

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	GS-AP-MW-44HO	GS-AP-MW-6D	GS-AP-MW-6S	GS-AP-MW-6V	GS-AP-MW-7	GS-AP-MW-8 (bg)	GS-AP-MW-9V	GS-AP-PZ-16	GS-AP-PZ-22
7/19/2022							0.0327 (J)		
7/20/2022									
7/25/2022		1.39		0.0978 (J)	1.73				
7/26/2022			1.11					0.0612 (J)	
8/2/2022						<0.1015			
8/3/2022									
8/9/2022									0.0448 (J)
3/6/2023	0.0433 (J)								
3/8/2023				0.101 (J)					
3/14/2023		1.32	0.935		1.64				
3/15/2023									
3/21/2023								0.0798 (J)	0.0442 (J)
3/22/2023									
3/27/2023						<0.1015	0.0359 (J)		
3/28/2023									

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Boron (mg/L) Analysis Run 5/23/2023 3:38 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-10R	GS-AP-MW-11R	GS-AP-MW-13R	GS-AP-MW-14R	GS-AP-MW-18R	GS-AP-MW-18VR	GS-AP-MW-1R
8/2/2016							
8/3/2016							
9/20/2016							
9/21/2016							
10/24/2016							
10/25/2016							
10/26/2016							
12/12/2016							
12/13/2016							
2/6/2017							
3/27/2017							
3/28/2017							
4/24/2017							
6/6/2017							
6/7/2017							
8/21/2017							
5/14/2018							
5/15/2018							
10/15/2018							
10/16/2018							
4/16/2019							
4/23/2019							
9/23/2019							
9/24/2019							
3/17/2020							
3/18/2020							
3/23/2020							
3/24/2020							
8/27/2020							
9/8/2020							
9/15/2020							
9/16/2020							
9/17/2020							
9/21/2020							
9/22/2020							
2/2/2021							
2/3/2021							
2/17/2021							
7/27/2021							
8/2/2021							
8/3/2021							
8/9/2021							
8/10/2021							
2/8/2022							
2/9/2022							
2/14/2022							
2/15/2022							
2/16/2022							
2/21/2022							
2/22/2022					<0.1015	0.0488 (J)	
2/28/2022				<0.1015			
3/1/2022	<0.1015	0.0844 (J)	<0.1015				0.0582 (J)

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Boron (mg/L) Analysis Run 5/23/2023 3:38 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-10R	GS-AP-MW-11R	GS-AP-MW-13R	GS-AP-MW-14R	GS-AP-MW-18R	GS-AP-MW-18VR	GS-AP-MW-1R
7/19/2022		0.111					
7/20/2022			<0.1015				
7/25/2022							
7/26/2022							
8/2/2022							0.0596 (J)
8/3/2022	<0.1015			<0.1015	<0.1015		
8/9/2022						0.0488 (J)	
3/6/2023							
3/8/2023							
3/14/2023							
3/15/2023				<0.1015			
3/21/2023							
3/22/2023		0.13					
3/27/2023	<0.1015		<0.1015			0.0477 (J)	0.0603 (J)
3/28/2023					<0.1015		

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Boron (mg/L) Analysis Run 5/23/2023 3:38 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-23V	GS-AP-MW-27HR	GS-AP-MW-31V	GS-AP-MW-36V	GS-AP-MW-37HR	GS-AP-MW-3V	GS-AP-MW-45V	GS-AP-MW-47	GS-AP-MW-5R
2/21/2022									
2/22/2022		0.0541 (J)	<0.1015	0.0402 (J)					
2/23/2022	0.0919 (J)					0.109	0.038 (J)		
2/28/2022					<0.1015			<0.1015	
3/1/2022									0.036 (J)
7/19/2022									
7/20/2022						0.148			
7/26/2022	0.0772 (J)				<0.1015			<0.1015	
7/27/2022		0.107		0.0689 (J)					
8/2/2022									0.0384 (J)
8/3/2022			0.0391 (J)						
8/8/2022							0.0415 (J)		
3/14/2023	0.409	0.107		0.0771 (J)					
3/15/2023					<0.1015			<0.1015	
3/20/2023									0.038 (J)
3/21/2023						0.0528 (J)			
3/27/2023			0.048 (J)						
3/28/2023							0.0582 (J)		

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Boron (mg/L) Analysis Run 5/23/2023 3:38 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-9R	GS-AP-PZ-18R	GS-AP-MW-46
2/21/2022		0.0925 (J)	
2/22/2022			
2/23/2022			0.768
2/28/2022			
3/1/2022	0.106		
7/19/2022	0.104		
7/20/2022			
7/26/2022			
7/27/2022		0.0879 (J)	
8/2/2022			0.832
8/3/2022			
8/8/2022			
3/14/2023			
3/15/2023			
3/20/2023			
3/21/2023			
3/27/2023	0.152		0.886
3/28/2023		0.0871 (J)	

Time Series

Constituent: Cadmium (mg/L) Analysis Run 5/23/2023 3:38 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-12	GS-AP-MW-12V	GS-AP-MW-13 (bg)	GS-AP-MW-15	GS-AP-MW-15V	GS-AP-MW-16D	GS-AP-MW-17	GS-AP-MW-17V ...	GS-AP-MW-19
8/1/2016				<0.000203		<0.000203	<0.000203		<0.000203
8/2/2016			<0.001						
8/3/2016	<0.000203								
9/19/2016						<0.000203	<0.000203		
9/20/2016	<0.000203		<0.001	<0.000203					
9/21/2016									<0.000203
10/24/2016							<0.000203		<0.000203
10/25/2016	<0.000203		<0.001	<0.000203		<0.000203			
12/13/2016	<0.000203		<0.001			<0.000203	<0.000203		<0.000203
12/14/2016				<0.000203					
2/6/2017							<0.000203		
2/7/2017									<0.000203
2/8/2017	<0.000203		<0.001	<0.000203		<0.000203			
3/27/2017							<0.000203		
3/28/2017				<0.000203					<0.000203
3/29/2017	<0.000203		<0.001			<0.000203			
3/30/2017									
4/24/2017							<0.000203		
4/26/2017	<0.000203		<0.001	<0.000203		<0.000203			<0.000203
6/5/2017							<0.000203		
6/6/2017				<0.000203		<0.000203			<0.000203
6/7/2017	<0.000203		<0.001						
2/19/2018							<0.000203		
2/20/2018	<0.000203		<0.001	<0.000203					
2/21/2018						<0.000203			<0.000203
5/15/2018	<0.000203		<0.001	<0.000203			<0.000203		
5/16/2018						<0.000203			<0.000203
10/15/2018				<0.000203			<0.000203		
10/16/2018	<0.000203								<0.000203
10/17/2018			<0.001			<0.000203			
2/20/2019								<0.000203	
2/21/2019		<0.000203							
2/26/2019									
2/27/2019									
4/16/2019	<0.000203		<0.001						
4/17/2019				<0.000203		<0.000203	<0.000203		<0.000203
9/23/2019							<0.000203		
9/24/2019				<0.000203		<0.000203		<0.000203	<0.000203
9/25/2019	<0.000203	<0.000203							
3/16/2020							<0.000203		
3/17/2020									
3/18/2020	<0.000203			<0.000203	<0.000203				
3/23/2020									
3/24/2020		<0.000203				<0.000203			<0.000203
3/25/2020								<0.000203	
5/12/2020							<0.000203		
5/13/2020									
9/17/2020									
9/21/2020					<0.000203		<0.000203		
9/22/2020						<0.000203			<0.000203
9/23/2020	<0.000203	<0.000203		<0.000203				<0.000203	
2/1/2021	<0.000203	<0.000203							

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cadmium (mg/L) Analysis Run 5/23/2023 3:38 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-12	GS-AP-MW-12V	GS-AP-MW-13 (bg)	GS-AP-MW-15	GS-AP-MW-15V	GS-AP-MW-16D	GS-AP-MW-17	GS-AP-MW-17V ...	GS-AP-MW-19
2/2/2021							<0.000203	<0.000203	
2/3/2021									
2/8/2021									<0.000203
2/9/2021				<0.000203	<0.000203				
2/10/2021						<0.000203			
7/27/2021									
8/2/2021								<0.000203	
8/3/2021				<0.000203	<0.000203		<0.000203		
8/4/2021									
8/9/2021	<0.000203	<0.000203				<0.000203			
8/10/2021									<0.000203
8/11/2021									
8/12/2021									
2/8/2022									
2/14/2022							<0.000203	<0.000203	
2/15/2022						<0.000203			
2/16/2022				<0.000203	<0.000203				
2/22/2022									<0.000203
2/23/2022		<0.000203							
2/28/2022	<0.000203								
7/19/2022	<0.000203								
7/20/2022		<0.000203							
7/26/2022									
7/27/2022									
8/2/2022				<0.000203	<0.000203	<0.000203			
8/3/2022									<0.000203
8/8/2022							<0.000203		
8/9/2022								<0.000203	
8/10/2022									
3/14/2023									
3/15/2023									
3/20/2023				<0.000203	<0.000203				
3/21/2023						<0.000203			<0.000203
3/22/2023	<0.000203	<0.000203					<0.000203	<0.000203	

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cadmium (mg/L) Analysis Run 5/23/2023 3:38 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-2	GS-AP-MW-21	GS-AP-MW-21V	GS-AP-MW-23H	GS-AP-MW-24H	GS-AP-MW-25HA	GS-AP-MW-26H
8/1/2016							
8/2/2016	<0.000203	<0.000203					
8/3/2016							
9/19/2016	<0.000203						
9/20/2016							
9/21/2016		<0.000203					
10/24/2016	<0.000203						
10/25/2016		<0.000203					
12/13/2016	<0.000203						
12/14/2016		<0.000203					
2/6/2017							
2/7/2017							
2/8/2017	<0.000203	<0.000203					
3/27/2017							
3/28/2017		<0.000203					
3/29/2017							
3/30/2017	<0.000203						
4/24/2017							
4/26/2017	<0.000203	<0.000203					
6/5/2017							
6/6/2017	<0.000203	<0.000203					
6/7/2017							
2/19/2018							
2/20/2018		<0.000203					
2/21/2018	<0.000203						
5/15/2018		<0.000203					
5/16/2018	<0.000203						
10/15/2018							
10/16/2018	<0.000203	<0.000203					
10/17/2018							
2/20/2019				<0.000203			
2/21/2019							
2/26/2019					<0.000203		
2/27/2019							<0.000203
4/16/2019							
4/17/2019	<0.000203	<0.000203					
9/23/2019				<0.000203			<0.000203
9/24/2019		<0.000203			<0.000203		
9/25/2019	<0.000203						
3/16/2020							
3/17/2020				<0.000203			
3/18/2020		<0.000203			<0.000203		
3/23/2020			<0.000203				
3/24/2020						<0.000203	
3/25/2020	<0.000203						<0.000203
5/12/2020							
5/13/2020	<0.000203						
9/17/2020				<0.000203	<0.000203	<0.000203	
9/21/2020							<0.000203
9/22/2020	<0.000203						
9/23/2020		<0.000203	<0.000203				
2/1/2021	<0.000203						

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cadmium (mg/L) Analysis Run 5/23/2023 3:38 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-2	GS-AP-MW-21	GS-AP-MW-21V	GS-AP-MW-23H	GS-AP-MW-24H	GS-AP-MW-25HA	GS-AP-MW-26H
2/2/2021					<0.000203		
2/3/2021				<0.000203			
2/8/2021		<0.000203					
2/9/2021			<0.000203				<0.000203
2/10/2021						<0.000203	
7/27/2021				<0.000203			
8/2/2021							
8/3/2021					<0.000203		
8/4/2021	<0.000203	<0.000203					
8/9/2021							
8/10/2021							<0.000203
8/11/2021			<0.000203				
8/12/2021						<0.000203	
2/8/2022		<0.000203	<0.000203				
2/14/2022				<0.000203			
2/15/2022					<0.000203		<0.000203
2/16/2022						<0.000203	
2/22/2022	<0.000203						
2/23/2022							
2/28/2022							
7/19/2022	<0.000203						
7/20/2022							
7/26/2022				<0.000203			
7/27/2022					<0.000203		
8/2/2022							
8/3/2022						<0.000203	
8/8/2022							
8/9/2022			<0.000203				
8/10/2022		<0.000203					<0.000203
3/14/2023				<0.000203			
3/15/2023					<0.000203		
3/20/2023							
3/21/2023		<0.000203	<0.000203				
3/22/2023	<0.000203					<0.000203	<0.000203

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cadmium (mg/L) Analysis Run 5/23/2023 3:38 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-28H	GS-AP-MW-29H	GS-AP-MW-3	GS-AP-MW-30HA	GS-AP-MW-31H	GS-AP-MW-32H	GS-AP-MW-33HO	GS-AP-MW-34HO	GS-AP-MW-35HO
2/27/2019		<0.000203							
3/13/2019	<0.000203								
9/24/2019		<0.000203							
9/25/2019	<0.000203								
3/16/2020	<0.000203							<0.000203	
3/17/2020							<0.000203		<0.000203
3/18/2020				<0.000203	<0.000203				
3/24/2020						<0.000203			
3/25/2020		<0.000203							
5/12/2020	<0.000203							<0.000203	<0.000203
5/13/2020				<0.000203			<0.000203		
9/15/2020							<0.000203		
9/16/2020								<0.000203	<0.000203
9/17/2020									
9/21/2020				<0.000203		<0.000203			
9/22/2020	<0.000203	<0.000203			<0.000203				
2/1/2021					<0.000203				
2/2/2021									
2/3/2021		<0.000203					<0.000203	<0.000203	
2/4/2021									<0.000203
2/8/2021									
2/9/2021									
2/10/2021						<0.000203			
2/17/2021	<0.000203		<0.000203	<0.000203					
7/27/2021							<0.000203	<0.000203	
7/28/2021									<0.000203
8/2/2021				<0.000203	<0.000203				
8/3/2021			<0.000203						
8/4/2021		<0.000203							
8/9/2021	<0.000203								
8/10/2021						<0.000203			
2/8/2022				<0.000203	<0.000203				
2/9/2022							<0.000203	<0.000203	<0.000203
2/14/2022	<0.000203	<0.000203				<0.000203			
2/15/2022									
2/16/2022			<0.000203						
2/21/2022									
2/22/2022									
7/20/2022			<0.000203						
7/26/2022									
7/27/2022	<0.000203					<0.000203			
8/2/2022									
8/3/2022		<0.000203		<0.000203	<0.000203				
8/10/2022									
3/8/2023								<0.000203	<0.000203
3/13/2023				<0.000203					
3/14/2023	<0.000203						<0.000203		
3/15/2023									
3/21/2023			<0.000203			<0.000203			
3/22/2023									
3/27/2023					<0.000203				
3/28/2023		<0.000203							

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cadmium (mg/L) Analysis Run 5/23/2023 3:38 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-36H	GS-AP-MW-38H	GS-AP-MW-40H	GS-AP-MW-41HD	GS-AP-MW-41HS	GS-AP-MW-42H	GS-AP-MW-43HO
2/27/2019							
3/13/2019							
9/24/2019							
9/25/2019							
3/16/2020							
3/17/2020	<0.000203						
3/18/2020				<0.000203			
3/24/2020		<0.000203				<0.000203	
3/25/2020							<0.000203
5/12/2020							
5/13/2020	<0.000203						
9/15/2020							
9/16/2020							
9/17/2020	<0.000203			<0.000203			
9/21/2020							
9/22/2020		<0.000203	<0.000203			<0.000203	<0.000203
2/1/2021							
2/2/2021			<0.000203				
2/3/2021						<0.000203	
2/4/2021							
2/8/2021				<0.000203	<0.000203		
2/9/2021		<0.000203					
2/10/2021							
2/17/2021	<0.000203						<0.000203
7/27/2021							
7/28/2021					<0.000203		
8/2/2021							
8/3/2021				<0.000203			
8/4/2021	<0.000203	<0.000203				<0.000203	<0.000203
8/9/2021							
8/10/2021			<0.000203				
2/8/2022					<0.000203		
2/9/2022							
2/14/2022	<0.000203						
2/15/2022			<0.000203	<0.000203			
2/16/2022						<0.000203	
2/21/2022							<0.000203
2/22/2022		<0.000203					
7/20/2022	<0.000203						
7/26/2022					<0.000203		
7/27/2022				<0.000203		<0.000203	
8/2/2022			<0.000203				
8/3/2022							<0.000203
8/10/2022		<0.000203					
3/8/2023							
3/13/2023					<0.000203		
3/14/2023							
3/15/2023	<0.000203			<0.000203		<0.000203	
3/21/2023							
3/22/2023			<0.000203				
3/27/2023							
3/28/2023		<0.000203					<0.000203

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cadmium (mg/L) Analysis Run 5/23/2023 3:38 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-44HO	GS-AP-MW-6D	GS-AP-MW-6S	GS-AP-MW-6V	GS-AP-MW-7	GS-AP-MW-8 (bg)	GS-AP-MW-9V	GS-AP-PZ-16	GS-AP-PZ-22
8/2/2016					<0.000203				
8/3/2016		<0.000203	<0.000203			<0.000203			
9/20/2016		<0.000203	<0.000203						
9/21/2016					<0.000203	<0.000203			
10/24/2016		<0.000203			<0.000203				
10/25/2016						<0.000203			
10/26/2016			<0.000203						
12/12/2016		<0.000203	<0.000203		<0.000203				
12/13/2016						<0.000203			
2/6/2017		<0.000203	<0.000203		<0.000203	<0.000203			
3/27/2017		<0.000203	<0.000203						
3/28/2017					<0.000203	<0.000203			
4/24/2017		<0.000203	<0.000203		<0.000203	<0.000203			
6/6/2017		<0.000203	<0.000203						
6/7/2017					<0.000203	<0.000203			
2/19/2018		<0.000203	<0.000203		<0.000203	<0.000203			
5/14/2018		<0.000203	<0.000203						
5/15/2018					<0.000203	<0.000203			
10/15/2018		<0.000203	<0.000203		<0.000203				
10/16/2018						<0.000203			
4/16/2019		<0.000203	<0.000203			<0.000203			
4/23/2019					<0.000203				
9/23/2019		<0.000203	<0.000203						
9/24/2019					<0.000203	<0.000203			
3/17/2020		<0.000203	<0.000203		<0.000203				
3/18/2020						<0.000203			
3/23/2020							<0.000203		
3/24/2020								<0.000203	<0.000203
8/27/2020	<0.000203								
9/8/2020				<0.000203					
9/15/2020	<0.000203			<0.000203					
9/16/2020			<0.000203		<0.000203				
9/17/2020		<0.000203						<0.000203	<0.000203
9/21/2020						<0.000203			
9/22/2020							<0.000203		
2/2/2021					<0.000203	<0.000203	<0.000203		<0.000203
2/3/2021	<0.000203	<0.000203	<0.000203	<0.000203					
2/17/2021								<0.000203	
7/27/2021	<0.000203	<0.000203	<0.000203						
8/2/2021				<0.000203					
8/3/2021									<0.000203
8/9/2021					<0.000203			<0.000203	
8/10/2021						<0.000203	<0.000203		
2/8/2022					<0.000203				
2/9/2022	<0.000203			<0.000203					
2/14/2022		<0.000203	<0.000203						<0.000203
2/15/2022								<0.000203	
2/16/2022						<0.000203			
2/21/2022							<0.000203		
2/22/2022									
2/28/2022									
3/1/2022									

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cadmium (mg/L) Analysis Run 5/23/2023 3:38 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-44HO	GS-AP-MW-6D	GS-AP-MW-6S	GS-AP-MW-6V	GS-AP-MW-7	GS-AP-MW-8 (bg)	GS-AP-MW-9V	GS-AP-PZ-16	GS-AP-PZ-22
7/19/2022							<0.000203		
7/20/2022									
7/25/2022		<0.000203		<0.000203	<0.000203				
7/26/2022			<0.000203					<0.000203	
8/2/2022						<0.000203			
8/3/2022									
8/9/2022									<0.000203
3/6/2023	<0.000203								
3/8/2023				<0.000203					
3/14/2023		<0.000203	<0.000203		<0.000203				
3/15/2023									
3/21/2023								<0.000203	<0.000203
3/22/2023									
3/27/2023						<0.000203	<0.000203		
3/28/2023									

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cadmium (mg/L) Analysis Run 5/23/2023 3:38 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-10R	GS-AP-MW-11R	GS-AP-MW-13R	GS-AP-MW-14R	GS-AP-MW-18R	GS-AP-MW-18VR	GS-AP-MW-1R
8/2/2016							
8/3/2016							
9/20/2016							
9/21/2016							
10/24/2016							
10/25/2016							
10/26/2016							
12/12/2016							
12/13/2016							
2/6/2017							
3/27/2017							
3/28/2017							
4/24/2017							
6/6/2017							
6/7/2017							
2/19/2018							
5/14/2018							
5/15/2018							
10/15/2018							
10/16/2018							
4/16/2019							
4/23/2019							
9/23/2019							
9/24/2019							
3/17/2020							
3/18/2020							
3/23/2020							
3/24/2020							
8/27/2020							
9/8/2020							
9/15/2020							
9/16/2020							
9/17/2020							
9/21/2020							
9/22/2020							
2/2/2021							
2/3/2021							
2/17/2021							
7/27/2021							
8/2/2021							
8/3/2021							
8/9/2021							
8/10/2021							
2/8/2022							
2/9/2022							
2/14/2022							
2/15/2022							
2/16/2022							
2/21/2022							
2/22/2022					<0.000203	<0.000203	
2/28/2022				<0.000203			
3/1/2022	<0.000203	<0.000203	<0.000203				<0.000203

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cadmium (mg/L) Analysis Run 5/23/2023 3:38 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-10R	GS-AP-MW-11R	GS-AP-MW-13R	GS-AP-MW-14R	GS-AP-MW-18R	GS-AP-MW-18VR	GS-AP-MW-1R
7/19/2022		<0.000203					
7/20/2022			<0.000203				
7/25/2022							
7/26/2022							
8/2/2022							<0.000203
8/3/2022	<0.000203			<0.000203	<0.000203		
8/9/2022						8E-05 (J)	
3/6/2023							
3/8/2023							
3/14/2023							
3/15/2023				<0.000203			
3/21/2023							
3/22/2023		<0.000203					
3/27/2023	<0.000203		<0.000203			<0.000203	<0.000203
3/28/2023					<0.000203		

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cadmium (mg/L)   Analysis Run 5/23/2023 3:38 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

	GS-AP-MW-23V	GS-AP-MW-27HR	GS-AP-MW-31V	GS-AP-MW-36V	GS-AP-MW-37HR	GS-AP-MW-3V	GS-AP-MW-45V	GS-AP-MW-47	GS-AP-MW-5R
2/21/2022									
2/22/2022		<0.000203	<0.000203	<0.000203					
2/23/2022	<0.000203					<0.000203	<0.000203		
2/28/2022					<0.000203			<0.000203	
3/1/2022									<0.000203
7/19/2022									
7/20/2022						<0.000203			
7/26/2022	<0.000203				<0.000203			<0.000203	
7/27/2022		<0.000203		<0.000203					
8/2/2022									<0.000203
8/3/2022			<0.000203						
8/8/2022							<0.000203		
3/14/2023	<0.000203	<0.000203		<0.000203					
3/15/2023					<0.000203			<0.000203	
3/20/2023									<0.000203
3/21/2023						<0.000203			
3/27/2023			<0.000203						
3/28/2023							<0.000203		

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cadmium (mg/L) Analysis Run 5/23/2023 3:38 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-9R	GS-AP-PZ-18R	GS-AP-MW-46
2/21/2022		<0.000203	
2/22/2022			
2/23/2022			<0.000203
2/28/2022			
3/1/2022	<0.000203		
7/19/2022	<0.000203		
7/20/2022			
7/26/2022			
7/27/2022		<0.000203	
8/2/2022			<0.000203
8/3/2022			
8/8/2022			
3/14/2023			
3/15/2023			
3/20/2023			
3/21/2023			
3/27/2023	<0.000203		<0.000203
3/28/2023		<0.000203	

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Calcium (mg/L) Analysis Run 5/23/2023 3:38 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-12	GS-AP-MW-12V	GS-AP-MW-13 (bg)	GS-AP-MW-15	GS-AP-MW-15V	GS-AP-MW-16D	GS-AP-MW-17	GS-AP-MW-17V ...	GS-AP-MW-19
8/1/2016				10.5		33	4.52		39.6
8/2/2016			47.2						
8/3/2016	36.1								
9/19/2016						31.7	4.3		
9/20/2016	27		46.3	14.7					
9/21/2016									38.1
10/24/2016							4.02		34.7
10/25/2016	26.1		46.6	14.7		32.2			
12/13/2016	29.4		43.1			33.1	5.5		44
12/14/2016				11.9					
2/6/2017							3.79		
2/7/2017									39
2/8/2017	31.9		47.5	14.4		32.7			
3/27/2017							3.13		
3/28/2017				12.9					43.9
3/29/2017	31.8		46.8			32.7			
3/30/2017									
4/24/2017							3.41		
4/26/2017	34.6		48.1	10.4		33.8			42.8
6/5/2017							3.32		
6/6/2017				9.41		32.2			43.1
6/7/2017	33.4		44.4						
8/21/2017									
8/22/2017	31.5		42.9	6.89		30.9	3.52		40.7
8/23/2017									
5/15/2018	34.8		44.3	6.86			4.53		
5/16/2018						33.5			45.3
10/15/2018				6.28			3.38		
10/16/2018	35.6								40.9
10/17/2018			41.8			32			
2/20/2019								30.6	
2/21/2019		52.3							
2/26/2019									
2/27/2019									
4/16/2019	38.3		38.6						
4/17/2019				8.53		32.3	3.86		38.4
9/23/2019							5.43		
9/24/2019				3.26		34.3		29.7	48.4
9/25/2019	48.1	33.4							
3/16/2020							3		
3/17/2020									
3/18/2020	44			5.25	8.01				
3/23/2020									
3/24/2020		48.9				34.1			41.7
3/25/2020								31.1	
5/12/2020							2.95		
5/13/2020									
9/17/2020									
9/21/2020					8.2		3.73		
9/22/2020						32			46.9
9/23/2020	45.9	44.8		3.83				29.3	
2/1/2021	45.8	48.9							

Time Series

Constituent: Calcium (mg/L) Analysis Run 5/23/2023 3:38 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-12	GS-AP-MW-12V	GS-AP-MW-13 (bg)	GS-AP-MW-15	GS-AP-MW-15V	GS-AP-MW-16D	GS-AP-MW-17	GS-AP-MW-17V ...	GS-AP-MW-19
2/2/2021							3.3	31.8	
2/3/2021									
2/8/2021									56.8
2/9/2021				4.38	10				
2/10/2021						34.6			
7/27/2021									
8/2/2021								33	
8/3/2021				3.55	10.6		2.17		
8/4/2021									
8/9/2021	40.2	35.7				33.2			
8/10/2021									54.8
8/11/2021									
8/12/2021									
2/8/2022									
2/14/2022							2.17	30.1	
2/15/2022						31.5			
2/16/2022				6.76	14.3				
2/22/2022									54.6
2/23/2022		46.3							
2/28/2022	37.9								
7/19/2022	37.599998								
7/20/2022		47.5							
7/26/2022									
7/27/2022									
8/2/2022				3.31	22.200001	33.799999			
8/3/2022									56.400002
8/8/2022							2.44		
8/9/2022								31.4	
8/10/2022									
3/14/2023									
3/15/2023									
3/20/2023				6.6	18.2				
3/21/2023						32			46.9
3/22/2023	36.4	38					2.07	29.6	

Time Series

Constituent: Calcium (mg/L) Analysis Run 5/23/2023 3:38 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-2	GS-AP-MW-21	GS-AP-MW-21V	GS-AP-MW-23H	GS-AP-MW-24H	GS-AP-MW-25HA	GS-AP-MW-26H
8/1/2016							
8/2/2016	2.25	5.29					
8/3/2016							
9/19/2016	0.724						
9/20/2016							
9/21/2016		4.51					
10/24/2016	0.635						
10/25/2016		4.92					
12/13/2016	0.714						
12/14/2016		3.5					
2/6/2017							
2/7/2017							
2/8/2017	0.722	3.75					
3/27/2017							
3/28/2017		3.63					
3/29/2017							
3/30/2017	0.686						
4/24/2017							
4/26/2017	0.646	3.3					
6/5/2017							
6/6/2017	0.569	3.24					
6/7/2017							
8/21/2017	0.634						
8/22/2017							
8/23/2017		6.6					
5/15/2018		7.57					
5/16/2018	0.588						
10/15/2018							
10/16/2018	0.714	4.4					
10/17/2018							
2/20/2019				64.5			
2/21/2019							
2/26/2019					46		
2/27/2019							29.1
4/16/2019							
4/17/2019	0.511	2.88					
9/23/2019				80.6			29.6
9/24/2019		2.47			46.5		
9/25/2019	0.581						
3/16/2020							
3/17/2020				79.8			
3/18/2020		2.35			44		
3/23/2020			110				
3/24/2020						2.42	
3/25/2020	0.518						28.6
5/12/2020							
5/13/2020	0.493 (J)						
9/17/2020				87.2	45.5	1.99	
9/21/2020							27.6
9/22/2020	0.503						
9/23/2020		1.96	119				
2/1/2021	0.517						

Time Series

Constituent: Calcium (mg/L) Analysis Run 5/23/2023 3:38 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-2	GS-AP-MW-21	GS-AP-MW-21V	GS-AP-MW-23H	GS-AP-MW-24H	GS-AP-MW-25HA	GS-AP-MW-26H
2/2/2021					42.4		
2/3/2021				75.6			
2/8/2021		1.95					
2/9/2021			73.8				28.1
2/10/2021						2.11	
7/27/2021				75.5			
8/2/2021							
8/3/2021					43.4		
8/4/2021	0.564	1.76					
8/9/2021							
8/10/2021							27.2
8/11/2021			13.8				
8/12/2021						1.79	
2/8/2022		1.98	37.2				
2/14/2022				74.4			
2/15/2022					42.4		26.6
2/16/2022						1.82	
2/22/2022	0.413						
2/23/2022							
2/28/2022							
7/19/2022	0.359 (J)						
7/20/2022							
7/26/2022				72.400002			
7/27/2022					41.900002		
8/2/2022							
8/3/2022						1.86	
8/8/2022							
8/9/2022			33				
8/10/2022		3.49					28.700001
3/14/2023				59.5			
3/15/2023					41.200001		
3/20/2023							
3/21/2023		2.74	46.6				
3/22/2023	0.4 (J)					1.84	25.7

Time Series

Constituent: Calcium (mg/L) Analysis Run 5/23/2023 3:38 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-28H	GS-AP-MW-29H	GS-AP-MW-3	GS-AP-MW-30HA	GS-AP-MW-31H	GS-AP-MW-32H	GS-AP-MW-33HO	GS-AP-MW-34HO	GS-AP-MW-35HO
2/27/2019		12.1							
3/13/2019	3.42								
9/24/2019		32.8							
9/25/2019	2.52								
3/16/2020	2.4							83.8	
3/17/2020							42.3		5.27
3/18/2020				36	6.06				
3/24/2020						2.62			
3/25/2020		27.8							
5/12/2020	2.83							80.4	3.04
5/13/2020				35.3			25.2		
9/15/2020							29.5		
9/16/2020								86.9	3.04
9/17/2020									
9/21/2020				29.4		3			
9/22/2020	2.37	28.1			5.31				
2/1/2021					4.92				
2/2/2021									
2/3/2021		26.1					30.3	100	
2/4/2021									3.3
2/8/2021									
2/9/2021									
2/10/2021						3.24			
2/17/2021	2.02		39.3	29.7					
7/27/2021							30.5	100	
7/28/2021									2.51
8/2/2021				43.8	4.6				
8/3/2021			30.8						
8/4/2021		17.7							
8/9/2021	1.75								
8/10/2021						3.59			
2/8/2022				46.7	5.73				
2/9/2022							25.2	105	2.11
2/14/2022	1.66	13.9				2.53			
2/15/2022									
2/16/2022			18.6						
2/21/2022									
2/22/2022									
7/20/2022			17.6						
7/26/2022									
7/27/2022	1.45					2.86			
8/2/2022									
8/3/2022		14.5		60.299999	4.85				
8/10/2022									
3/8/2023								64.5	1.49
3/13/2023				56					
3/14/2023	1.99						18.200001		
3/15/2023									
3/21/2023			19.4			2.42			
3/22/2023									
3/27/2023					3.9				
3/28/2023		12.2							

Time Series

Constituent: Calcium (mg/L) Analysis Run 5/23/2023 3:38 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-36H	GS-AP-MW-38H	GS-AP-MW-40H	GS-AP-MW-41HD	GS-AP-MW-41HS	GS-AP-MW-42H	GS-AP-MW-43HO
2/27/2019							
3/13/2019							
9/24/2019							
9/25/2019							
3/16/2020							
3/17/2020	3.45						
3/18/2020				56.6			
3/24/2020		9.33				149	
3/25/2020							4.11
5/12/2020							
5/13/2020	2.93						
9/15/2020							
9/16/2020							
9/17/2020	4.12			61.1			
9/21/2020							
9/22/2020		9.56	205			142	2.82
2/1/2021							
2/2/2021			199				
2/3/2021						134	
2/4/2021							
2/8/2021				60.8	49.8		
2/9/2021		10.6					
2/10/2021							
2/17/2021	3.16						4.82
7/27/2021							
7/28/2021					45.1		
8/2/2021							
8/3/2021				57.1			
8/4/2021	5.78	12.2				133	4.58
8/9/2021							
8/10/2021			197				
2/8/2022					30.6		
2/9/2022							
2/14/2022	4.69						
2/15/2022			203	57.6			
2/16/2022						138	
2/21/2022							4.56
2/22/2022		10.8					
7/20/2022	1.16						
7/26/2022					36.700001		
7/27/2022				57.5		133	
8/2/2022			211				
8/3/2022							5.62
8/10/2022		15.1					
3/8/2023							
3/13/2023					33.3		
3/14/2023							
3/15/2023	5.26			58.9		128	
3/21/2023							
3/22/2023			196				
3/27/2023							
3/28/2023		13.4					17.4

Time Series

Constituent: Calcium (mg/L) Analysis Run 5/23/2023 3:38 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-44HO	GS-AP-MW-6D	GS-AP-MW-6S	GS-AP-MW-6V	GS-AP-MW-7	GS-AP-MW-8 (bg)	GS-AP-MW-9V	GS-AP-PZ-16	GS-AP-PZ-22
8/2/2016					19.4				
8/3/2016		48.1	42.5			6.85			
9/20/2016		51.2	51.1						
9/21/2016					15.4	11.7			
10/24/2016		49.5			14.8				
10/25/2016						10.8			
10/26/2016			65.6						
12/12/2016		54.3	66.5		15				
12/13/2016						5.86			
2/6/2017		51.2	73.1		14.9	9.76			
3/27/2017		51.4	71.9						
3/28/2017					14.3	5.28			
4/24/2017		54.7	73.5		14.5	6.89			
6/6/2017		53.9	71.8						
6/7/2017					14.1	3.58			
8/21/2017		47.3	63.5		12.6	3.38			
5/14/2018		54.8	67.5						
5/15/2018					12.9	4.25			
10/15/2018		53.9	68.9		12.5				
10/16/2018						3.21			
4/16/2019		54	57.1			4.43			
4/23/2019					13.8				
9/23/2019		56.1	60						
9/24/2019					13.4	7.24			
3/17/2020		57.2	59.3		13.5				
3/18/2020						4.51			
3/23/2020							42.9		
3/24/2020								13.9	19.3
8/27/2020	2.89								
9/8/2020				1.8					
9/15/2020	2.94			1.74					
9/16/2020			55.9		12.2				
9/17/2020		61.5						9.69	12.6
9/21/2020						5.19			
9/22/2020							45.3		
2/2/2021					12.2	4.35	44.8		16.5
2/3/2021	2.87	56.9	50.7	1.5					
2/17/2021								9.59	
7/27/2021	1.46	55.5	52.6						
8/2/2021				2.1					
8/3/2021									16
8/9/2021					11.6			18.5	
8/10/2021						4.47	45.1		
2/8/2022					10.7				
2/9/2022	1.16			1.29					
2/14/2022		55.7	60.1						18.1
2/15/2022								11.5	
2/16/2022						4.42			
2/21/2022							47.7		
2/22/2022									
2/28/2022									
3/1/2022									

Time Series

Constituent: Calcium (mg/L) Analysis Run 5/23/2023 3:38 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-44HO	GS-AP-MW-6D	GS-AP-MW-6S	GS-AP-MW-6V	GS-AP-MW-7	GS-AP-MW-8 (bg)	GS-AP-MW-9V	GS-AP-PZ-16	GS-AP-PZ-22
7/19/2022							54.700001		
7/20/2022									
7/25/2022		57.900002		1.52	10.6				
7/26/2022			51.799999					13.7	
8/2/2022						5.28			
8/3/2022									
8/9/2022									11.6
3/6/2023	1.09								
3/8/2023				1.46					
3/14/2023		52.4	50.900002		11				
3/15/2023									
3/21/2023								12.4	7.61
3/22/2023									
3/27/2023						4.77	49		
3/28/2023									

Time Series

Constituent: Calcium (mg/L) Analysis Run 5/23/2023 3:38 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-10R	GS-AP-MW-11R	GS-AP-MW-13R	GS-AP-MW-14R	GS-AP-MW-18R	GS-AP-MW-18VR	GS-AP-MW-1R
8/2/2016							
8/3/2016							
9/20/2016							
9/21/2016							
10/24/2016							
10/25/2016							
10/26/2016							
12/12/2016							
12/13/2016							
2/6/2017							
3/27/2017							
3/28/2017							
4/24/2017							
6/6/2017							
6/7/2017							
8/21/2017							
5/14/2018							
5/15/2018							
10/15/2018							
10/16/2018							
4/16/2019							
4/23/2019							
9/23/2019							
9/24/2019							
3/17/2020							
3/18/2020							
3/23/2020							
3/24/2020							
8/27/2020							
9/8/2020							
9/15/2020							
9/16/2020							
9/17/2020							
9/21/2020							
9/22/2020							
2/2/2021							
2/3/2021							
2/17/2021							
7/27/2021							
8/2/2021							
8/3/2021							
8/9/2021							
8/10/2021							
2/8/2022							
2/9/2022							
2/14/2022							
2/15/2022							
2/16/2022							
2/21/2022							
2/22/2022					20.3	5.8	
2/28/2022				33.7			
3/1/2022	39.8	45.3	31.6				1.14

Time Series

Constituent: Calcium (mg/L) Analysis Run 5/23/2023 3:38 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-10R	GS-AP-MW-11R	GS-AP-MW-13R	GS-AP-MW-14R	GS-AP-MW-18R	GS-AP-MW-18VR	GS-AP-MW-1R
7/19/2022		56.799999					
7/20/2022			31.799999				
7/25/2022							
7/26/2022							
8/2/2022							0.888
8/3/2022	46.599998			35.299999	30.799999		
8/9/2022						2.49	
3/6/2023							
3/8/2023							
3/14/2023							
3/15/2023				32.8			
3/21/2023							
3/22/2023		52					
3/27/2023	45.3		32.1			2.12	0.838
3/28/2023					25.799999		

Time Series

Constituent: Calcium (mg/L) Analysis Run 5/23/2023 3:38 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-23V	GS-AP-MW-27HR	GS-AP-MW-31V	GS-AP-MW-36V	GS-AP-MW-37HR	GS-AP-MW-3V	GS-AP-MW-45V	GS-AP-MW-47	GS-AP-MW-5R
2/21/2022									
2/22/2022		12.3	7.58	9.42					
2/23/2022	152					9.73	5.61		
2/28/2022					2.59			28.7	
3/1/2022									97.3
7/19/2022									
7/20/2022						22.1			
7/26/2022	138				3.48			29	
7/27/2022		65.099998		33.900002					
8/2/2022									107
8/3/2022			13						
8/8/2022							6.3		
3/14/2023	73.6	95.3		43					
3/15/2023					3.16			30.2	
3/20/2023									94.8
3/21/2023						9.04			
3/27/2023			16.4						
3/28/2023							19		

Time Series

Constituent: Calcium (mg/L)   Analysis Run 5/23/2023 3:38 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

	GS-AP-MW-9R	GS-AP-PZ-18R	GS-AP-MW-46
2/21/2022		69	
2/22/2022			
2/23/2022			1.2
2/28/2022			
3/1/2022	54		
7/19/2022	52		
7/20/2022			
7/26/2022			
7/27/2022		63.099998	
8/2/2022			1.21
8/3/2022			
8/8/2022			
3/14/2023			
3/15/2023			
3/20/2023			
3/21/2023			
3/27/2023	43		0.975
3/28/2023		61.799999	

Time Series

Constituent: Chloride (mg/L) Analysis Run 5/23/2023 3:38 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-12	GS-AP-MW-12V	GS-AP-MW-13 (bg)	GS-AP-MW-15	GS-AP-MW-15V	GS-AP-MW-16D	GS-AP-MW-17	GS-AP-MW-17V ...	GS-AP-MW-19
8/1/2016				15.6		2.6	6.47		6.67
8/2/2016			2.91						
8/3/2016	14.5								
9/19/2016						2.51	7.78		
9/20/2016	12.9		2.94	8.6					
9/21/2016									6.54
10/24/2016							7.29		8.77
10/25/2016	12.2		2.94	7.96		2.53			
12/13/2016	10.4		2.93			2.53	12.2		6.16
12/14/2016				6.94					
2/6/2017							7.68		
2/7/2017									7.57
2/8/2017	8.77		2.85	4.96		2.5			
3/27/2017							9		
3/28/2017				5.2					5.9
3/29/2017	10		3.4			2.9			
3/30/2017									
4/24/2017							10		
4/26/2017	9.8		3.7	6		3.2			6.5
6/5/2017							10		
6/6/2017				4.9		2.6			5.5
6/7/2017	8		3.3						
8/21/2017									
8/22/2017	6.5		3.4	5.3		2.9	12		6.5
8/23/2017									
5/15/2018	4.4		3.2	3.8			13		
5/16/2018						3			6.6
10/15/2018				6.6			10		
10/16/2018	3.1								6.2
10/17/2018			2.3			2.2			
2/20/2019								3.56	
2/21/2019		3.77							
2/26/2019									
2/27/2019									
4/16/2019	3.22		3.23						
4/17/2019				5.2		2.82	12.7		7.27
9/23/2019							16.2		
9/24/2019				5.96		2.9		3.69	5.83
9/25/2019	6.68	3.84							
3/16/2020							9.95		
3/17/2020									
3/18/2020	4.22			8	108				
3/23/2020									
3/24/2020		4.46				2.88			6.29
3/25/2020								3.72	
5/12/2020							9.16		
5/13/2020									
9/17/2020									
9/21/2020					171		13.8		
9/22/2020						2.94			6.6
9/23/2020	3.15	4.63		6				3.74	
2/1/2021	3.32	3.86							

Time Series

Constituent: Chloride (mg/L)   Analysis Run 5/23/2023 3:38 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

	GS-AP-MW-12	GS-AP-MW-12V	GS-AP-MW-13 (bg)	GS-AP-MW-15	GS-AP-MW-15V	GS-AP-MW-16D	GS-AP-MW-17	GS-AP-MW-17V ...	GS-AP-MW-19
2/2/2021							10.2	3.49	
2/3/2021									
2/8/2021									6
2/9/2021				6.12	197				
2/10/2021						3.19			
7/27/2021									
8/2/2021								3.12	
8/3/2021				6.22	176		5.88		
8/4/2021									
8/9/2021	2.75	4.44				3.08			
8/10/2021									4.83
8/11/2021									
8/12/2021									
2/8/2022									
2/14/2022							7.15	3.26	
2/15/2022						3.58			
2/16/2022				5.86	129				
2/22/2022									4.59
2/23/2022		3.83							
2/28/2022	3.34								
7/19/2022	2.99								
7/20/2022		3.85							
7/26/2022									
7/27/2022									
8/2/2022				4.36	126	3.65			
8/3/2022									5.35
8/8/2022							6.21		
8/9/2022								3.09	
8/10/2022									
3/14/2023									
3/15/2023									
3/20/2023				5.41	93.5				
3/21/2023						3.72			5.22
3/22/2023	2.73	3.77					5.96	2.8	

Time Series

Constituent: Chloride (mg/L) Analysis Run 5/23/2023 3:38 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-2	GS-AP-MW-21	GS-AP-MW-21V	GS-AP-MW-23H	GS-AP-MW-24H	GS-AP-MW-25HA	GS-AP-MW-26H
8/1/2016							
8/2/2016	6.15	28.1					
8/3/2016							
9/19/2016	5.98						
9/20/2016							
9/21/2016		26.8					
10/24/2016	5.93						
10/25/2016		26					
12/13/2016	5.7						
12/14/2016		25.3					
2/6/2017							
2/7/2017							
2/8/2017	8.44	23.8					
3/27/2017							
3/28/2017		28					
3/29/2017							
3/30/2017	11						
4/24/2017							
4/26/2017	10	27					
6/5/2017							
6/6/2017	9.6	28					
6/7/2017							
8/21/2017	12						
8/22/2017							
8/23/2017		29					
5/15/2018		27					
5/16/2018	12						
10/15/2018							
10/16/2018	20	31					
10/17/2018							
2/20/2019				2.58			
2/21/2019							
2/26/2019					3.28		
2/27/2019							2.87
4/16/2019							
4/17/2019	9.5	32.3					
9/23/2019				2.26			2.35
9/24/2019		36			2.89		
9/25/2019	12						
3/16/2020							
3/17/2020				2.62			
3/18/2020		49.5			3.5		
3/23/2020			981				
3/24/2020						38	
3/25/2020	9.7						2.73
5/12/2020							
5/13/2020	8.25						
9/17/2020				1.92	3.19	38.3	
9/21/2020							3.25
9/22/2020	6.33						
9/23/2020		56.9	1100				
2/1/2021	8.42						

Time Series

Constituent: Chloride (mg/L)   Analysis Run 5/23/2023 3:38 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

	GS-AP-MW-2	GS-AP-MW-21	GS-AP-MW-21V	GS-AP-MW-23H	GS-AP-MW-24H	GS-AP-MW-25HA	GS-AP-MW-26H
2/2/2021					3.06		
2/3/2021				2.07			
2/8/2021		39.8					
2/9/2021			592				2.55
2/10/2021						43.7	
7/27/2021				2.48			
8/2/2021							
8/3/2021					2.94		
8/4/2021	7.25	54.8					
8/9/2021							
8/10/2021							2.87
8/11/2021			162				
8/12/2021						36.3	
2/8/2022		41.4	432				
2/14/2022				12.8			
2/15/2022					3.18		2.59
2/16/2022						34.3	
2/22/2022	6.05						
2/23/2022							
2/28/2022							
7/19/2022	4.42						
7/20/2022							
7/26/2022				12.9			
7/27/2022					3.3		
8/2/2022							
8/3/2022						30.5	
8/8/2022							
8/9/2022			327				
8/10/2022		44					2.33
3/14/2023				9.24			
3/15/2023					2.88		
3/20/2023							
3/21/2023		38.5	564				
3/22/2023	4.23					28.5	2.33

Time Series

Constituent: Chloride (mg/L) Analysis Run 5/23/2023 3:38 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-28H	GS-AP-MW-29H	GS-AP-MW-3	GS-AP-MW-30HA	GS-AP-MW-31H	GS-AP-MW-32H	GS-AP-MW-33HO	GS-AP-MW-34HO	GS-AP-MW-35HO
2/27/2019		3.09							
3/13/2019	8								
9/24/2019		3.11							
9/25/2019	8.93								
3/16/2020	10.6							101	
3/17/2020							108		23.9
3/18/2020				5.14	41.3				
3/24/2020						20.5			
3/25/2020		3.1							
5/12/2020	12.7							148	14.5
5/13/2020				4.24			63.3		
9/15/2020							75.6		
9/16/2020								210	20.9
9/17/2020									
9/21/2020				3.45		28.2			
9/22/2020	12.2	13.2			27.3				
2/1/2021					31.2				
2/2/2021									
2/3/2021		18.9					55.2	156	
2/4/2021									23.9
2/8/2021									
2/9/2021									
2/10/2021						39.4			
2/17/2021	10.3		17.4	3.69					
7/27/2021							75.3	386	
7/28/2021									16.7
8/2/2021				4.28	38.5				
8/3/2021			13.6						
8/4/2021		13.8							
8/9/2021	7.85								
8/10/2021						36.6			
2/8/2022				5.81	32.5				
2/9/2022							68.9	392	17.5
2/14/2022	8.33	14.2				29.8			
2/15/2022									
2/16/2022			14						
2/21/2022									
2/22/2022									
7/20/2022			15.3						
7/26/2022									
7/27/2022	7.71					33.200001			
8/2/2022									
8/3/2022		7.1		5.91	21.6				
8/10/2022									
3/8/2023								354	8.75
3/13/2023				4.77					
3/14/2023	8.63						15.3		
3/15/2023									
3/21/2023			16			32.6			
3/22/2023									
3/27/2023					18.4				
3/28/2023		5.09							

Time Series

Constituent: Chloride (mg/L) Analysis Run 5/23/2023 3:38 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-36H	GS-AP-MW-38H	GS-AP-MW-40H	GS-AP-MW-41HD	GS-AP-MW-41HS	GS-AP-MW-42H	GS-AP-MW-43HO
2/27/2019							
3/13/2019							
9/24/2019							
9/25/2019							
3/16/2020							
3/17/2020	29.4						
3/18/2020				6.02			
3/24/2020		12.6				3.35	
3/25/2020							90.6
5/12/2020							
5/13/2020	27.2						
9/15/2020							
9/16/2020							
9/17/2020	38.5			6.63			
9/21/2020							
9/22/2020		24.8	30.4			7.07	78
2/1/2021							
2/2/2021			36.8				
2/3/2021						10.1	
2/4/2021							
2/8/2021				6.44	9.18		
2/9/2021		28.1					
2/10/2021							
2/17/2021	24.3						96.3
7/27/2021							
7/28/2021					8.34		
8/2/2021							
8/3/2021				6.07			
8/4/2021	59.8	33.1				9.75	69.4
8/9/2021							
8/10/2021			28				
2/8/2022					6.72		
2/9/2022							
2/14/2022	77.7						
2/15/2022			18	6.67			
2/16/2022						8.61	
2/21/2022							104
2/22/2022		31					
7/20/2022	10.6						
7/26/2022					7.24		
7/27/2022				7.18		9.12	
8/2/2022			12.7				
8/3/2022							84.5
8/10/2022		59.299999					
3/8/2023							
3/13/2023					6.83		
3/14/2023							
3/15/2023	66.6			7.05		9.31	
3/21/2023							
3/22/2023			15.5				
3/27/2023							
3/28/2023		45.8					228

Time Series

Constituent: Chloride (mg/L) Analysis Run 5/23/2023 3:38 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-44HO	GS-AP-MW-6D	GS-AP-MW-6S	GS-AP-MW-6V	GS-AP-MW-7	GS-AP-MW-8 (bg)	GS-AP-MW-9V	GS-AP-PZ-16	GS-AP-PZ-22
8/2/2016					3.7				
8/3/2016		5.2	21.9			3.21			
9/20/2016		5.31	20.9						
9/21/2016					3.74	2.95			
10/24/2016		5.4			3.75				
10/25/2016						3.03			
10/26/2016			20.7						
12/12/2016		5.46	21.1		4.06				
12/13/2016						3.21			
2/6/2017		5.28	23.3		3.92	3			
3/27/2017		6.4	25						
3/28/2017					4.3	3.3			
4/24/2017		6.5	24		4.6	3.8			
6/6/2017		4.7	22						
6/7/2017					4.3	3.5			
8/21/2017		6.1	21		4.7	3.6			
5/14/2018		6	20						
5/15/2018					4.3	3.3			
10/15/2018		7	20		5.1				
10/16/2018						3.3			
4/16/2019		8.36	23.1			3.69			
4/23/2019					5.16				
9/23/2019		8.72	23.4						
9/24/2019					5.76	3.21			
3/17/2020		10.1	17.4		6.65				
3/18/2020						4.35			
3/23/2020							5.13		
3/24/2020								5.72	2.53
8/27/2020	27.1								
9/8/2020				50.4					
9/15/2020	36.2			49.8					
9/16/2020			14.6		6.17				
9/17/2020		10.5						6.57	2.46
9/21/2020						3.22			
9/22/2020							7.57		
2/2/2021					6.76	3.85	10.8		2.99
2/3/2021	44.8	12.2	14.9	48					
2/17/2021								6.69	
7/27/2021	33.4	11.1	17						
8/2/2021				94.1					
8/3/2021									2.67
8/9/2021					7.03			6.22	
8/10/2021						4.04	18.8		
2/8/2022					7.475 (D)				
2/9/2022	28.5			53.3					
2/14/2022		11.7	20.6						3.1
2/15/2022								5.84	
2/16/2022						4.42			
2/21/2022							18.4		
2/22/2022									
2/28/2022									
3/1/2022									

Time Series

Constituent: Chloride (mg/L) Analysis Run 5/23/2023 3:38 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-44HO	GS-AP-MW-6D	GS-AP-MW-6S	GS-AP-MW-6V	GS-AP-MW-7	GS-AP-MW-8 (bg)	GS-AP-MW-9V	GS-AP-PZ-16	GS-AP-PZ-22
7/19/2022							18.799999		
7/20/2022									
7/25/2022		9.533 (D)		51.25 (D)	7.9725 (D)				
7/26/2022			22.9					4.94	
8/2/2022						4.35			
8/3/2022									
8/9/2022									2.32
3/6/2023	33.799999								
3/8/2023				49.8500005 (D)					
3/14/2023		9.66	18.5		7.98				
3/15/2023									
3/21/2023								5.96	2.8
3/22/2023									
3/27/2023						4.17	23.2		
3/28/2023									

Time Series

Constituent: Chloride (mg/L) Analysis Run 5/23/2023 3:38 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-10R	GS-AP-MW-11R	GS-AP-MW-13R	GS-AP-MW-14R	GS-AP-MW-18R	GS-AP-MW-18VR	GS-AP-MW-1R
8/2/2016							
8/3/2016							
9/20/2016							
9/21/2016							
10/24/2016							
10/25/2016							
10/26/2016							
12/12/2016							
12/13/2016							
2/6/2017							
3/27/2017							
3/28/2017							
4/24/2017							
6/6/2017							
6/7/2017							
8/21/2017							
5/14/2018							
5/15/2018							
10/15/2018							
10/16/2018							
4/16/2019							
4/23/2019							
9/23/2019							
9/24/2019							
3/17/2020							
3/18/2020							
3/23/2020							
3/24/2020							
8/27/2020							
9/8/2020							
9/15/2020							
9/16/2020							
9/17/2020							
9/21/2020							
9/22/2020							
2/2/2021							
2/3/2021							
2/17/2021							
7/27/2021							
8/2/2021							
8/3/2021							
8/9/2021							
8/10/2021							
2/8/2022							
2/9/2022							
2/14/2022							
2/15/2022							
2/16/2022							
2/21/2022							
2/22/2022					3.52	15.3	
2/28/2022				38.1			
3/1/2022	37.5	5.08	19.2				5.25

Time Series

Constituent: Chloride (mg/L)   Analysis Run 5/23/2023 3:38 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

	GS-AP-MW-10R	GS-AP-MW-11R	GS-AP-MW-13R	GS-AP-MW-14R	GS-AP-MW-18R	GS-AP-MW-18VR	GS-AP-MW-1R
7/19/2022		5.38					
7/20/2022			17.6				
7/25/2022							
7/26/2022							
8/2/2022							5.38
8/3/2022	33.5			16.1	4.34		
8/9/2022						3.31	
3/6/2023							
3/8/2023							
3/14/2023							
3/15/2023				11			
3/21/2023							
3/22/2023		4.39					
3/27/2023	19.3		11.4			3.45	7.49
3/28/2023					3		

Time Series

Constituent: Chloride (mg/L) Analysis Run 5/23/2023 3:38 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-23V	GS-AP-MW-27HR	GS-AP-MW-31V	GS-AP-MW-36V	GS-AP-MW-37HR	GS-AP-MW-3V	GS-AP-MW-45V	GS-AP-MW-47	GS-AP-MW-5R
2/21/2022									
2/22/2022		253	32.1	55.9					
2/23/2022	3.21					155	54.2		
2/28/2022					28.1			11.7	
3/1/2022									46.4
7/19/2022									
7/20/2022						399			
7/26/2022	3.49				32.099998			15.4	
7/27/2022		635		436					
8/2/2022									54.5
8/3/2022			127						
8/8/2022							58.799999		
3/14/2023	5.79	781		428					
3/15/2023					44.4			19.8	
3/20/2023									54.6
3/21/2023						212			
3/27/2023			196						
3/28/2023							209		

Time Series

Constituent: Chloride (mg/L) Analysis Run 5/23/2023 3:38 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-9R	GS-AP-PZ-18R	GS-AP-MW-46
2/21/2022		5.32	
2/22/2022			
2/23/2022			43.9
2/28/2022			
3/1/2022	65.9		
7/19/2022	24.5		
7/20/2022			
7/26/2022			
7/27/2022		4.98	
8/2/2022			37
8/3/2022			
8/8/2022			
3/14/2023			
3/15/2023			
3/20/2023			
3/21/2023			
3/27/2023	19.1		30.200001
3/28/2023		4	

Time Series

Constituent: Chromium (mg/L) Analysis Run 5/23/2023 3:38 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-12	GS-AP-MW-12V	GS-AP-MW-13 (bg)	GS-AP-MW-15	GS-AP-MW-15V	GS-AP-MW-16D	GS-AP-MW-17	GS-AP-MW-17V ...	GS-AP-MW-19
8/1/2016				0.00209 (J)		<0.001015	<0.001015		<0.001015
8/2/2016			<0.01						
8/3/2016	<0.001015								
9/19/2016						<0.001015	<0.001015		
9/20/2016	<0.001015		<0.01	<0.01					
9/21/2016									<0.001015
10/24/2016							<0.001015		<0.001015
10/25/2016	<0.001015		<0.01	<0.01		<0.001015			
12/13/2016	<0.001015		<0.01			<0.001015	<0.001015		<0.001015
12/14/2016				<0.01					
2/6/2017							<0.001015		
2/7/2017									<0.001015
2/8/2017	<0.001015		<0.01	<0.01		<0.001015			
3/27/2017							<0.001015		
3/28/2017				<0.01					<0.001015
3/29/2017	<0.001015		<0.01			<0.001015			
3/30/2017									
4/24/2017							<0.001015		
4/26/2017	<0.001015		<0.01	<0.01		<0.001015			<0.001015
6/5/2017							<0.001015		
6/6/2017				<0.01		<0.001015			<0.001015
6/7/2017	<0.001015		<0.01						
2/19/2018							<0.001015		
2/20/2018	<0.001015		<0.01	<0.01					
2/21/2018						<0.001015			<0.001015
5/15/2018	<0.001015		<0.01	<0.01			<0.001015		
5/16/2018						<0.001015			<0.001015
10/15/2018				<0.01			<0.001015		
10/16/2018	<0.001015								<0.001015
10/17/2018			<0.01			<0.001015			
2/20/2019								<0.001015	
2/21/2019		<0.01							
2/26/2019									
2/27/2019									
4/16/2019	<0.001015		<0.01						
4/17/2019				<0.01		<0.001015	<0.001015		<0.001015
9/23/2019							<0.001015		
9/24/2019				<0.01		<0.001015		0.00405 (J)	<0.001015
9/25/2019	<0.001015	0.00202 (J)							
3/16/2020							<0.001015		
3/17/2020									
3/18/2020	<0.001015			<0.01	0.00716 (J)				
3/23/2020									
3/24/2020		0.00774 (J)				<0.001015			<0.001015
3/25/2020								<0.001015	
5/12/2020							<0.001015		
5/13/2020									
9/17/2020									
9/21/2020					0.00239 (J)		<0.001015		
9/22/2020						<0.001015			<0.001015
9/23/2020	<0.001015	0.00362 (J)		<0.01				<0.001015	
2/1/2021	<0.001015	0.00311							

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Chromium (mg/L) Analysis Run 5/23/2023 3:38 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-12	GS-AP-MW-12V	GS-AP-MW-13 (bg)	GS-AP-MW-15	GS-AP-MW-15V	GS-AP-MW-16D	GS-AP-MW-17	GS-AP-MW-17V ...	GS-AP-MW-19
2/2/2021							0.00255	0.000313 (J)	
2/3/2021									
2/8/2021									0.000258 (J)
2/9/2021				0.00072 (J)	0.00142				
2/10/2021						0.00107			
7/27/2021									
8/2/2021								0.00032 (J)	
8/3/2021				0.0008 (J)	0.00051 (J)		0.00041 (J)		
8/4/2021									
8/9/2021	0.00031 (J)	0.00146				0.00068 (J)			
8/10/2021									0.00032 (J)
8/11/2021									
8/12/2021									
2/8/2022									
2/14/2022							0.00034 (J)	0.00021 (J)	
2/15/2022						0.00025 (J)			
2/16/2022				0.00048 (J)	0.00062 (J)				
2/22/2022									<0.001015
2/23/2022		0.00061 (J)							
2/28/2022	<0.001015								
7/19/2022	0.000322 (J)								
7/20/2022		0.000485 (J)							
7/26/2022									
7/27/2022									
8/2/2022				0.000913 (J)	0.000427 (J)	0.000402 (J)			
8/3/2022									0.000412 (J)
8/8/2022							0.000334 (J)		
8/9/2022								0.000291 (J)	
8/10/2022									
3/14/2023									
3/15/2023									
3/20/2023				0.000384 (J)	<0.001015				
3/21/2023						<0.001015			<0.001015
3/22/2023	<0.001015	0.000396 (J)					<0.001015	<0.001015	

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Chromium (mg/L) Analysis Run 5/23/2023 3:38 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-2	GS-AP-MW-21	GS-AP-MW-21V	GS-AP-MW-23H	GS-AP-MW-24H	GS-AP-MW-25HA	GS-AP-MW-26H
8/1/2016							
8/2/2016	<0.01	<0.01					
8/3/2016							
9/19/2016	<0.01						
9/20/2016							
9/21/2016		0.00233 (J)					
10/24/2016	<0.01						
10/25/2016		0.00204 (J)					
12/13/2016	<0.01						
12/14/2016		<0.01					
2/6/2017							
2/7/2017							
2/8/2017	<0.01	<0.01					
3/27/2017							
3/28/2017		<0.01					
3/29/2017							
3/30/2017	<0.01						
4/24/2017							
4/26/2017	<0.01	<0.01					
6/5/2017							
6/6/2017	<0.01	<0.01					
6/7/2017							
2/19/2018							
2/20/2018		0.00219 (J)					
2/21/2018	<0.01						
5/15/2018		<0.01					
5/16/2018	<0.01						
10/15/2018							
10/16/2018	<0.01	<0.01					
10/17/2018							
2/20/2019				<0.00102			
2/21/2019							
2/26/2019					<0.01		
2/27/2019							<0.001015
4/16/2019							
4/17/2019	<0.01	<0.01					
9/23/2019				<0.00102			0.00295 (J)
9/24/2019		<0.01			<0.01		
9/25/2019	<0.01						
3/16/2020							
3/17/2020				<0.00102			
3/18/2020		<0.01			<0.01		
3/23/2020			<0.01				
3/24/2020						<0.001015	
3/25/2020	<0.01						0.00547 (J)
5/12/2020							
5/13/2020	<0.01						
9/17/2020				<0.00102	<0.01	<0.001015	
9/21/2020							0.00804 (J)
9/22/2020	<0.01						
9/23/2020		<0.01	<0.01				
2/1/2021	0.000505 (J)						

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Chromium (mg/L) Analysis Run 5/23/2023 3:38 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-2	GS-AP-MW-21	GS-AP-MW-21V	GS-AP-MW-23H	GS-AP-MW-24H	GS-AP-MW-25HA	GS-AP-MW-26H
2/2/2021					0.000382 (J)		
2/3/2021				0.000222 (J)			
2/8/2021		0.000705 (J)					
2/9/2021			0.000218 (J)				<0.001015
2/10/2021						<0.001015	
7/27/2021				<0.00102			
8/2/2021							
8/3/2021					0.00028 (J)		
8/4/2021	0.00085 (J)	0.00042 (J)					
8/9/2021							
8/10/2021							0.00037 (J)
8/11/2021			0.00134				
8/12/2021						0.00035 (J)	
2/8/2022		0.0004 (J)	0.00041 (J)				
2/14/2022				0.00023 (J)			
2/15/2022					0.00029 (J)		0.00031 (J)
2/16/2022						0.00062 (J)	
2/22/2022	0.00044 (J)						
2/23/2022							
2/28/2022							
7/19/2022	0.000469 (J)						
7/20/2022							
7/26/2022				0.000302 (J)			
7/27/2022					0.000446 (J)		
8/2/2022							
8/3/2022						0.000794 (J)	
8/8/2022							
8/9/2022			0.000378 (J)				
8/10/2022		0.000827 (J)					0.000311 (J)
3/14/2023				0.000226 (J)			
3/15/2023					0.000208 (J)		
3/20/2023							
3/21/2023		0.000459 (J)	0.000223 (J)				
3/22/2023	0.000254 (J)					0.00024 (J)	0.000429 (J)

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Chromium (mg/L)   Analysis Run 5/23/2023 3:38 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

	GS-AP-MW-28H	GS-AP-MW-29H	GS-AP-MW-3	GS-AP-MW-30HA	GS-AP-MW-31H	GS-AP-MW-32H	GS-AP-MW-33HO	GS-AP-MW-34HO	GS-AP-MW-35HO
2/27/2019		<0.001015							
3/13/2019	<0.01								
9/24/2019		<0.001015							
9/25/2019	<0.01								
3/16/2020	<0.01							<0.01	
3/17/2020							<0.01		<0.001015
3/18/2020				<0.01	0.00264 (J)				
3/24/2020						<0.001015			
3/25/2020		<0.001015							
5/12/2020	0.00281 (J)							<0.01	<0.001015
5/13/2020				<0.01			<0.01		
9/15/2020							<0.01		
9/16/2020								<0.01	<0.001015
9/17/2020									
9/21/2020				<0.01		<0.001015			
9/22/2020	<0.01	<0.001015			<0.01				
2/1/2021					0.000345 (J)				
2/2/2021									
2/3/2021		<0.001015					0.000207 (J)	0.000397 (J)	
2/4/2021									0.000211 (J)
2/8/2021									
2/9/2021									
2/10/2021						<0.001015			
2/17/2021	0.000352 (J)		0.000326 (J)	0.000418 (J)					
7/27/2021							0.00028 (J)	0.0005 (J)	
7/28/2021									0.00041 (J)
8/2/2021				0.00035 (J)	0.00029 (J)				
8/3/2021			0.00027 (J)						
8/4/2021		0.00022 (J)							
8/9/2021	0.0005 (J)								
8/10/2021						0.00027 (J)			
2/8/2022				0.00038 (J)	0.00027 (J)				
2/9/2022							0.00026 (J)	0.00041 (J)	0.00029 (J)
2/14/2022	0.00025 (J)	0.00029 (J)				0.00026 (J)			
2/15/2022									
2/16/2022			0.00027 (J)						
2/21/2022									
2/22/2022									
7/20/2022			0.000315 (J)						
7/26/2022									
7/27/2022	0.000336 (J)					0.000353 (J)			
8/2/2022									
8/3/2022		0.000265 (J)		0.000398 (J)	0.00035 (J)				
8/10/2022									
3/8/2023								0.000538 (J)	<0.001015
3/13/2023				0.000264 (J)					
3/14/2023	0.000248 (J)						0.000368 (J)		
3/15/2023									
3/21/2023			0.000239 (J)			<0.001015			
3/22/2023									
3/27/2023					0.000232 (J)				
3/28/2023		0.000258 (J)							

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Chromium (mg/L) Analysis Run 5/23/2023 3:38 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-36H	GS-AP-MW-38H	GS-AP-MW-40H	GS-AP-MW-41HD	GS-AP-MW-41HS	GS-AP-MW-42H	GS-AP-MW-43HO
2/27/2019							
3/13/2019							
9/24/2019							
9/25/2019							
3/16/2020							
3/17/2020	<0.00102						
3/18/2020				<0.001015			
3/24/2020		<0.00102				<0.00102	
3/25/2020							<0.01
5/12/2020							
5/13/2020	<0.00102						
9/15/2020							
9/16/2020							
9/17/2020	<0.00102			<0.001015			
9/21/2020							
9/22/2020		<0.00102	<0.00102			<0.00102	<0.01
2/1/2021							
2/2/2021			0.000222 (J)				
2/3/2021						0.000298 (J)	
2/4/2021							
2/8/2021				0.000235 (J)	<0.001015		
2/9/2021		<0.00102					
2/10/2021							
2/17/2021	0.000271 (J)						0.000219 (J)
7/27/2021							
7/28/2021					0.00031 (J)		
8/2/2021							
8/3/2021				0.00025 (J)			
8/4/2021	0.00032 (J)	<0.00102				0.00026 (J)	0.00031 (J)
8/9/2021							
8/10/2021			0.00032 (J)				
2/8/2022					0.00035 (J)		
2/9/2022							
2/14/2022	<0.00102						
2/15/2022			<0.00102	0.00026 (J)			
2/16/2022						<0.00102	
2/21/2022							0.00027 (J)
2/22/2022		<0.00102					
7/20/2022	0.000451 (J)						
7/26/2022					0.000309 (J)		
7/27/2022				0.000351 (J)		0.000306 (J)	
8/2/2022			0.000337 (J)				
8/3/2022							0.000257 (J)
8/10/2022		0.000322 (J)					
3/8/2023							
3/13/2023					<0.001015		
3/14/2023							
3/15/2023	0.00044 (J)			<0.001015		0.000226 (J)	
3/21/2023							
3/22/2023			0.000209 (J)				
3/27/2023							
3/28/2023		0.000213 (J)					0.000229 (J)

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Chromium (mg/L) Analysis Run 5/23/2023 3:38 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-44HO	GS-AP-MW-6D	GS-AP-MW-6S	GS-AP-MW-6V	GS-AP-MW-7	GS-AP-MW-8 (bg)	GS-AP-MW-9V	GS-AP-PZ-16	GS-AP-PZ-22
8/2/2016					<0.01				
8/3/2016		<0.001015	<0.01			<0.01			
9/20/2016		<0.001015	<0.01						
9/21/2016					<0.01	0.00266 (J)			
10/24/2016		<0.001015			0.00216 (J)				
10/25/2016						<0.01			
10/26/2016			<0.01						
12/12/2016		<0.001015	<0.01		<0.01				
12/13/2016						<0.01			
2/6/2017		<0.001015	<0.01		<0.01	<0.01			
3/27/2017		<0.001015	<0.01						
3/28/2017					<0.01	0.00322 (J)			
4/24/2017		<0.001015	<0.01		<0.01	<0.01			
6/6/2017		<0.001015	<0.01						
6/7/2017					<0.01	0.00227 (J)			
2/19/2018		<0.001015	<0.01		<0.01	<0.01			
5/14/2018		<0.001015	<0.01						
5/15/2018					<0.01	<0.01			
10/15/2018		<0.001015	<0.01		<0.01				
10/16/2018						<0.01			
4/16/2019		<0.001015	<0.01			<0.01			
4/23/2019					0.00435 (J)				
9/23/2019		<0.001015	<0.01						
9/24/2019					<0.01	<0.01			
3/17/2020		<0.001015	<0.01		0.0076 (J)				
3/18/2020						<0.01			
3/23/2020							<0.00102		
3/24/2020								<0.001015	<0.001015
8/27/2020	<0.00102								
9/8/2020				<0.01					
9/15/2020	<0.00102			<0.01					
9/16/2020			<0.01		0.00482 (J)				
9/17/2020		<0.001015						<0.001015	<0.001015
9/21/2020						<0.01			
9/22/2020							<0.00102		
2/2/2021					0.00435	0.000389 (J)	0.000228 (J)		<0.001015
2/3/2021	0.000255 (J)	0.000264 (J)	0.000268 (J)	0.000274 (J)					
2/17/2021								<0.001015	
7/27/2021	<0.00102	0.00024 (J)	0.00024 (J)						
8/2/2021				0.00057 (J)					
8/3/2021									0.00024 (J)
8/9/2021					0.00234			0.0004 (J)	
8/10/2021						0.00058 (J)	0.00029 (J)		
2/8/2022					0.00103				
2/9/2022	0.00023 (J)			0.00042 (J)					
2/14/2022		0.00024 (J)	0.00026 (J)						0.00022 (J)
2/15/2022								0.0003 (J)	
2/16/2022						0.0004 (J)			
2/21/2022							<0.00102		
2/22/2022									
2/28/2022									
3/1/2022									

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Chromium (mg/L) Analysis Run 5/23/2023 3:38 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-44HO	GS-AP-MW-6D	GS-AP-MW-6S	GS-AP-MW-6V	GS-AP-MW-7	GS-AP-MW-8 (bg)	GS-AP-MW-9V	GS-AP-PZ-16	GS-AP-PZ-22
7/19/2022							0.000323 (J)		
7/20/2022									
7/25/2022		0.000301 (J)		0.000519 (J)	0.00103				
7/26/2022			0.000359 (J)					0.000449 (J)	
8/2/2022						0.000629 (J)			
8/3/2022									
8/9/2022									0.000258 (J)
3/6/2023	0.000343 (J)								
3/8/2023				0.00361					
3/14/2023		<0.001015	0.000206 (J)		0.000482 (J)				
3/15/2023									
3/21/2023								<0.001015	<0.001015
3/22/2023									
3/27/2023						0.000761 (J)	0.000236 (J)		
3/28/2023									

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Chromium (mg/L) Analysis Run 5/23/2023 3:38 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-10R	GS-AP-MW-11R	GS-AP-MW-13R	GS-AP-MW-14R	GS-AP-MW-18R	GS-AP-MW-18VR	GS-AP-MW-1R
8/2/2016							
8/3/2016							
9/20/2016							
9/21/2016							
10/24/2016							
10/25/2016							
10/26/2016							
12/12/2016							
12/13/2016							
2/6/2017							
3/27/2017							
3/28/2017							
4/24/2017							
6/6/2017							
6/7/2017							
2/19/2018							
5/14/2018							
5/15/2018							
10/15/2018							
10/16/2018							
4/16/2019							
4/23/2019							
9/23/2019							
9/24/2019							
3/17/2020							
3/18/2020							
3/23/2020							
3/24/2020							
8/27/2020							
9/8/2020							
9/15/2020							
9/16/2020							
9/17/2020							
9/21/2020							
9/22/2020							
2/2/2021							
2/3/2021							
2/17/2021							
7/27/2021							
8/2/2021							
8/3/2021							
8/9/2021							
8/10/2021							
2/8/2022							
2/9/2022							
2/14/2022							
2/15/2022							
2/16/2022							
2/21/2022							
2/22/2022					0.00022 (J)	0.00052 (J)	
2/28/2022				0.00062 (J)			
3/1/2022	0.00024 (J)	0.00026 (J)	0.00023 (J)				0.00044 (J)

Time Series

Constituent: Chromium (mg/L) Analysis Run 5/23/2023 3:38 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-10R	GS-AP-MW-11R	GS-AP-MW-13R	GS-AP-MW-14R	GS-AP-MW-18R	GS-AP-MW-18VR	GS-AP-MW-1R
7/19/2022		0.000455 (J)					
7/20/2022			0.000261 (J)				
7/25/2022							
7/26/2022							
8/2/2022							0.00037 (J)
8/3/2022	0.000414 (J)			0.000306 (J)	0.000304 (J)		
8/9/2022						0.000584 (J)	
3/6/2023							
3/8/2023							
3/14/2023							
3/15/2023				0.000302 (J)			
3/21/2023							
3/22/2023		<0.001015					
3/27/2023	0.000235 (J)		0.000246 (J)			0.000272 (J)	0.000404 (J)
3/28/2023					0.000221 (J)		

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Chromium (mg/L) Analysis Run 5/23/2023 3:38 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-23V	GS-AP-MW-27HR	GS-AP-MW-31V	GS-AP-MW-36V	GS-AP-MW-37HR	GS-AP-MW-3V	GS-AP-MW-45V	GS-AP-MW-47	GS-AP-MW-5R
2/21/2022									
2/22/2022		0.00029 (J)	0.00035 (J)	0.00025 (J)					
2/23/2022	0.00066 (J)					0.00051 (J)	0.0002 (J)		
2/28/2022					0.00037 (J)			0.00033 (J)	
3/1/2022									0.00035 (J)
7/19/2022									
7/20/2022						0.000397 (J)			
7/26/2022	0.000389 (J)				0.000407 (J)			0.000389 (J)	
7/27/2022		0.000354 (J)		0.000348 (J)					
8/2/2022									0.00036 (J)
8/3/2022			0.000803 (J)						
8/8/2022							0.000882 (J)		
3/14/2023	<0.001015	0.000255 (J)		0.000257 (J)					
3/15/2023					0.00024 (J)			0.000359 (J)	
3/20/2023									0.000222 (J)
3/21/2023						<0.001015			
3/27/2023			0.000368 (J)						
3/28/2023							0.000479 (J)		

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Chromium (mg/L)   Analysis Run 5/23/2023 3:38 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

	GS-AP-MW-9R	GS-AP-PZ-18R	GS-AP-MW-46
2/21/2022		0.00026 (J)	
2/22/2022			
2/23/2022			<0.00102
2/28/2022			
3/1/2022	0.00027 (J)		
7/19/2022	0.000384 (J)		
7/20/2022			
7/26/2022			
7/27/2022		0.000346 (J)	
8/2/2022			0.000317 (J)
8/3/2022			
8/8/2022			
3/14/2023			
3/15/2023			
3/20/2023			
3/21/2023			
3/27/2023	0.000216 (J)		0.000222 (J)
3/28/2023		0.000212 (J)	

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cobalt (mg/L) Analysis Run 5/23/2023 3:38 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-12	GS-AP-MW-12V	GS-AP-MW-13 (bg)	GS-AP-MW-15	GS-AP-MW-15V	GS-AP-MW-16D	GS-AP-MW-17	GS-AP-MW-17V ...	GS-AP-MW-19
8/1/2016				<0.000203		<0.000203	<0.000203		<0.000203
8/2/2016			<0.005						
8/3/2016	<0.000203								
9/19/2016						<0.000203	<0.000203		
9/20/2016	<0.000203		<0.005	<0.000203					
9/21/2016									<0.000203
10/24/2016							<0.000203		<0.000203
10/25/2016	<0.000203		<0.005	<0.000203		<0.000203			
12/13/2016	<0.000203		<0.005			<0.000203	<0.000203		<0.000203
12/14/2016				<0.000203					
2/6/2017							<0.000203		
2/7/2017									<0.000203
2/8/2017	<0.000203		<0.005	<0.000203		<0.000203			
3/27/2017							<0.000203		
3/28/2017				<0.000203					<0.000203
3/29/2017	<0.000203		<0.005			<0.000203			
3/30/2017									
4/24/2017							<0.000203		
4/26/2017	<0.000203		<0.005	<0.000203		<0.000203			<0.000203
6/5/2017							<0.000203		
6/6/2017				<0.000203		<0.000203			<0.000203
6/7/2017	<0.000203		<0.005						
2/19/2018							<0.000203		
2/20/2018	<0.000203		<0.005	<0.000203					
2/21/2018						<0.000203			<0.000203
5/15/2018	<0.000203		<0.005	<0.000203			<0.000203		
5/16/2018						<0.000203			<0.000203
10/15/2018				<0.000203			<0.000203		
10/16/2018	<0.000203								<0.000203
10/17/2018			<0.005			<0.000203			
2/20/2019								<0.000203	
2/21/2019		<0.000203							
2/26/2019									
2/27/2019									
4/16/2019	<0.000203		<0.005						
4/17/2019				<0.000203		<0.000203	<0.000203		<0.000203
9/23/2019							<0.000203		
9/24/2019				<0.000203		<0.000203		<0.000203	<0.000203
9/25/2019	<0.000203	<0.000203							
3/16/2020							<0.000203		
3/17/2020									
3/18/2020	<0.000203			<0.000203	<0.000203				
3/23/2020									
3/24/2020		0.00277 (J)				<0.000203			<0.000203
3/25/2020								<0.000203	
5/12/2020							<0.000203		
5/13/2020									
9/17/2020									
9/21/2020					<0.000203		<0.000203		
9/22/2020						<0.000203			<0.000203
9/23/2020	<0.000203	<0.000203		<0.000203				<0.000203	
2/1/2021	<0.000203	0.00129							

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cobalt (mg/L) Analysis Run 5/23/2023 3:38 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-12	GS-AP-MW-12V	GS-AP-MW-13 (bg)	GS-AP-MW-15	GS-AP-MW-15V	GS-AP-MW-16D	GS-AP-MW-17	GS-AP-MW-17V ...	GS-AP-MW-19
2/2/2021							0.000102 (J)	<0.000203	
2/3/2021									
2/8/2021									<0.000203
2/9/2021				<0.000203	<0.000203				
2/10/2021						0.000252			
7/27/2021									
8/2/2021								<0.000203	
8/3/2021				9E-05 (J)	<0.000203		<0.000203		
8/4/2021									
8/9/2021	<0.000203	0.00043				9E-05 (J)			
8/10/2021									<0.000203
8/11/2021									
8/12/2021									
2/8/2022									
2/14/2022							<0.000203	<0.000203	
2/15/2022						<0.000203			
2/16/2022				<0.000203	<0.000203				
2/22/2022									<0.000203
2/23/2022		0.00013 (J)							
2/28/2022	<0.000203								
7/19/2022	<0.000203								
7/20/2022		<0.000203							
7/26/2022									
7/27/2022									
8/2/2022				<0.000203	<0.000203	<0.000203			
8/3/2022									<0.000203
8/8/2022							<0.000203		
8/9/2022								<0.000203	
8/10/2022									
3/14/2023									
3/15/2023									
3/20/2023				<0.000203	<0.000203				
3/21/2023						<0.000203			<0.000203
3/22/2023	<0.000203	<0.000203					<0.000203	<0.000203	

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cobalt (mg/L) Analysis Run 5/23/2023 3:38 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-2	GS-AP-MW-21	GS-AP-MW-21V	GS-AP-MW-23H	GS-AP-MW-24H	GS-AP-MW-25HA	GS-AP-MW-26H
8/1/2016							
8/2/2016	<0.000203	<0.000203					
8/3/2016							
9/19/2016	<0.000203						
9/20/2016							
9/21/2016		<0.000203					
10/24/2016	<0.000203						
10/25/2016		<0.000203					
12/13/2016	<0.000203						
12/14/2016		<0.000203					
2/6/2017							
2/7/2017							
2/8/2017	<0.000203	<0.000203					
3/27/2017							
3/28/2017		<0.000203					
3/29/2017							
3/30/2017	<0.000203						
4/24/2017							
4/26/2017	<0.000203	<0.000203					
6/5/2017							
6/6/2017	<0.000203	<0.000203					
6/7/2017							
2/19/2018							
2/20/2018		<0.000203					
2/21/2018	<0.000203						
5/15/2018		<0.000203					
5/16/2018	<0.000203						
10/15/2018							
10/16/2018	<0.000203	<0.000203					
10/17/2018							
2/20/2019				<0.005			
2/21/2019							
2/26/2019					<0.005		
2/27/2019							<0.000203
4/16/2019							
4/17/2019	<0.000203	<0.000203					
9/23/2019				<0.005			<0.000203
9/24/2019		<0.000203			<0.005		
9/25/2019	<0.000203						
3/16/2020							
3/17/2020				<0.005			
3/18/2020		<0.000203			<0.005		
3/23/2020			<0.000203				
3/24/2020						<0.000203	
3/25/2020	<0.000203						0.00207 (J)
5/12/2020							
5/13/2020	<0.000203						
9/17/2020				<0.005	<0.005	<0.000203	
9/21/2020							0.00357 (J)
9/22/2020	<0.000203						
9/23/2020		<0.000203	<0.000203				
2/1/2021	<0.000203						

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cobalt (mg/L)   Analysis Run 5/23/2023 3:38 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

	GS-AP-MW-2	GS-AP-MW-21	GS-AP-MW-21V	GS-AP-MW-23H	GS-AP-MW-24H	GS-AP-MW-25HA	GS-AP-MW-26H
2/2/2021					0.000192 (J)		
2/3/2021				0.000512			
2/8/2021		<0.000203					
2/9/2021			<0.000203				<0.000203
2/10/2021						<0.000203	
7/27/2021				0.00049			
8/2/2021							
8/3/2021					0.00024		
8/4/2021	<0.000203	<0.000203					
8/9/2021							
8/10/2021							<0.000203
8/11/2021			<0.000203				
8/12/2021						<0.000203	
2/8/2022		<0.000203	<0.000203				
2/14/2022				0.00052			
2/15/2022					0.00023		<0.000203
2/16/2022						0.00011 (J)	
2/22/2022	<0.000203						
2/23/2022							
2/28/2022							
7/19/2022	<0.000203						
7/20/2022							
7/26/2022				0.000576			
7/27/2022					0.00029		
8/2/2022							
8/3/2022						6.8E-05 (J)	
8/8/2022							
8/9/2022			<0.000203				
8/10/2022		<0.000203					<0.000203
3/14/2023				0.000974			
3/15/2023					0.000286		
3/20/2023							
3/21/2023		<0.000203	<0.000203				
3/22/2023	<0.000203					<0.000203	<0.000203

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cobalt (mg/L)   Analysis Run 5/23/2023 3:39 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

	GS-AP-MW-28H	GS-AP-MW-29H	GS-AP-MW-3	GS-AP-MW-30HA	GS-AP-MW-31H	GS-AP-MW-32H	GS-AP-MW-33HO	GS-AP-MW-34HO	GS-AP-MW-35HO
2/27/2019		<0.000203							
3/13/2019	<0.000203								
9/24/2019		<0.000203							
9/25/2019	<0.000203								
3/16/2020	<0.000203							<0.0002	
3/17/2020							<0.000203		<0.000203
3/18/2020				<0.005	<0.000203				
3/24/2020						<0.000203			
3/25/2020		<0.000203							
5/12/2020	<0.000203							<0.0002	<0.000203
5/13/2020				<0.005			<0.000203		
9/15/2020							<0.000203		
9/16/2020								<0.0002	<0.000203
9/17/2020									
9/21/2020				<0.005		<0.000203			
9/22/2020	<0.000203	<0.000203			<0.000203				
2/1/2021					<0.000203				
2/2/2021									
2/3/2021		<0.000203					<0.000203	<0.0002	
2/4/2021									<0.000203
2/8/2021									
2/9/2021									
2/10/2021						<0.000203			
2/17/2021	<0.000203		<0.000203	0.00016 (J)					
7/27/2021							<0.000203	<0.0002	
7/28/2021									<0.000203
8/2/2021				0.00022	<0.000203				
8/3/2021			<0.000203						
8/4/2021		<0.000203							
8/9/2021	<0.000203								
8/10/2021						<0.000203			
2/8/2022				0.00018 (J)	<0.000203				
2/9/2022							<0.000203	8E-05 (J)	<0.000203
2/14/2022	<0.000203	<0.000203				<0.000203			
2/15/2022									
2/16/2022			<0.000203						
2/21/2022									
2/22/2022									
7/20/2022			<0.000203						
7/26/2022									
7/27/2022	<0.000203					<0.000203			
8/2/2022									
8/3/2022		<0.000203		0.000255	<0.000203				
8/10/2022									
3/8/2023								0.00059	<0.000203
3/13/2023				0.000168 (J)					
3/14/2023	<0.000203						<0.000203		
3/15/2023									
3/21/2023			<0.000203			<0.000203			
3/22/2023									
3/27/2023					<0.000203				
3/28/2023		<0.000203							

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cobalt (mg/L) Analysis Run 5/23/2023 3:39 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-36H	GS-AP-MW-38H	GS-AP-MW-40H	GS-AP-MW-41HD	GS-AP-MW-41HS	GS-AP-MW-42H	GS-AP-MW-43HO
2/27/2019							
3/13/2019							
9/24/2019							
9/25/2019							
3/16/2020							
3/17/2020	<0.000203						
3/18/2020				<0.005			
3/24/2020		<0.000203				0.00218 (J)	
3/25/2020							<0.000203
5/12/2020							
5/13/2020	<0.000203						
9/15/2020							
9/16/2020							
9/17/2020	<0.000203			<0.005			
9/21/2020							
9/22/2020		<0.000203	0.0027 (J)			<0.005	<0.000203
2/1/2021							
2/2/2021			0.002				
2/3/2021						0.000752	
2/4/2021							
2/8/2021				0.000585	0.00175		
2/9/2021		<0.000203					
2/10/2021							
2/17/2021	0.000148 (J)						<0.000203
7/27/2021							
7/28/2021					0.00029		
8/2/2021							
8/3/2021				0.00085			
8/4/2021	<0.000203	<0.000203				0.00062	<0.000203
8/9/2021							
8/10/2021			0.0011				
2/8/2022					0.00378		
2/9/2022							
2/14/2022	<0.000203						
2/15/2022			0.00052	0.00102			
2/16/2022						0.00045	
2/21/2022							<0.000203
2/22/2022		<0.000203					
7/20/2022	<0.000203						
7/26/2022					0.00237		
7/27/2022				0.000979		0.000429	
8/2/2022			0.000206				
8/3/2022							<0.000203
8/10/2022		<0.000203					
3/8/2023							
3/13/2023					0.00193		
3/14/2023							
3/15/2023	<0.000203			0.00097		0.000371	
3/21/2023							
3/22/2023			0.000195 (J)				
3/27/2023							
3/28/2023		<0.000203					<0.000203

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cobalt (mg/L) Analysis Run 5/23/2023 3:39 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-44HO	GS-AP-MW-6D	GS-AP-MW-6S	GS-AP-MW-6V	GS-AP-MW-7	GS-AP-MW-8 (bg)	GS-AP-MW-9V	GS-AP-PZ-16	GS-AP-PZ-22
8/2/2016					<0.005				
8/3/2016		<0.000203	<0.005			0.0026 (J)			
9/20/2016		<0.000203	<0.005						
9/21/2016					<0.005	0.00362 (J)			
10/24/2016		<0.000203			<0.005				
10/25/2016						0.00305 (J)			
10/26/2016			<0.005						
12/12/2016		<0.000203	0.00212 (J)		<0.005				
12/13/2016						<0.005			
2/6/2017		<0.000203	0.00247 (J)		<0.005	0.00308 (J)			
3/27/2017		<0.000203	0.00224 (J)						
3/28/2017					<0.005	<0.005			
4/24/2017		<0.000203	<0.005		<0.005	<0.005			
6/6/2017		<0.000203	0.00222 (J)						
6/7/2017					<0.005	<0.005			
2/19/2018		<0.000203	<0.005		<0.005	<0.005			
5/14/2018		<0.000203	<0.005						
5/15/2018					<0.005	<0.005			
10/15/2018		<0.000203	<0.005		<0.005				
10/16/2018						<0.005			
4/16/2019		<0.000203	<0.005			<0.005			
4/23/2019					0.00231 (J)				
9/23/2019		<0.000203	<0.005						
9/24/2019					<0.005	0.00234 (J)			
3/17/2020		<0.000203	<0.005		0.00476 (J)				
3/18/2020						<0.005			
3/23/2020							<0.000203		
3/24/2020								<0.000203	<0.000203
8/27/2020	<0.000203								
9/8/2020				<0.005					
9/15/2020	<0.000203			<0.005					
9/16/2020			<0.005		0.00301 (J)				
9/17/2020		<0.000203						<0.000203	<0.000203
9/21/2020						<0.005			
9/22/2020							<0.000203		
2/2/2021					0.00248	0.000384	<0.000203		<0.000203
2/3/2021	<0.000203	<0.000203	0.000663	8.19E-05 (J)					
2/17/2021								<0.000203	
7/27/2021	<0.000203	<0.000203	0.00064						
8/2/2021				0.00011 (J)					
8/3/2021									<0.000203
8/9/2021					0.0011			<0.000203	
8/10/2021						0.00059	<0.000203		
2/8/2022					0.00051				
2/9/2022	<0.000203			0.00012 (J)					
2/14/2022		<0.000203	0.00065						<0.000203
2/15/2022								8E-05 (J)	
2/16/2022						0.00055			
2/21/2022							<0.000203		
2/22/2022									
2/28/2022									
3/1/2022									

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cobalt (mg/L)   Analysis Run 5/23/2023 3:39 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

	GS-AP-MW-44HO	GS-AP-MW-6D	GS-AP-MW-6S	GS-AP-MW-6V	GS-AP-MW-7	GS-AP-MW-8 (bg)	GS-AP-MW-9V	GS-AP-PZ-16	GS-AP-PZ-22
7/19/2022							<0.000203		
7/20/2022									
7/25/2022		<0.000203		0.000146 (J)	0.000372				
7/26/2022			0.000768					7.6E-05 (J)	
8/2/2022						0.00124			
8/3/2022									
8/9/2022									<0.000203
3/6/2023	<0.000203								
3/8/2023				0.000224					
3/14/2023		<0.000203	0.000746		9.22E-05 (J)				
3/15/2023									
3/21/2023								<0.000203	<0.000203
3/22/2023									
3/27/2023						0.000254	<0.000203		
3/28/2023									

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cobalt (mg/L) Analysis Run 5/23/2023 3:39 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-10R	GS-AP-MW-11R	GS-AP-MW-13R	GS-AP-MW-14R	GS-AP-MW-18R	GS-AP-MW-18VR	GS-AP-MW-1R
8/2/2016							
8/3/2016							
9/20/2016							
9/21/2016							
10/24/2016							
10/25/2016							
10/26/2016							
12/12/2016							
12/13/2016							
2/6/2017							
3/27/2017							
3/28/2017							
4/24/2017							
6/6/2017							
6/7/2017							
2/19/2018							
5/14/2018							
5/15/2018							
10/15/2018							
10/16/2018							
4/16/2019							
4/23/2019							
9/23/2019							
9/24/2019							
3/17/2020							
3/18/2020							
3/23/2020							
3/24/2020							
8/27/2020							
9/8/2020							
9/15/2020							
9/16/2020							
9/17/2020							
9/21/2020							
9/22/2020							
2/2/2021							
2/3/2021							
2/17/2021							
7/27/2021							
8/2/2021							
8/3/2021							
8/9/2021							
8/10/2021							
2/8/2022							
2/9/2022							
2/14/2022							
2/15/2022							
2/16/2022							
2/21/2022							
2/22/2022					0.00066	9E-05 (J)	
2/28/2022				0.00015 (J)			
3/1/2022	0.00014 (J)	0.00011 (J)	<0.000203				9E-05 (J)

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cobalt (mg/L) Analysis Run 5/23/2023 3:39 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-10R	GS-AP-MW-11R	GS-AP-MW-13R	GS-AP-MW-14R	GS-AP-MW-18R	GS-AP-MW-18VR	GS-AP-MW-1R
7/19/2022		<0.000203					
7/20/2022			<0.000203				
7/25/2022							
7/26/2022							
8/2/2022							<0.000203
8/3/2022	8.9E-05 (J)			<0.000203	0.000564		
8/9/2022						0.000256	
3/6/2023							
3/8/2023							
3/14/2023							
3/15/2023				<0.000203			
3/21/2023							
3/22/2023		<0.000203					
3/27/2023	0.000682		<0.000203			<0.000203	<0.000203
3/28/2023					0.000688		

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cobalt (mg/L)   Analysis Run 5/23/2023 3:39 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

	GS-AP-MW-23V	GS-AP-MW-27HR	GS-AP-MW-31V	GS-AP-MW-36V	GS-AP-MW-37HR	GS-AP-MW-3V	GS-AP-MW-45V	GS-AP-MW-47	GS-AP-MW-5R
2/21/2022									
2/22/2022		<0.000203	7E-05 (J)	9E-05 (J)					
2/23/2022	0.0002					0.00025	<0.000203		
2/28/2022					<0.000203			0.00012 (J)	
3/1/2022									<0.000203
7/19/2022									
7/20/2022						0.000249			
7/26/2022	<0.000203				<0.000203			0.000112 (J)	
7/27/2022		<0.000203		0.000136 (J)					
8/2/2022									<0.000203
8/3/2022			<0.000203						
8/8/2022							<0.000203		
3/14/2023	<0.000203	<0.000203		<0.000203					
3/15/2023					<0.000203			0.000135 (J)	
3/20/2023									<0.000203
3/21/2023						<0.000203			
3/27/2023			6.82E-05 (J)						
3/28/2023							<0.000203		

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cobalt (mg/L)   Analysis Run 5/23/2023 3:39 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

	GS-AP-MW-9R	GS-AP-PZ-18R	GS-AP-MW-46
2/21/2022		0.00014 (J)	
2/22/2022			
2/23/2022			<0.000203
2/28/2022			
3/1/2022	9E-05 (J)		
7/19/2022	<0.000203		
7/20/2022			
7/26/2022			
7/27/2022		0.000105 (J)	
8/2/2022			<0.000203
8/3/2022			
8/8/2022			
3/14/2023			
3/15/2023			
3/20/2023			
3/21/2023			
3/27/2023	<0.000203		<0.000203
3/28/2023		7.8E-05 (J)	

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L)   Analysis Run 5/23/2023 3:39 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

	GS-AP-MW-12	GS-AP-MW-12V	GS-AP-MW-13 (bg)	GS-AP-MW-15	GS-AP-MW-15V	GS-AP-MW-16D	GS-AP-MW-17	GS-AP-MW-17V ...	GS-AP-MW-19
8/1/2016				0.682		0.363 (U)	0.508 (U)		0.697 (U)
8/2/2016			0.0177 (U)						
8/3/2016	1.08								
9/19/2016						0.435 (U)	0.216 (U)		
9/20/2016	0.848		0.725	1.2					
9/21/2016									1.79
10/24/2016							0.694		1.53
10/25/2016	0.92		0.494 (U)	0.194 (U)		0.725			
12/13/2016	0.974		0.39 (U)			0.309 (U)	0.614		0.758
12/14/2016				0.688					
2/6/2017							-0.0283 (U)		
2/7/2017									0.473
2/8/2017	0.535		0.455 (U)	0.254 (U)		0.00772 (U)			
3/27/2017							0.0736 (U)		
3/28/2017				-0.0411 (U)					0.0705 (U)
3/29/2017	0.194 (U)		0.251 (U)			0.36 (U)			
3/30/2017									
4/24/2017							0.114 (U)		
4/26/2017	0.384 (U)		0.0762 (U)	0.207 (U)		0.0175 (U)			0.238 (U)
6/5/2017							0.476		
6/6/2017				0.0618 (U)		0.464			0.909
6/7/2017	0.729		0.32 (U)						
2/19/2018							0.322 (U)		
2/20/2018	0.242 (U)		0.465	0.0898 (U)					
2/21/2018						0.44			0.349 (U)
5/15/2018	0.433 (U)		0.0571 (U)	0.829			0.526		
5/16/2018						0.209 (U)			1.12
10/15/2018				0.708			0.199 (U)		
10/16/2018	0.421 (U)								0.856
10/17/2018			0.482			0.368 (U)			
2/20/2019								0.398 (U)	
2/21/2019		0.296 (U)							
2/26/2019									
2/27/2019									
4/16/2019	0.184 (U)		0.506 (U)						
4/17/2019				-0.11 (U)		0.121 (U)	0.00935 (U)		0.507 (U)
9/23/2019							0.983		
9/24/2019				0.951		-0.033 (U)		0.373 (U)	0.664
9/25/2019	0.442 (U)	1.03							
3/16/2020							0.185 (U)		
3/17/2020									
3/18/2020	0.605			0.939	0.566 (U)				
3/23/2020									
3/24/2020		0.877 (U)				0.636			1.07
3/25/2020								0.0656 (U)	
5/12/2020							0.0339 (U)		
5/13/2020									
9/17/2020									
9/21/2020					0.494 (U)		0.651 (U)		
9/22/2020						0.59 (U)			2.09
9/23/2020	0.811 (U)	1.38		0.547 (U)				0.542 (U)	
2/1/2021	0.946 (U)	0.944 (U)							

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 5/23/2023 3:39 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-12	GS-AP-MW-12V	GS-AP-MW-13 (bg)	GS-AP-MW-15	GS-AP-MW-15V	GS-AP-MW-16D	GS-AP-MW-17	GS-AP-MW-17V ...	GS-AP-MW-19
2/2/2021							2.53	0.448 (U)	
2/3/2021									
2/8/2021									0.947 (U)
2/9/2021				0.442 (U)	0.55 (U)				
2/10/2021						0.285 (U)			
7/27/2021									
8/2/2021								0.738 (U)	
8/3/2021				0.65 (U)	1.13 (U)		0.667 (U)		
8/4/2021									
8/9/2021	0.907 (U)	1.0895 (UD)				1.07 (U)			
8/10/2021									1.42 (U)
8/11/2021									
8/12/2021									
2/8/2022									
2/14/2022							0.523 (U)	7.76	
2/15/2022						0.557 (U)			
2/16/2022				0.234 (U)	0.841 (U)				
2/22/2022									0.639 (U)
2/23/2022		1.3							
2/28/2022	0.725 (U)								
7/19/2022	0.934 (U)								
7/20/2022		0.596 (U)							
7/26/2022									
7/27/2022									
8/2/2022				1.12	0.437 (U)	0.696 (U)			
8/3/2022									0.53 (U)
8/8/2022							0.0413 (U)		
8/9/2022								0.584 (U)	
8/10/2022									
3/14/2023									
3/15/2023									
3/20/2023				0.679 (U)	0.484 (U)				
3/21/2023						0.861 (U)			0.407 (U)
3/22/2023	1.18	1.17					0.602 (U)	0.707 (U)	

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L)   Analysis Run 5/23/2023 3:39 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

	GS-AP-MW-2	GS-AP-MW-21	GS-AP-MW-21V	GS-AP-MW-23H	GS-AP-MW-24H	GS-AP-MW-25HA	GS-AP-MW-26H
8/1/2016							
8/2/2016	0.274 (U)	0.665					
8/3/2016							
9/19/2016	0.0478 (U)						
9/20/2016							
9/21/2016		0.532 (U)					
10/24/2016	1.41						
10/25/2016		0.601					
12/13/2016	0.733						
12/14/2016		1.02					
2/6/2017							
2/7/2017							
2/8/2017	0.0206 (U)	-0.074 (U)					
3/27/2017							
3/28/2017		0.3 (U)					
3/29/2017							
3/30/2017	0.122 (U)						
4/24/2017							
4/26/2017	0.397 (U)	0.982 (U)					
6/5/2017							
6/6/2017	0.0873 (U)	0.312 (U)					
6/7/2017							
2/19/2018							
2/20/2018		0.321 (U)					
2/21/2018	0.562						
5/15/2018		1.7					
5/16/2018	1.44						
10/15/2018							
10/16/2018	0.736	0.586					
10/17/2018							
2/20/2019				0.0759 (U)			
2/21/2019							
2/26/2019					0.9		
2/27/2019							0.492
4/16/2019							
4/17/2019	0.0905 (U)	0.47 (U)					
9/23/2019				0.00709 (U)			0.404 (U)
9/24/2019		1.08			1.23		
9/25/2019	0.537 (U)						
3/16/2020							
3/17/2020				0.989			
3/18/2020		0.732			0.788		
3/23/2020			0.982				
3/24/2020						-0.00194 (U)	
3/25/2020	4						0.707 (U)
5/12/2020							
5/13/2020	0.289 (U)						
9/17/2020				0.66 (U)	0.298 (U)	-0.369 (U)	
9/21/2020							2.05
9/22/2020	0.712						
9/23/2020		0.468 (U)	0.563 (U)				
2/1/2021	0.518 (U)						

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L)   Analysis Run 5/23/2023 3:39 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

	GS-AP-MW-2	GS-AP-MW-21	GS-AP-MW-21V	GS-AP-MW-23H	GS-AP-MW-24H	GS-AP-MW-25HA	GS-AP-MW-26H
2/2/2021					1.03 (U)		
2/3/2021				0.767 (U)			
2/8/2021		0.667 (U)					
2/9/2021			0.867 (U)				0.674 (U)
2/10/2021						0.422 (U)	
7/27/2021				0.124 (U)			
8/2/2021							
8/3/2021					1.3 (U)		
8/4/2021	0.502 (U)	0.337 (U)					
8/9/2021							
8/10/2021							1.05 (U)
8/11/2021			0.782 (U)				
8/12/2021						0.129 (U)	
2/8/2022		0.529 (U)	0.467 (U)				
2/14/2022				0.153 (U)			
2/15/2022					1.16		1.19
2/16/2022						0.763 (U)	
2/22/2022	0.21 (U)						
2/23/2022							
2/28/2022							
7/19/2022	0.306 (U)						
7/20/2022							
7/26/2022				0.223 (U)			
7/27/2022					0.833 (U)		
8/2/2022							
8/3/2022						0.73 (U)	
8/8/2022							
8/9/2022			0.458 (U)				
8/10/2022		0.395 (U)					0.178 (U)
3/14/2023				0.741 (U)			
3/15/2023					1.03 (U)		
3/20/2023							
3/21/2023		0.213 (U)	1.07 (U)				
3/22/2023	0.0664 (U)					1.72 (U)	0.546 (U)

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 5/23/2023 3:39 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-28H	GS-AP-MW-29H	GS-AP-MW-3	GS-AP-MW-30HA	GS-AP-MW-31H	GS-AP-MW-32H	GS-AP-MW-33HO	GS-AP-MW-34HO	GS-AP-MW-35HO
2/27/2019		0.556							
3/13/2019	0.824								
9/24/2019		1.09							
9/25/2019	0.648 (U)								
3/16/2020	0.762 (U)							-0.085 (U)	
3/17/2020							2.14		7.32
3/18/2020				2.26	0.0549 (U)				
3/24/2020						0.313 (U)			
3/25/2020		0.036 (U)							
5/12/2020	0.425 (U)							0.345 (U)	1.02
5/13/2020				0.604			0.415 (U)		
9/15/2020							-0.106 (U)		
9/16/2020								0.286 (U)	0.435 (U)
9/17/2020									
9/21/2020				1.1		0.484 (U)			
9/22/2020	1.02	0.591 (U)			0.912				
2/1/2021					0.189 (U)				
2/2/2021									
2/3/2021		0.102 (U)					0.313 (U)	0.485 (U)	
2/4/2021									0.527 (U)
2/8/2021									
2/9/2021									
2/10/2021						0.546 (U)			
2/17/2021	0.911 (U)		0.331 (U)	0.902 (U)					
7/27/2021							0.408 (U)	0.732 (U)	
7/28/2021									0.0525 (U)
8/2/2021				1.8	1.48 (U)				
8/3/2021			0.978 (U)						
8/4/2021		1.02 (U)							
8/9/2021	0.706 (U)								
8/10/2021						0.445 (U)			
2/8/2022				0.806 (U)	0.189 (U)				
2/9/2022							0.767 (U)	0.213 (U)	0.23 (U)
2/14/2022	0.31 (U)	0.725 (U)				0.371 (U)			
2/15/2022									
2/16/2022			0.601 (U)						
2/21/2022									
2/22/2022									
7/20/2022			0.473 (U)						
7/26/2022									
7/27/2022	0.742 (U)					0.994 (U)			
8/2/2022									
8/3/2022		0.535 (U)		1.29 (U)	0.32 (U)				
8/10/2022									
3/9/2023									0.578 (U)
3/10/2023								0.868 (U)	
3/13/2023				0.963					
3/14/2023	0.739 (U)						2.94		
3/15/2023									
3/21/2023			1.08			0.503 (U)			
3/22/2023									
3/27/2023					0.39 (U)				

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 5/23/2023 3:39 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-28H	GS-AP-MW-29H	GS-AP-MW-3	GS-AP-MW-30HA	GS-AP-MW-31H	GS-AP-MW-32H	GS-AP-MW-33HO	GS-AP-MW-34HO	GS-AP-MW-35HO
3/28/2023		0.397 (U)							

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 5/23/2023 3:39 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-36H	GS-AP-MW-38H	GS-AP-MW-40H	GS-AP-MW-41HD	GS-AP-MW-41HS	GS-AP-MW-42H	GS-AP-MW-43HO
2/27/2019							
3/13/2019							
9/24/2019							
9/25/2019							
3/16/2020							
3/17/2020	4.33						
3/18/2020				0.64			
3/24/2020		0.862				0.0821 (U)	
3/25/2020							0.678 (U)
5/12/2020							
5/13/2020	-0.225 (U)						
9/15/2020							
9/16/2020							
9/17/2020	-0.125 (U)			0.14 (U)			
9/21/2020							
9/22/2020		1.1	1.91			0.36 (U)	0.0466 (U)
2/1/2021							
2/2/2021			0.369 (U)				
2/3/2021						0.475 (U)	
2/4/2021							
2/8/2021				0.409 (U)	0.49 (U)		
2/9/2021		0.746 (U)					
2/10/2021							
2/17/2021	0.322 (U)						0.629 (U)
7/27/2021							
7/28/2021					0.759 (U)		
8/2/2021							
8/3/2021				0.453 (U)			
8/4/2021	1.13	0.844 (U)				0.186 (U)	0.949 (U)
8/9/2021							
8/10/2021			0.91 (U)				
2/8/2022					0.267 (U)		
2/9/2022							
2/14/2022	7.37						
2/15/2022			0.64 (U)	0.256 (U)			
2/16/2022						0.275 (U)	
2/21/2022							0.509 (U)
2/22/2022		0.341 (U)					
7/20/2022	0.473 (U)						
7/26/2022					0.728 (U)		
7/27/2022				0.42 (U)		1.06 (U)	
8/2/2022			0.608 (U)				
8/3/2022							0.252 (U)
8/10/2022		0.411 (U)					
3/9/2023							
3/10/2023							
3/13/2023					0.305 (U)		
3/14/2023							
3/15/2023	0.356 (U)			0.534 (U)		0.641 (U)	
3/21/2023							
3/22/2023			0.772 (U)				
3/27/2023							

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 5/23/2023 3:39 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-36H	GS-AP-MW-38H	GS-AP-MW-40H	GS-AP-MW-41HD	GS-AP-MW-41HS	GS-AP-MW-42H	GS-AP-MW-43HO
3/28/2023		0.502 (U)					0.833 (U)

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 5/23/2023 3:39 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-44HO	GS-AP-MW-6D	GS-AP-MW-6S	GS-AP-MW-6V	GS-AP-MW-7	GS-AP-MW-8 (bg)	GS-AP-MW-9V	GS-AP-PZ-16	GS-AP-PZ-22
8/2/2016					0.87				
8/3/2016		0.42 (U)	1.38			0.299 (U)			
9/20/2016		1.13	1.3						
9/21/2016					0.107 (U)	0.835			
10/24/2016		0.327 (U)			0.337 (U)				
10/25/2016						0.0629 (U)			
10/26/2016			0.721 (U)						
12/12/2016		1.26	1.36		0.803				
12/13/2016						0.547			
2/6/2017		0.532	0.702		-0.0165 (U)	0.251 (U)			
3/27/2017		0.334 (U)	0.325 (U)						
3/28/2017					0.00697 (U)	-0.109 (U)			
4/24/2017		0.492	0.436 (U)		0.672	0.293 (U)			
6/6/2017		0.156 (U)	0.592						
6/7/2017					0.096 (U)	0.529			
2/19/2018		0.283 (U)	0.776		0.207 (U)	0.497			
5/14/2018		0.083 (U)	-0.169 (U)						
5/15/2018					0.0311 (U)	-0.601 (U)			
10/15/2018		0.656	0.792		0.309 (U)				
10/16/2018						0.2 (U)			
4/16/2019		0.528	1.11			0.733			
4/23/2019					0.894				
9/23/2019		0.677	1.06						
9/24/2019					0.618 (U)	0.753			
3/17/2020		0.629	0.351 (U)		1.2				
3/18/2020						0.465 (U)			
3/23/2020							0.156 (U)		
3/24/2020								0.847	0.878
8/27/2020	0.798								
9/8/2020				-0.0377 (U)					
9/15/2020	0.311 (U)			1.25					
9/16/2020			1.05		1.74				
9/17/2020		0.32 (U)						0.438 (U)	0.896
9/21/2020						1.25			
9/22/2020							0.536 (U)		
2/2/2021					0.373 (U)	0.223 (U)	0.154 (U)		1.01 (U)
2/3/2021	0.145 (U)	0.647 (U)	0.489 (U)	0.2 (U)					
2/17/2021								0.753 (U)	
7/27/2021	0.48 (U)	0.919 (U)	0.87 (U)						
8/2/2021				1.53					
8/3/2021									0.195 (U)
8/9/2021					1.28 (UD)			1.47	
8/10/2021						0.77 (U)	0.895 (U)		
2/8/2022					0.587 (UD)				
2/9/2022	0.793 (U)			0.209 (U)					
2/14/2022		1.24	0.14 (U)						0.67 (U)
2/15/2022								1.12 (U)	
2/16/2022						0.561 (U)			
2/21/2022							0.134 (U)		
2/22/2022									
2/28/2022									
3/1/2022									

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 5/23/2023 3:39 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-44HO	GS-AP-MW-6D	GS-AP-MW-6S	GS-AP-MW-6V	GS-AP-MW-7	GS-AP-MW-8 (bg)	GS-AP-MW-9V	GS-AP-PZ-16	GS-AP-PZ-22
7/19/2022							1.03		
7/20/2022									
7/25/2022		0.513 (U)		0.722 (UD)	0.455 (U)				
7/26/2022								1.13	
8/2/2022						0.154 (U)			
8/3/2022									
8/9/2022									0.481 (U)
3/6/2023	1.11								
3/8/2023				0.3535 (UD)					
3/14/2023		0.656 (U)	0.424 (U)		0.351 (U)				
3/15/2023									
3/21/2023								0.891 (U)	1.01 (U)
3/22/2023									
3/27/2023						0.142 (U)	0.414 (U)		
3/28/2023									

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L)   Analysis Run 5/23/2023 3:39 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

	GS-AP-MW-10R	GS-AP-MW-11R	GS-AP-MW-13R	GS-AP-MW-14R	GS-AP-MW-18R	GS-AP-MW-18VR	GS-AP-MW-1R
8/2/2016							
8/3/2016							
9/20/2016							
9/21/2016							
10/24/2016							
10/25/2016							
10/26/2016							
12/12/2016							
12/13/2016							
2/6/2017							
3/27/2017							
3/28/2017							
4/24/2017							
6/6/2017							
6/7/2017							
2/19/2018							
5/14/2018							
5/15/2018							
10/15/2018							
10/16/2018							
4/16/2019							
4/23/2019							
9/23/2019							
9/24/2019							
3/17/2020							
3/18/2020							
3/23/2020							
3/24/2020							
8/27/2020							
9/8/2020							
9/15/2020							
9/16/2020							
9/17/2020							
9/21/2020							
9/22/2020							
2/2/2021							
2/3/2021							
2/17/2021							
7/27/2021							
8/2/2021							
8/3/2021							
8/9/2021							
8/10/2021							
2/8/2022							
2/9/2022							
2/14/2022							
2/15/2022							
2/16/2022							
2/21/2022							
2/22/2022					0.961 (U)	0.187 (U)	
2/28/2022				0.801 (U)			
3/1/2022	1.05 (U)	0.757 (U)	0.656 (U)				0.836 (U)

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 5/23/2023 3:39 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-10R	GS-AP-MW-11R	GS-AP-MW-13R	GS-AP-MW-14R	GS-AP-MW-18R	GS-AP-MW-18VR	GS-AP-MW-1R
7/19/2022		0.586 (U)					
7/20/2022			0.551 (U)				
7/25/2022							
7/26/2022							
8/2/2022							0.53 (U)
8/3/2022	0.552 (U)			0.55 (U)	0.507 (U)		
8/9/2022						0.473 (U)	
3/6/2023							
3/8/2023							
3/14/2023							
3/15/2023				0.145 (U)			
3/21/2023							
3/22/2023		0.691 (U)					
3/27/2023	0.422 (U)		0.347 (U)			0.708 (U)	0.498 (U)
3/28/2023					0.889 (U)		

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L)   Analysis Run 5/23/2023 3:39 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

	GS-AP-MW-23V	GS-AP-MW-27HR	GS-AP-MW-31V	GS-AP-MW-36V	GS-AP-MW-37HR	GS-AP-MW-3V	GS-AP-MW-45V	GS-AP-MW-47	GS-AP-MW-5R
2/21/2022									
2/22/2022		0.645 (U)	0.486 (U)	0.495 (U)					
2/23/2022	0.258 (U)					0.57 (U)	0.442 (U)		
2/28/2022					0.739 (U)			0.174 (U)	
3/1/2022									0.799 (U)
7/19/2022									
7/20/2022						0.762 (U)			
7/26/2022	0.603 (U)				0.5 (U)			0.441 (U)	
7/27/2022		1.63		0.857 (U)					
8/2/2022									0.479 (U)
8/3/2022			0.696 (U)						
8/8/2022							0.469 (U)		
3/14/2023	0.317 (U)	1.29		0.805 (U)				0.767 (U)	
3/15/2023					0.545 (U)				
3/20/2023									0.742 (U)
3/21/2023						0.189 (U)			
3/27/2023			0.965 (U)						
3/28/2023							0.647 (U)		

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 5/23/2023 3:39 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-9R	GS-AP-PZ-18R	GS-AP-MW-46
2/21/2022		0.775 (U)	
2/22/2022			
2/23/2022			0.0974 (U)
2/28/2022			
3/1/2022	0.663 (U)		
7/19/2022	0.803 (U)		
7/20/2022			
7/26/2022			
7/27/2022		0.14 (U)	
8/2/2022			0.314 (U)
8/3/2022			
8/8/2022			
3/14/2023			
3/15/2023			
3/20/2023			
3/21/2023			
3/27/2023	0.263 (U)		0.0303 (U)
3/28/2023		0.526 (U)	

Time Series

Constituent: Fluoride (mg/L) Analysis Run 5/23/2023 3:39 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-12	GS-AP-MW-12V	GS-AP-MW-13 (bg)	GS-AP-MW-15	GS-AP-MW-15V	GS-AP-MW-16D	GS-AP-MW-17	GS-AP-MW-17V ...	GS-AP-MW-19
8/1/2016				1.16		0.117 (J)	0.214 (J)		0.385
8/2/2016			0.161 (J)						
8/3/2016	0.656								
9/19/2016						0.078 (J)	0.151 (J)		
9/20/2016	0.691		0.122 (J)	0.7					
9/21/2016									0.303
10/24/2016							0.086 (J)		0.24 (J)
10/25/2016	0.588		0.058 (J)	0.544		0.018 (J)			
12/13/2016	0.545		0.072 (J)			0.035 (J)	0.14 (J)		0.188 (J)
12/14/2016				0.51					
2/6/2017							0.2		
2/7/2017									0.38
2/8/2017	0.79		0.16	0.56		0.1			
3/27/2017							0.21		
3/28/2017				0.59					0.32
3/29/2017	0.51		0.14			0.08 (J)			
3/30/2017									
4/24/2017							0.2		
4/26/2017	0.49		0.16	0.72		0.11			0.31
6/5/2017							0.2		
6/6/2017				0.65		0.11			0.31
6/7/2017	0.43		0.15						
8/21/2017									
8/22/2017	0.41		0.18	0.9		0.11	0.24		0.35
8/23/2017									
2/19/2018							0.34		
2/20/2018	0.27		0.17	0.6					
2/21/2018						0.11			0.39
5/15/2018	0.23		0.17	0.57			0.27		
5/16/2018						0.12			0.36
10/15/2018				0.77			0.23		
10/16/2018	0.23								0.37
10/17/2018			0.19			0.13			
2/20/2019								0.239	
2/21/2019		0.205							
2/26/2019									
2/27/2019									
4/16/2019	0.188		0.197						
4/17/2019				0.463		0.171	0.354		0.27
9/23/2019							0.351		
9/24/2019				0.628		0.124		0.245	0.307
9/25/2019	0.168	0.185							
3/16/2020							0.261		
3/17/2020									
3/18/2020	0.122			0.647	0.243				
3/23/2020									
3/24/2020		0.155				0.109			0.327
3/25/2020								0.243	
5/12/2020							0.263		
5/13/2020									
9/17/2020									
9/21/2020					0.372		0.371		

Time Series

Constituent: Fluoride (mg/L)   Analysis Run 5/23/2023 3:39 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

	GS-AP-MW-12	GS-AP-MW-12V	GS-AP-MW-13 (bg)	GS-AP-MW-15	GS-AP-MW-15V	GS-AP-MW-16D	GS-AP-MW-17	GS-AP-MW-17V ...	GS-AP-MW-19
9/22/2020						0.123			0.339
9/23/2020	0.12	0.176		0.452				0.278	
2/1/2021	0.126	0.169							
2/2/2021							0.276	0.244	
2/3/2021									
2/8/2021									0.319
2/9/2021				0.591	0.329				
2/10/2021						0.103			
7/27/2021									
8/2/2021								0.276	
8/3/2021				0.615	0.278		0.3		
8/4/2021									
8/9/2021	0.139	0.187				0.131			
8/10/2021									0.283
8/11/2021									
8/12/2021									
2/8/2022									
2/14/2022							0.206	0.237	
2/15/2022						0.114			
2/16/2022				0.349	0.208				
2/22/2022									0.259
2/23/2022		0.153							
2/28/2022	0.12								
7/19/2022	0.0983 (J)								
7/20/2022		0.18							
7/26/2022									
7/27/2022									
8/2/2022				0.373	0.206	0.112 (J)			
8/3/2022									0.231
8/8/2022							0.257		
8/9/2022								0.245	
8/10/2022									
3/14/2023									
3/15/2023									
3/20/2023				0.333	0.183				
3/21/2023						0.0849 (J)			0.24
3/22/2023	0.0941 (J)	0.138					0.183	0.198	

Time Series

Constituent: Fluoride (mg/L) Analysis Run 5/23/2023 3:39 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-2	GS-AP-MW-21	GS-AP-MW-21V	GS-AP-MW-23H	GS-AP-MW-24H	GS-AP-MW-25HA	GS-AP-MW-26H
8/1/2016							
8/2/2016	1.76	0.282 (J)					
8/3/2016							
9/19/2016	1.55						
9/20/2016							
9/21/2016		0.231 (J)					
10/24/2016	1.29						
10/25/2016		0.137 (J)					
12/13/2016	1.19						
12/14/2016		0.131 (J)					
2/6/2017							
2/7/2017							
2/8/2017	1.6	0.25					
3/27/2017							
3/28/2017		0.27					
3/29/2017							
3/30/2017	1.5						
4/24/2017							
4/26/2017	1.4	0.24					
6/5/2017							
6/6/2017	1.3	0.25					
6/7/2017							
8/21/2017	1.4						
8/22/2017							
8/23/2017		0.3					
2/19/2018							
2/20/2018		0.23					
2/21/2018	1.1						
5/15/2018		0.24					
5/16/2018	1.1						
10/15/2018							
10/16/2018	1	0.25					
10/17/2018							
2/20/2019				0.188			
2/21/2019							
2/26/2019					0.19		
2/27/2019							0.14
4/16/2019							
4/17/2019	0.868	0.272					
9/23/2019				0.144			0.146
9/24/2019		0.209			0.201		
9/25/2019	0.86						
3/16/2020							
3/17/2020				0.241			
3/18/2020		0.234			0.206		
3/23/2020			0.494				
3/24/2020						1.77	
3/25/2020	0.855						0.131
5/12/2020							
5/13/2020	0.777						
9/17/2020				0.117	0.217	1.93	
9/21/2020							0.151

Time Series

Constituent: Fluoride (mg/L) Analysis Run 5/23/2023 3:39 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-2	GS-AP-MW-21	GS-AP-MW-21V	GS-AP-MW-23H	GS-AP-MW-24H	GS-AP-MW-25HA	GS-AP-MW-26H
9/22/2020	0.921						
9/23/2020		0.208	0.641				
2/1/2021	0.865						
2/2/2021					0.209		
2/3/2021				0.156			
2/8/2021		0.203					
2/9/2021			0.546				0.112
2/10/2021						1.81	
7/27/2021				0.13			
8/2/2021							
8/3/2021					0.208		
8/4/2021	0.932	0.24					
8/9/2021							
8/10/2021							0.152
8/11/2021			0.41				
8/12/2021						2.01	
2/8/2022		0.175	0.398				
2/14/2022				0.14			
2/15/2022					0.176		0.101
2/16/2022						1.89	
2/22/2022	0.819						
2/23/2022							
2/28/2022							
7/19/2022	0.752						
7/20/2022							
7/26/2022				0.0867 (J)			
7/27/2022					0.215		
8/2/2022							
8/3/2022						2.07	
8/8/2022							
8/9/2022			0.406				
8/10/2022		0.186					0.131
3/14/2023				0.165			
3/15/2023					0.172		
3/20/2023							
3/21/2023		0.194	0.381				
3/22/2023	0.72					2.03	0.123 (J)

Time Series

Constituent: Fluoride (mg/L) Analysis Run 5/23/2023 3:39 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-28H	GS-AP-MW-29H	GS-AP-MW-3	GS-AP-MW-30HA	GS-AP-MW-31H	GS-AP-MW-32H	GS-AP-MW-33HO	GS-AP-MW-34HO	GS-AP-MW-35HO
2/27/2019		0.218							
3/13/2019	0.187								
9/24/2019		0.183							
9/25/2019	0.172								
3/16/2020	0.183							0.338	
3/17/2020							0.202		0.166
3/18/2020				0.634	0.15				
3/24/2020						0.18			
3/25/2020		0.194							
5/12/2020	0.195							0.37	0.167
5/13/2020				0.833			0.191		
9/15/2020							0.188		
9/16/2020								0.364	0.162
9/17/2020									
9/21/2020				0.872		0.202			
9/22/2020	0.181	0.198			0.148				
2/1/2021					0.176				
2/2/2021									
2/3/2021		0.267					0.178	0.298	
2/4/2021									0.152
2/8/2021									
2/9/2021									
2/10/2021						0.134			
2/17/2021	0.18		0.1	0.884					
7/27/2021							0.214	0.408	
7/28/2021									0.207
8/2/2021				1.49	0.191				
8/3/2021			0.102						
8/4/2021		0.353							
8/9/2021	0.204								
8/10/2021						0.218			
2/8/2022				1.66	0.119				
2/9/2022							0.131	0.291	0.119
2/14/2022	0.121	0.332				0.148			
2/15/2022									
2/16/2022			<0.125						
2/21/2022									
2/22/2022									
7/20/2022			<0.125						
7/26/2022									
7/27/2022	0.179					0.161			
8/2/2022									
8/3/2022		0.359		2.2	0.141				
8/10/2022									
3/8/2023								0.315	0.171
3/13/2023				1.61					
3/14/2023	0.187						0.248		
3/15/2023									
3/21/2023			0.0689 (J)			0.144			
3/22/2023									
3/27/2023					0.155				
3/28/2023		0.388							

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Fluoride (mg/L) Analysis Run 5/23/2023 3:39 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-36H	GS-AP-MW-38H	GS-AP-MW-40H	GS-AP-MW-41HD	GS-AP-MW-41HS	GS-AP-MW-42H	GS-AP-MW-43HO
2/27/2019							
3/13/2019							
9/24/2019							
9/25/2019							
3/16/2020							
3/17/2020	0.214						
3/18/2020				0.165			
3/24/2020		0.291				0.13	
3/25/2020							0.204
5/12/2020							
5/13/2020	0.224						
9/15/2020							
9/16/2020							
9/17/2020	0.209			0.16			
9/21/2020							
9/22/2020		0.28	0.114			0.121	0.216
2/1/2021							
2/2/2021			0.123				
2/3/2021						0.131	
2/4/2021							
2/8/2021				0.138	0.152		
2/9/2021		0.243					
2/10/2021							
2/17/2021	0.22						0.174
7/27/2021							
7/28/2021					0.172		
8/2/2021							
8/3/2021				0.15			
8/4/2021	0.31	0.305				0.203	0.289
8/9/2021							
8/10/2021			0.113				
2/8/2022					0.117		
2/9/2022							
2/14/2022	0.238						
2/15/2022			0.0854 (J)	0.125			
2/16/2022						0.0837 (J)	
2/21/2022							0.226
2/22/2022		0.239					
7/20/2022	0.186						
7/26/2022					0.121 (J)		
7/27/2022				0.122 (J)		0.116 (J)	
8/2/2022			0.151				
8/3/2022							0.173
8/10/2022		0.231					
3/8/2023							
3/13/2023					0.104 (J)		
3/14/2023							
3/15/2023	0.212			0.18		0.128	
3/21/2023							
3/22/2023			0.1 (J)				
3/27/2023							
3/28/2023		0.254					0.239

Time Series

Constituent: Fluoride (mg/L) Analysis Run 5/23/2023 3:39 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-44HO	GS-AP-MW-6D	GS-AP-MW-6S	GS-AP-MW-6V	GS-AP-MW-7	GS-AP-MW-8 (bg)	GS-AP-MW-9V	GS-AP-PZ-16	GS-AP-PZ-22
8/2/2016					0.098 (J)				
8/3/2016		0.127 (J)	0.099 (J)			0.125 (J)			
9/20/2016		0.087 (J)	0.074 (J)						
9/21/2016					0.061 (J)	0.098 (J)			
10/24/2016		0.019 (J)			<0.3				
10/25/2016						0.025 (J)			
10/26/2016			0.032 (J)						
12/12/2016		0.043 (J)	0.034 (J)		0.01 (J)				
12/13/2016						0.045 (J)			
2/6/2017		0.11	0.06 (J)		0.07 (J)	0.1			
3/27/2017		0.12	0.07 (J)						
3/28/2017					0.07 (J)	0.08 (J)			
4/24/2017		0.11	0.08 (J)		0.08 (J)	0.09 (J)			
6/6/2017		0.12	0.09 (J)						
6/7/2017					0.09 (J)	0.08 (J)			
8/21/2017		0.15	0.1		0.09 (J)	0.08 (J)			
2/19/2018		0.13	0.1		0.09 (J)	0.08 (J)			
5/14/2018		0.13	0.13						
5/15/2018					0.09 (J)	0.1			
10/15/2018		0.16	0.14		0.11				
10/16/2018						0.09 (J)			
4/16/2019		0.156	0.147			0.143			
4/23/2019					0.111				
9/23/2019		0.132	0.142						
9/24/2019					0.106	0.128			
3/17/2020		0.132	0.231		0.107				
3/18/2020						0.108			
3/23/2020							0.187		
3/24/2020								0.228	0.387
8/27/2020	0.174								
9/8/2020				4.46					
9/15/2020	0.221			4.59					
9/16/2020			0.308		0.126				
9/17/2020		0.133						0.237	0.402
9/21/2020						0.125			
9/22/2020							0.174		
2/2/2021					0.124	0.114	0.183		0.389
2/3/2021	0.181	0.135	0.195	4.28					
2/17/2021								0.219	
7/27/2021	0.254	0.127	0.2						
8/2/2021				4.45					
8/3/2021									0.419
8/9/2021					0.11			0.235	
8/10/2021						0.0924 (J)	0.166		
2/8/2022					0.0872 (JD)				
2/9/2022	0.142			4.35					
2/14/2022		0.108	0.164						0.422
2/15/2022								0.258	
2/16/2022						0.0616 (J)			
2/21/2022							0.177		
2/22/2022									
2/28/2022									

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Fluoride (mg/L) Analysis Run 5/23/2023 3:39 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-44HO	GS-AP-MW-6D	GS-AP-MW-6S	GS-AP-MW-6V	GS-AP-MW-7	GS-AP-MW-8 (bg)	GS-AP-MW-9V	GS-AP-PZ-16	GS-AP-PZ-22
3/1/2022									
7/19/2022							0.159		
7/20/2022									
7/25/2022		0.0978 (JD)		4.6 (D)	0.0896 (JD)				
7/26/2022			0.164					0.206	
8/2/2022						0.0815 (J)			
8/3/2022									
8/9/2022									0.338
3/6/2023	0.227								
3/8/2023				4.525 (D)					
3/14/2023		0.122 (J)	0.153		0.177				
3/15/2023									
3/21/2023								0.171	0.393
3/22/2023									
3/27/2023						0.112 (J)	0.164		
3/28/2023									

Time Series

Constituent: Fluoride (mg/L) Analysis Run 5/23/2023 3:39 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-10R	GS-AP-MW-11R	GS-AP-MW-13R	GS-AP-MW-14R	GS-AP-MW-18R	GS-AP-MW-18VR	GS-AP-MW-1R
8/2/2016							
8/3/2016							
9/20/2016							
9/21/2016							
10/24/2016							
10/25/2016							
10/26/2016							
12/12/2016							
12/13/2016							
2/6/2017							
3/27/2017							
3/28/2017							
4/24/2017							
6/6/2017							
6/7/2017							
8/21/2017							
2/19/2018							
5/14/2018							
5/15/2018							
10/15/2018							
10/16/2018							
4/16/2019							
4/23/2019							
9/23/2019							
9/24/2019							
3/17/2020							
3/18/2020							
3/23/2020							
3/24/2020							
8/27/2020							
9/8/2020							
9/15/2020							
9/16/2020							
9/17/2020							
9/21/2020							
9/22/2020							
2/2/2021							
2/3/2021							
2/17/2021							
7/27/2021							
8/2/2021							
8/3/2021							
8/9/2021							
8/10/2021							
2/8/2022							
2/9/2022							
2/14/2022							
2/15/2022							
2/16/2022							
2/21/2022							
2/22/2022					0.124	0.199	
2/28/2022				0.215			

Time Series

Constituent: Fluoride (mg/L) Analysis Run 5/23/2023 3:39 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-10R	GS-AP-MW-11R	GS-AP-MW-13R	GS-AP-MW-14R	GS-AP-MW-18R	GS-AP-MW-18VR	GS-AP-MW-1R
3/1/2022	0.278	0.143	0.122				0.248
7/19/2022		0.0992 (J)					
7/20/2022			0.084 (J)				
7/25/2022							
7/26/2022							
8/2/2022							0.177
8/3/2022	0.265			0.145	0.0924 (J)		
8/9/2022						0.133	
3/6/2023							
3/8/2023							
3/14/2023							
3/15/2023				0.141			
3/21/2023							
3/22/2023		0.0999 (J)					
3/27/2023	0.283		0.18			0.182	0.234
3/28/2023					0.115 (J)		

Time Series

Constituent: Fluoride (mg/L)   Analysis Run 5/23/2023 3:39 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

	GS-AP-MW-23V	GS-AP-MW-27HR	GS-AP-MW-31V	GS-AP-MW-36V	GS-AP-MW-37HR	GS-AP-MW-3V	GS-AP-MW-45V	GS-AP-MW-47	GS-AP-MW-5R
2/21/2022									
2/22/2022		0.292	0.179	0.259					
2/23/2022	0.141					0.241	0.204		
2/28/2022					0.194			0.121	
3/1/2022									0.147
7/19/2022									
7/20/2022						0.231			
7/26/2022	0.0773 (J)				0.143			0.0601 (J)	
7/27/2022		0.263		0.38					
8/2/2022									0.144
8/3/2022			0.237						
8/8/2022							0.154		
3/14/2023	0.189	0.335		0.344					
3/15/2023					0.116 (J)			0.107 (J)	
3/20/2023									0.117 (J)
3/21/2023						0.161			
3/27/2023			0.309						
3/28/2023							0.249		

Time Series

Constituent: Fluoride (mg/L)   Analysis Run 5/23/2023 3:39 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

	GS-AP-MW-9R	GS-AP-PZ-18R	GS-AP-MW-46
2/21/2022		0.207	
2/22/2022			
2/23/2022			0.226
2/28/2022			
3/1/2022	0.218		
7/19/2022	0.245		
7/20/2022			
7/26/2022			
7/27/2022		0.157	
8/2/2022			0.249
8/3/2022			
8/8/2022			
3/14/2023			
3/15/2023			
3/20/2023			
3/21/2023			
3/27/2023	0.207		0.271
3/28/2023		0.175	

Time Series

Constituent: Lead (mg/L) Analysis Run 5/23/2023 3:39 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-12	GS-AP-MW-12V	GS-AP-MW-13 (bg)	GS-AP-MW-15	GS-AP-MW-15V	GS-AP-MW-16D	GS-AP-MW-17	GS-AP-MW-17V ...	GS-AP-MW-19
8/1/2016				<0.000203		<0.000203	<0.000203		<0.000203
8/2/2016			<0.005						
8/3/2016	<0.000203								
9/19/2016						<0.000203	<0.000203		
9/20/2016	<0.000203		<0.005	<0.000203					
9/21/2016									<0.000203
10/24/2016							<0.000203		<0.000203
10/25/2016	<0.000203		<0.005	<0.000203		<0.000203			
12/13/2016	<0.000203		<0.005			<0.000203	<0.000203		<0.000203
12/14/2016				<0.000203					
2/6/2017							<0.000203		
2/7/2017									<0.000203
2/8/2017	<0.000203		<0.005	<0.000203		<0.000203			
3/27/2017							<0.000203		
3/28/2017				<0.000203					<0.000203
3/29/2017	<0.000203		<0.005			<0.000203			
3/30/2017									
4/24/2017							<0.000203		
4/26/2017	<0.000203		<0.005	<0.000203		<0.000203			<0.000203
6/5/2017							<0.000203		
6/6/2017				<0.000203		<0.000203			<0.000203
6/7/2017	<0.000203		<0.005						
2/19/2018							<0.000203		
2/20/2018	<0.000203		<0.005	<0.000203					
2/21/2018						<0.000203			<0.000203
5/15/2018	<0.000203		<0.005	<0.000203			<0.000203		
5/16/2018						<0.000203			<0.000203
10/15/2018				<0.000203			<0.000203		
10/16/2018	<0.000203								<0.000203
10/17/2018			<0.005			<0.000203			
2/20/2019								0.00189 (J)	
2/21/2019		<0.000203							
2/26/2019									
2/27/2019									
4/16/2019	<0.000203		<0.005						
4/17/2019				<0.000203		<0.000203	<0.000203		<0.000203
9/23/2019							<0.000203		
9/24/2019				<0.000203		<0.000203		<0.000203	<0.000203
9/25/2019	<0.000203	<0.000203							
3/16/2020							<0.000203		
3/17/2020									
3/18/2020	<0.000203			<0.000203	<0.000203				
3/23/2020									
3/24/2020		0.00279 (J)				<0.000203			<0.000203
3/25/2020								<0.000203	
5/12/2020							<0.000203		
5/13/2020									
9/17/2020									
9/21/2020					<0.000203		<0.000203		
9/22/2020						<0.000203			<0.000203
9/23/2020	<0.000203	0.0014 (J)		<0.000203				<0.000203	
2/1/2021	<0.000203	0.0013							

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Lead (mg/L) Analysis Run 5/23/2023 3:39 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-12	GS-AP-MW-12V	GS-AP-MW-13 (bg)	GS-AP-MW-15	GS-AP-MW-15V	GS-AP-MW-16D	GS-AP-MW-17	GS-AP-MW-17V ...	GS-AP-MW-19
2/2/2021							0.000175 (J)	<0.000203	
2/3/2021									
2/8/2021									<0.000203
2/9/2021				8.74E-05 (J)	<0.000203				
2/10/2021						0.000873			
7/27/2021									
8/2/2021								<0.000203	
8/3/2021				8E-05 (J)	<0.000203		<0.000203		
8/4/2021									
8/9/2021	<0.000203	0.00048				0.00016 (J)			
8/10/2021									<0.000203
8/11/2021									
8/12/2021									
2/8/2022									
2/14/2022							<0.000203	<0.000203	
2/15/2022						<0.000203			
2/16/2022				<0.000203	<0.000203				
2/22/2022									<0.000203
2/23/2022		0.00019 (J)							
2/28/2022	<0.000203								
7/19/2022	<0.000203								
7/20/2022		<0.000203							
7/26/2022									
7/27/2022									
8/2/2022				<0.000203	<0.000203	<0.000203			
8/3/2022									<0.000203
8/8/2022							<0.000203		
8/9/2022								<0.000203	
8/10/2022									
3/14/2023									
3/15/2023									
3/20/2023				<0.000203	<0.000203				
3/21/2023						<0.000203			<0.000203
3/22/2023	<0.000203	8.97E-05 (J)					<0.000203	<0.000203	

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Lead (mg/L) Analysis Run 5/23/2023 3:39 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-2	GS-AP-MW-21	GS-AP-MW-21V	GS-AP-MW-23H	GS-AP-MW-24H	GS-AP-MW-25HA	GS-AP-MW-26H
8/1/2016							
8/2/2016	<0.000203	<0.000203					
8/3/2016							
9/19/2016	<0.000203						
9/20/2016							
9/21/2016		<0.000203					
10/24/2016	<0.000203						
10/25/2016		<0.000203					
12/13/2016	<0.000203						
12/14/2016		<0.000203					
2/6/2017							
2/7/2017							
2/8/2017	<0.000203	<0.000203					
3/27/2017							
3/28/2017		<0.000203					
3/29/2017							
3/30/2017	<0.000203						
4/24/2017							
4/26/2017	<0.000203	<0.000203					
6/5/2017							
6/6/2017	<0.000203	<0.000203					
6/7/2017							
2/19/2018							
2/20/2018		<0.000203					
2/21/2018	<0.000203						
5/15/2018		<0.000203					
5/16/2018	<0.000203						
10/15/2018							
10/16/2018	<0.000203	<0.000203					
10/17/2018							
2/20/2019				<0.000203			
2/21/2019							
2/26/2019					<0.000203		
2/27/2019							<0.000203
4/16/2019							
4/17/2019	<0.000203	<0.000203					
9/23/2019				<0.000203			0.00109 (J)
9/24/2019		<0.000203			<0.000203		
9/25/2019	<0.000203						
3/16/2020							
3/17/2020				<0.000203			
3/18/2020		<0.000203			<0.000203		
3/23/2020			<0.000203				
3/24/2020						<0.000203	
3/25/2020	<0.000203						0.0019 (J)
5/12/2020							
5/13/2020	<0.000203						
9/17/2020				<0.000203	<0.000203	<0.000203	
9/21/2020							0.00309 (J)
9/22/2020	<0.000203						
9/23/2020		<0.000203	<0.000203				
2/1/2021	<0.000203						

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Lead (mg/L) Analysis Run 5/23/2023 3:39 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-2	GS-AP-MW-21	GS-AP-MW-21V	GS-AP-MW-23H	GS-AP-MW-24H	GS-AP-MW-25HA	GS-AP-MW-26H
2/2/2021					<0.000203		
2/3/2021				<0.000203			
2/8/2021		<0.000203					
2/9/2021			<0.000203				<0.000203
2/10/2021						<0.000203	
7/27/2021				<0.000203			
8/2/2021							
8/3/2021					<0.000203		
8/4/2021	<0.000203	<0.000203					
8/9/2021							
8/10/2021							<0.000203
8/11/2021			<0.000203				
8/12/2021						<0.000203	
2/8/2022		<0.000203	<0.000203				
2/14/2022				<0.000203			
2/15/2022					<0.000203		<0.000203
2/16/2022						0.00018 (J)	
2/22/2022	<0.000203						
2/23/2022							
2/28/2022							
7/19/2022	<0.000203						
7/20/2022							
7/26/2022				<0.000203			
7/27/2022					<0.000203		
8/2/2022							
8/3/2022						0.000206	
8/8/2022							
8/9/2022			<0.000203				
8/10/2022		<0.000203					<0.000203
3/14/2023				<0.000203			
3/15/2023					<0.000203		
3/20/2023							
3/21/2023		<0.000203	<0.000203				
3/22/2023	<0.000203					<0.000203	<0.000203

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Lead (mg/L) Analysis Run 5/23/2023 3:39 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-28H	GS-AP-MW-29H	GS-AP-MW-3	GS-AP-MW-30HA	GS-AP-MW-31H	GS-AP-MW-32H	GS-AP-MW-33HO	GS-AP-MW-34HO	GS-AP-MW-35HO
2/27/2019		<0.000203							
3/13/2019	0.00208 (J)								
9/24/2019		<0.000203							
9/25/2019	<0.000203								
3/16/2020	<0.000203							<0.0002	
3/17/2020							<0.0002		<0.000203
3/18/2020				<0.005	<0.000203				
3/24/2020						<0.000203			
3/25/2020		<0.000203							
5/12/2020	<0.000203							<0.0002	<0.000203
5/13/2020				<0.005			<0.0002		
9/15/2020							<0.0002		
9/16/2020								<0.0002	<0.000203
9/17/2020									
9/21/2020				<0.005		<0.000203			
9/22/2020	<0.000203	<0.000203			<0.000203				
2/1/2021					0.000102 (J)				
2/2/2021									
2/3/2021		<0.000203					<0.0002	<0.0002	
2/4/2021									<0.000203
2/8/2021									
2/9/2021									
2/10/2021						<0.000203			
2/17/2021	<0.000203		<0.000203	0.00028					
7/27/2021							<0.0002	<0.0002	
7/28/2021									<0.000203
8/2/2021				0.00017 (J)	<0.000203				
8/3/2021			<0.000203						
8/4/2021		<0.000203							
8/9/2021	<0.000203								
8/10/2021						<0.000203			
2/8/2022				0.00012 (J)	<0.000203				
2/9/2022							<0.0002	<0.0002	<0.000203
2/14/2022	<0.000203	<0.000203				<0.000203			
2/15/2022									
2/16/2022			<0.000203						
2/21/2022									
2/22/2022									
7/20/2022			<0.000203						
7/26/2022									
7/27/2022	<0.000203					6.9E-05 (J)			
8/2/2022									
8/3/2022		<0.000203		0.000194 (J)	<0.000203				
8/10/2022									
3/8/2023								0.00103	<0.000203
3/13/2023				0.000162 (J)					
3/14/2023	<0.000203						0.000147 (J)		
3/15/2023									
3/21/2023			<0.000203			<0.000203			
3/22/2023									
3/27/2023					<0.000203				
3/28/2023		<0.000203							

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Lead (mg/L) Analysis Run 5/23/2023 3:39 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-36H	GS-AP-MW-38H	GS-AP-MW-40H	GS-AP-MW-41HD	GS-AP-MW-41HS	GS-AP-MW-42H	GS-AP-MW-43HO
2/27/2019							
3/13/2019							
9/24/2019							
9/25/2019							
3/16/2020							
3/17/2020	<0.000203						
3/18/2020				<0.000203			
3/24/2020		<0.000203				<0.000203	
3/25/2020							<0.000203
5/12/2020							
5/13/2020	<0.000203						
9/15/2020							
9/16/2020							
9/17/2020	<0.000203			<0.000203			
9/21/2020							
9/22/2020		<0.000203	<0.000203			<0.000203	<0.000203
2/1/2021							
2/2/2021			<0.000203				
2/3/2021						<0.000203	
2/4/2021							
2/8/2021				<0.000203	<0.000203		
2/9/2021		8.23E-05 (J)					
2/10/2021							
2/17/2021	8.8E-05 (J)						0.000328
7/27/2021							
7/28/2021					<0.000203		
8/2/2021							
8/3/2021				<0.000203			
8/4/2021	<0.000203	<0.000203				<0.000203	0.00027
8/9/2021							
8/10/2021			<0.000203				
2/8/2022					<0.000203		
2/9/2022							
2/14/2022	<0.000203						
2/15/2022			<0.000203	<0.000203			
2/16/2022						<0.000203	
2/21/2022							0.00012 (J)
2/22/2022		<0.000203					
7/20/2022	<0.000203						
7/26/2022					<0.000203		
7/27/2022				<0.000203		<0.000203	
8/2/2022			<0.000203				
8/3/2022							<0.000203
8/10/2022		<0.000203					
3/8/2023							
3/13/2023					<0.000203		
3/14/2023							
3/15/2023	0.00019 (J)			<0.000203		<0.000203	
3/21/2023							
3/22/2023			<0.000203				
3/27/2023							
3/28/2023		<0.000203					<0.000203

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Lead (mg/L) Analysis Run 5/23/2023 3:39 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-44HO	GS-AP-MW-6D	GS-AP-MW-6S	GS-AP-MW-6V	GS-AP-MW-7	GS-AP-MW-8 (bg)	GS-AP-MW-9V	GS-AP-PZ-16	GS-AP-PZ-22
8/2/2016					0.00279 (J)				
8/3/2016		<0.000203	<0.000203			<0.000203			
9/20/2016		<0.000203	<0.000203						
9/21/2016					0.0024 (J)	<0.000203			
10/24/2016		<0.000203			<0.005				
10/25/2016						<0.000203			
10/26/2016			<0.000203						
12/12/2016		<0.000203	<0.000203		<0.005				
12/13/2016						<0.000203			
2/6/2017		<0.000203	<0.000203		<0.005	<0.000203			
3/27/2017		<0.000203	<0.000203						
3/28/2017					<0.005	<0.000203			
4/24/2017		<0.000203	<0.000203		<0.005	<0.000203			
6/6/2017		<0.000203	<0.000203						
6/7/2017					<0.005	<0.000203			
2/19/2018		<0.000203	<0.000203		<0.005	<0.000203			
5/14/2018		<0.000203	<0.000203						
5/15/2018					<0.005	<0.000203			
10/15/2018		<0.000203	<0.000203		<0.005				
10/16/2018						<0.000203			
4/16/2019		<0.000203	<0.000203			<0.000203			
4/23/2019					0.00207 (J)				
9/23/2019		<0.000203	<0.000203						
9/24/2019					<0.005	<0.000203			
3/17/2020		<0.000203	<0.000203		0.00386 (J)				
3/18/2020						<0.000203			
3/23/2020							<0.000203		
3/24/2020								<0.005	<0.000203
8/27/2020	<0.000203								
9/8/2020				<0.005					
9/15/2020	<0.000203			<0.005					
9/16/2020			<0.000203		0.00295 (J)				
9/17/2020		<0.000203						<0.005	<0.000203
9/21/2020						<0.000203			
9/22/2020							<0.000203		
2/2/2021					0.00243	8.09E-05 (J)	<0.000203		<0.000203
2/3/2021	<0.000203	<0.000203	<0.000203	0.000155 (J)					
2/17/2021								0.000148 (J)	
7/27/2021	<0.000203	<0.000203	8E-05 (J)						
8/2/2021				0.00023					
8/3/2021									<0.000203
8/9/2021					0.00119			0.00024	
8/10/2021						0.00015 (J)	<0.000203		
2/8/2022					0.0008				
2/9/2022	<0.000203			0.00019 (J)					
2/14/2022		<0.000203	<0.000203						<0.000203
2/15/2022								0.00066	
2/16/2022						<0.000203			
2/21/2022							<0.000203		
2/22/2022									
2/28/2022									
3/1/2022									

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Lead (mg/L) Analysis Run 5/23/2023 3:39 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-44HO	GS-AP-MW-6D	GS-AP-MW-6S	GS-AP-MW-6V	GS-AP-MW-7	GS-AP-MW-8 (bg)	GS-AP-MW-9V	GS-AP-PZ-16	GS-AP-PZ-22
7/19/2022							<0.000203		
7/20/2022									
7/25/2022		0.000171 (J)		0.000278	0.000431				
7/26/2022			9.8E-05 (J)					0.000603	
8/2/2022						8.3E-05 (J)			
8/3/2022									
8/9/2022									<0.000203
3/6/2023	<0.000203								
3/8/2023				0.00037					
3/14/2023		<0.000203	<0.000203		0.000188 (J)				
3/15/2023									
3/21/2023								0.000192 (J)	<0.000203
3/22/2023									
3/27/2023						<0.000203	<0.000203		
3/28/2023									

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Lead (mg/L)   Analysis Run 5/23/2023 3:39 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

	GS-AP-MW-10R	GS-AP-MW-11R	GS-AP-MW-13R	GS-AP-MW-14R	GS-AP-MW-18R	GS-AP-MW-18VR	GS-AP-MW-1R
8/2/2016							
8/3/2016							
9/20/2016							
9/21/2016							
10/24/2016							
10/25/2016							
10/26/2016							
12/12/2016							
12/13/2016							
2/6/2017							
3/27/2017							
3/28/2017							
4/24/2017							
6/6/2017							
6/7/2017							
2/19/2018							
5/14/2018							
5/15/2018							
10/15/2018							
10/16/2018							
4/16/2019							
4/23/2019							
9/23/2019							
9/24/2019							
3/17/2020							
3/18/2020							
3/23/2020							
3/24/2020							
8/27/2020							
9/8/2020							
9/15/2020							
9/16/2020							
9/17/2020							
9/21/2020							
9/22/2020							
2/2/2021							
2/3/2021							
2/17/2021							
7/27/2021							
8/2/2021							
8/3/2021							
8/9/2021							
8/10/2021							
2/8/2022							
2/9/2022							
2/14/2022							
2/15/2022							
2/16/2022							
2/21/2022							
2/22/2022					8E-05 (J)	9E-05 (J)	
2/28/2022				0.00045			
3/1/2022	0.00013 (J)	<0.000203	0.00013 (J)				0.00022

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Lead (mg/L) Analysis Run 5/23/2023 3:39 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-10R	GS-AP-MW-11R	GS-AP-MW-13R	GS-AP-MW-14R	GS-AP-MW-18R	GS-AP-MW-18VR	GS-AP-MW-1R
7/19/2022		<0.000203					
7/20/2022			<0.000203				
7/25/2022							
7/26/2022							
8/2/2022							0.000135 (J)
8/3/2022	<0.000203			<0.000203	<0.000203		
8/9/2022						0.000634	
3/6/2023							
3/8/2023							
3/14/2023							
3/15/2023				<0.000203			
3/21/2023							
3/22/2023		<0.000203					
3/27/2023	<0.000203		<0.000203			<0.000203	0.000134 (J)
3/28/2023					<0.000203		

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Lead (mg/L)   Analysis Run 5/23/2023 3:39 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

	GS-AP-MW-23V	GS-AP-MW-27HR	GS-AP-MW-31V	GS-AP-MW-36V	GS-AP-MW-37HR	GS-AP-MW-3V	GS-AP-MW-45V	GS-AP-MW-47	GS-AP-MW-5R
2/21/2022									
2/22/2022		<0.000203	0.00028	0.00016 (J)					
2/23/2022	0.00021					0.00014 (J)	7E-05 (J)		
2/28/2022					<0.000203			<0.000203	
3/1/2022									<0.000203
7/19/2022									
7/20/2022						7.2E-05 (J)			
7/26/2022	<0.000203				<0.000203			<0.000203	
7/27/2022		<0.000203		<0.000203					
8/2/2022									<0.000203
8/3/2022			0.000166 (J)						
8/8/2022							<0.000203		
3/14/2023	<0.000203	<0.000203		<0.000203					
3/15/2023					<0.000203			<0.000203	
3/20/2023									<0.000203
3/21/2023						<0.000203			
3/27/2023			<0.000203						
3/28/2023							<0.000203		

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Lead (mg/L) Analysis Run 5/23/2023 3:39 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-9R	GS-AP-PZ-18R	GS-AP-MW-46
2/21/2022		<0.000203	
2/22/2022			
2/23/2022			<0.000203
2/28/2022			
3/1/2022	<0.000203		
7/19/2022	<0.000203		
7/20/2022			
7/26/2022			
7/27/2022		<0.000203	
8/2/2022			<0.000203
8/3/2022			
8/8/2022			
3/14/2023			
3/15/2023			
3/20/2023			
3/21/2023			
3/27/2023	<0.000203		<0.000203
3/28/2023		<0.000203	

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Lithium (mg/L) Analysis Run 5/23/2023 3:39 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-12	GS-AP-MW-12V	GS-AP-MW-13 (bg)	GS-AP-MW-15	GS-AP-MW-15V	GS-AP-MW-16D	GS-AP-MW-17	GS-AP-MW-17V ...	GS-AP-MW-19
8/1/2016				0.393		0.036 (J)	0.0479 (J)		0.0252 (J)
8/2/2016			0.0121 (J)						
8/3/2016	0.0265 (J)								
9/19/2016						0.0346 (J)	0.0467 (J)		
9/20/2016	0.0225 (J)		0.0116 (J)	0.144					
9/21/2016									0.0223 (J)
10/24/2016							0.0462 (J)		0.0247 (J)
10/25/2016	0.0217 (J)		0.0114 (J)	0.152		0.0353 (J)			
12/13/2016	0.026 (J)		0.0116 (J)			0.0361 (J)	0.0296 (J)		0.0312 (J)
12/14/2016				0.136					
2/6/2017							0.064		
2/7/2017									0.0406 (J)
2/8/2017	0.0315 (J)		0.0118 (J)	0.15		0.0401 (J)			
3/27/2017							0.0683		
3/28/2017				0.137					0.0309 (J)
3/29/2017	0.0308 (J)		0.0118 (J)			0.0379 (J)			
3/30/2017									
4/24/2017							0.0534		
4/26/2017	0.0248 (J)		<0.02	0.123		0.0318 (J)			0.0267 (J)
6/5/2017							0.0574		
6/6/2017				0.123		0.032 (J)			0.0311 (J)
6/7/2017	0.0234 (J)		<0.02						
2/19/2018							0.0481 (J)		
2/20/2018	0.058		<0.02	0.149					
2/21/2018						0.0327 (J)			0.0472 (J)
5/15/2018	0.0489 (J)		0.0101	0.159			0.0551		
5/16/2018						0.0337 (J)			0.0391 (J)
10/15/2018				0.297			0.0606		
10/16/2018	0.0341								0.0406
10/17/2018			<0.02			0.0336			
2/20/2019								0.0671	
2/21/2019		0.0468							
2/26/2019									
2/27/2019									
4/16/2019	0.0261		0.0101 (J)						
4/17/2019				0.19		0.0349	0.0574		0.0429
9/23/2019							0.0583		
9/24/2019				0.469		0.0362		0.0809	0.0392
9/25/2019	0.028	0.0611							
3/16/2020							0.0665		
3/17/2020									
3/18/2020	0.0297			0.378	0.208				
3/23/2020									
3/24/2020		0.0462				0.035			0.0417
3/25/2020								0.0646	
5/12/2020							0.0602		
5/13/2020									
9/17/2020									
9/21/2020					0.116		0.0579		
9/22/2020						0.0343			0.0435
9/23/2020	0.0279	0.0409		0.414				0.0574	
2/1/2021	0.0249	0.0384							

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Lithium (mg/L)   Analysis Run 5/23/2023 3:39 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

	GS-AP-MW-12	GS-AP-MW-12V	GS-AP-MW-13 (bg)	GS-AP-MW-15	GS-AP-MW-15V	GS-AP-MW-16D	GS-AP-MW-17	GS-AP-MW-17V ...	GS-AP-MW-19
2/2/2021							0.0634	0.0585	
2/3/2021									
2/8/2021									0.0368
2/9/2021				0.493	0.122				
2/10/2021						0.0376			
7/27/2021									
8/2/2021								0.056	
8/3/2021				0.536	0.0986		0.068		
8/4/2021									
8/9/2021	0.0354	0.0398				0.0326			
8/10/2021									0.0305
8/11/2021									
8/12/2021									
2/8/2022									
2/14/2022							0.0572	0.0499	
2/15/2022						0.033			
2/16/2022				0.263	0.0788				
2/22/2022									0.0266
2/23/2022		0.0279							
2/28/2022	0.0523								
7/19/2022	0.0631								
7/20/2022		0.0309							
7/26/2022									
7/27/2022									
8/2/2022				0.529	0.096	0.0343			
8/3/2022									0.0416
8/8/2022							0.0646		
8/9/2022								0.0555	
8/10/2022									
3/14/2023									
3/15/2023									
3/20/2023				0.305	0.0787				
3/21/2023						0.034			0.0402
3/22/2023	0.0468	0.0304					0.0586	0.0507	

Time Series

Constituent: Lithium (mg/L) Analysis Run 5/23/2023 3:39 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-2	GS-AP-MW-21	GS-AP-MW-21V	GS-AP-MW-23H	GS-AP-MW-24H	GS-AP-MW-25HA	GS-AP-MW-26H
8/1/2016							
8/2/2016	0.0495 (J)	0.145					
8/3/2016							
9/19/2016	0.049 (J)						
9/20/2016							
9/21/2016		0.153					
10/24/2016	0.0488 (J)						
10/25/2016		0.171					
12/13/2016	0.0483 (J)						
12/14/2016		0.182					
2/6/2017							
2/7/2017							
2/8/2017	0.0644	0.178					
3/27/2017							
3/28/2017		0.161					
3/29/2017							
3/30/2017	0.0597						
4/24/2017							
4/26/2017	0.0459 (J)	0.126					
6/5/2017							
6/6/2017	0.0491 (J)	0.135					
6/7/2017							
2/19/2018							
2/20/2018		0.158					
2/21/2018	0.0534						
5/15/2018		0.174					
5/16/2018	0.0451 (J)						
10/15/2018							
10/16/2018	0.0511	0.219					
10/17/2018							
2/20/2019				0.031			
2/21/2019							
2/26/2019					0.0282		
2/27/2019							0.0966
4/16/2019							
4/17/2019	0.0421	0.312					
9/23/2019				0.0324			0.0945
9/24/2019		0.276			0.0275		
9/25/2019	0.0457						
3/16/2020							
3/17/2020				0.0327			
3/18/2020		0.379			0.0264		
3/23/2020			0.146				
3/24/2020						0.0461	
3/25/2020	0.0434						0.0946
5/12/2020							
5/13/2020	0.0409						
9/17/2020				0.0333	0.0237	0.0449	
9/21/2020							0.0958
9/22/2020	0.0395						
9/23/2020		0.179	0.137				
2/1/2021	0.0445						

Time Series

Constituent: Lithium (mg/L) Analysis Run 5/23/2023 3:39 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-2	GS-AP-MW-21	GS-AP-MW-21V	GS-AP-MW-23H	GS-AP-MW-24H	GS-AP-MW-25HA	GS-AP-MW-26H
2/2/2021					0.0247		
2/3/2021				0.0319			
2/8/2021		0.239					
2/9/2021			0.124				0.0928
2/10/2021						0.0579	
7/27/2021				0.0309			
8/2/2021							
8/3/2021					0.0249		
8/4/2021	0.0443	0.213					
8/9/2021							
8/10/2021							0.0932
8/11/2021			0.048				
8/12/2021						0.0558	
2/8/2022		0.0996	0.0835				
2/14/2022				0.0306			
2/15/2022					0.0239		0.0917
2/16/2022						0.0504	
2/22/2022	0.0354						
2/23/2022							
2/28/2022							
7/19/2022	0.033						
7/20/2022							
7/26/2022				0.032			
7/27/2022					0.0253		
8/2/2022							
8/3/2022						0.061	
8/8/2022							
8/9/2022			0.0789				
8/10/2022		0.0868					0.0924
3/14/2023				0.0286			
3/15/2023					0.0238		
3/20/2023							
3/21/2023		0.0884	0.11				
3/22/2023	0.0359					0.0564	0.085

Time Series

Constituent: Lithium (mg/L)   Analysis Run 5/23/2023 3:39 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

	GS-AP-MW-28H	GS-AP-MW-29H	GS-AP-MW-3	GS-AP-MW-30HA	GS-AP-MW-31H	GS-AP-MW-32H	GS-AP-MW-33HO	GS-AP-MW-34HO	GS-AP-MW-35HO
2/27/2019		0.07							
3/13/2019	0.0625								
9/24/2019		0.0509							
9/25/2019	0.0619								
3/16/2020	0.0627							0.205	
3/17/2020							0.0516		0.074
3/18/2020				0.0528	0.0347				
3/24/2020						0.0428			
3/25/2020		0.0528							
5/12/2020	0.0569							0.18	0.0693
5/13/2020				0.0536			0.0455		
9/15/2020							0.0479		
9/16/2020								0.18	0.0685
9/17/2020									
9/21/2020				0.0494		0.0421			
9/22/2020	0.0574	0.0586			0.0357				
2/1/2021					0.0417				
2/2/2021									
2/3/2021		0.0915					0.0534	0.249	
2/4/2021									0.0734
2/8/2021									
2/9/2021									
2/10/2021						0.0471			
2/17/2021	0.0686		0.0995	0.0548					
7/27/2021							0.0563	0.207	
7/28/2021									0.0722
8/2/2021				0.0582	0.0411				
8/3/2021			0.088						
8/4/2021		0.0809							
8/9/2021	0.0633								
8/10/2021						0.0466			
2/8/2022				0.0533	0.0366				
2/9/2022							0.0517	0.185	0.0673
2/14/2022	0.0551	0.067				0.0407			
2/15/2022									
2/16/2022			0.0732						
2/21/2022									
2/22/2022									
7/20/2022			0.07						
7/26/2022									
7/27/2022	0.0603					0.0456			
8/2/2022									
8/3/2022		0.0811		0.07	0.0512				
8/10/2022									
3/8/2023								0.14	0.0633
3/13/2023				0.0516					
3/14/2023	0.0561						0.044		
3/15/2023									
3/21/2023			0.075			0.0418			
3/22/2023									
3/27/2023					0.0435				
3/28/2023		0.0656							

Time Series

Constituent: Lithium (mg/L) Analysis Run 5/23/2023 3:39 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-36H	GS-AP-MW-38H	GS-AP-MW-40H	GS-AP-MW-41HD	GS-AP-MW-41HS	GS-AP-MW-42H	GS-AP-MW-43HO
2/27/2019							
3/13/2019							
9/24/2019							
9/25/2019							
3/16/2020							
3/17/2020	0.0342						
3/18/2020				0.311			
3/24/2020		0.0632				0.0346	
3/25/2020							0.0505
5/12/2020							
5/13/2020	0.0337						
9/15/2020							
9/16/2020							
9/17/2020	0.035			0.341			
9/21/2020							
9/22/2020		0.0591	0.0405			0.0333	0.0587
2/1/2021							
2/2/2021			0.0571				
2/3/2021						0.0356	
2/4/2021							
2/8/2021				0.356	0.14		
2/9/2021		0.0676					
2/10/2021							
2/17/2021	0.039						0.0723
7/27/2021							
7/28/2021					0.178		
8/2/2021							
8/3/2021				0.369			
8/4/2021	0.0455	0.0672				0.0348	0.0706
8/9/2021							
8/10/2021			0.0567				
2/8/2022					0.0817		
2/9/2022							
2/14/2022	0.0417						
2/15/2022			0.0539	0.366			
2/16/2022						0.0313	
2/21/2022							0.0579
2/22/2022		0.0594					
7/20/2022	0.0303						
7/26/2022					0.0954		
7/27/2022				0.413		0.035	
8/2/2022			0.0705				
8/3/2022							0.0749
8/10/2022		0.0705					
3/8/2023							
3/13/2023					0.0511		
3/14/2023							
3/15/2023	0.0449			0.341		0.0309	
3/21/2023							
3/22/2023			0.0548				
3/27/2023							
3/28/2023		0.0603					0.0686

Time Series

Constituent: Lithium (mg/L)   Analysis Run 5/23/2023 3:39 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

	GS-AP-MW-44HO	GS-AP-MW-6D	GS-AP-MW-6S	GS-AP-MW-6V	GS-AP-MW-7	GS-AP-MW-8 (bg)	GS-AP-MW-9V	GS-AP-PZ-16	GS-AP-PZ-22
8/2/2016					0.144				
8/3/2016		0.204	<0.02			<0.02			
9/20/2016		0.223	<0.02						
9/21/2016					0.136	<0.02			
10/24/2016		0.243			0.135				
10/25/2016						<0.02			
10/26/2016			0.0199 (J)						
12/12/2016		0.22	<0.02		0.146				
12/13/2016						<0.02			
2/6/2017		0.247	<0.02		0.182	<0.02			
3/27/2017		0.263	<0.02						
3/28/2017					0.175	<0.02			
4/24/2017		0.237	<0.02		0.143	<0.02			
6/6/2017		0.259	<0.02						
6/7/2017					0.152	<0.02			
2/19/2018		0.213	<0.02		0.143	<0.02			
5/14/2018		0.239	0.0238 (J)						
5/15/2018					0.151	<0.02			
10/15/2018		0.236	0.03		0.155				
10/16/2018						<0.02			
4/16/2019		0.267	<0.02			<0.02			
4/23/2019					0.144				
9/23/2019		0.264	0.0105 (J)						
9/24/2019					0.156	<0.02			
3/17/2020		0.292	0.0695		0.161				
3/18/2020						<0.02			
3/23/2020							0.0309		
3/24/2020								0.0714	0.0734
8/27/2020	0.0411								
9/8/2020				0.138					
9/15/2020	0.0494			0.136					
9/16/2020			0.066		0.16				
9/17/2020		0.299						0.073	0.0862
9/21/2020						<0.02			
9/22/2020							0.0293		
2/2/2021					0.183	0.00796 (J)	0.0299		0.0743
2/3/2021	0.063	0.312	0.0455	0.156					
2/17/2021								0.0762	
7/27/2021	0.0567	0.326	0.0576						
8/2/2021				0.152					
8/3/2021									0.0685
8/9/2021					0.205			0.0657	
8/10/2021						0.00832 (J)	0.031		
2/8/2022					0.203				
2/9/2022	0.0478			0.121					
2/14/2022		0.302	0.0625						0.055
2/15/2022								0.0614	
2/16/2022						0.00826 (J)			
2/21/2022							0.0293		
2/22/2022									
2/28/2022									
3/1/2022									

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Lithium (mg/L) Analysis Run 5/23/2023 3:39 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-44HO	GS-AP-MW-6D	GS-AP-MW-6S	GS-AP-MW-6V	GS-AP-MW-7	GS-AP-MW-8 (bg)	GS-AP-MW-9V	GS-AP-PZ-16	GS-AP-PZ-22
7/19/2022							0.029		
7/20/2022									
7/25/2022		0.348		0.138	0.227				
7/26/2022			0.0665					0.0839	
8/2/2022						0.01 (J)			
8/3/2022									
8/9/2022									0.071
3/6/2023	0.0451								
3/8/2023				0.126					
3/14/2023		0.308	0.0468		0.207				
3/15/2023									
3/21/2023								0.0522	0.094
3/22/2023									
3/27/2023						0.00968 (J)	0.0298		
3/28/2023									

Time Series

Constituent: Lithium (mg/L) Analysis Run 5/23/2023 3:39 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-10R	GS-AP-MW-11R	GS-AP-MW-13R	GS-AP-MW-14R	GS-AP-MW-18R	GS-AP-MW-18VR	GS-AP-MW-1R
8/2/2016							
8/3/2016							
9/20/2016							
9/21/2016							
10/24/2016							
10/25/2016							
10/26/2016							
12/12/2016							
12/13/2016							
2/6/2017							
3/27/2017							
3/28/2017							
4/24/2017							
6/6/2017							
6/7/2017							
2/19/2018							
5/14/2018							
5/15/2018							
10/15/2018							
10/16/2018							
4/16/2019							
4/23/2019							
9/23/2019							
9/24/2019							
3/17/2020							
3/18/2020							
3/23/2020							
3/24/2020							
8/27/2020							
9/8/2020							
9/15/2020							
9/16/2020							
9/17/2020							
9/21/2020							
9/22/2020							
2/2/2021							
2/3/2021							
2/17/2021							
7/27/2021							
8/2/2021							
8/3/2021							
8/9/2021							
8/10/2021							
2/8/2022							
2/9/2022							
2/14/2022							
2/15/2022							
2/16/2022							
2/21/2022							
2/22/2022					<0.02	0.0446	
2/28/2022				0.0228			
3/1/2022	0.0349	0.0281	0.0272				0.0309

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Lithium (mg/L) Analysis Run 5/23/2023 3:39 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-10R	GS-AP-MW-11R	GS-AP-MW-13R	GS-AP-MW-14R	GS-AP-MW-18R	GS-AP-MW-18VR	GS-AP-MW-1R
7/19/2022		0.0289					
7/20/2022			0.027				
7/25/2022							
7/26/2022							
8/2/2022							0.0385
8/3/2022	0.0391			0.0265	0.00863 (J)		
8/9/2022						0.059	
3/6/2023							
3/8/2023							
3/14/2023							
3/15/2023				0.0248			
3/21/2023							
3/22/2023		0.0317					
3/27/2023	0.0362		0.0261			0.0536	0.0319
3/28/2023					<0.02		

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Lithium (mg/L) Analysis Run 5/23/2023 3:39 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-23V	GS-AP-MW-27HR	GS-AP-MW-31V	GS-AP-MW-36V	GS-AP-MW-37HR	GS-AP-MW-3V	GS-AP-MW-45V	GS-AP-MW-47	GS-AP-MW-5R
2/21/2022									
2/22/2022		0.042	0.0316	0.0383					
2/23/2022	0.041					0.0489	0.0374		
2/28/2022					0.0312			0.04	
3/1/2022									0.0644
7/19/2022									
7/20/2022						0.071			
7/26/2022	0.0419				0.0357			0.0429	
7/27/2022		0.0935		0.0378					
8/2/2022									0.0827
8/3/2022			0.0429						
8/8/2022							0.0486		
3/14/2023	0.0406	0.108		0.0402					
3/15/2023					0.0345			0.0394	
3/20/2023									0.0711
3/21/2023						0.0825			
3/27/2023			0.0508						
3/28/2023							0.0531		

Time Series

Constituent: Lithium (mg/L)   Analysis Run 5/23/2023 3:39 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

	GS-AP-MW-9R	GS-AP-PZ-18R	GS-AP-MW-46
2/21/2022		0.0157 (J)	
2/22/2022			
2/23/2022			0.0653
2/28/2022			
3/1/2022	0.0361		
7/19/2022	0.0356		
7/20/2022			
7/26/2022			
7/27/2022		0.0172 (J)	
8/2/2022			0.0756
8/3/2022			
8/8/2022			
3/14/2023			
3/15/2023			
3/20/2023			
3/21/2023			
3/27/2023	0.0351		0.0593
3/28/2023		0.0155 (J)	

Time Series

Constituent: Mercury (mg/L)   Analysis Run 5/23/2023 3:39 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

	GS-AP-MW-12	GS-AP-MW-12V	GS-AP-MW-13 (bg)	GS-AP-MW-15	GS-AP-MW-15V	GS-AP-MW-16D	GS-AP-MW-17	GS-AP-MW-17V ...	GS-AP-MW-19
8/1/2016				<0.0005		<0.0005	<0.0005		<0.0005
8/2/2016			<0.0005						
8/3/2016	<0.0005								
9/19/2016						<0.0005	<0.0005		
9/20/2016	<0.0005		<0.0005	<0.0005					
9/21/2016									<0.0005
10/24/2016							<0.0005		<0.0005
10/25/2016	<0.0005		<0.0005	<0.0005		<0.0005			
12/13/2016	<0.0005		<0.0005			<0.0005	<0.0005		<0.0005
12/14/2016				<0.0005					
2/6/2017							<0.0005		
2/7/2017									<0.0005
2/8/2017	<0.0005		<0.0005	<0.0005		<0.0005			
3/27/2017							<0.0005		
3/28/2017				<0.0005					<0.0005
3/29/2017	<0.0005		<0.0005			<0.0005			
3/30/2017									
4/24/2017							<0.0005		
4/26/2017	<0.0005		<0.0005	<0.0005		<0.0005			<0.0005
6/5/2017							<0.0005		
6/6/2017				<0.0005		<0.0005			<0.0005
6/7/2017	<0.0005		<0.0005						
2/19/2018							<0.0005		
2/20/2018	<0.0005		<0.0005	<0.0005					
2/21/2018						<0.0005			<0.0005
5/15/2018	<0.0005		<0.0005	<0.0005			<0.0005		
5/16/2018						<0.0005			<0.0005
10/15/2018				<0.0005			<0.0005		
10/16/2018	<0.0005								<0.0005
10/17/2018			<0.0005			<0.0005			
2/20/2019								<0.0005	
2/21/2019		<0.0005							
2/26/2019									
2/27/2019									
4/16/2019	<0.0005		<0.0005						
4/17/2019				<0.0005		<0.0005	<0.0005		<0.0005
9/23/2019							<0.0005		
9/24/2019				<0.0005		<0.0005		<0.0005	<0.0005
9/25/2019	<0.0005	<0.0005							
3/16/2020							<0.0005		
3/17/2020									
3/18/2020	<0.0005			<0.0005	<0.0005				
3/23/2020									
3/24/2020		<0.0005				<0.0005			<0.0005
3/25/2020								<0.0005	
5/12/2020							<0.0005		
5/13/2020									
9/17/2020									
9/21/2020					<0.0005		<0.0005		
9/22/2020						<0.0005			<0.0005
9/23/2020	<0.0005	<0.0005		<0.0005				<0.0005	
2/1/2021	<0.0005	<0.0005							

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Mercury (mg/L) Analysis Run 5/23/2023 3:39 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-12	GS-AP-MW-12V	GS-AP-MW-13 (bg)	GS-AP-MW-15	GS-AP-MW-15V	GS-AP-MW-16D	GS-AP-MW-17	GS-AP-MW-17V ...	GS-AP-MW-19
2/2/2021							<0.0005	<0.0005	
2/3/2021									
2/8/2021									<0.0005
2/9/2021				<0.0005	<0.0005				
2/10/2021						<0.0005			
7/27/2021									
8/2/2021								<0.0005	
8/3/2021				<0.0005	<0.0005		<0.0005		
8/4/2021									
8/9/2021	<0.0005	<0.0005				<0.0005			
8/10/2021									<0.0005
8/11/2021									
8/12/2021									
2/8/2022									
2/14/2022							<0.0005	<0.0005	
2/15/2022						<0.0005			
2/16/2022				<0.0005	<0.0005				
2/22/2022									<0.0005
2/23/2022		<0.0005							
2/28/2022	<0.0005								
7/19/2022	<0.0005								
7/20/2022		<0.0005							
7/26/2022									
7/27/2022									
8/2/2022				<0.0005	<0.0005	<0.0005			
8/3/2022									<0.0005
8/8/2022							<0.0005		
8/9/2022								<0.0005	
8/10/2022									
3/14/2023									
3/15/2023									
3/20/2023				<0.0005	<0.0005				
3/21/2023						<0.0005			<0.0005
3/22/2023	<0.0005	<0.0005					<0.0005	<0.0005	

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Mercury (mg/L) Analysis Run 5/23/2023 3:39 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-2	GS-AP-MW-21	GS-AP-MW-21V	GS-AP-MW-23H	GS-AP-MW-24H	GS-AP-MW-25HA	GS-AP-MW-26H
8/1/2016							
8/2/2016	<0.0005	<0.0005					
8/3/2016							
9/19/2016	<0.0005						
9/20/2016							
9/21/2016		<0.0005					
10/24/2016	<0.0005						
10/25/2016		<0.0005					
12/13/2016	<0.0005						
12/14/2016		<0.0005					
2/6/2017							
2/7/2017							
2/8/2017	<0.0005	<0.0005					
3/27/2017							
3/28/2017		<0.0005					
3/29/2017							
3/30/2017	<0.0005						
4/24/2017							
4/26/2017	<0.0005	<0.0005					
6/5/2017							
6/6/2017	<0.0005	<0.0005					
6/7/2017							
2/19/2018							
2/20/2018		<0.0005					
2/21/2018	<0.0005						
5/15/2018		<0.0005					
5/16/2018	<0.0005						
10/15/2018							
10/16/2018	<0.0005	<0.0005					
10/17/2018							
2/20/2019				<0.0005			
2/21/2019							
2/26/2019					<0.0005		
2/27/2019							<0.0005
4/16/2019							
4/17/2019	<0.0005	<0.0005					
9/23/2019				<0.0005			<0.0005
9/24/2019		<0.0005			<0.0005		
9/25/2019	<0.0005						
3/16/2020							
3/17/2020				<0.0005			
3/18/2020		<0.0005			<0.0005		
3/23/2020			<0.0005				
3/24/2020						<0.0005	
3/25/2020	<0.0005						<0.0005
5/12/2020							
5/13/2020	<0.0005						
9/17/2020				<0.0005	<0.0005	<0.0005	
9/21/2020							<0.0005
9/22/2020	<0.0005						
9/23/2020		<0.0005	<0.0005				
2/1/2021	<0.0005						

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Mercury (mg/L) Analysis Run 5/23/2023 3:39 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-2	GS-AP-MW-21	GS-AP-MW-21V	GS-AP-MW-23H	GS-AP-MW-24H	GS-AP-MW-25HA	GS-AP-MW-26H
2/2/2021					<0.0005		
2/3/2021				<0.0005			
2/8/2021		<0.0005					
2/9/2021			<0.0005				<0.0005
2/10/2021						<0.0005	
7/27/2021				<0.0005			
8/2/2021							
8/3/2021					<0.0005		
8/4/2021	<0.0005	<0.0005					
8/9/2021							
8/10/2021							<0.0005
8/11/2021			<0.0005				
8/12/2021						<0.0005	
2/8/2022		<0.0005	<0.0005				
2/14/2022				<0.0005			
2/15/2022					<0.0005		<0.0005
2/16/2022						<0.0005	
2/22/2022	<0.0005						
2/23/2022							
2/28/2022							
7/19/2022	<0.0005						
7/20/2022							
7/26/2022				<0.0005			
7/27/2022					<0.0005		
8/2/2022							
8/3/2022						<0.0005	
8/8/2022							
8/9/2022			<0.0005				
8/10/2022		<0.0005					<0.0005
3/14/2023				<0.0005			
3/15/2023					<0.0005		
3/20/2023							
3/21/2023		<0.0005	<0.0005				
3/22/2023	<0.0005					<0.0005	<0.0005

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Mercury (mg/L) Analysis Run 5/23/2023 3:39 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-28H	GS-AP-MW-29H	GS-AP-MW-3	GS-AP-MW-30HA	GS-AP-MW-31H	GS-AP-MW-32H	GS-AP-MW-33HO	GS-AP-MW-34HO	GS-AP-MW-35HO
2/27/2019		<0.0005							
3/13/2019	<0.0005								
9/24/2019		<0.0005							
9/25/2019	<0.0005								
3/16/2020	<0.0005							<0.0005	
3/17/2020							<0.0005		<0.0005
3/18/2020				<0.0005	<0.0005				
3/24/2020						<0.0005			
3/25/2020		<0.0005							
5/12/2020	<0.0005							<0.0005	<0.0005
5/13/2020				<0.0005			<0.0005		
9/15/2020							<0.0005		
9/16/2020								<0.0005	<0.0005
9/17/2020									
9/21/2020				<0.0005		<0.0005			
9/22/2020	<0.0005	<0.0005			<0.0005				
2/1/2021					<0.0005				
2/2/2021									
2/3/2021		<0.0005					<0.0005	<0.0005	
2/4/2021									<0.0005
2/8/2021									
2/9/2021									
2/10/2021						<0.0005			
2/17/2021	<0.0005		<0.0005	<0.0005					
7/27/2021							<0.0005	<0.0005	
7/28/2021									<0.0005
8/2/2021				<0.0005	<0.0005				
8/3/2021			<0.0005						
8/4/2021		<0.0005							
8/9/2021	<0.0005								
8/10/2021						<0.0005			
2/8/2022				<0.0005	<0.0005				
2/9/2022							<0.0005	<0.0005	<0.0005
2/14/2022	<0.0005	<0.0005				<0.0005			
2/15/2022									
2/16/2022			<0.0005						
2/21/2022									
2/22/2022									
7/20/2022			<0.0005						
7/26/2022									
7/27/2022	<0.0005					<0.0005			
8/2/2022									
8/3/2022		<0.0005		<0.0005	<0.0005				
8/10/2022									
3/8/2023								<0.0005	<0.0005
3/13/2023				<0.0005					
3/14/2023	<0.0005						<0.0005		
3/15/2023									
3/21/2023			<0.0005			<0.0005			
3/22/2023									
3/27/2023					<0.0005				
3/28/2023		<0.0005							

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Mercury (mg/L)   Analysis Run 5/23/2023 3:39 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

	GS-AP-MW-36H	GS-AP-MW-38H	GS-AP-MW-40H	GS-AP-MW-41HD	GS-AP-MW-41HS	GS-AP-MW-42H	GS-AP-MW-43HO
2/27/2019							
3/13/2019							
9/24/2019							
9/25/2019							
3/16/2020							
3/17/2020	<0.0005						
3/18/2020				<0.0005			
3/24/2020		<0.0005				<0.0005	
3/25/2020							<0.0005
5/12/2020							
5/13/2020	<0.0005						
9/15/2020							
9/16/2020							
9/17/2020	<0.0005			<0.0005			
9/21/2020							
9/22/2020		<0.0005	<0.0005			<0.0005	<0.0005
2/1/2021							
2/2/2021			<0.0005				
2/3/2021						<0.0005	
2/4/2021							
2/8/2021				<0.0005	<0.0005		
2/9/2021		<0.0005					
2/10/2021							
2/17/2021	<0.0005						<0.0005
7/27/2021							
7/28/2021					<0.0005		
8/2/2021							
8/3/2021				<0.0005			
8/4/2021	<0.0005	<0.0005				<0.0005	<0.0005
8/9/2021							
8/10/2021			<0.0005				
2/8/2022					<0.0005		
2/9/2022							
2/14/2022	<0.0005						
2/15/2022			<0.0005	<0.0005			
2/16/2022						<0.0005	
2/21/2022							<0.0005
2/22/2022		<0.0005					
7/20/2022	<0.0005						
7/26/2022					<0.0005		
7/27/2022				<0.0005		<0.0005	
8/2/2022			<0.0005				
8/3/2022							<0.0005
8/10/2022		<0.0005					
3/8/2023							
3/13/2023					<0.0005		
3/14/2023							
3/15/2023	<0.0005			<0.0005		<0.0005	
3/21/2023							
3/22/2023			<0.0005				
3/27/2023							
3/28/2023		<0.0005					<0.0005

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Mercury (mg/L)   Analysis Run 5/23/2023 3:39 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

	GS-AP-MW-44HO	GS-AP-MW-6D	GS-AP-MW-6S	GS-AP-MW-6V	GS-AP-MW-7	GS-AP-MW-8 (bg)	GS-AP-MW-9V	GS-AP-PZ-16	GS-AP-PZ-22
8/2/2016					<0.0005				
8/3/2016		<0.0005	<0.0005			<0.0005			
9/20/2016		<0.0005	<0.0005						
9/21/2016					<0.0005	<0.0005			
10/24/2016		<0.0005			<0.0005				
10/25/2016						<0.0005			
10/26/2016			<0.0005						
12/12/2016		<0.0005	<0.0005		<0.0005				
12/13/2016						<0.0005			
2/6/2017		<0.0005	<0.0005		<0.0005	<0.0005			
3/27/2017		<0.0005	<0.0005						
3/28/2017					<0.0005	<0.0005			
4/24/2017		<0.0005	<0.0005		<0.0005	<0.0005			
6/6/2017		<0.0005	<0.0005						
6/7/2017					<0.0005	<0.0005			
2/19/2018		<0.0005	<0.0005		<0.0005	<0.0005			
5/14/2018		<0.0005	<0.0005						
5/15/2018					<0.0005	<0.0005			
10/15/2018		<0.0005	<0.0005		<0.0005				
10/16/2018						<0.0005			
4/16/2019		<0.0005	<0.0005			<0.0005			
4/23/2019					<0.0005				
9/23/2019		<0.0005	<0.0005						
9/24/2019					<0.0005	<0.0005			
3/17/2020		<0.0005	<0.0005		<0.0005				
3/18/2020						<0.0005			
3/23/2020							<0.0005		
3/24/2020								<0.0005	<0.0005
8/27/2020	<0.0005								
9/8/2020				<0.0005					
9/15/2020	<0.0005			<0.0005					
9/16/2020			<0.0005		<0.0005				
9/17/2020		<0.0005						<0.0005	<0.0005
9/21/2020						<0.0005			
9/22/2020							<0.0005		
2/2/2021					<0.0005	<0.0005	<0.0005		<0.0005
2/3/2021	<0.0005	<0.0005	<0.0005	<0.0005					
2/17/2021								<0.0005	
7/27/2021	<0.0005	<0.0005	<0.0005						
8/2/2021				<0.0005					
8/3/2021									<0.0005
8/9/2021					<0.0005			<0.0005	
8/10/2021						<0.0005	<0.0005		
2/8/2022					<0.0005				
2/9/2022	<0.0005			<0.0005					
2/14/2022		<0.0005	<0.0005						<0.0005
2/15/2022								<0.0005	
2/16/2022						<0.0005			
2/21/2022							<0.0005		
2/22/2022									
2/28/2022									
3/1/2022									

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Mercury (mg/L)   Analysis Run 5/23/2023 3:39 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

	GS-AP-MW-44HO	GS-AP-MW-6D	GS-AP-MW-6S	GS-AP-MW-6V	GS-AP-MW-7	GS-AP-MW-8 (bg)	GS-AP-MW-9V	GS-AP-PZ-16	GS-AP-PZ-22
7/19/2022							<0.0005		
7/20/2022									
7/25/2022		<0.0005		<0.0005	<0.0005				
7/26/2022			<0.0005					<0.0005	
8/2/2022						<0.0005			
8/3/2022									
8/9/2022									<0.0005
3/6/2023	<0.0005								
3/8/2023				<0.0005					
3/14/2023		<0.0005	<0.0005		<0.0005				
3/15/2023									
3/21/2023								<0.0005	<0.0005
3/22/2023									
3/27/2023						<0.0005	<0.0005		
3/28/2023									

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Mercury (mg/L)   Analysis Run 5/23/2023 3:39 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

	GS-AP-MW-10R	GS-AP-MW-11R	GS-AP-MW-13R	GS-AP-MW-14R	GS-AP-MW-18R	GS-AP-MW-18VR	GS-AP-MW-1R
8/2/2016							
8/3/2016							
9/20/2016							
9/21/2016							
10/24/2016							
10/25/2016							
10/26/2016							
12/12/2016							
12/13/2016							
2/6/2017							
3/27/2017							
3/28/2017							
4/24/2017							
6/6/2017							
6/7/2017							
2/19/2018							
5/14/2018							
5/15/2018							
10/15/2018							
10/16/2018							
4/16/2019							
4/23/2019							
9/23/2019							
9/24/2019							
3/17/2020							
3/18/2020							
3/23/2020							
3/24/2020							
8/27/2020							
9/8/2020							
9/15/2020							
9/16/2020							
9/17/2020							
9/21/2020							
9/22/2020							
2/2/2021							
2/3/2021							
2/17/2021							
7/27/2021							
8/2/2021							
8/3/2021							
8/9/2021							
8/10/2021							
2/8/2022							
2/9/2022							
2/14/2022							
2/15/2022							
2/16/2022							
2/21/2022							
2/22/2022					<0.0005	<0.0005	
2/28/2022				<0.0005			
3/1/2022	<0.0005	<0.0005	<0.0005				<0.0005

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Mercury (mg/L) Analysis Run 5/23/2023 3:39 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-10R	GS-AP-MW-11R	GS-AP-MW-13R	GS-AP-MW-14R	GS-AP-MW-18R	GS-AP-MW-18VR	GS-AP-MW-1R
7/19/2022		<0.0005					
7/20/2022			<0.0005				
7/25/2022							
7/26/2022							
8/2/2022							<0.0005
8/3/2022	<0.0005			<0.0005	<0.0005		
8/9/2022						<0.0005	
3/6/2023							
3/8/2023							
3/14/2023							
3/15/2023				<0.0005			
3/21/2023							
3/22/2023		<0.0005					
3/27/2023	<0.0005		<0.0005			<0.0005	<0.0005
3/28/2023					<0.0005		

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Mercury (mg/L) Analysis Run 5/23/2023 3:39 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-23V	GS-AP-MW-27HR	GS-AP-MW-31V	GS-AP-MW-36V	GS-AP-MW-37HR	GS-AP-MW-3V	GS-AP-MW-45V	GS-AP-MW-47	GS-AP-MW-5R
2/21/2022									
2/22/2022		<0.0005	<0.0005	<0.0005					
2/23/2022	<0.0005					<0.0005	<0.0005		
2/28/2022					<0.0005			<0.0005	
3/1/2022									<0.0005
7/19/2022									
7/20/2022						<0.0005			
7/26/2022	<0.0005				<0.0005			<0.0005	
7/27/2022		<0.0005		<0.0005					
8/2/2022									<0.0005
8/3/2022			<0.0005						
8/8/2022							<0.0005		
3/14/2023	<0.0005	<0.0005		<0.0005					
3/15/2023					<0.0005			<0.0005	
3/20/2023									<0.0005
3/21/2023						<0.0005			
3/27/2023			<0.0005						
3/28/2023							<0.0005		

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Mercury (mg/L)   Analysis Run 5/23/2023 3:39 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

	GS-AP-MW-9R	GS-AP-PZ-18R	GS-AP-MW-46
2/21/2022		<0.0005	
2/22/2022			
2/23/2022			<0.0005
2/28/2022			
3/1/2022	<0.0005		
7/19/2022	<0.0005		
7/20/2022			
7/26/2022			
7/27/2022		<0.0005	
8/2/2022			<0.0005
8/3/2022			
8/8/2022			
3/14/2023			
3/15/2023			
3/20/2023			
3/21/2023			
3/27/2023	<0.0005		<0.0005
3/28/2023		<0.0005	

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 5/23/2023 3:39 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-12	GS-AP-MW-12V	GS-AP-MW-13 (bg)	GS-AP-MW-15	GS-AP-MW-15V	GS-AP-MW-16D	GS-AP-MW-17	GS-AP-MW-17V ...	GS-AP-MW-19
8/1/2016				0.142		<0.01015	0.00738 (J)		0.00752 (J)
8/2/2016			<0.01						
8/3/2016	0.0269								
9/19/2016						<0.01015	0.00889 (J)		
9/20/2016	0.00762 (J)		<0.01	0.0683					
9/21/2016									0.0117
10/24/2016							0.00819 (J)		0.0198
10/25/2016	0.00456 (J)		<0.01	0.063		<0.01015			
12/13/2016	0.00411 (J)		<0.01			<0.01015	0.0189		0.00703 (J)
12/14/2016				0.0604					
2/6/2017							0.00852 (J)		
2/7/2017									0.0103
2/8/2017	0.00235 (J)		<0.01	0.0346		<0.01015			
3/27/2017							0.00592 (J)		
3/28/2017				0.0331					0.00599 (J)
3/29/2017	<0.01		<0.01			<0.01015			
3/30/2017									
4/24/2017							0.00644 (J)		
4/26/2017	<0.01		<0.01	0.038		<0.01015			0.00845 (J)
6/5/2017							0.00537 (J)		
6/6/2017				0.0327		<0.01015			0.00624 (J)
6/7/2017	<0.01		<0.01						
2/19/2018							0.0134		
2/20/2018	<0.01		<0.01	0.0362					
2/21/2018						<0.01015			0.00903 (J)
5/15/2018	<0.01		<0.01	0.0344			0.00789 (J)		
5/16/2018						<0.01015			0.00515 (J)
10/15/2018				0.0525			0.00376 (J)		
10/16/2018	<0.01								0.00593 (J)
10/17/2018			<0.01			<0.01015			
2/20/2019								0.00577 (J)	
2/21/2019		0.00253 (J)							
2/26/2019									
2/27/2019									
4/16/2019	<0.01		<0.01						
4/17/2019				0.029		<0.01015	0.00661 (J)		0.00703 (J)
9/23/2019							0.011		
9/24/2019				0.0597		<0.01015		0.00906 (J)	0.00562 (J)
9/25/2019	<0.01	0.00942 (J)							
3/16/2020							0.00504 (J)		
3/17/2020									
3/18/2020	0.00444 (J)			0.0673	0.0327				
3/23/2020									
3/24/2020		0.00454 (J)				<0.01015			0.00605 (J)
3/25/2020								0.00508 (J)	
5/12/2020							0.00436 (J)		
5/13/2020									
9/17/2020									
9/21/2020					0.0538		0.00776 (J)		
9/22/2020						<0.01015			0.0063 (J)
9/23/2020	0.00577 (J)	0.00463 (J)		0.0744				0.00664 (J)	
2/1/2021	0.00792	0.00164							

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Molybdenum (mg/L)   Analysis Run 5/23/2023 3:39 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

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	GS-AP-MW-12	GS-AP-MW-12V	GS-AP-MW-13 (bg)	GS-AP-MW-15	GS-AP-MW-15V	GS-AP-MW-16D	GS-AP-MW-17	GS-AP-MW-17V ...	GS-AP-MW-19
2/2/2021							0.00538	0.00252	
2/3/2021									
2/8/2021									0.00366
2/9/2021				0.0644	0.0522				
2/10/2021						0.00014 (J)			
7/27/2021									
8/2/2021								0.00206	
8/3/2021				0.0663	0.0311		0.00157		
8/4/2021									
8/9/2021	0.00452	0.00302				0.00069			
8/10/2021									0.00269
8/11/2021									
8/12/2021									
2/8/2022									
2/14/2022							0.00252	0.00276	
2/15/2022						0.00032			
2/16/2022				0.0306	0.0272				
2/22/2022									0.00267
2/23/2022		0.00144							
2/28/2022	0.00903								
7/19/2022	0.0112								
7/20/2022		0.00204							
7/26/2022									
7/27/2022									
8/2/2022				0.0642	0.0295	0.000984			
8/3/2022									0.00355
8/8/2022							0.00154		
8/9/2022								0.00298	
8/10/2022									
3/14/2023									
3/15/2023									
3/20/2023				0.0315	0.0195				
3/21/2023						<0.01015			<0.01015
3/22/2023	0.00512 (J)	<0.01015					<0.01015	<0.01015	

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 5/23/2023 3:39 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-2	GS-AP-MW-21	GS-AP-MW-21V	GS-AP-MW-23H	GS-AP-MW-24H	GS-AP-MW-25HA	GS-AP-MW-26H
8/1/2016							
8/2/2016	<0.01015	0.0365					
8/3/2016							
9/19/2016	<0.01015						
9/20/2016							
9/21/2016		0.0362					
10/24/2016	<0.01015						
10/25/2016		0.0326					
12/13/2016	<0.01015						
12/14/2016		0.0345					
2/6/2017							
2/7/2017							
2/8/2017	0.00359 (J)	0.0419					
3/27/2017							
3/28/2017		0.0523					
3/29/2017							
3/30/2017	0.00485 (J)						
4/24/2017							
4/26/2017	0.00444 (J)	0.0502					
6/5/2017							
6/6/2017	0.00489 (J)	0.05					
6/7/2017							
2/19/2018							
2/20/2018		0.0966					
2/21/2018	0.0112						
5/15/2018		0.0687					
5/16/2018	0.00547 (J)						
10/15/2018							
10/16/2018	0.00919 (J)	0.061					
10/17/2018							
2/20/2019				<0.01015			
2/21/2019							
2/26/2019					<0.01015		
2/27/2019							0.00286 (J)
4/16/2019							
4/17/2019	0.00293 (J)	0.0885					
9/23/2019				<0.01015			<0.01015
9/24/2019		0.0613			<0.01015		
9/25/2019	0.00803 (J)						
3/16/2020							
3/17/2020				<0.01015			
3/18/2020		0.102			<0.01015		
3/23/2020			0.117				
3/24/2020						0.0176	
3/25/2020	0.00343 (J)						<0.01015
5/12/2020							
5/13/2020	0.00224 (J)						
9/17/2020				<0.01015	<0.01015	0.0182	
9/21/2020							<0.01015
9/22/2020	0.00308 (J)						
9/23/2020		0.0404	0.12				
2/1/2021	0.00427						

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 5/23/2023 3:39 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-2	GS-AP-MW-21	GS-AP-MW-21V	GS-AP-MW-23H	GS-AP-MW-24H	GS-AP-MW-25HA	GS-AP-MW-26H
2/2/2021					0.000563		
2/3/2021				0.000902			
2/8/2021		0.0396					
2/9/2021			0.0983				0.000207
2/10/2021						0.0158	
7/27/2021				0.0009			
8/2/2021							
8/3/2021					0.00052		
8/4/2021	0.00168	0.0367					
8/9/2021							
8/10/2021							0.00016 (J)
8/11/2021			0.0394				
8/12/2021						0.0125	
2/8/2022		0.0153	0.0819				
2/14/2022				0.00097			
2/15/2022					0.00053		7E-05 (J)
2/16/2022						0.00977	
2/22/2022	0.00327						
2/23/2022							
2/28/2022							
7/19/2022	0.00146						
7/20/2022							
7/26/2022				0.000783			
7/27/2022					0.00055		
8/2/2022							
8/3/2022						0.00758	
8/8/2022							
8/9/2022			0.0509				
8/10/2022		0.00802					<0.01015
3/14/2023				<0.01015			
3/15/2023					<0.01015		
3/20/2023							
3/21/2023		0.0103	0.0361				
3/22/2023	<0.01015					0.00584 (J)	<0.01015

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 5/23/2023 3:39 PM
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-28H	GS-AP-MW-29H	GS-AP-MW-3	GS-AP-MW-30HA	GS-AP-MW-31H	GS-AP-MW-32H	GS-AP-MW-33HO	GS-AP-MW-34HO	GS-AP-MW-35HO
2/27/2019		<0.01							
3/13/2019	0.00555 (J)								
9/24/2019		0.00424 (J)							
9/25/2019	0.00338 (J)								
3/16/2020	0.00463 (J)							0.00386 (J)	
3/17/2020							<0.01015		0.00222 (J)
3/18/2020				0.00603 (J)	0.0102				
3/24/2020						0.0826			
3/25/2020		0.0025 (J)							
5/12/2020	0.00644 (J)							0.0088 (J)	<0.01
5/13/2020				0.00519 (J)			0.00626 (J)		
9/15/2020							0.00496 (J)		
9/16/2020								0.00598 (J)	<0.01
9/17/2020									
9/21/2020				0.00254 (J)		0.0896			
9/22/2020	0.00616 (J)	0.0281			0.00438 (J)				
2/1/2021					0.00447				
2/2/2021									
2/3/2021		0.0623					0.00346	0.00753	
2/4/2021									0.00273
2/8/2021									
2/9/2021									
2/10/2021						0.0889			
2/17/2021	0.00454		0.0113	0.0019					
7/27/2021							0.00574	0.0143	
7/28/2021									0.0017
8/2/2021				0.00394	0.00486				
8/3/2021			0.00977						
8/4/2021		0.0377							
8/9/2021	0.00412								
8/10/2021						0.0858			
2/8/2022				0.00529	0.00596				
2/9/2022							0.00513	0.00959	0.00175
2/14/2022	0.00481	0.0622				0.0933			
2/15/2022									
2/16/2022			0.00722						
2/21/2022									
2/22/2022									
7/20/2022			0.0066						
7/26/2022									
7/27/2022	0.00336					0.0865			
8/2/2022									
8/3/2022		0.0341		0.00614	0.00255				
8/10/2022									
3/8/2023								0.0104	0.0006
3/13/2023				<0.01015					
3/14/2023	<0.01015						<0.01015		
3/15/2023									
3/21/2023			0.00847 (J)			0.086			
3/22/2023									
3/27/2023					<0.01015				
3/28/2023		0.0333							

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 5/23/2023 3:39 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-36H	GS-AP-MW-38H	GS-AP-MW-40H	GS-AP-MW-41HD	GS-AP-MW-41HS	GS-AP-MW-42H	GS-AP-MW-43HO
2/27/2019							
3/13/2019							
9/24/2019							
9/25/2019							
3/16/2020							
3/17/2020	0.00571 (J)						
3/18/2020				0.0158			
3/24/2020		0.00445 (J)				<0.01015	
3/25/2020							<0.01
5/12/2020							
5/13/2020	0.00475 (J)						
9/15/2020							
9/16/2020							
9/17/2020	0.0105			0.026			
9/21/2020							
9/22/2020		0.00423 (J)	0.00293 (J)			<0.01015	<0.01
2/1/2021							
2/2/2021			0.00257				
2/3/2021						0.00174	
2/4/2021							
2/8/2021				0.0284	0.00288		
2/9/2021		0.00267					
2/10/2021							
2/17/2021	0.0054						0.00292
7/27/2021							
7/28/2021					0.0044		
8/2/2021							
8/3/2021				0.0286			
8/4/2021	0.017	0.00377				0.00169	0.00385
8/9/2021							
8/10/2021			0.00171				
2/8/2022					0.00104		
2/9/2022							
2/14/2022	0.0189						
2/15/2022			0.002	0.0331			
2/16/2022						0.00155	
2/21/2022							0.00309
2/22/2022		0.00322					
7/20/2022	0.00183						
7/26/2022					0.000889		
7/27/2022				0.0351		0.00131	
8/2/2022			0.00114				
8/3/2022							0.00526
8/10/2022		0.00406					
3/8/2023							
3/13/2023					<0.01015		
3/14/2023							
3/15/2023	0.0183			0.0339		<0.01015	
3/21/2023							
3/22/2023			<0.01015				
3/27/2023							
3/28/2023		<0.01015					0.0074 (J)

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 5/23/2023 3:39 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-44HO	GS-AP-MW-6D	GS-AP-MW-6S	GS-AP-MW-6V	GS-AP-MW-7	GS-AP-MW-8 (bg)	GS-AP-MW-9V	GS-AP-PZ-16	GS-AP-PZ-22
8/2/2016					0.146				
8/3/2016		0.00372 (J)	<0.01			<0.01015			
9/20/2016		0.00481 (J)	0.00202 (J)						
9/21/2016					0.146	<0.01015			
10/24/2016		0.00496 (J)			0.136				
10/25/2016						<0.01015			
10/26/2016			0.00599 (J)						
12/12/2016		0.00467 (J)	0.00214 (J)		0.14				
12/13/2016						<0.01015			
2/6/2017		0.00468 (J)	<0.01		0.15	<0.01015			
3/27/2017		0.00548 (J)	<0.01						
3/28/2017					0.159	<0.01015			
4/24/2017		0.00606 (J)	<0.01		0.16	<0.01015			
6/6/2017		0.00545 (J)	<0.01						
6/7/2017					0.15	<0.01015			
2/19/2018		0.00537 (J)	<0.01		0.172	<0.01015			
5/14/2018		0.00564 (J)	0.00526 (J)						
5/15/2018					0.177	<0.01015			
10/15/2018		0.00538 (J)	0.00644 (J)		0.168				
10/16/2018						<0.01015			
4/16/2019		0.00747 (J)	0.00246 (J)			<0.01015			
4/23/2019					0.185				
9/23/2019		0.00758 (J)	0.00412 (J)						
9/24/2019					0.178	<0.01015			
3/17/2020		0.00959 (J)	0.0272		0.193				
3/18/2020						<0.01015			
3/23/2020							<0.01015		
3/24/2020								<0.01015	0.00333 (J)
8/27/2020	0.0071 (J)								
9/8/2020				0.00317 (J)					
9/15/2020	0.00858 (J)			0.00256 (J)					
9/16/2020			0.0427		0.215				
9/17/2020		0.00924 (J)						0.00241 (J)	0.00357 (J)
9/21/2020						<0.01015			
9/22/2020							<0.01015		
2/2/2021					0.202	<0.01015	0.000538		0.00367
2/3/2021	0.00429	0.0095	0.0218	0.00284					
2/17/2021								0.00132	
7/27/2021	0.0035	0.0101	0.0452						
8/2/2021				0.00438					
8/3/2021									0.00352
8/9/2021					0.207			0.00221	
8/10/2021						<0.01015	0.00269		
2/8/2022					0.221				
2/9/2022	0.00348			0.00336					
2/14/2022		0.0115	0.0411						0.00419
2/15/2022								0.00266	
2/16/2022						0.00012 (J)			
2/21/2022							0.0022		
2/22/2022									
2/28/2022									
3/1/2022									

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Molybdenum (mg/L)   Analysis Run 5/23/2023 3:39 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

	GS-AP-MW-44HO	GS-AP-MW-6D	GS-AP-MW-6S	GS-AP-MW-6V	GS-AP-MW-7	GS-AP-MW-8 (bg)	GS-AP-MW-9V	GS-AP-PZ-16	GS-AP-PZ-22
7/19/2022							0.00146		
7/20/2022									
7/25/2022		0.011		0.00208	0.214				
7/26/2022			0.0377					0.0044	
8/2/2022						<0.01015			
8/3/2022									
8/9/2022									0.00294
3/6/2023	0.00325								
3/8/2023				<0.01015					
3/14/2023		0.0104	0.0298		0.215				
3/15/2023									
3/21/2023								<0.01015	0.00545 (J)
3/22/2023									
3/27/2023						<0.01015	<0.01015		
3/28/2023									

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 5/23/2023 3:39 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-10R	GS-AP-MW-11R	GS-AP-MW-13R	GS-AP-MW-14R	GS-AP-MW-18R	GS-AP-MW-18VR	GS-AP-MW-1R
8/2/2016							
8/3/2016							
9/20/2016							
9/21/2016							
10/24/2016							
10/25/2016							
10/26/2016							
12/12/2016							
12/13/2016							
2/6/2017							
3/27/2017							
3/28/2017							
4/24/2017							
6/6/2017							
6/7/2017							
2/19/2018							
5/14/2018							
5/15/2018							
10/15/2018							
10/16/2018							
4/16/2019							
4/23/2019							
9/23/2019							
9/24/2019							
3/17/2020							
3/18/2020							
3/23/2020							
3/24/2020							
8/27/2020							
9/8/2020							
9/15/2020							
9/16/2020							
9/17/2020							
9/21/2020							
9/22/2020							
2/2/2021							
2/3/2021							
2/17/2021							
7/27/2021							
8/2/2021							
8/3/2021							
8/9/2021							
8/10/2021							
2/8/2022							
2/9/2022							
2/14/2022							
2/15/2022							
2/16/2022							
2/21/2022							
2/22/2022					0.00028	0.0336	
2/28/2022				0.00097			
3/1/2022	0.00288	0.00014 (J)	0.00061				0.00143

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 5/23/2023 3:39 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-10R	GS-AP-MW-11R	GS-AP-MW-13R	GS-AP-MW-14R	GS-AP-MW-18R	GS-AP-MW-18VR	GS-AP-MW-1R
7/19/2022		<0.01015					
7/20/2022			0.000155 (J)				
7/25/2022							
7/26/2022							
8/2/2022							0.00102
8/3/2022	0.00163			0.000479	0.000529		
8/9/2022						0.0456	
3/6/2023							
3/8/2023							
3/14/2023							
3/15/2023				<0.01015			
3/21/2023							
3/22/2023		<0.01015					
3/27/2023	<0.01015		<0.01015			0.0495	<0.01015
3/28/2023					<0.01015		

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 5/23/2023 3:39 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-23V	GS-AP-MW-27HR	GS-AP-MW-31V	GS-AP-MW-36V	GS-AP-MW-37HR	GS-AP-MW-3V	GS-AP-MW-45V	GS-AP-MW-47	GS-AP-MW-5R
2/21/2022									
2/22/2022		0.00083	0.00536	0.00427					
2/23/2022	0.00013 (J)					0.0191	0.0047		
2/28/2022					0.00315			0.00165	
3/1/2022									0.00212
7/19/2022									
7/20/2022						0.0489			
7/26/2022	<0.01015				0.00536			0.00213	
7/27/2022		0.0101		0.0268					
8/2/2022									0.00237
8/3/2022			0.0243						
8/8/2022							0.00454		
3/14/2023	<0.01015	0.0095 (J)		0.00789 (J)					
3/15/2023					<0.01015			<0.01015	
3/20/2023									<0.01015
3/21/2023						0.02			
3/27/2023			0.0409						
3/28/2023							0.0123		

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 5/23/2023 3:39 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-9R	GS-AP-PZ-18R	GS-AP-MW-46
2/21/2022		0.00091	
2/22/2022			
2/23/2022			0.00678
2/28/2022			
3/1/2022	0.00313		
7/19/2022	0.00308		
7/20/2022			
7/26/2022			
7/27/2022		0.000765	
8/2/2022			0.00955
8/3/2022			
8/8/2022			
3/14/2023			
3/15/2023			
3/20/2023			
3/21/2023			
3/27/2023	<0.01015		0.0114
3/28/2023		<0.01015	

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: pH (SU) Analysis Run 5/23/2023 3:39 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-12	GS-AP-MW-12V	GS-AP-MW-13 (bg)	GS-AP-MW-15	GS-AP-MW-15V	GS-AP-MW-16D	GS-AP-MW-17	GS-AP-MW-17V ...	GS-AP-MW-19
8/1/2016				11.74		7.53	8.39		8.05
8/2/2016			6.8						
8/3/2016	7.36								
9/19/2016						7.5	8.42		
9/20/2016	7.28		6.8	10.33					
9/21/2016									8.14
10/24/2016							8.42		8.55
10/25/2016	7.23		6.85	10.24		7.44			
12/13/2016	7.27		6.8			7.45	8.43		8.08
12/14/2016				10.09					
2/6/2017							8.38		
2/7/2017									8.61
2/8/2017	7.25		6.76	9.75		7.41			
3/27/2017							8.43		
3/28/2017				9.9					7.94
3/29/2017	7.34		6.76			7.44			
3/30/2017									
4/24/2017							8.39		
4/26/2017	7.19		6.71	10.08		7.47			8.26
6/5/2017							8.42		
6/6/2017				10.2		7.37			8.23
6/7/2017	7.24		6.71						
8/21/2017									
8/22/2017	7.31		6.84	10.57		7.48	8.4		8.1
8/23/2017									
2/19/2018							8.33		
2/20/2018	7.69		6.77	10.63					
2/21/2018						7.44			8.48
5/15/2018	7.69		6.8	10.71			8.3		
5/16/2018						7.45			8.12
10/15/2018				11.51			8.37		
10/16/2018	7.51								8.22
10/17/2018			6.67			7.41			
2/20/2019								7.76	
2/21/2019		7.46							
2/26/2019									
2/27/2019									
4/16/2019	7.41		6.64						
4/17/2019				10.76		7.33	8.36		8.06
9/23/2019							8.37		
9/24/2019				11.7		7.43		7.65	7.8
9/25/2019	7.38	9.29							
3/16/2020							8.45		
3/17/2020									
3/18/2020	7.56			11.47	10.89				
3/23/2020									
3/24/2020		7.8				7.46			7.93
3/25/2020								7.63	
5/12/2020							8.42		
5/13/2020									
9/17/2020									
9/21/2020					10.07		8.22		

Time Series

Constituent: pH (SU) Analysis Run 5/23/2023 3:39 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-12	GS-AP-MW-12V	GS-AP-MW-13 (bg)	GS-AP-MW-15	GS-AP-MW-15V	GS-AP-MW-16D	GS-AP-MW-17	GS-AP-MW-17V ...	GS-AP-MW-19
9/22/2020						7.52			8.17
9/23/2020	8.3	8.84		11.89				7.53	
2/1/2021	7.55	7.3							
2/2/2021							8.43	7.58	
2/3/2021									
2/8/2021									7.89
2/9/2021				11.88	9.55				
2/10/2021						7.73			
7/27/2021									
8/2/2021								7.65	
8/3/2021				11.56	8.97		8.6		
8/4/2021									
8/9/2021	7.98	8.77				7.53			
8/10/2021									7.72
8/11/2021									
8/12/2021									
2/8/2022									
2/14/2022							8.32	7.43	
2/15/2022						7.48			
2/16/2022				11.57	8.65				
2/22/2022									7.71
2/23/2022		7.73							
2/28/2022	8.12								
7/19/2022	8.79								
7/20/2022		8.52							
7/26/2022									
7/27/2022									
8/2/2022				11.84	8.21	7.49			
8/3/2022									7.87
8/8/2022							8.38		
8/9/2022								7.55	
8/10/2022									
3/14/2023									
3/15/2023									
3/20/2023				11.26	7.96				
3/21/2023						7.51			7.85
3/22/2023	8.15	9					8.56	7.61	

Time Series

Constituent: pH (SU)   Analysis Run 5/23/2023 3:39 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

	GS-AP-MW-2	GS-AP-MW-21	GS-AP-MW-21V	GS-AP-MW-23H	GS-AP-MW-24H	GS-AP-MW-25HA	GS-AP-MW-26H
8/1/2016							
8/2/2016	9.18	10.26					
8/3/2016							
9/19/2016	9.18						
9/20/2016							
9/21/2016		10.45					
10/24/2016	9.14						
10/25/2016		10.42					
12/13/2016	9.2						
12/14/2016		10.12					
2/6/2017							
2/7/2017							
2/8/2017	9.17	10.28					
3/27/2017							
3/28/2017		10.67					
3/29/2017							
3/30/2017	9.08						
4/24/2017							
4/26/2017	9.22	10.42					
6/5/2017							
6/6/2017	9.22	10.51					
6/7/2017							
8/21/2017	9.12						
8/22/2017							
8/23/2017		11.91					
2/19/2018							
2/20/2018		11.57					
2/21/2018	9.17						
5/15/2018		11.26					
5/16/2018	9.28						
10/15/2018							
10/16/2018	9.35	11.34					
10/17/2018							
2/20/2019				6.17			
2/21/2019							
2/26/2019					7.04		
2/27/2019							7.25
4/16/2019							
4/17/2019	9.26	11.71					
9/23/2019				5.76			7.25
9/24/2019		11.24			6.59		
9/25/2019	9.31						
3/16/2020							
3/17/2020				5.95			
3/18/2020		11.37			7		
3/23/2020			7.93				
3/24/2020						8.67	
3/25/2020	9.29						7.24
5/12/2020							
5/13/2020	9.43						
9/17/2020				5.74	7.02	8.83	
9/21/2020							7.25

Time Series

Constituent: pH (SU) Analysis Run 5/23/2023 3:39 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-2	GS-AP-MW-21	GS-AP-MW-21V	GS-AP-MW-23H	GS-AP-MW-24H	GS-AP-MW-25HA	GS-AP-MW-26H
9/22/2020	9.41						
9/23/2020		10.71	7.81				
2/1/2021	9.31						
2/2/2021					6.93		
2/3/2021				6.22			
2/8/2021		10.69					
2/9/2021			7.87				7.38
2/10/2021						8.77	
7/27/2021				5.65			
8/2/2021							
8/3/2021					6.94		
8/4/2021	9.08	10.95					
8/9/2021							
8/10/2021							6.69
8/11/2021			8.28				
8/12/2021						8.78	
2/8/2022		10.26	7.98				
2/14/2022				5.8			
2/15/2022					7		6.82
2/16/2022						8.5	
2/22/2022	9.42						
2/23/2022							
2/28/2022							
7/19/2022	9.6						
7/20/2022							
7/26/2022				5.73			
7/27/2022					6.98		
8/2/2022							
8/3/2022						8.55	
8/8/2022							
8/9/2022			7.9				
8/10/2022		9.26					7.13
3/14/2023				5.93			
3/15/2023					6.93		
3/20/2023							
3/21/2023		9.56	7.67				
3/22/2023	9.27					8.78	7.23

Time Series

Constituent: pH (SU)   Analysis Run 5/23/2023 3:39 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

	GS-AP-MW-28H	GS-AP-MW-29H	GS-AP-MW-3	GS-AP-MW-30HA	GS-AP-MW-31H	GS-AP-MW-32H	GS-AP-MW-33HO	GS-AP-MW-34HO	GS-AP-MW-35HO
2/27/2019		8.01							
3/13/2019	8.3								
9/24/2019		7.11							
9/25/2019	8.57								
3/16/2020	8.31							7.35	
3/17/2020							7.67		8.4
3/18/2020				7.2	8.73				
3/24/2020						8.47			
3/25/2020		7.45							
5/12/2020	8.35							7.44	8.46
5/13/2020				7.27			7.7		
9/15/2020							7.66		
9/16/2020								7.45	8.48
9/17/2020									
9/21/2020				7.56		8.15			
9/22/2020	8.24	7.42			8.76				
2/1/2021					8.66				
2/2/2021									
2/3/2021		7.63					7.64	7.26	
2/4/2021									8.35
2/8/2021									
2/9/2021									
2/10/2021						8.03			
2/17/2021	8.31		7.71	7.29					
7/27/2021							7.59	7.32	
7/28/2021									8.45
8/2/2021				7.27	8.69				
8/3/2021			7.82						
8/4/2021		7.68							
8/9/2021	8.5								
8/10/2021						8.35			
2/8/2022				7.35	8.53				
2/9/2022							7.64	7.4	8.55
2/14/2022	8.37	7.77				8.22			
2/15/2022									
2/16/2022			7.78						
2/21/2022									
2/22/2022									
7/20/2022			8.1						
7/26/2022									
7/27/2022	8.43					7.88			
8/2/2022									
8/3/2022		7.83		7.17	8.85				
8/10/2022									
3/8/2023								7.26	8.42
3/13/2023				7.22					
3/14/2023	8.31						7.71		
3/15/2023									
3/21/2023			8.19			8.3			
3/22/2023									
3/27/2023					8.86				
3/28/2023		7.82							

Time Series

Constituent: pH (SU) Analysis Run 5/23/2023 3:39 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-36H	GS-AP-MW-38H	GS-AP-MW-40H	GS-AP-MW-41HD	GS-AP-MW-41HS	GS-AP-MW-42H	GS-AP-MW-43HO
2/27/2019							
3/13/2019							
9/24/2019							
9/25/2019							
3/16/2020							
3/17/2020	8.44						
3/18/2020				7.2			
3/24/2020		7.99				6.28	
3/25/2020							8.24
5/12/2020							
5/13/2020	8.52						
9/15/2020							
9/16/2020							
9/17/2020	8.18			7.22			
9/21/2020							
9/22/2020		7.96	6.64			6.51	8.66
2/1/2021							
2/2/2021			6.55				
2/3/2021						6.47	
2/4/2021							
2/8/2021				7.36	6.77		
2/9/2021		8.06					
2/10/2021							
2/17/2021	8.36						8.72
7/27/2021							
7/28/2021					6.86		
8/2/2021							
8/3/2021				6.97			
8/4/2021	8.37	7.75				6.41	8.75
8/9/2021							
8/10/2021			6.56				
2/8/2022					6.66		
2/9/2022							
2/14/2022	8.22						
2/15/2022			6.6	7.35			
2/16/2022						6.54	
2/21/2022							8.58
2/22/2022		7.89					
7/20/2022	8.05						
7/26/2022					6.19		
7/27/2022				7.16		6.59	
8/2/2022			6.47				
8/3/2022							8.51
8/10/2022		7.49					
3/8/2023							
3/13/2023					6.49		
3/14/2023							
3/15/2023	8.06			7.43		6.63	
3/21/2023							
3/22/2023			6.6				
3/27/2023							
3/28/2023		7.85					7.92

Time Series

Constituent: pH (SU) Analysis Run 5/23/2023 3:39 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-44HO	GS-AP-MW-6D	GS-AP-MW-6S	GS-AP-MW-6V	GS-AP-MW-7	GS-AP-MW-8 (bg)	GS-AP-MW-9V	GS-AP-PZ-16	GS-AP-PZ-22
8/2/2016					7.72				
8/3/2016		7.27	6.81			5.84			
9/20/2016		7.27	6.72						
9/21/2016					7.6	5.99			
10/24/2016		7.25			7.68				
10/25/2016						5.94			
10/26/2016			6.68						
12/12/2016		7.26	6.76		7.72				
12/13/2016						5.84			
2/6/2017		7.24	6.75		7.64	5.9			
3/27/2017		7.29	6.67						
3/28/2017					7.58	5.67			
4/24/2017		7.46	6.81		7.68	5.79			
6/6/2017		7.29	6.8						
6/7/2017					7.56	5.71			
8/21/2017		7.21	6.78		7.61	5.7			
2/19/2018		7.36	6.85		7.65	5.78			
5/14/2018		7.36	6.82						
5/15/2018					7.69	5.84			
10/15/2018		7.33	6.78		7.62				
10/16/2018						5.75			
4/16/2019		7.26	6.82			5.76			
4/23/2019					7.83				
9/23/2019		7.23	6.51						
9/24/2019					7.38	5.27			
3/17/2020		7.39	6.92		7.72				
3/18/2020						5.81			
3/23/2020							6.97		
3/24/2020								7.89	7.77
8/27/2020	8.9								
9/8/2020				8.67					
9/15/2020	8.94			8.76					
9/16/2020			6.93		7.74				
9/17/2020		7.41						9.15	8.81
9/21/2020						5.75			
9/22/2020							7.08		
2/2/2021					7.77	5.69	6.94		7.5
2/3/2021	8.9	7.55	7.05	8.9					
2/17/2021								8.32	
7/27/2021	9.04	6.79	6.67						
8/2/2021				8.76					
8/3/2021									7.74
8/9/2021					7.49			9.09	
8/10/2021						5.02	7.12		
2/8/2022					7.71				
2/9/2022	8.94			8.8					
2/14/2022		7.43	6.99						7.4
2/15/2022								9.34	
2/16/2022						5.8			
2/21/2022							7		
2/22/2022									
2/28/2022									

Time Series

Constituent: pH (SU) Analysis Run 5/23/2023 3:39 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-44HO	GS-AP-MW-6D	GS-AP-MW-6S	GS-AP-MW-6V	GS-AP-MW-7	GS-AP-MW-8 (bg)	GS-AP-MW-9V	GS-AP-PZ-16	GS-AP-PZ-22
3/1/2022									
7/19/2022							6.99		
7/20/2022									
7/25/2022		6.95 (D)		8.66	7.64 (D)				
7/26/2022			6.97					9.29	
8/2/2022						5.78			
8/3/2022									
8/9/2022									8.78
3/6/2023	9.06								
3/8/2023				8.7					
3/14/2023		7.33	7.04		7.67				
3/15/2023									
3/21/2023								8.44	9.53
3/22/2023									
3/27/2023						5.82	7		
3/28/2023									

Time Series

Constituent: pH (SU) Analysis Run 5/23/2023 3:39 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-10R	GS-AP-MW-11R	GS-AP-MW-13R	GS-AP-MW-14R	GS-AP-MW-18R	GS-AP-MW-18VR	GS-AP-MW-1R
8/2/2016							
8/3/2016							
9/20/2016							
9/21/2016							
10/24/2016							
10/25/2016							
10/26/2016							
12/12/2016							
12/13/2016							
2/6/2017							
3/27/2017							
3/28/2017							
4/24/2017							
6/6/2017							
6/7/2017							
8/21/2017							
2/19/2018							
5/14/2018							
5/15/2018							
10/15/2018							
10/16/2018							
4/16/2019							
4/23/2019							
9/23/2019							
9/24/2019							
3/17/2020							
3/18/2020							
3/23/2020							
3/24/2020							
8/27/2020							
9/8/2020							
9/15/2020							
9/16/2020							
9/17/2020							
9/21/2020							
9/22/2020							
2/2/2021							
2/3/2021							
2/17/2021							
7/27/2021							
8/2/2021							
8/3/2021							
8/9/2021							
8/10/2021							
2/8/2022							
2/9/2022							
2/14/2022							
2/15/2022							
2/16/2022							
2/21/2022							
2/22/2022					6.29	7.88	
2/28/2022				7.04			

Time Series

Constituent: pH (SU) Analysis Run 5/23/2023 3:39 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-10R	GS-AP-MW-11R	GS-AP-MW-13R	GS-AP-MW-14R	GS-AP-MW-18R	GS-AP-MW-18VR	GS-AP-MW-1R
3/1/2022	6.87	6.68	6.47				8.86
7/19/2022		6.13					
7/20/2022			6.39				
7/25/2022							
7/26/2022							
8/2/2022							8.35
8/3/2022	6.7			6.44	6.46		
8/9/2022						7.93	
3/6/2023							
3/8/2023							
3/14/2023							
3/15/2023				6.63			
3/21/2023							
3/22/2023		6.69					
3/27/2023	6.68		6.47			8.03	8.84
3/28/2023					6.48		

Time Series

Constituent: pH (SU)   Analysis Run 5/23/2023 3:39 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

	GS-AP-MW-23V	GS-AP-MW-27HR	GS-AP-MW-31V	GS-AP-MW-36V	GS-AP-MW-37HR	GS-AP-MW-3V	GS-AP-MW-45V	GS-AP-MW-47	GS-AP-MW-5R
2/21/2022									
2/22/2022		7.83	8	7.35					
2/23/2022	7.38					7.45	7.86		
2/28/2022					7.88			7.15	
3/1/2022									6.77
7/19/2022									
7/20/2022						7.41			
7/26/2022	7.1				7.88			7.32	
7/27/2022		7.44		7.14					
8/2/2022									6.72
8/3/2022			7.88						
8/8/2022							7.74		
3/14/2023	7.37	7.28		7.27					
3/15/2023					7.81			7.44	
3/20/2023									6.8
3/21/2023						7.71			
3/27/2023			7.8						
3/28/2023							7.47		

Time Series

Constituent: pH (SU)   Analysis Run 5/23/2023 3:39 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

	GS-AP-MW-9R	GS-AP-PZ-18R	GS-AP-MW-46
2/21/2022		7.37	
2/22/2022			
2/23/2022			8.69
2/28/2022			
3/1/2022	6.4		
7/19/2022	6.31		
7/20/2022			
7/26/2022			
7/27/2022		7.18	
8/2/2022			8.67
8/3/2022			
8/8/2022			
3/14/2023			
3/15/2023			
3/20/2023			
3/21/2023			
3/27/2023	6.01		8.81
3/28/2023		7.22	

Time Series

Constituent: Selenium (mg/L)   Analysis Run 5/23/2023 3:39 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

	GS-AP-MW-12	GS-AP-MW-12V	GS-AP-MW-13 (bg)	GS-AP-MW-15	GS-AP-MW-15V	GS-AP-MW-16D	GS-AP-MW-17	GS-AP-MW-17V ...	GS-AP-MW-19
8/1/2016				<0.001015		<0.001015	<0.001015		<0.001015
8/2/2016			<0.01						
8/3/2016	<0.001015								
9/19/2016						<0.001015	<0.001015		
9/20/2016	<0.001015		<0.01	<0.001015					
9/21/2016									<0.001015
10/24/2016							<0.001015		<0.001015
10/25/2016	<0.001015		<0.01	<0.001015		<0.001015			
12/13/2016	<0.001015		<0.01			<0.001015	<0.001015		<0.001015
12/14/2016				<0.001015					
2/6/2017							<0.001015		
2/7/2017									<0.001015
2/8/2017	<0.001015		<0.01	<0.001015		<0.001015			
3/27/2017							<0.001015		
3/28/2017				<0.001015					<0.001015
3/29/2017	<0.001015		<0.01			<0.001015			
3/30/2017									
4/24/2017							<0.001015		
4/26/2017	<0.001015		<0.01	<0.001015		<0.001015			<0.001015
6/5/2017							<0.001015		
6/6/2017				<0.001015		<0.001015			<0.001015
6/7/2017	<0.001015		<0.01						
2/19/2018							<0.001015		
2/20/2018	<0.001015		<0.01	<0.001015					
2/21/2018						<0.001015			<0.001015
5/15/2018	<0.001015		<0.01	<0.001015			<0.001015		
5/16/2018						<0.001015			<0.001015
10/15/2018				<0.001015			<0.001015		
10/16/2018	<0.001015								<0.001015
10/17/2018			<0.01			<0.001015			
2/20/2019								<0.001015	
2/21/2019		<0.001015							
2/26/2019									
2/27/2019									
4/16/2019	<0.001015		<0.01						
4/17/2019				<0.001015		<0.001015	<0.001015		<0.001015
9/23/2019							<0.001015		
9/24/2019				<0.001015		<0.001015		<0.001015	<0.001015
9/25/2019	<0.001015	<0.001015							
3/16/2020							<0.001015		
3/17/2020									
3/18/2020	<0.001015			<0.001015	<0.001015				
3/23/2020									
3/24/2020		<0.001015				<0.001015			<0.001015
3/25/2020								<0.001015	
5/12/2020							<0.001015		
5/13/2020									
9/17/2020									
9/21/2020					<0.001015		<0.001015		
9/22/2020						<0.001015			<0.001015
9/23/2020	<0.001015	<0.001015		<0.001015				<0.001015	
2/1/2021	<0.001015	<0.001015							

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Selenium (mg/L) Analysis Run 5/23/2023 3:39 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-12	GS-AP-MW-12V	GS-AP-MW-13 (bg)	GS-AP-MW-15	GS-AP-MW-15V	GS-AP-MW-16D	GS-AP-MW-17	GS-AP-MW-17V ...	GS-AP-MW-19
2/2/2021							<0.001015	<0.001015	
2/3/2021									
2/8/2021									<0.001015
2/9/2021				<0.001015	<0.001015				
2/10/2021						<0.001015			
7/27/2021									
8/2/2021								<0.001015	
8/3/2021				<0.001015	<0.001015		<0.001015		
8/4/2021									
8/9/2021	<0.001015	<0.001015				<0.001015			
8/10/2021									<0.001015
8/11/2021									
8/12/2021									
2/8/2022									
2/14/2022							<0.001015	<0.001015	
2/15/2022						<0.001015			
2/16/2022				<0.001015	<0.001015				
2/22/2022									<0.001015
2/23/2022		<0.001015							
2/28/2022	<0.001015								
7/19/2022	<0.001015								
7/20/2022		<0.001015							
7/26/2022									
7/27/2022									
8/2/2022				<0.001015	<0.001015	<0.001015			
8/3/2022									<0.001015
8/8/2022							<0.001015		
8/9/2022								<0.001015	
8/10/2022									
3/14/2023									
3/15/2023									
3/20/2023				<0.001015	<0.001015				
3/21/2023						<0.001015			<0.001015
3/22/2023	<0.001015	<0.001015					<0.001015	<0.001015	

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Selenium (mg/L) Analysis Run 5/23/2023 3:39 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-2	GS-AP-MW-21	GS-AP-MW-21V	GS-AP-MW-23H	GS-AP-MW-24H	GS-AP-MW-25HA	GS-AP-MW-26H
8/1/2016							
8/2/2016	<0.001015	<0.001015					
8/3/2016							
9/19/2016	<0.001015						
9/20/2016							
9/21/2016		<0.001015					
10/24/2016	<0.001015						
10/25/2016		<0.001015					
12/13/2016	<0.001015						
12/14/2016		<0.001015					
2/6/2017							
2/7/2017							
2/8/2017	<0.001015	<0.001015					
3/27/2017							
3/28/2017		<0.001015					
3/29/2017							
3/30/2017	<0.001015						
4/24/2017							
4/26/2017	<0.001015	<0.001015					
6/5/2017							
6/6/2017	<0.001015	<0.001015					
6/7/2017							
2/19/2018							
2/20/2018		<0.001015					
2/21/2018	<0.001015						
5/15/2018		<0.001015					
5/16/2018	<0.001015						
10/15/2018							
10/16/2018	<0.001015	<0.001015					
10/17/2018							
2/20/2019				<0.001015			
2/21/2019							
2/26/2019					<0.001015		
2/27/2019							<0.001015
4/16/2019							
4/17/2019	<0.001015	<0.001015					
9/23/2019				<0.001015			<0.001015
9/24/2019		<0.001015			<0.001015		
9/25/2019	<0.001015						
3/16/2020							
3/17/2020				<0.001015			
3/18/2020		<0.001015			<0.001015		
3/23/2020			<0.001015				
3/24/2020						<0.001015	
3/25/2020	<0.001015						<0.001015
5/12/2020							
5/13/2020	<0.001015						
9/17/2020				<0.001015	<0.001015	0.00636 (J)	
9/21/2020							<0.001015
9/22/2020	<0.001015						
9/23/2020		<0.001015	<0.001015				
2/1/2021	<0.001015						

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Selenium (mg/L) Analysis Run 5/23/2023 3:39 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-2	GS-AP-MW-21	GS-AP-MW-21V	GS-AP-MW-23H	GS-AP-MW-24H	GS-AP-MW-25HA	GS-AP-MW-26H
2/2/2021					<0.001015		
2/3/2021				<0.001015			
2/8/2021		<0.001015					
2/9/2021			<0.001015				<0.001015
2/10/2021						<0.001015	
7/27/2021				<0.001015			
8/2/2021							
8/3/2021					<0.001015		
8/4/2021	<0.001015	<0.001015					
8/9/2021							
8/10/2021							<0.001015
8/11/2021			<0.001015				
8/12/2021						<0.001015	
2/8/2022		<0.001015	<0.001015				
2/14/2022				<0.001015			
2/15/2022					<0.001015		<0.001015
2/16/2022						<0.001015	
2/22/2022	<0.001015						
2/23/2022							
2/28/2022							
7/19/2022	<0.001015						
7/20/2022							
7/26/2022				<0.001015			
7/27/2022					<0.001015		
8/2/2022							
8/3/2022						<0.001015	
8/8/2022							
8/9/2022			<0.001015				
8/10/2022		<0.001015					<0.001015
3/14/2023				<0.001015			
3/15/2023					<0.001015		
3/20/2023							
3/21/2023		<0.001015	<0.001015				
3/22/2023	<0.001015					<0.001015	<0.001015

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Selenium (mg/L) Analysis Run 5/23/2023 3:39 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-28H	GS-AP-MW-29H	GS-AP-MW-3	GS-AP-MW-30HA	GS-AP-MW-31H	GS-AP-MW-32H	GS-AP-MW-33HO	GS-AP-MW-34HO	GS-AP-MW-35HO
2/27/2019		<0.001015							
3/13/2019	<0.001015								
9/24/2019		<0.001015							
9/25/2019	<0.001015								
3/16/2020	<0.001015							<0.001015	
3/17/2020							<0.001015		<0.001015
3/18/2020				<0.001015	<0.001015				
3/24/2020						<0.001015			
3/25/2020		<0.001015							
5/12/2020	<0.001015							<0.001015	<0.001015
5/13/2020				<0.001015			<0.001015		
9/15/2020							<0.001015		
9/16/2020								<0.001015	<0.001015
9/17/2020									
9/21/2020				<0.001015		<0.001015			
9/22/2020	<0.001015	<0.001015			<0.001015				
2/1/2021					<0.001015				
2/2/2021									
2/3/2021		<0.001015					<0.001015	<0.001015	
2/4/2021									<0.001015
2/8/2021									
2/9/2021									
2/10/2021						<0.001015			
2/17/2021	<0.001015		<0.001015	<0.001015					
7/27/2021							<0.001015	<0.001015	
7/28/2021									<0.001015
8/2/2021				<0.001015	<0.001015				
8/3/2021			<0.001015						
8/4/2021		<0.001015							
8/9/2021	<0.001015								
8/10/2021						<0.001015			
2/8/2022				<0.001015	<0.001015				
2/9/2022							<0.001015	<0.001015	<0.001015
2/14/2022	<0.001015	<0.001015				<0.001015			
2/15/2022									
2/16/2022			<0.001015						
2/21/2022									
2/22/2022									
7/20/2022			<0.001015						
7/26/2022									
7/27/2022	<0.001015					<0.001015			
8/2/2022									
8/3/2022		<0.001015		<0.001015	<0.001015				
8/10/2022									
3/8/2023								<0.001015	<0.001015
3/13/2023				<0.001015					
3/14/2023	<0.001015						<0.001015		
3/15/2023									
3/21/2023			<0.001015			<0.001015			
3/22/2023									
3/27/2023					<0.001015				
3/28/2023		<0.001015							

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Selenium (mg/L)   Analysis Run 5/23/2023 3:39 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

	GS-AP-MW-36H	GS-AP-MW-38H	GS-AP-MW-40H	GS-AP-MW-41HD	GS-AP-MW-41HS	GS-AP-MW-42H	GS-AP-MW-43HO
2/27/2019							
3/13/2019							
9/24/2019							
9/25/2019							
3/16/2020							
3/17/2020	<0.001015						
3/18/2020				<0.001015			
3/24/2020		<0.001015				<0.001015	
3/25/2020							<0.001015
5/12/2020							
5/13/2020	<0.001015						
9/15/2020							
9/16/2020							
9/17/2020	<0.001015			<0.001015			
9/21/2020							
9/22/2020		<0.001015	<0.001015			<0.001015	<0.001015
2/1/2021							
2/2/2021			<0.001015				
2/3/2021						<0.001015	
2/4/2021							
2/8/2021				<0.001015	<0.001015		
2/9/2021		<0.001015					
2/10/2021							
2/17/2021	<0.001015						<0.001015
7/27/2021							
7/28/2021					<0.001015		
8/2/2021							
8/3/2021				<0.001015			
8/4/2021	<0.001015	<0.001015				<0.001015	<0.001015
8/9/2021							
8/10/2021			<0.001015				
2/8/2022					<0.001015		
2/9/2022							
2/14/2022	<0.001015						
2/15/2022			<0.001015	<0.001015			
2/16/2022						<0.001015	
2/21/2022							<0.001015
2/22/2022		<0.001015					
7/20/2022	<0.001015						
7/26/2022					<0.001015		
7/27/2022				<0.001015		<0.001015	
8/2/2022			<0.001015				
8/3/2022							<0.001015
8/10/2022		<0.001015					
3/8/2023							
3/13/2023					<0.001015		
3/14/2023							
3/15/2023	<0.001015			<0.001015		<0.001015	
3/21/2023							
3/22/2023			<0.001015				
3/27/2023							
3/28/2023		<0.001015					<0.001015

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Selenium (mg/L) Analysis Run 5/23/2023 3:39 PM
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-44HO	GS-AP-MW-6D	GS-AP-MW-6S	GS-AP-MW-6V	GS-AP-MW-7	GS-AP-MW-8 (bg)	GS-AP-MW-9V	GS-AP-PZ-16	GS-AP-PZ-22
8/2/2016					<0.001015				
8/3/2016		<0.001015	<0.01			<0.001015			
9/20/2016		<0.001015	<0.01						
9/21/2016					<0.001015	<0.001015			
10/24/2016		<0.001015			<0.001015				
10/25/2016						<0.001015			
10/26/2016			<0.01						
12/12/2016		<0.001015	<0.01		<0.001015				
12/13/2016						<0.001015			
2/6/2017		<0.001015	<0.01		<0.001015	<0.001015			
3/27/2017		<0.001015	<0.01						
3/28/2017					<0.001015	<0.001015			
4/24/2017		<0.001015	<0.01		<0.001015	<0.001015			
6/6/2017		<0.001015	<0.01						
6/7/2017					<0.001015	<0.001015			
2/19/2018		<0.001015	<0.01		<0.001015	<0.001015			
5/14/2018		<0.001015	<0.01						
5/15/2018					<0.001015	<0.001015			
10/15/2018		<0.001015	<0.01		<0.001015				
10/16/2018						<0.001015			
4/16/2019		<0.001015	<0.01			<0.001015			
4/23/2019					<0.001015				
9/23/2019		<0.001015	<0.01						
9/24/2019					<0.001015	<0.001015			
3/17/2020		<0.001015	<0.01		<0.001015				
3/18/2020						<0.001015			
3/23/2020							<0.001015		
3/24/2020								<0.001015	<0.001015
8/27/2020	<0.001015								
9/8/2020				<0.001015					
9/15/2020	<0.001015			<0.001015					
9/16/2020			<0.01		<0.001015				
9/17/2020		<0.001015						<0.001015	<0.001015
9/21/2020						<0.001015			
9/22/2020							<0.001015		
2/2/2021					<0.001015	<0.001015	<0.001015		<0.001015
2/3/2021	<0.001015	<0.001015	0.000794 (J)	<0.001015					
2/17/2021								<0.001015	
7/27/2021	<0.001015	<0.001015	0.00124						
8/2/2021				<0.001015					
8/3/2021									<0.001015
8/9/2021					<0.001015			<0.001015	
8/10/2021						<0.001015	<0.001015		
2/8/2022					<0.001015				
2/9/2022	<0.001015			<0.001015					
2/14/2022		<0.001015	0.00085 (J)						<0.001015
2/15/2022								<0.001015	
2/16/2022						<0.001015			
2/21/2022							<0.001015		
2/22/2022									
2/28/2022									
3/1/2022									

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Selenium (mg/L)   Analysis Run 5/23/2023 3:39 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

	GS-AP-MW-44HO	GS-AP-MW-6D	GS-AP-MW-6S	GS-AP-MW-6V	GS-AP-MW-7	GS-AP-MW-8 (bg)	GS-AP-MW-9V	GS-AP-PZ-16	GS-AP-PZ-22
7/19/2022							<0.001015		
7/20/2022									
7/25/2022		<0.001015		<0.001015	<0.001015				
7/26/2022			0.00086 (J)					<0.001015	
8/2/2022						<0.001015			
8/3/2022									
8/9/2022									<0.001015
3/6/2023	<0.001015								
3/8/2023				<0.001015					
3/14/2023		<0.001015	0.000886 (J)		<0.001015				
3/15/2023									
3/21/2023								<0.001015	<0.001015
3/22/2023									
3/27/2023						<0.001015	<0.001015		
3/28/2023									

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Selenium (mg/L) Analysis Run 5/23/2023 3:39 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-10R	GS-AP-MW-11R	GS-AP-MW-13R	GS-AP-MW-14R	GS-AP-MW-18R	GS-AP-MW-18VR	GS-AP-MW-1R
8/2/2016							
8/3/2016							
9/20/2016							
9/21/2016							
10/24/2016							
10/25/2016							
10/26/2016							
12/12/2016							
12/13/2016							
2/6/2017							
3/27/2017							
3/28/2017							
4/24/2017							
6/6/2017							
6/7/2017							
2/19/2018							
5/14/2018							
5/15/2018							
10/15/2018							
10/16/2018							
4/16/2019							
4/23/2019							
9/23/2019							
9/24/2019							
3/17/2020							
3/18/2020							
3/23/2020							
3/24/2020							
8/27/2020							
9/8/2020							
9/15/2020							
9/16/2020							
9/17/2020							
9/21/2020							
9/22/2020							
2/2/2021							
2/3/2021							
2/17/2021							
7/27/2021							
8/2/2021							
8/3/2021							
8/9/2021							
8/10/2021							
2/8/2022							
2/9/2022							
2/14/2022							
2/15/2022							
2/16/2022							
2/21/2022							
2/22/2022					<0.001015	<0.001015	
2/28/2022				<0.001015			
3/1/2022	<0.001015	<0.001015	<0.001015				<0.001015

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Selenium (mg/L) Analysis Run 5/23/2023 3:39 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-10R	GS-AP-MW-11R	GS-AP-MW-13R	GS-AP-MW-14R	GS-AP-MW-18R	GS-AP-MW-18VR	GS-AP-MW-1R
7/19/2022		<0.001015					
7/20/2022			<0.001015				
7/25/2022							
7/26/2022							
8/2/2022							<0.001015
8/3/2022	<0.001015			<0.001015	<0.001015		
8/9/2022						<0.001015	
3/6/2023							
3/8/2023							
3/14/2023							
3/15/2023				<0.001015			
3/21/2023							
3/22/2023		<0.001015					
3/27/2023	<0.001015		<0.001015			<0.001015	<0.001015
3/28/2023					<0.001015		

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Selenium (mg/L)   Analysis Run 5/23/2023 3:39 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

	GS-AP-MW-23V	GS-AP-MW-27HR	GS-AP-MW-31V	GS-AP-MW-36V	GS-AP-MW-37HR	GS-AP-MW-3V	GS-AP-MW-45V	GS-AP-MW-47	GS-AP-MW-5R
2/21/2022									
2/22/2022		<0.001015	<0.001015	<0.001015					
2/23/2022	<0.001015					<0.001015	<0.001015		
2/28/2022					<0.001015			<0.001015	
3/1/2022									<0.001015
7/19/2022									
7/20/2022						<0.001015			
7/26/2022	<0.001015				<0.001015			<0.001015	
7/27/2022		<0.001015		<0.001015					
8/2/2022									<0.001015
8/3/2022			<0.001015						
8/8/2022							<0.001015		
3/14/2023	<0.001015	<0.001015		<0.001015					
3/15/2023					<0.001015			<0.001015	
3/20/2023									<0.001015
3/21/2023						<0.001015			
3/27/2023			<0.001015						
3/28/2023							<0.001015		

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Selenium (mg/L) Analysis Run 5/23/2023 3:39 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-9R	GS-AP-PZ-18R	GS-AP-MW-46
2/21/2022		<0.001015	
2/22/2022			
2/23/2022			<0.001015
2/28/2022			
3/1/2022	<0.001015		
7/19/2022	<0.001015		
7/20/2022			
7/26/2022			
7/27/2022		<0.001015	
8/2/2022			<0.001015
8/3/2022			
8/8/2022			
3/14/2023			
3/15/2023			
3/20/2023			
3/21/2023			
3/27/2023	<0.001015		<0.001015
3/28/2023		<0.001015	

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Sulfate (mg/L) Analysis Run 5/23/2023 3:39 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-12	GS-AP-MW-12V	GS-AP-MW-13 (bg)	GS-AP-MW-15	GS-AP-MW-15V	GS-AP-MW-16D	GS-AP-MW-17	GS-AP-MW-17V ...	GS-AP-MW-19
8/1/2016				102		13.4	9.56		9.02
8/2/2016			12						
8/3/2016	19.2								
9/19/2016						12.9	12.7		
9/20/2016	1.42		11.2	53.3					
9/21/2016									8.38
10/24/2016							8.58		18.5
10/25/2016	<1		10.1	49.8		11.6			
12/13/2016	3.21		11.4			12.7	31		7.4
12/14/2016				40.9					
2/6/2017							14.7		
2/7/2017									8.16
2/8/2017	3.3		10.9	25		12.2			
3/27/2017							14		
3/28/2017				27					6.4
3/29/2017	3.8 (J)		11			12			
3/30/2017									
4/24/2017							22		
4/26/2017	1.4 (J)		11	29		13			4.6 (J)
6/5/2017							30		
6/6/2017				23		12			5.2
6/7/2017	1.7 (J)		11						
8/21/2017									
8/22/2017	4.2 (J)		11	22		12	42		5.3
8/23/2017									
5/15/2018	14		11	13			54		
5/16/2018						13			6
10/15/2018				14			34		
10/16/2018	13								5.6
10/17/2018			12			13			
2/20/2019								15.2	
2/21/2019		<1							
2/26/2019									
2/27/2019									
4/16/2019	13.3		12.1						
4/17/2019				9.02		14.1	76.6		14.3
9/23/2019							124		
9/24/2019				12.4		14.1		11.8	13.8
9/25/2019	25.5	1.61							
3/16/2020							48.6		
3/17/2020									
3/18/2020	20.8			15.9	261				
3/23/2020									
3/24/2020		<1				14.1			15.2
3/25/2020								9.69	
5/12/2020							44.4		
5/13/2020									
9/17/2020									
9/21/2020					348		104		
9/22/2020						13.6			16.9
9/23/2020	19.1	6.56		13.2				11.1	
2/1/2021	18.7	<1							

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Sulfate (mg/L) Analysis Run 5/23/2023 3:39 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-12	GS-AP-MW-12V	GS-AP-MW-13 (bg)	GS-AP-MW-15	GS-AP-MW-15V	GS-AP-MW-16D	GS-AP-MW-17	GS-AP-MW-17V ...	GS-AP-MW-19
2/2/2021							55.1	8.81	
2/3/2021									
2/8/2021									16.2
2/9/2021				10.6	350				
2/10/2021						15.8			
7/27/2021									
8/2/2021								10.2	
8/3/2021				9.77	241		7.58		
8/4/2021									
8/9/2021	17.3	1.85				14.4			
8/10/2021									15.2
8/11/2021									
8/12/2021									
2/8/2022									
2/14/2022							14.4	9.09	
2/15/2022						14.7			
2/16/2022				7.37	224				
2/22/2022									13.7
2/23/2022		0.741 (J)							
2/28/2022	17.9								
7/19/2022	18.5								
7/20/2022		1.08 (J)							
7/26/2022									
7/27/2022									
8/2/2022				9.11	218	15.6			
8/3/2022									17.1
8/8/2022							8.35		
8/9/2022								8.13	
8/10/2022									
3/14/2023									
3/15/2023									
3/20/2023				6.57	176				
3/21/2023						14.7			16.4
3/22/2023	18.3	1.52 (J)					7	10.6	

Time Series

Constituent: Sulfate (mg/L) Analysis Run 5/23/2023 3:39 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-2	GS-AP-MW-21	GS-AP-MW-21V	GS-AP-MW-23H	GS-AP-MW-24H	GS-AP-MW-25HA	GS-AP-MW-26H
8/1/2016							
8/2/2016	2.87	9.14					
8/3/2016							
9/19/2016	1.22						
9/20/2016							
9/21/2016		8.71					
10/24/2016	<1						
10/25/2016		8.54					
12/13/2016	<1						
12/14/2016		11.5					
2/6/2017							
2/7/2017							
2/8/2017	19.4	17					
3/27/2017							
3/28/2017		25					
3/29/2017							
3/30/2017	31						
4/24/2017							
4/26/2017	29	28					
6/5/2017							
6/6/2017	37	33					
6/7/2017							
8/21/2017	55						
8/22/2017							
8/23/2017		43					
5/15/2018		110					
5/16/2018	34						
10/15/2018							
10/16/2018	90	160					
10/17/2018							
2/20/2019				352			
2/21/2019							
2/26/2019					10.9		
2/27/2019							4.89
4/16/2019							
4/17/2019	48.6	215					
9/23/2019				394			16.9
9/24/2019		224			15.3		
9/25/2019	47.7						
3/16/2020							
3/17/2020				356			
3/18/2020		228			12.2		
3/23/2020			1050				
3/24/2020						201	
3/25/2020	38.5						3.25
5/12/2020							
5/13/2020	33.6						
9/17/2020				361	6.7	173	
9/21/2020							4.54
9/22/2020	21.5						
9/23/2020		248	1120				
2/1/2021	21.3						

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Sulfate (mg/L) Analysis Run 5/23/2023 3:39 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-2	GS-AP-MW-21	GS-AP-MW-21V	GS-AP-MW-23H	GS-AP-MW-24H	GS-AP-MW-25HA	GS-AP-MW-26H
2/2/2021					6.43		
2/3/2021				339			
2/8/2021		232					
2/9/2021			645				5.76
2/10/2021						171	
7/27/2021				339			
8/2/2021							
8/3/2021					6.21		
8/4/2021	16.8	231					
8/9/2021							
8/10/2021							4.73
8/11/2021			137				
8/12/2021						125	
2/8/2022		241	451				
2/14/2022				356			
2/15/2022					12.1		7.16
2/16/2022						130	
2/22/2022	17.1						
2/23/2022							
2/28/2022							
7/19/2022	19.4						
7/20/2022							
7/26/2022				322			
7/27/2022					6.24		
8/2/2022							
8/3/2022						81.800003	
8/8/2022							
8/9/2022			360				
8/10/2022		245					4.09
3/14/2023				292			
3/15/2023					7.51		
3/20/2023							
3/21/2023		238	595				
3/22/2023	8.17					62.1	4.65

Time Series

Constituent: Sulfate (mg/L) Analysis Run 5/23/2023 3:39 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-28H	GS-AP-MW-29H	GS-AP-MW-3	GS-AP-MW-30HA	GS-AP-MW-31H	GS-AP-MW-32H	GS-AP-MW-33HO	GS-AP-MW-34HO	GS-AP-MW-35HO
2/27/2019		20.7							
3/13/2019	30								
9/24/2019		32.6							
9/25/2019	10.2								
3/16/2020	9.91							1480	
3/17/2020							172		40.1
3/18/2020				184	50.4				
3/24/2020						33.2			
3/25/2020		29.4							
5/12/2020	14.3							1330	22.6
5/13/2020				194			60		
9/15/2020							98.6		
9/16/2020								1390	24.6
9/17/2020									
9/21/2020				128		38.7			
9/22/2020	10.5	81.6			22.1				
2/1/2021					32.2				
2/2/2021									
2/3/2021		135					70.7	1610	
2/4/2021									25.3
2/8/2021									
2/9/2021									
2/10/2021						50.8			
2/17/2021	6.39		158	136					
7/27/2021							100	1580	
7/28/2021									20.7
8/2/2021				201	35.1				
8/3/2021			99.4						
8/4/2021		74							
8/9/2021	3.49								
8/10/2021						45.6			
2/8/2022				215	29.5				
2/9/2022							77.8	1570	21.7
2/14/2022	3.99	49.7				38.4			
2/15/2022									
2/16/2022			91.2						
2/21/2022									
2/22/2022									
7/20/2022			78.599998						
7/26/2022									
7/27/2022	2.87					41.299999			
8/2/2022									
8/3/2022		28.299999		279	12.5				
8/10/2022									
3/8/2023								1200	15
3/13/2023				228					
3/14/2023	5.24						15.9		
3/15/2023									
3/21/2023			83.1			38.5			
3/22/2023									
3/27/2023					8.13				
3/28/2023		27.3							

Time Series

Constituent: Sulfate (mg/L) Analysis Run 5/23/2023 3:39 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-36H	GS-AP-MW-38H	GS-AP-MW-40H	GS-AP-MW-41HD	GS-AP-MW-41HS	GS-AP-MW-42H	GS-AP-MW-43HO
2/27/2019							
3/13/2019							
9/24/2019							
9/25/2019							
3/16/2020							
3/17/2020	57.1						
3/18/2020				122			
3/24/2020		16.7				449	
3/25/2020							327
5/12/2020							
5/13/2020	47.8						
9/15/2020							
9/16/2020							
9/17/2020	50.2			105			
9/21/2020							
9/22/2020		27	626			372	269
2/1/2021							
2/2/2021			644				
2/3/2021						373	
2/4/2021							
2/8/2021				111	95.1		
2/9/2021		27					
2/10/2021							
2/17/2021	28.9						285
7/27/2021							
7/28/2021					103		
8/2/2021							
8/3/2021				94.1			
8/4/2021	83.7	32.3				372	301
8/9/2021							
8/10/2021			661				
2/8/2022					105		
2/9/2022							
2/14/2022	112						
2/15/2022			684	110			
2/16/2022						396	
2/21/2022							347
2/22/2022		27.9					
7/20/2022	11						
7/26/2022					109		
7/27/2022				116		363	
8/2/2022			732				
8/3/2022							250
8/10/2022		58.599998					
3/8/2023							
3/13/2023					88.6		
3/14/2023							
3/15/2023	77			103		329	
3/21/2023							
3/22/2023			683				
3/27/2023							
3/28/2023		39.5					322

Time Series

Constituent: Sulfate (mg/L)   Analysis Run 5/23/2023 3:39 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

	GS-AP-MW-44HO	GS-AP-MW-6D	GS-AP-MW-6S	GS-AP-MW-6V	GS-AP-MW-7	GS-AP-MW-8 (bg)	GS-AP-MW-9V	GS-AP-PZ-16	GS-AP-PZ-22
8/2/2016					154				
8/3/2016		52	203			4.2			
9/20/2016		56	209						
9/21/2016					146	4.27			
10/24/2016		57.5			131				
10/25/2016						2.78			
10/26/2016			224						
12/12/2016		50	249		141				
12/13/2016						3.18			
2/6/2017		54.9	309		135	3.74			
3/27/2017		50	290						
3/28/2017					140	3.4 (J)			
4/24/2017		56	300		140	2.7 (J)			
6/6/2017		63	310						
6/7/2017					150	2.7 (J)			
8/21/2017		35	260		140	3.9 (J)			
5/14/2018		46	210						
5/15/2018					120	2.5 (J)			
10/15/2018		37	170		130				
10/16/2018						2.4 (J)			
4/16/2019		46.8	195			4.53			
4/23/2019					156				
9/23/2019		47.9	176						
9/24/2019					145	6.61			
3/17/2020		59.5	148		149				
3/18/2020						4.86			
3/23/2020							18.7		
3/24/2020								27.7	70.1
8/27/2020	33.5								
9/8/2020				9.06					
9/15/2020	71.6			7.02					
9/16/2020			115		131				
9/17/2020		65.1						15.2	79.9
9/21/2020						4.69			
9/22/2020							21.2		
2/2/2021					130	4.83	31.2		84.1
2/3/2021	57	58.9	116	4.29					
2/17/2021								14.1	
7/27/2021	36.9	64.4	114						
8/2/2021				14.1					
8/3/2021									74.7
8/9/2021					133			13.6	
8/10/2021						3.77	32.7		
2/8/2022					137 (D)				
2/9/2022	27.7			8.6					
2/14/2022		58.3	115						91.1
2/15/2022								23.1	
2/16/2022						4.68			
2/21/2022							32.4		
2/22/2022									
2/28/2022									
3/1/2022									

Time Series

Constituent: Sulfate (mg/L) Analysis Run 5/23/2023 3:39 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-44HO	GS-AP-MW-6D	GS-AP-MW-6S	GS-AP-MW-6V	GS-AP-MW-7	GS-AP-MW-8 (bg)	GS-AP-MW-9V	GS-AP-PZ-16	GS-AP-PZ-22
7/19/2022							37.099998		
7/20/2022									
7/25/2022		57.6 (D)		4.355 (D)	137.75 (D)				
7/26/2022			106					38	
8/2/2022						4.18			
8/3/2022									
8/9/2022									53.799999
3/6/2023	23.1								
3/8/2023				11.235 (D)					
3/14/2023		57.5	96.099998		130				
3/15/2023									
3/21/2023								8.8	62.9
3/22/2023									
3/27/2023						4.41	47.9		
3/28/2023									

Time Series

Constituent: Sulfate (mg/L) Analysis Run 5/23/2023 3:39 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-10R	GS-AP-MW-11R	GS-AP-MW-13R	GS-AP-MW-14R	GS-AP-MW-18R	GS-AP-MW-18VR	GS-AP-MW-1R
8/2/2016							
8/3/2016							
9/20/2016							
9/21/2016							
10/24/2016							
10/25/2016							
10/26/2016							
12/12/2016							
12/13/2016							
2/6/2017							
3/27/2017							
3/28/2017							
4/24/2017							
6/6/2017							
6/7/2017							
8/21/2017							
5/14/2018							
5/15/2018							
10/15/2018							
10/16/2018							
4/16/2019							
4/23/2019							
9/23/2019							
9/24/2019							
3/17/2020							
3/18/2020							
3/23/2020							
3/24/2020							
8/27/2020							
9/8/2020							
9/15/2020							
9/16/2020							
9/17/2020							
9/21/2020							
9/22/2020							
2/2/2021							
2/3/2021							
2/17/2021							
7/27/2021							
8/2/2021							
8/3/2021							
8/9/2021							
8/10/2021							
2/8/2022							
2/9/2022							
2/14/2022							
2/15/2022							
2/16/2022							
2/21/2022							
2/22/2022					27	13	
2/28/2022				33.3			
3/1/2022	21.6	39.4	38				5.88

Time Series

Constituent: Sulfate (mg/L) Analysis Run 5/23/2023 3:39 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-10R	GS-AP-MW-11R	GS-AP-MW-13R	GS-AP-MW-14R	GS-AP-MW-18R	GS-AP-MW-18VR	GS-AP-MW-1R
7/19/2022		39.400002					
7/20/2022			38.900002				
7/25/2022							
7/26/2022							
8/2/2022							4.28
8/3/2022	30.9			24.700001	21.200001		
8/9/2022						5.54	
3/6/2023							
3/8/2023							
3/14/2023							
3/15/2023				20.9			
3/21/2023							
3/22/2023		45.6					
3/27/2023	17.5		33.1			1.61 (J)	5.43
3/28/2023					26.299999		

Time Series

Constituent: Sulfate (mg/L)   Analysis Run 5/23/2023 3:39 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

	GS-AP-MW-23V	GS-AP-MW-27HR	GS-AP-MW-31V	GS-AP-MW-36V	GS-AP-MW-37HR	GS-AP-MW-3V	GS-AP-MW-45V	GS-AP-MW-47	GS-AP-MW-5R
2/21/2022									
2/22/2022		268	26.2	53.9					
2/23/2022	331					370	273		
2/28/2022					22.6			14.4	
3/1/2022									348
7/19/2022									
7/20/2022						454			
7/26/2022	286				32.200001			16.700001	
7/27/2022		593		387					
8/2/2022									294
8/3/2022			111						
8/8/2022							273		
3/14/2023	113	864		346					
3/15/2023					40.9			24.3	
3/20/2023									290
3/21/2023						330			
3/27/2023			214						
3/28/2023							489		

Time Series

Constituent: Sulfate (mg/L) Analysis Run 5/23/2023 3:39 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-9R	GS-AP-PZ-18R	GS-AP-MW-46
2/21/2022		55.5	
2/22/2022			
2/23/2022			317
2/28/2022			
3/1/2022	104		
7/19/2022	86.599998		
7/20/2022			
7/26/2022			
7/27/2022		48.200001	
8/2/2022			200
8/3/2022			
8/8/2022			
3/14/2023			
3/15/2023			
3/20/2023			
3/21/2023			
3/27/2023	80.6		168
3/28/2023		44.900002	

Time Series

Constituent: TDS (mg/L) Analysis Run 5/23/2023 3:39 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-12	GS-AP-MW-12V	GS-AP-MW-13 (bg)	GS-AP-MW-15	GS-AP-MW-15V	GS-AP-MW-16D	GS-AP-MW-17	GS-AP-MW-17V ...	GS-AP-MW-19
8/1/2016				640		222	408		245
8/2/2016			221						
8/3/2016	546								
9/19/2016						220	441		
9/20/2016	542		221	434					
9/21/2016									267
10/24/2016							424		275
10/25/2016	518		226	394		223			
12/13/2016	424		211			211	466		255
12/14/2016				387					
2/6/2017							414		
2/7/2017									272
2/8/2017	379		212	303		206			
3/27/2017							444		
3/28/2017				305					271
3/29/2017	334		217			215			
3/30/2017									
4/24/2017							446		
4/26/2017	332		202	329		212			265
6/5/2017							493		
6/6/2017				331		227			287
6/7/2017	308		218						
8/21/2017									
8/22/2017	286		224	364		230	500		293
8/23/2017									
5/15/2018	235		209	340			528		
5/16/2018						216			301
10/15/2018				448			462		
10/16/2018	211								303
10/17/2018			208			191			
2/20/2019								346	
2/21/2019		237							
2/26/2019									
2/27/2019									
4/16/2019	193		185						
4/17/2019				354		207	540		296
9/23/2019							684		
9/24/2019				536		208		365	302
9/25/2019	253	183							
3/16/2020							516		
3/17/2020									
3/18/2020	236			515	873				
3/23/2020									
3/24/2020		206				205			302
3/25/2020								364	
5/12/2020							493		
5/13/2020									
9/17/2020									
9/21/2020					1090		658		
9/22/2020						218			300
9/23/2020	216	195		600				368	
2/1/2021	224	240							

Time Series

Constituent: TDS (mg/L) Analysis Run 5/23/2023 3:39 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-12	GS-AP-MW-12V	GS-AP-MW-13 (bg)	GS-AP-MW-15	GS-AP-MW-15V	GS-AP-MW-16D	GS-AP-MW-17	GS-AP-MW-17V ...	GS-AP-MW-19
2/2/2021							548	356	
2/3/2021									
2/8/2021									324
2/9/2021				616	1040				
2/10/2021						224			
7/27/2021									
8/2/2021								333	
8/3/2021				632	782		435		
8/4/2021									
8/9/2021	219	145				207			
8/10/2021									307
8/11/2021									
8/12/2021									
2/8/2022									
2/14/2022							448	365	
2/15/2022						214			
2/16/2022				426	782				
2/22/2022									304
2/23/2022		209							
2/28/2022	195								
7/19/2022	199								
7/20/2022		189							
7/26/2022									
7/27/2022									
8/2/2022				592	788	210			
8/3/2022									327
8/8/2022							446		
8/9/2022								344	
8/10/2022									
3/14/2023									
3/15/2023									
3/20/2023				444	694				
3/21/2023						221			320
3/22/2023	203	182					441	344	

Time Series

Constituent: TDS (mg/L)   Analysis Run 5/23/2023 3:39 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

	GS-AP-MW-2	GS-AP-MW-21	GS-AP-MW-21V	GS-AP-MW-23H	GS-AP-MW-24H	GS-AP-MW-25HA	GS-AP-MW-26H
8/1/2016							
8/2/2016	390	348					
8/3/2016							
9/19/2016	398						
9/20/2016							
9/21/2016		368					
10/24/2016	395						
10/25/2016		348					
12/13/2016	381						
12/14/2016		352					
2/6/2017							
2/7/2017							
2/8/2017	376	352					
3/27/2017							
3/28/2017		370					
3/29/2017							
3/30/2017	391						
4/24/2017							
4/26/2017	384	342					
6/5/2017							
6/6/2017	404	367					
6/7/2017							
8/21/2017	416						
8/22/2017							
8/23/2017		508					
5/15/2018		438					
5/16/2018	365						
10/15/2018							
10/16/2018	430	520					
10/17/2018							
2/20/2019				560			
2/21/2019							
2/26/2019					249		
2/27/2019							266
4/16/2019							
4/17/2019	341	582					
9/23/2019				598			278
9/24/2019		630			253		
9/25/2019	358						
3/16/2020							
3/17/2020				626			
3/18/2020		661			250		
3/23/2020			3410				
3/24/2020						948	
3/25/2020	337						269
5/12/2020							
5/13/2020	328						
9/17/2020				648	250	960	
9/21/2020							287
9/22/2020	318						
9/23/2020		642	3690				
2/1/2021	333						

Time Series

Constituent: TDS (mg/L)   Analysis Run 5/23/2023 3:39 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

	GS-AP-MW-2	GS-AP-MW-21	GS-AP-MW-21V	GS-AP-MW-23H	GS-AP-MW-24H	GS-AP-MW-25HA	GS-AP-MW-26H
2/2/2021					259		
2/3/2021				612			
2/8/2021		684					
2/9/2021			2250				280
2/10/2021						887	
7/27/2021				580			
8/2/2021							
8/3/2021					191		
8/4/2021	316	594					
8/9/2021							
8/10/2021							271
8/11/2021			712				
8/12/2021						967	
2/8/2022		570	1360				
2/14/2022				592			
2/15/2022					241		273
2/16/2022						945	
2/22/2022	295						
2/23/2022							
2/28/2022							
7/19/2022	262						
7/20/2022							
7/26/2022				626			
7/27/2022					252		
8/2/2022							
8/3/2022						897	
8/8/2022							
8/9/2022			1240				
8/10/2022		592					282
3/14/2023				587			
3/15/2023					255		
3/20/2023							
3/21/2023		606	1950				
3/22/2023	297					873	280

Time Series

Constituent: TDS (mg/L) Analysis Run 5/23/2023 3:39 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-28H	GS-AP-MW-29H	GS-AP-MW-3	GS-AP-MW-30HA	GS-AP-MW-31H	GS-AP-MW-32H	GS-AP-MW-33HO	GS-AP-MW-34HO	GS-AP-MW-35HO
2/27/2019		414							
3/13/2019	514								
9/24/2019		389							
9/25/2019	443								
3/16/2020	449							2460	
3/17/2020							827		365
3/18/2020				612	326				
3/24/2020						331			
3/25/2020		371							
5/12/2020	464							2440	311
5/13/2020				624			457		
9/15/2020							538		
9/16/2020								2720	326
9/17/2020									
9/21/2020				592		357			
9/22/2020	456	430			298				
2/1/2021					339				
2/2/2021									
2/3/2021		480					443	2930	
2/4/2021									339
2/8/2021									
2/9/2021									
2/10/2021						379			
2/17/2021	451		387	534					
7/27/2021							472	2930	
7/28/2021									302
8/2/2021				602	332				
8/3/2021			333						
8/4/2021		407							
8/9/2021	436								
8/10/2021						379			
2/8/2022				628	285				
2/9/2022							471	3130	322
2/14/2022	433	392				354			
2/15/2022									
2/16/2022			307						
2/21/2022									
2/22/2022									
7/20/2022			294						
7/26/2022									
7/27/2022	426					357			
8/2/2022									
8/3/2022		373		758	383				
8/10/2022									
3/8/2023								2740	287
3/13/2023				680					
3/14/2023	445						267		
3/15/2023									
3/21/2023			295			359			
3/22/2023									
3/27/2023					373				
3/28/2023		373							

Time Series

Constituent: TDS (mg/L)   Analysis Run 5/23/2023 3:39 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

	GS-AP-MW-36H	GS-AP-MW-38H	GS-AP-MW-40H	GS-AP-MW-41HD	GS-AP-MW-41HS	GS-AP-MW-42H	GS-AP-MW-43HO
2/27/2019							
3/13/2019							
9/24/2019							
9/25/2019							
3/16/2020							
3/17/2020	362						
3/18/2020				309			
3/24/2020		335				850	
3/25/2020							930
5/12/2020							
5/13/2020	333						
9/15/2020							
9/16/2020							
9/17/2020	348			318			
9/21/2020							
9/22/2020		339	1310			800	910
2/1/2021							
2/2/2021			1320				
2/3/2021						768	
2/4/2021							
2/8/2021				326	317		
2/9/2021		355					
2/10/2021							
2/17/2021	292						853
7/27/2021							
7/28/2021					283		
8/2/2021							
8/3/2021				307			
8/4/2021	449	368				740	855
8/9/2021							
8/10/2021			1240				
2/8/2022					265		
2/9/2022							
2/14/2022	514						
2/15/2022			1230	307			
2/16/2022						774	
2/21/2022							894
2/22/2022		345					
7/20/2022	248						
7/26/2022					265		
7/27/2022				305		728	
8/2/2022			1220				
8/3/2022							864
8/10/2022		456					
3/8/2023							
3/13/2023					267		
3/14/2023							
3/15/2023	452			317		744	
3/21/2023							
3/22/2023			1300				
3/27/2023							
3/28/2023		403					1280

Time Series

Constituent: TDS (mg/L) Analysis Run 5/23/2023 3:39 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-44HO	GS-AP-MW-6D	GS-AP-MW-6S	GS-AP-MW-6V	GS-AP-MW-7	GS-AP-MW-8 (bg)	GS-AP-MW-9V	GS-AP-PZ-16	GS-AP-PZ-22
8/2/2016					358				
8/3/2016		302	394			113			
9/20/2016		298	444						
9/21/2016					370	128			
10/24/2016		306			370				
10/25/2016						121			
10/26/2016			456						
12/12/2016		291	491		353				
12/13/2016						101			
2/6/2017		285	580		338	108			
3/27/2017		305	554						
3/28/2017					352	91			
4/24/2017		301	566		362	89.3			
6/6/2017		311	580						
6/7/2017					348	84			
8/21/2017		289	524		362	91.3			
5/14/2018		303	458						
5/15/2018					338	94.7			
10/15/2018		309	404		333				
10/16/2018						76.7			
4/16/2019		285	382			92			
4/23/2019					354				
9/23/2019		296	381						
9/24/2019					344	109			
3/17/2020		303	328		334				
3/18/2020						90.7			
3/23/2020							268		
3/24/2020								381	412
8/27/2020	435								
9/8/2020				810					
9/15/2020	564			857					
9/16/2020			269		351				
9/17/2020		314						387	438
9/21/2020						94			
9/22/2020							285		
2/2/2021					349	98.7	314		446
2/3/2021	592	301	274	840					
2/17/2021								397	
7/27/2021	510	262	273						
8/2/2021				833					
8/3/2021									414
8/9/2021					340			384	
8/10/2021						101	309		
2/8/2022					325 (D)				
2/9/2022	480			818					
2/14/2022		297	299						423
2/15/2022								402	
2/16/2022						90.7			
2/21/2022							299		
2/22/2022									
2/28/2022									
3/1/2022									

Time Series

Constituent: TDS (mg/L) Analysis Run 5/23/2023 3:39 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-44HO	GS-AP-MW-6D	GS-AP-MW-6S	GS-AP-MW-6V	GS-AP-MW-7	GS-AP-MW-8 (bg)	GS-AP-MW-9V	GS-AP-PZ-16	GS-AP-PZ-22
7/19/2022							310		
7/20/2022									
7/25/2022		286 (D)		857.5 (D)	308.25 (D)				
7/26/2022			311					369	
8/2/2022						97.300003			
8/3/2022									
8/9/2022									383
3/6/2023	490								
3/8/2023				873 (D)					
3/14/2023		300	298		340				
3/15/2023									
3/21/2023								372	421
3/22/2023									
3/27/2023						100	335		
3/28/2023									

Time Series

Constituent: TDS (mg/L)   Analysis Run 5/23/2023 3:39 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

	GS-AP-MW-10R	GS-AP-MW-11R	GS-AP-MW-13R	GS-AP-MW-14R	GS-AP-MW-18R	GS-AP-MW-18VR	GS-AP-MW-1R
8/2/2016							
8/3/2016							
9/20/2016							
9/21/2016							
10/24/2016							
10/25/2016							
10/26/2016							
12/12/2016							
12/13/2016							
2/6/2017							
3/27/2017							
3/28/2017							
4/24/2017							
6/6/2017							
6/7/2017							
8/21/2017							
5/14/2018							
5/15/2018							
10/15/2018							
10/16/2018							
4/16/2019							
4/23/2019							
9/23/2019							
9/24/2019							
3/17/2020							
3/18/2020							
3/23/2020							
3/24/2020							
8/27/2020							
9/8/2020							
9/15/2020							
9/16/2020							
9/17/2020							
9/21/2020							
9/22/2020							
2/2/2021							
2/3/2021							
2/17/2021							
7/27/2021							
8/2/2021							
8/3/2021							
8/9/2021							
8/10/2021							
2/8/2022							
2/9/2022							
2/14/2022							
2/15/2022							
2/16/2022							
2/21/2022							
2/22/2022					136	298	
2/28/2022				305			
3/1/2022	250	244	201				288

Time Series

Constituent: TDS (mg/L) Analysis Run 5/23/2023 3:39 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-10R	GS-AP-MW-11R	GS-AP-MW-13R	GS-AP-MW-14R	GS-AP-MW-18R	GS-AP-MW-18VR	GS-AP-MW-1R
7/19/2022		251					
7/20/2022			210				
7/25/2022							
7/26/2022							
8/2/2022							309
8/3/2022	313			245	167		
8/9/2022						259	
3/6/2023							
3/8/2023							
3/14/2023							
3/15/2023				229			
3/21/2023							
3/22/2023		277					
3/27/2023	266		200			256	314
3/28/2023					154		

Time Series

Constituent: TDS (mg/L) Analysis Run 5/23/2023 3:39 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-23V	GS-AP-MW-27HR	GS-AP-MW-31V	GS-AP-MW-36V	GS-AP-MW-37HR	GS-AP-MW-3V	GS-AP-MW-45V	GS-AP-MW-47	GS-AP-MW-5R
2/21/2022									
2/22/2022		1100	406	438					
2/23/2022	752					1050	674		
2/28/2022					287			180	
3/1/2022									762
7/19/2022									
7/20/2022						1520			
7/26/2022	740				331			190	
7/27/2022		2290		1480					
8/2/2022									788
8/3/2022			767						
8/8/2022							696		
3/14/2023	418	2840		1540					
3/15/2023					367			234	
3/20/2023									767
3/21/2023						942			
3/27/2023			1010						
3/28/2023							1310		

Time Series

Constituent: TDS (mg/L) Analysis Run 5/23/2023 3:39 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-9R	GS-AP-PZ-18R	GS-AP-MW-46
2/21/2022		303	
2/22/2022			
2/23/2022			614
2/28/2022			
3/1/2022	398		
7/19/2022	297		
7/20/2022			
7/26/2022			
7/27/2022		307	
8/2/2022			594
8/3/2022			
8/8/2022			
3/14/2023			
3/15/2023			
3/20/2023			
3/21/2023			
3/27/2023	281		554
3/28/2023		297	

Time Series

Constituent: Thallium (mg/L)   Analysis Run 5/23/2023 3:39 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

	GS-AP-MW-12	GS-AP-MW-12V	GS-AP-MW-13 (bg)	GS-AP-MW-15	GS-AP-MW-15V	GS-AP-MW-16D	GS-AP-MW-17	GS-AP-MW-17V ...	GS-AP-MW-19
8/1/2016				<0.000203		<0.000203	<0.000203		<0.000203
8/2/2016			<0.001						
8/3/2016	<0.000203								
9/19/2016						<0.000203	<0.000203		
9/20/2016	<0.000203		<0.001	<0.000203					
9/21/2016									<0.000203
10/24/2016							<0.000203		<0.000203
10/25/2016	<0.000203		<0.001	<0.000203		<0.000203			
12/13/2016	<0.000203		<0.001			<0.000203	<0.000203		<0.000203
12/14/2016				<0.000203					
2/6/2017							<0.000203		
2/7/2017									<0.000203
2/8/2017	<0.000203		<0.001	<0.000203		<0.000203			
3/27/2017							<0.000203		
3/28/2017				<0.000203					<0.000203
3/29/2017	<0.000203		<0.001			<0.000203			
3/30/2017									
4/24/2017							<0.000203		
4/26/2017	<0.000203		<0.001	<0.000203		<0.000203			<0.000203
6/5/2017							<0.000203		
6/6/2017				<0.000203		<0.000203			<0.000203
6/7/2017	<0.000203		<0.001						
2/19/2018							<0.000203		
2/20/2018	<0.000203		<0.001	<0.000203					
2/21/2018						<0.000203			<0.000203
5/15/2018	<0.000203		<0.001	<0.000203			<0.000203		
5/16/2018						<0.000203			<0.000203
10/15/2018				<0.000203			<0.000203		
10/16/2018	<0.000203								<0.000203
10/17/2018			<0.001			<0.000203			
2/20/2019								<0.000203	
2/21/2019		<0.000203							
2/26/2019									
2/27/2019									
4/16/2019	<0.000203		<0.001						
4/17/2019				<0.000203		<0.000203	<0.000203		<0.000203
9/23/2019							<0.000203		
9/24/2019				<0.000203		<0.000203		<0.000203	<0.000203
9/25/2019	<0.000203	<0.000203							
3/16/2020							<0.000203		
3/17/2020									
3/18/2020	<0.000203			<0.000203	<0.000203				
3/23/2020									
3/24/2020		<0.000203				<0.000203			<0.000203
3/25/2020								<0.000203	
5/12/2020							<0.000203		
5/13/2020									
9/17/2020									
9/21/2020					<0.000203		<0.000203		
9/22/2020						<0.000203			<0.000203
9/23/2020	<0.000203	<0.000203		<0.000203				<0.000203	
2/1/2021	<0.000203	<0.000203							

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Thallium (mg/L) Analysis Run 5/23/2023 3:39 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-12	GS-AP-MW-12V	GS-AP-MW-13 (bg)	GS-AP-MW-15	GS-AP-MW-15V	GS-AP-MW-16D	GS-AP-MW-17	GS-AP-MW-17V ...	GS-AP-MW-19
2/2/2021							<0.000203	<0.000203	
2/3/2021									
2/8/2021									<0.000203
2/9/2021				<0.000203	<0.000203				
2/10/2021						<0.000203			
7/27/2021									
8/2/2021								<0.000203	
8/3/2021				<0.000203	<0.000203		<0.000203		
8/4/2021									
8/9/2021	<0.000203	<0.000203				<0.000203			
8/10/2021									<0.000203
8/11/2021									
8/12/2021									
2/8/2022									
2/14/2022							<0.000203	<0.000203	
2/15/2022						<0.000203			
2/16/2022				<0.000203	<0.000203				
2/22/2022									<0.000203
2/23/2022		<0.000203							
2/28/2022	<0.000203								
7/19/2022	<0.000203								
7/20/2022		<0.000203							
7/26/2022									
7/27/2022									
8/2/2022				<0.000203	<0.000203	<0.000203			
8/3/2022									<0.000203
8/8/2022							<0.000203		
8/9/2022								<0.000203	
8/10/2022									
3/14/2023									
3/15/2023									
3/20/2023				<0.000203	<0.000203				
3/21/2023						<0.000203			<0.000203
3/22/2023	<0.000203	<0.000203					<0.000203	<0.000203	

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Thallium (mg/L)   Analysis Run 5/23/2023 3:39 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

	GS-AP-MW-2	GS-AP-MW-21	GS-AP-MW-21V	GS-AP-MW-23H	GS-AP-MW-24H	GS-AP-MW-25HA	GS-AP-MW-26H
8/1/2016							
8/2/2016	<0.000203	<0.000203					
8/3/2016							
9/19/2016	<0.000203						
9/20/2016							
9/21/2016		<0.000203					
10/24/2016	<0.000203						
10/25/2016		<0.000203					
12/13/2016	<0.000203						
12/14/2016		<0.000203					
2/6/2017							
2/7/2017							
2/8/2017	<0.000203	<0.000203					
3/27/2017							
3/28/2017		<0.000203					
3/29/2017							
3/30/2017	<0.000203						
4/24/2017							
4/26/2017	<0.000203	<0.000203					
6/5/2017							
6/6/2017	<0.000203	<0.000203					
6/7/2017							
2/19/2018							
2/20/2018		<0.000203					
2/21/2018	<0.000203						
5/15/2018		<0.000203					
5/16/2018	<0.000203						
10/15/2018							
10/16/2018	<0.000203	<0.000203					
10/17/2018							
2/20/2019				<0.000203			
2/21/2019							
2/26/2019					<0.000203		
2/27/2019							<0.000203
4/16/2019							
4/17/2019	<0.000203	<0.000203					
9/23/2019				<0.000203			<0.000203
9/24/2019		<0.000203			<0.000203		
9/25/2019	<0.000203						
3/16/2020							
3/17/2020				<0.000203			
3/18/2020		<0.000203			<0.000203		
3/23/2020			<0.000203				
3/24/2020						<0.000203	
3/25/2020	<0.000203						<0.000203
5/12/2020							
5/13/2020	<0.000203						
9/17/2020				<0.000203	<0.000203	<0.000203	
9/21/2020							<0.000203
9/22/2020	<0.000203						
9/23/2020		<0.000203	<0.000203				
2/1/2021	<0.000203						

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Thallium (mg/L) Analysis Run 5/23/2023 3:39 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-2	GS-AP-MW-21	GS-AP-MW-21V	GS-AP-MW-23H	GS-AP-MW-24H	GS-AP-MW-25HA	GS-AP-MW-26H
2/2/2021					<0.000203		
2/3/2021				<0.000203			
2/8/2021		<0.000203					
2/9/2021			<0.000203				<0.000203
2/10/2021						<0.000203	
7/27/2021				<0.000203			
8/2/2021							
8/3/2021					<0.000203		
8/4/2021	<0.000203	<0.000203					
8/9/2021							
8/10/2021							<0.000203
8/11/2021			<0.000203				
8/12/2021						<0.000203	
2/8/2022		<0.000203	<0.000203				
2/14/2022				<0.000203			
2/15/2022					<0.000203		<0.000203
2/16/2022						<0.000203	
2/22/2022	<0.000203						
2/23/2022							
2/28/2022							
7/19/2022	<0.000203						
7/20/2022							
7/26/2022				<0.000203			
7/27/2022					<0.000203		
8/2/2022							
8/3/2022						<0.000203	
8/8/2022							
8/9/2022			<0.000203				
8/10/2022		<0.000203					<0.000203
3/14/2023				<0.000203			
3/15/2023					<0.000203		
3/20/2023							
3/21/2023		<0.000203	<0.000203				
3/22/2023	<0.000203					<0.000203	<0.000203

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Thallium (mg/L) Analysis Run 5/23/2023 3:39 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-28H	GS-AP-MW-29H	GS-AP-MW-3	GS-AP-MW-30HA	GS-AP-MW-31H	GS-AP-MW-32H	GS-AP-MW-33HO	GS-AP-MW-34HO	GS-AP-MW-35HO
2/27/2019		<0.000203							
3/13/2019	<0.000203								
9/24/2019		<0.000203							
9/25/2019	<0.000203								
3/16/2020	<0.000203							<0.000203	
3/17/2020							<0.000203		<0.000203
3/18/2020				<0.000203	<0.000203				
3/24/2020						<0.000203			
3/25/2020		<0.000203							
5/12/2020	<0.000203							<0.000203	<0.000203
5/13/2020				<0.000203			<0.000203		
9/15/2020							<0.000203		
9/16/2020								<0.000203	<0.000203
9/17/2020									
9/21/2020				<0.000203		<0.000203			
9/22/2020	<0.000203	<0.000203			<0.000203				
2/1/2021					<0.000203				
2/2/2021									
2/3/2021		<0.000203					<0.000203	<0.000203	
2/4/2021									<0.000203
2/8/2021									
2/9/2021									
2/10/2021						<0.000203			
2/17/2021	<0.000203		<0.000203	<0.000203					
7/27/2021							<0.000203	<0.000203	
7/28/2021									<0.000203
8/2/2021				<0.000203	<0.000203				
8/3/2021			<0.000203						
8/4/2021		<0.000203							
8/9/2021	<0.000203								
8/10/2021						<0.000203			
2/8/2022				<0.000203	<0.000203				
2/9/2022							<0.000203	<0.000203	<0.000203
2/14/2022	<0.000203	<0.000203				<0.000203			
2/15/2022									
2/16/2022			<0.000203						
2/21/2022									
2/22/2022									
7/20/2022			<0.000203						
7/26/2022									
7/27/2022	<0.000203					<0.000203			
8/2/2022									
8/3/2022		<0.000203		<0.000203	<0.000203				
8/10/2022									
3/8/2023								<0.000203	<0.000203
3/13/2023				<0.000203					
3/14/2023	<0.000203						<0.000203		
3/15/2023									
3/21/2023			<0.000203			<0.000203			
3/22/2023									
3/27/2023					<0.000203				
3/28/2023		<0.000203							

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Thallium (mg/L) Analysis Run 5/23/2023 3:39 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-36H	GS-AP-MW-38H	GS-AP-MW-40H	GS-AP-MW-41HD	GS-AP-MW-41HS	GS-AP-MW-42H	GS-AP-MW-43HO
2/27/2019							
3/13/2019							
9/24/2019							
9/25/2019							
3/16/2020							
3/17/2020	<0.000203						
3/18/2020				<0.000203			
3/24/2020		<0.000203				<0.000203	
3/25/2020							<0.000203
5/12/2020							
5/13/2020	<0.000203						
9/15/2020							
9/16/2020							
9/17/2020	<0.000203			<0.000203			
9/21/2020							
9/22/2020		<0.000203	<0.000203			<0.000203	<0.000203
2/1/2021							
2/2/2021			<0.000203				
2/3/2021						<0.000203	
2/4/2021							
2/8/2021				<0.000203	<0.000203		
2/9/2021		<0.000203					
2/10/2021							
2/17/2021	<0.000203						<0.000203
7/27/2021							
7/28/2021					<0.000203		
8/2/2021							
8/3/2021				<0.000203			
8/4/2021	<0.000203	<0.000203				<0.000203	<0.000203
8/9/2021							
8/10/2021			<0.000203				
2/8/2022					<0.000203		
2/9/2022							
2/14/2022	<0.000203						
2/15/2022			<0.000203	<0.000203			
2/16/2022						<0.000203	
2/21/2022							<0.000203
2/22/2022		<0.000203					
7/20/2022	<0.000203						
7/26/2022					<0.000203		
7/27/2022				<0.000203		<0.000203	
8/2/2022			<0.000203				
8/3/2022							<0.000203
8/10/2022		<0.000203					
3/8/2023							
3/13/2023					<0.000203		
3/14/2023							
3/15/2023	<0.000203			<0.000203		<0.000203	
3/21/2023							
3/22/2023			<0.000203				
3/27/2023							
3/28/2023		<0.000203					<0.000203

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Thallium (mg/L) Analysis Run 5/23/2023 3:39 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-44HO	GS-AP-MW-6D	GS-AP-MW-6S	GS-AP-MW-6V	GS-AP-MW-7	GS-AP-MW-8 (bg)	GS-AP-MW-9V	GS-AP-PZ-16	GS-AP-PZ-22
8/2/2016					<0.000203				
8/3/2016		<0.000203	<0.000203			<0.000203			
9/20/2016		<0.000203	<0.000203						
9/21/2016					<0.000203	<0.000203			
10/24/2016		<0.000203			<0.000203				
10/25/2016						<0.000203			
10/26/2016			<0.000203						
12/12/2016		<0.000203	<0.000203		<0.000203				
12/13/2016						<0.000203			
2/6/2017		<0.000203	<0.000203		<0.000203	<0.000203			
3/27/2017		<0.000203	<0.000203						
3/28/2017					<0.000203	<0.000203			
4/24/2017		<0.000203	<0.000203		<0.000203	<0.000203			
6/6/2017		<0.000203	<0.000203						
6/7/2017					<0.000203	<0.000203			
2/19/2018		<0.000203	<0.000203		<0.000203	<0.000203			
5/14/2018		<0.000203	<0.000203						
5/15/2018					<0.000203	<0.000203			
10/15/2018		<0.000203	<0.000203		<0.000203				
10/16/2018						<0.000203			
4/16/2019		<0.000203	<0.000203			<0.000203			
4/23/2019					<0.000203				
9/23/2019		<0.000203	<0.000203						
9/24/2019					<0.000203	<0.000203			
3/17/2020		<0.000203	<0.000203		<0.000203				
3/18/2020						<0.000203			
3/23/2020							<0.000203		
3/24/2020								<0.000203	<0.000203
8/27/2020	<0.000203								
9/8/2020				<0.000203					
9/15/2020	<0.000203			<0.000203					
9/16/2020			<0.000203		<0.000203				
9/17/2020		<0.000203						<0.000203	<0.000203
9/21/2020						<0.000203			
9/22/2020							<0.000203		
2/2/2021					<0.000203	<0.000203	<0.000203		<0.000203
2/3/2021	<0.000203	<0.000203	<0.000203	<0.000203					
2/17/2021								<0.000203	
7/27/2021	<0.000203	<0.000203	<0.000203						
8/2/2021				<0.000203					
8/3/2021									<0.000203
8/9/2021					<0.000203			<0.000203	
8/10/2021						<0.000203	<0.000203		
2/8/2022					<0.000203				
2/9/2022	<0.000203			<0.000203					
2/14/2022		<0.000203	<0.000203						<0.000203
2/15/2022								<0.000203	
2/16/2022						<0.000203			
2/21/2022							<0.000203		
2/22/2022									
2/28/2022									
3/1/2022									

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Thallium (mg/L) Analysis Run 5/23/2023 3:39 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-44HO	GS-AP-MW-6D	GS-AP-MW-6S	GS-AP-MW-6V	GS-AP-MW-7	GS-AP-MW-8 (bg)	GS-AP-MW-9V	GS-AP-PZ-16	GS-AP-PZ-22
7/19/2022							<0.000203		
7/20/2022									
7/25/2022		<0.000203		<0.000203	<0.000203				
7/26/2022			<0.000203					<0.000203	
8/2/2022						<0.000203			
8/3/2022									
8/9/2022									<0.000203
3/6/2023	<0.000203								
3/8/2023				<0.000203					
3/14/2023		<0.000203	<0.000203		<0.000203				
3/15/2023									
3/21/2023								<0.000203	<0.000203
3/22/2023									
3/27/2023						<0.000203	<0.000203		
3/28/2023									

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Thallium (mg/L) Analysis Run 5/23/2023 3:39 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-10R	GS-AP-MW-11R	GS-AP-MW-13R	GS-AP-MW-14R	GS-AP-MW-18R	GS-AP-MW-18VR	GS-AP-MW-1R
8/2/2016							
8/3/2016							
9/20/2016							
9/21/2016							
10/24/2016							
10/25/2016							
10/26/2016							
12/12/2016							
12/13/2016							
2/6/2017							
3/27/2017							
3/28/2017							
4/24/2017							
6/6/2017							
6/7/2017							
2/19/2018							
5/14/2018							
5/15/2018							
10/15/2018							
10/16/2018							
4/16/2019							
4/23/2019							
9/23/2019							
9/24/2019							
3/17/2020							
3/18/2020							
3/23/2020							
3/24/2020							
8/27/2020							
9/8/2020							
9/15/2020							
9/16/2020							
9/17/2020							
9/21/2020							
9/22/2020							
2/2/2021							
2/3/2021							
2/17/2021							
7/27/2021							
8/2/2021							
8/3/2021							
8/9/2021							
8/10/2021							
2/8/2022							
2/9/2022							
2/14/2022							
2/15/2022							
2/16/2022							
2/21/2022							
2/22/2022					<0.000203	<0.000203	
2/28/2022				<0.000203			
3/1/2022	<0.000203	<0.000203	<0.000203				<0.000203

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Thallium (mg/L) Analysis Run 5/23/2023 3:39 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-10R	GS-AP-MW-11R	GS-AP-MW-13R	GS-AP-MW-14R	GS-AP-MW-18R	GS-AP-MW-18VR	GS-AP-MW-1R
7/19/2022		<0.000203					
7/20/2022			<0.000203				
7/25/2022							
7/26/2022							
8/2/2022							<0.000203
8/3/2022	<0.000203			<0.000203	<0.000203		
8/9/2022						7.7E-05 (J)	
3/6/2023							
3/8/2023							
3/14/2023							
3/15/2023				<0.000203			
3/21/2023							
3/22/2023		<0.000203					
3/27/2023	<0.000203		<0.000203			<0.000203	<0.000203
3/28/2023					<0.000203		

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Thallium (mg/L) Analysis Run 5/23/2023 3:39 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-23V	GS-AP-MW-27HR	GS-AP-MW-31V	GS-AP-MW-36V	GS-AP-MW-37HR	GS-AP-MW-3V	GS-AP-MW-45V	GS-AP-MW-47	GS-AP-MW-5R
2/21/2022									
2/22/2022		<0.000203	<0.000203	<0.000203					
2/23/2022	<0.000203					<0.000203	<0.000203		
2/28/2022					<0.000203			<0.000203	
3/1/2022									<0.000203
7/19/2022									
7/20/2022						<0.000203			
7/26/2022	<0.000203				<0.000203			<0.000203	
7/27/2022		<0.000203		<0.000203					
8/2/2022									<0.000203
8/3/2022			<0.000203						
8/8/2022							<0.000203		
3/14/2023	<0.000203	<0.000203		<0.000203					
3/15/2023					<0.000203			<0.000203	
3/20/2023									<0.000203
3/21/2023						<0.000203			
3/27/2023			<0.000203						
3/28/2023							<0.000203		

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Thallium (mg/L) Analysis Run 5/23/2023 3:39 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

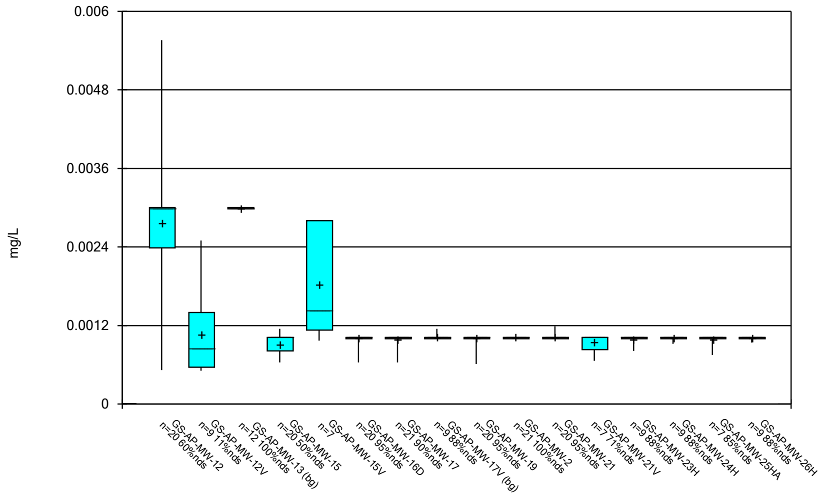
	GS-AP-MW-9R	GS-AP-PZ-18R	GS-AP-MW-46
2/21/2022		<0.000203	
2/22/2022			
2/23/2022			<0.000203
2/28/2022			
3/1/2022	<0.000203		
7/19/2022	<0.000203		
7/20/2022			
7/26/2022			
7/27/2022		<0.000203	
8/2/2022			<0.000203
8/3/2022			
8/8/2022			
3/14/2023			
3/15/2023			
3/20/2023			
3/21/2023			
3/27/2023	<0.000203		<0.000203
3/28/2023		<0.000203	

ND substitution: RL or RL/2 if <15% NDs.

FIGURE B.

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot

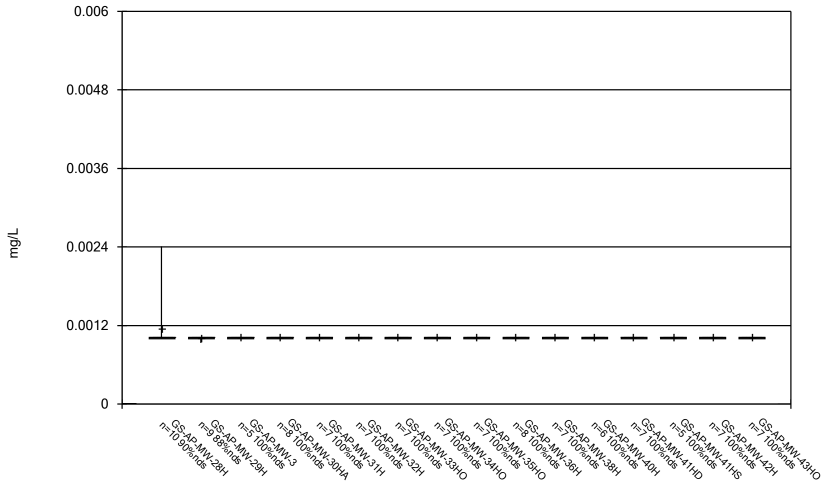


Constituent: Antimony   Analysis Run 5/23/2023 3:44 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot

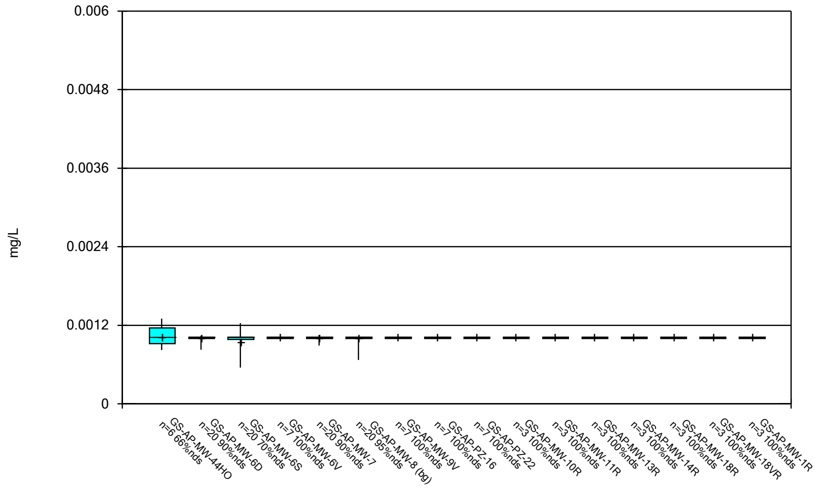


Constituent: Antimony   Analysis Run 5/23/2023 3:44 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot

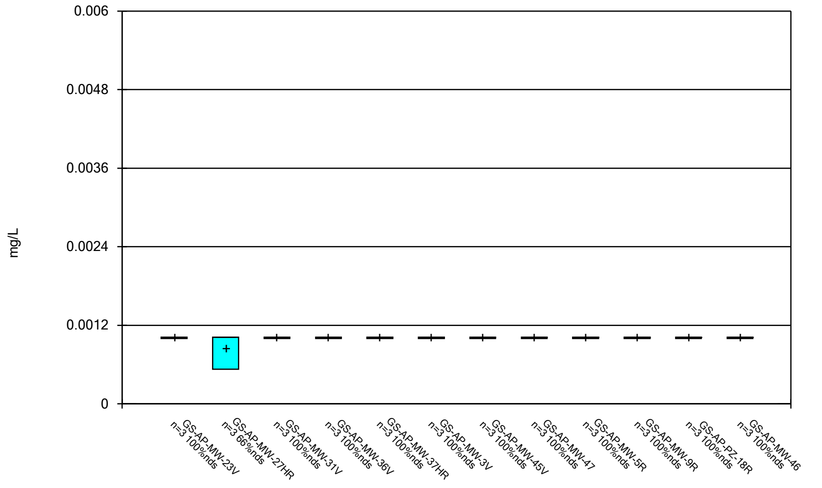


Constituent: Antimony   Analysis Run 5/23/2023 3:44 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot

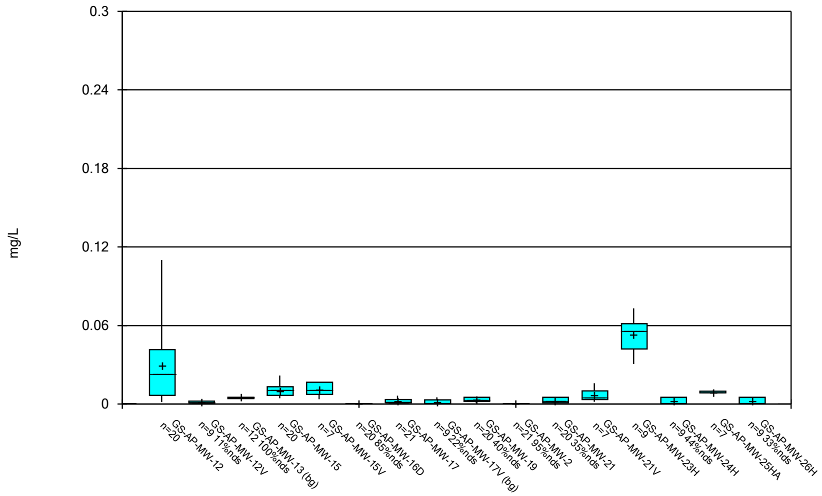


Constituent: Antimony   Analysis Run 5/23/2023 3:44 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot

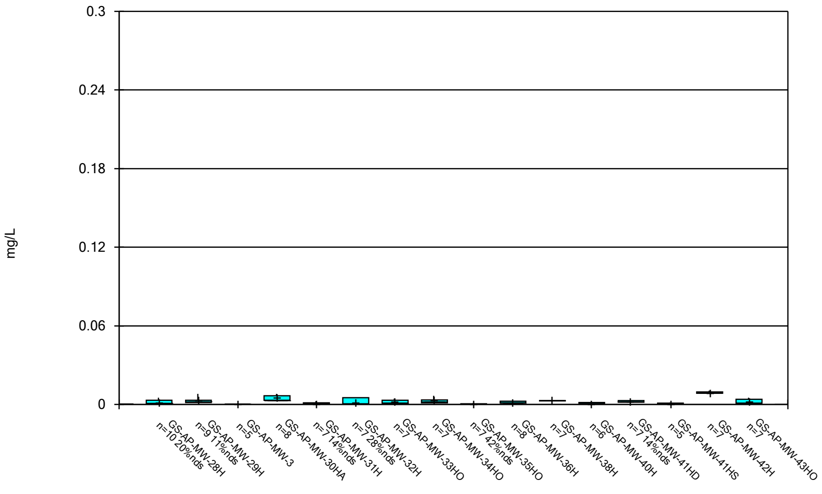


Constituent: Arsenic   Analysis Run 5/23/2023 3:44 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot

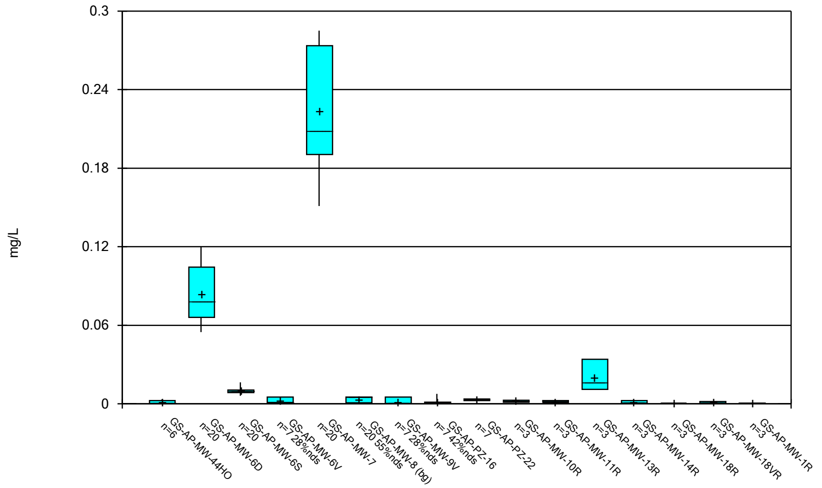


Constituent: Arsenic   Analysis Run 5/23/2023 3:44 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot

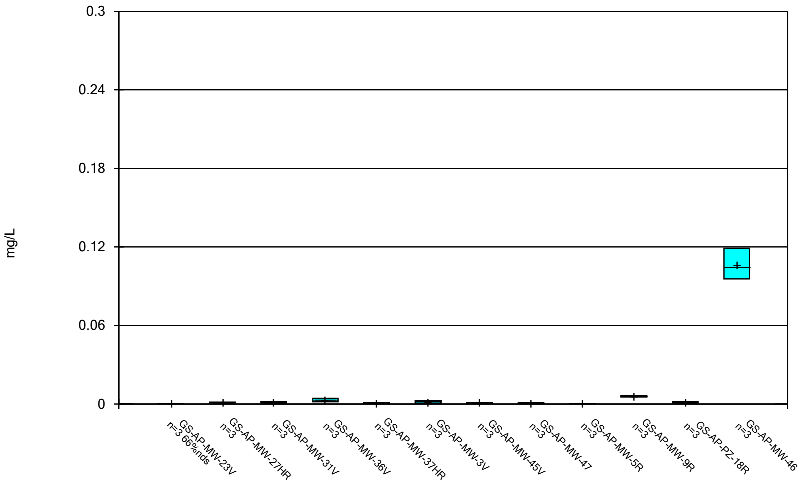


Constituent: Arsenic   Analysis Run 5/23/2023 3:44 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot

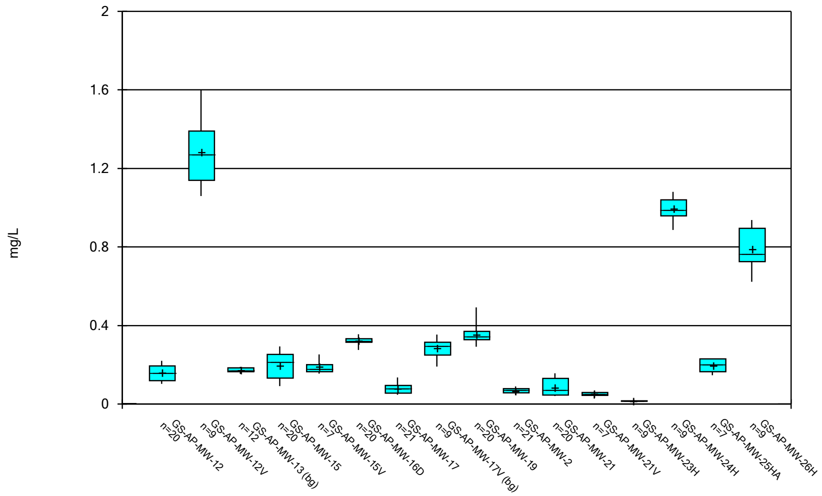


Constituent: Arsenic   Analysis Run 5/23/2023 3:45 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot

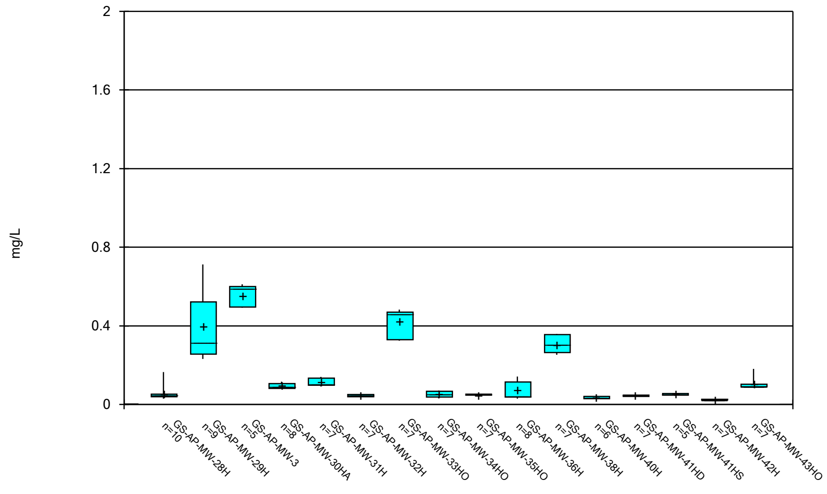


Constituent: Barium Analysis Run 5/23/2023 3:45 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot

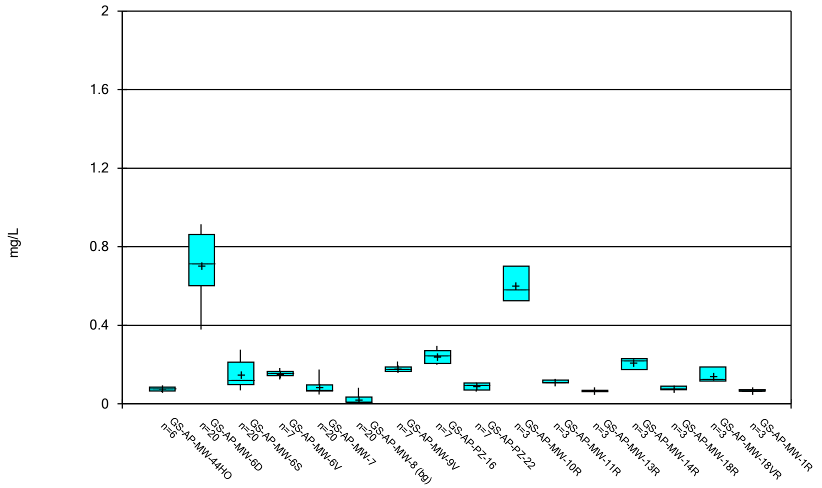


Constituent: Barium Analysis Run 5/23/2023 3:45 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot

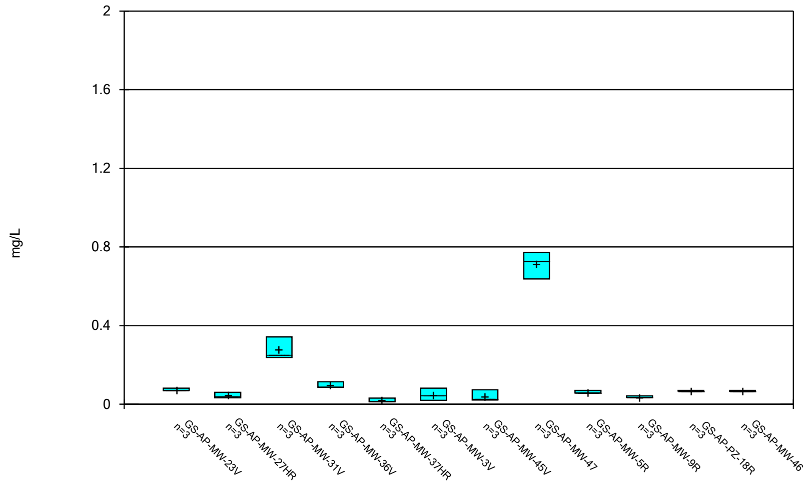


Constituent: Barium Analysis Run 5/23/2023 3:45 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot

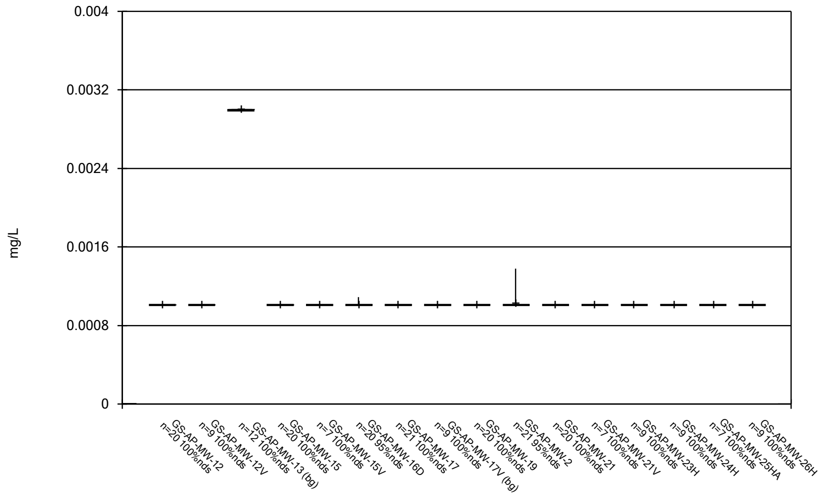


Constituent: Barium Analysis Run 5/23/2023 3:45 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot

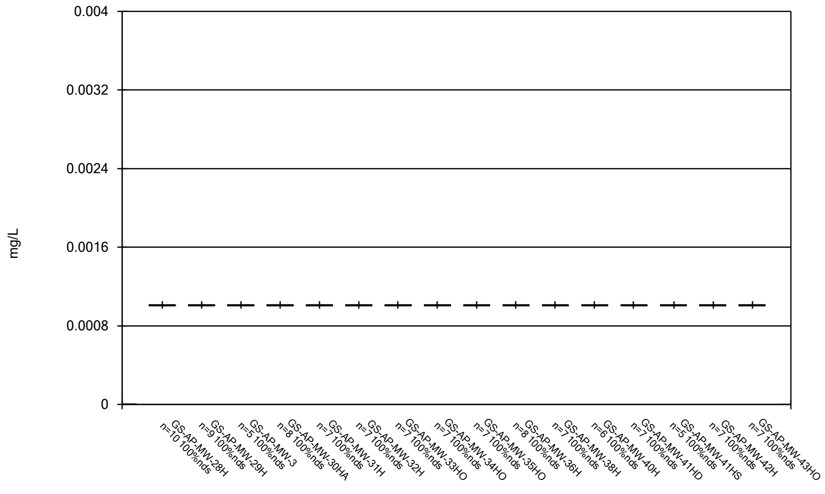


Constituent: Beryllium   Analysis Run 5/23/2023 3:45 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot

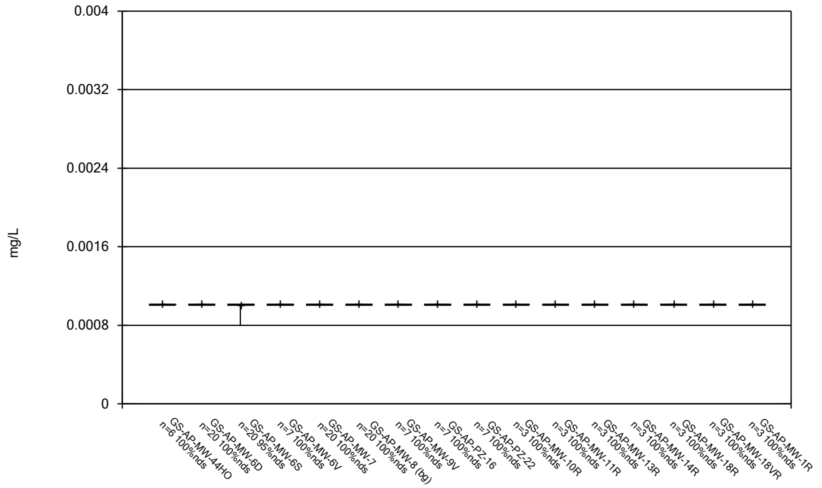


Constituent: Beryllium   Analysis Run 5/23/2023 3:45 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot

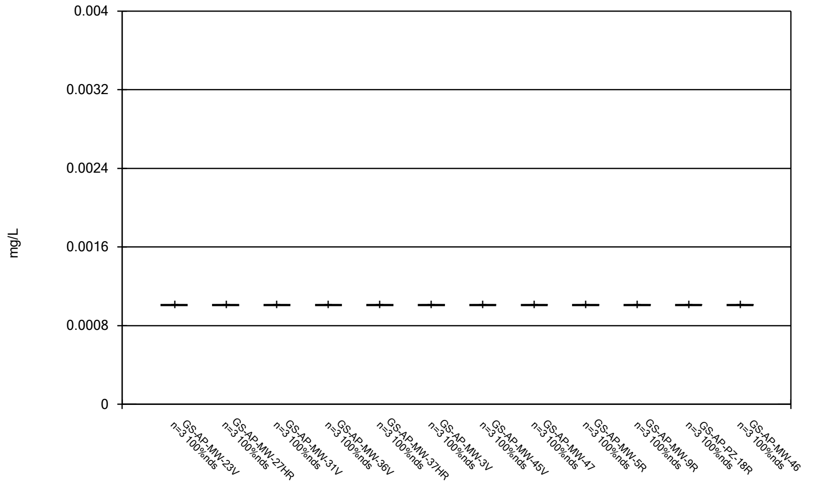


Constituent: Beryllium   Analysis Run 5/23/2023 3:45 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot

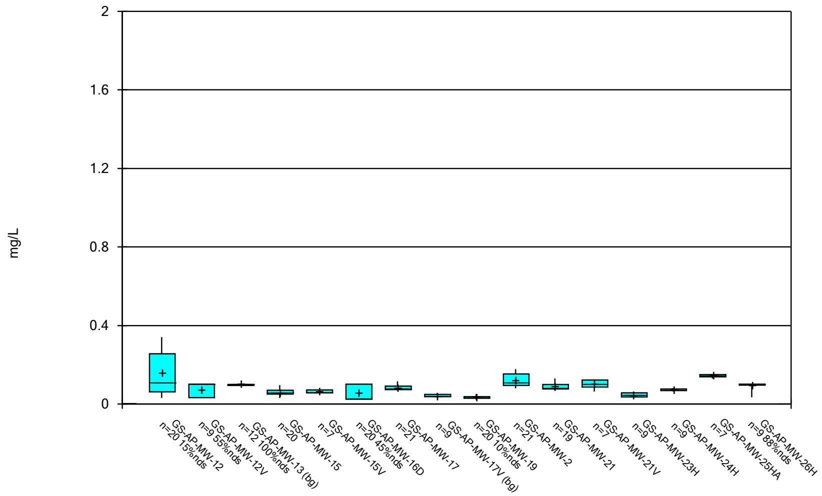


Constituent: Beryllium   Analysis Run 5/23/2023 3:45 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot

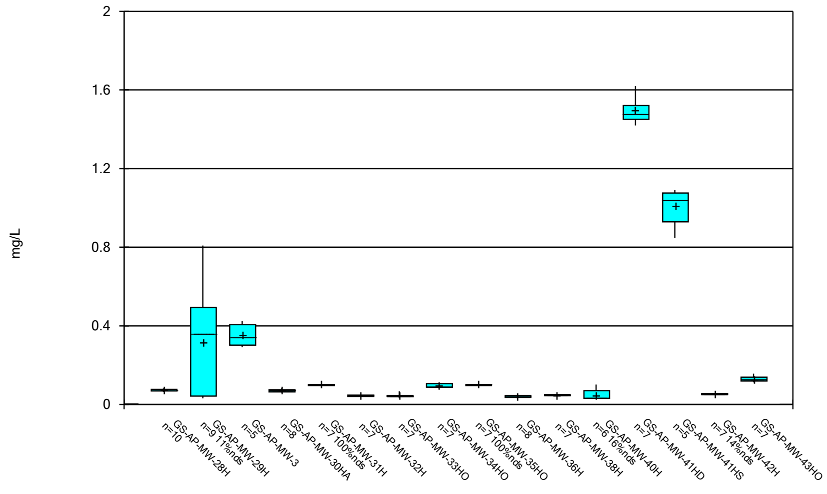


Constituent: Boron Analysis Run 5/23/2023 3:45 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot

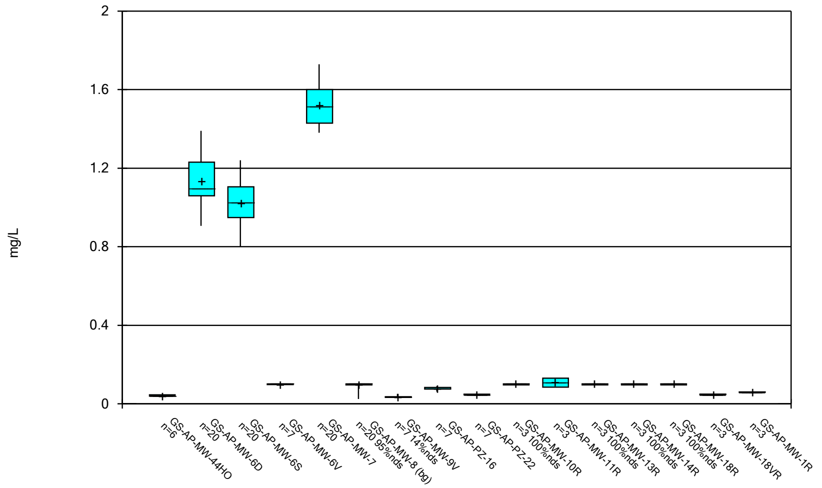


Constituent: Boron Analysis Run 5/23/2023 3:45 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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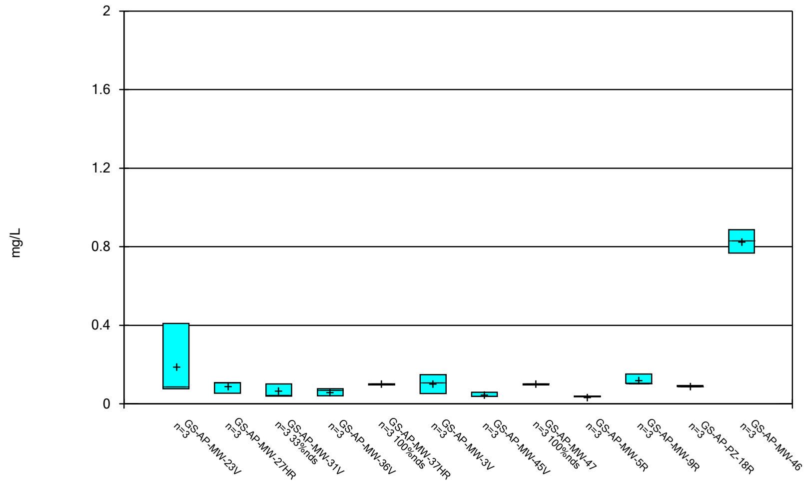
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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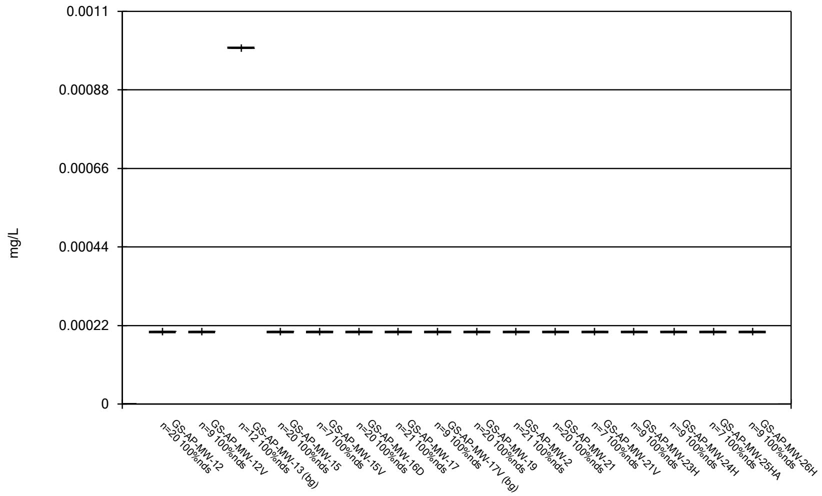
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

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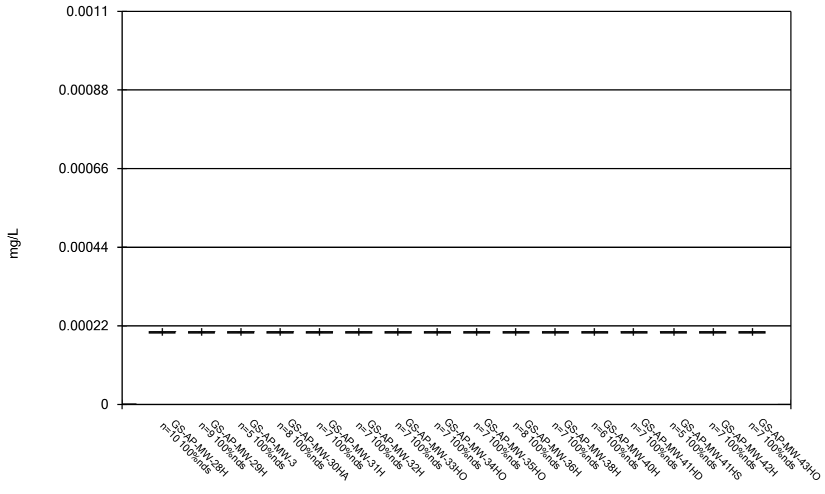
Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

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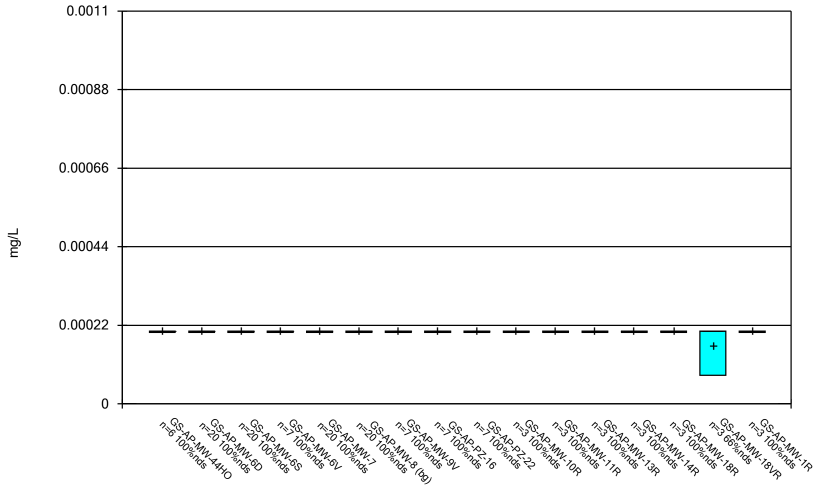
Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

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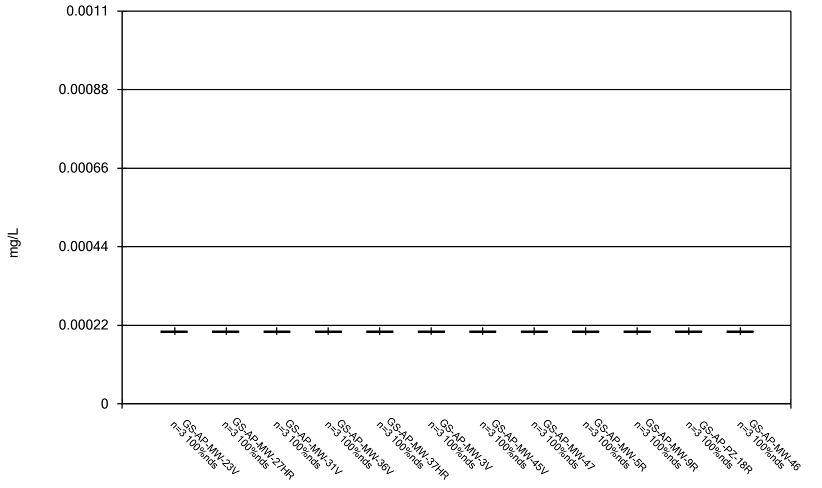
Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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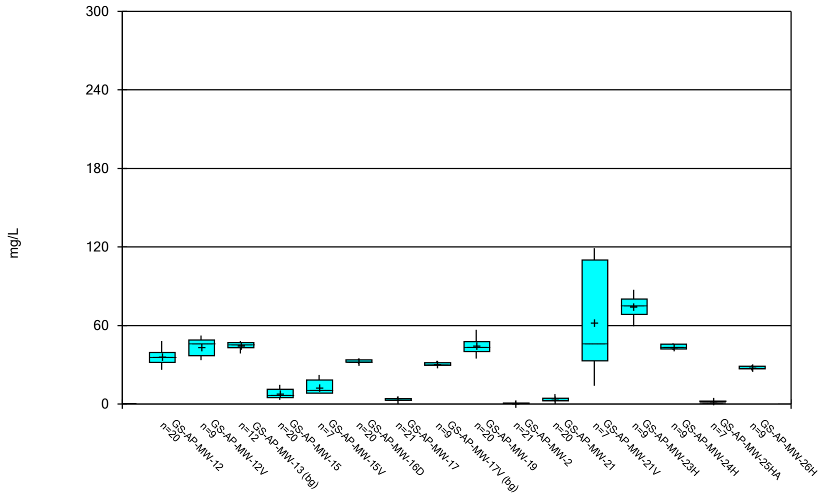
Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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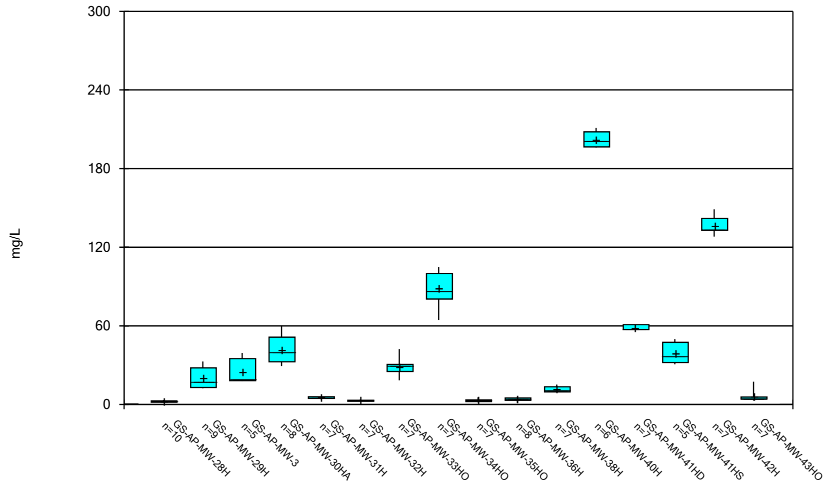
Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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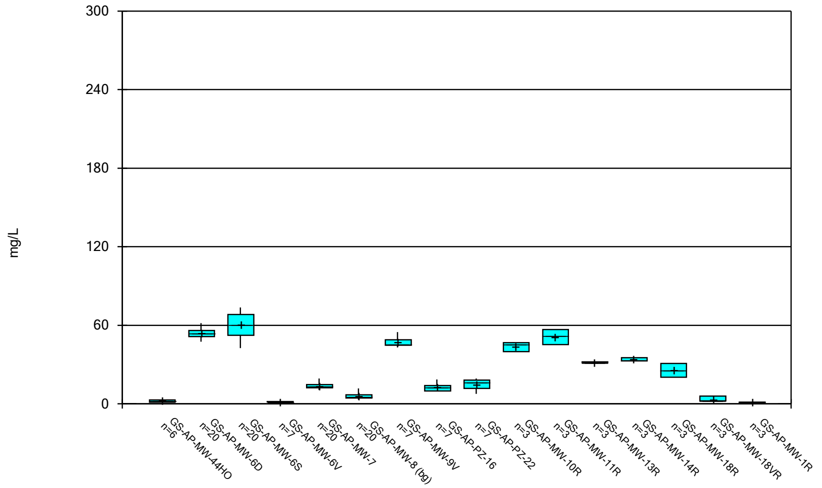
Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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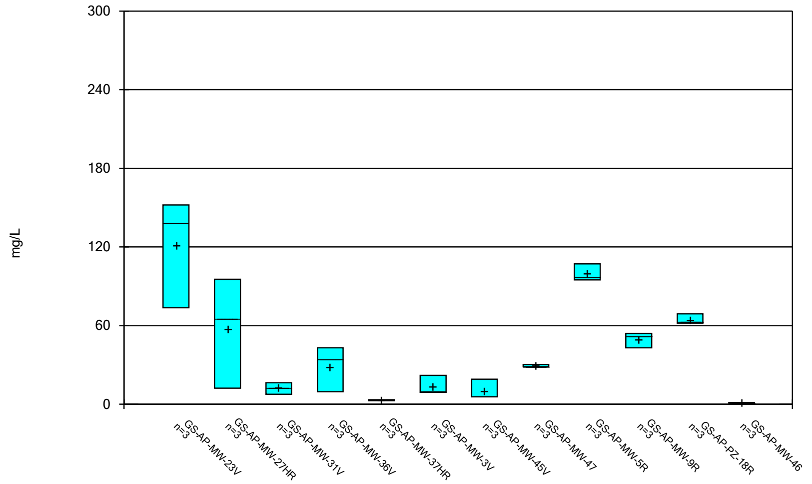
Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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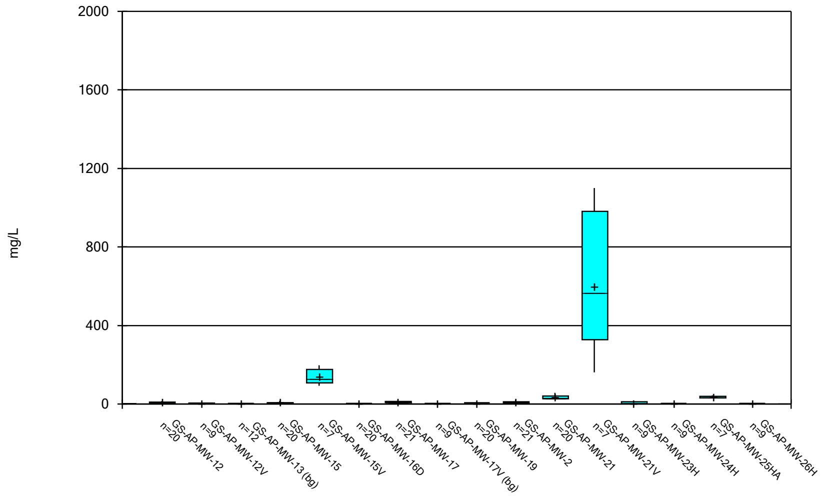
Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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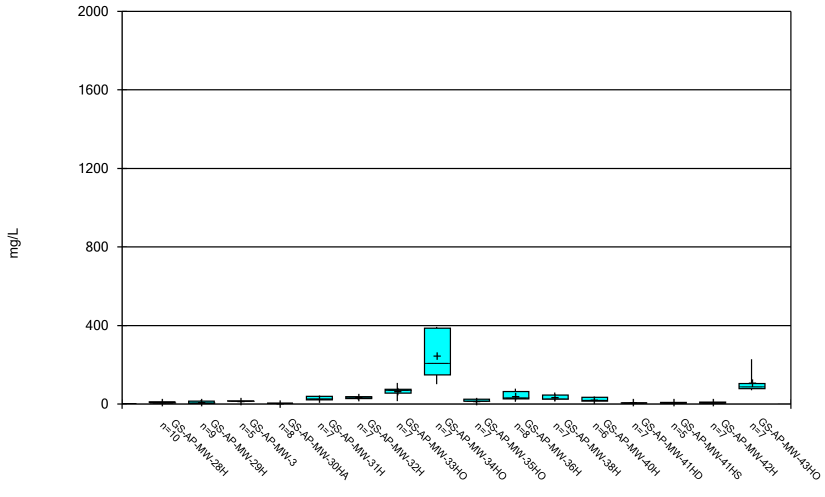
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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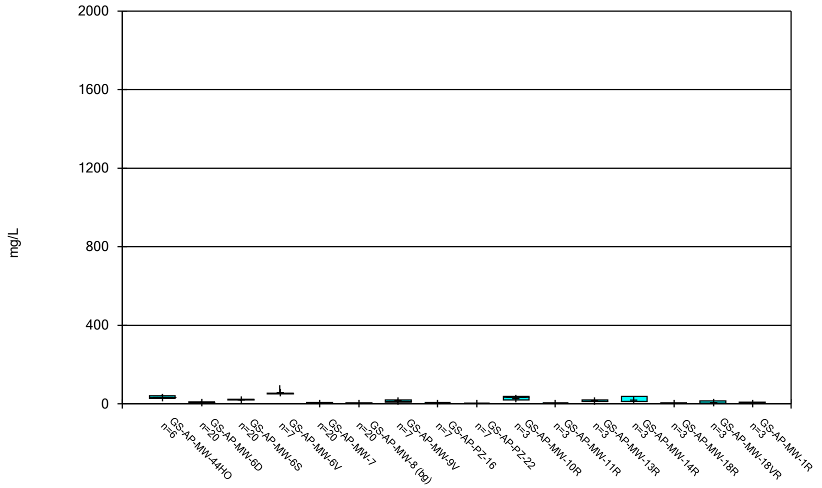
Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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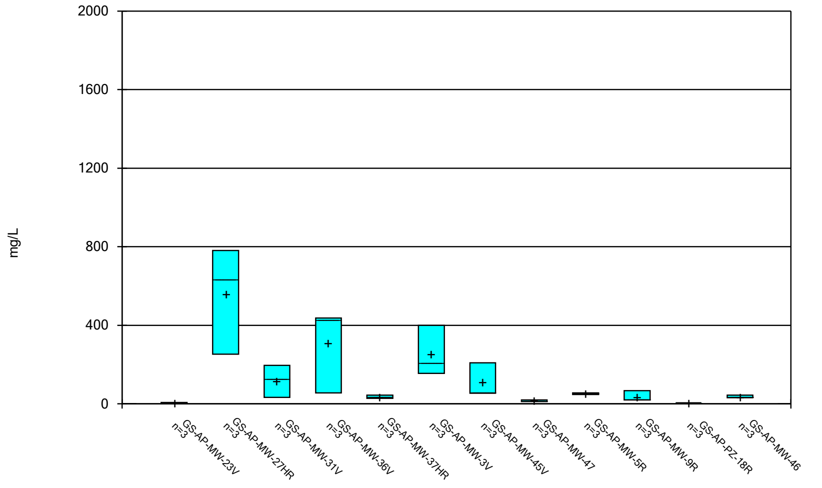
Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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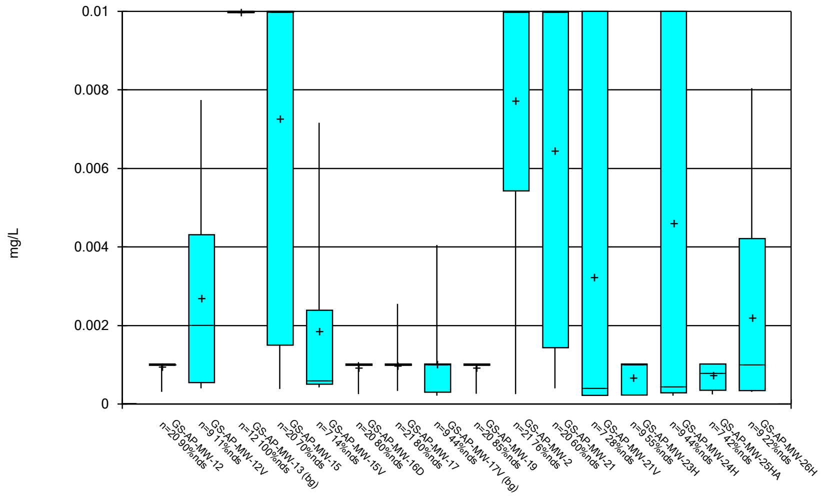
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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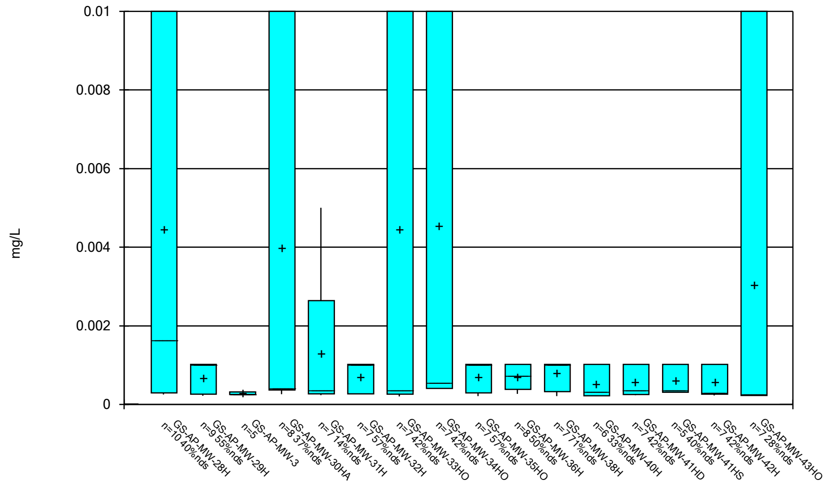
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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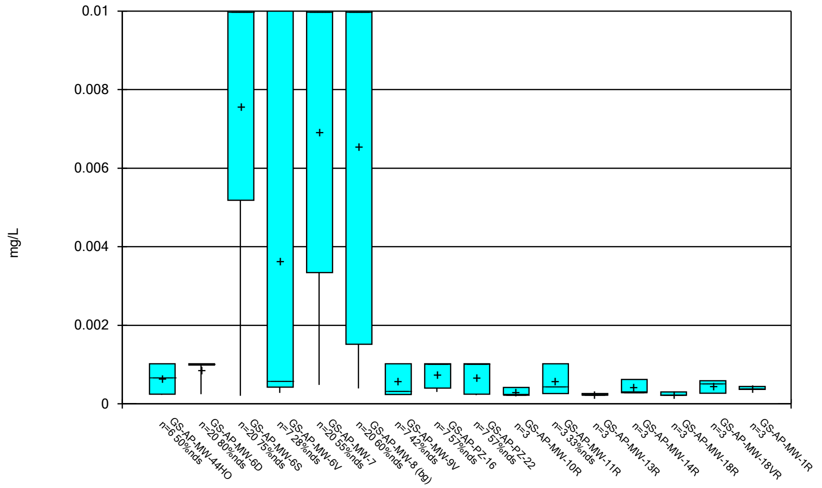
Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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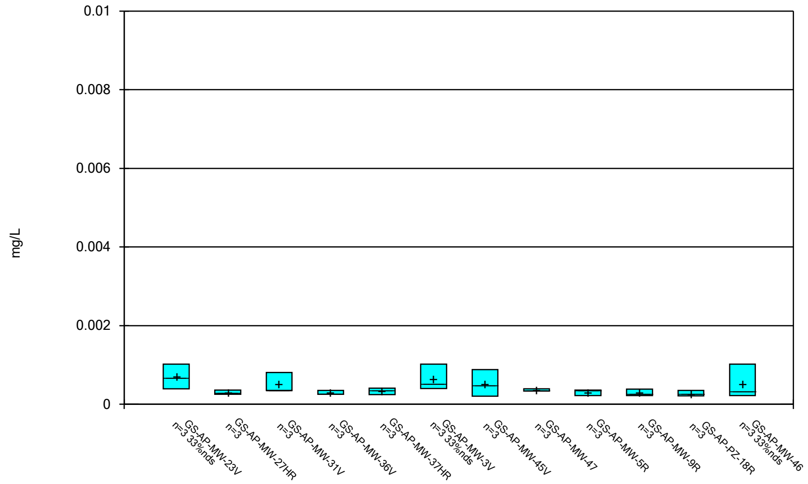
Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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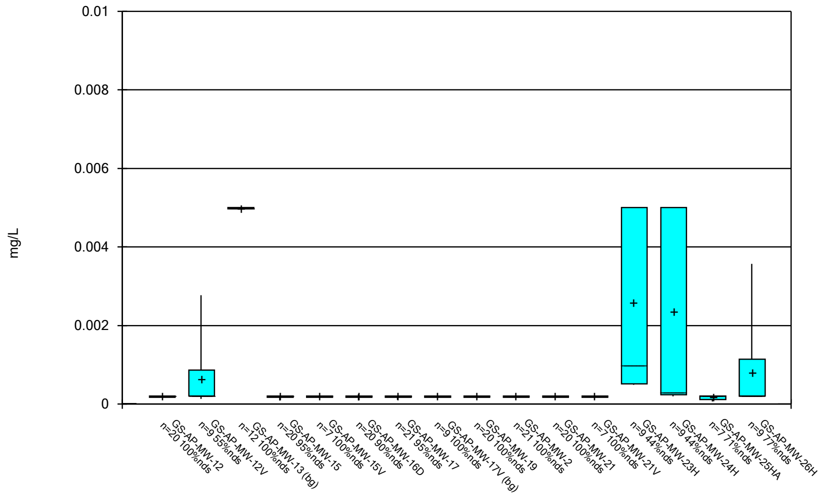
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot

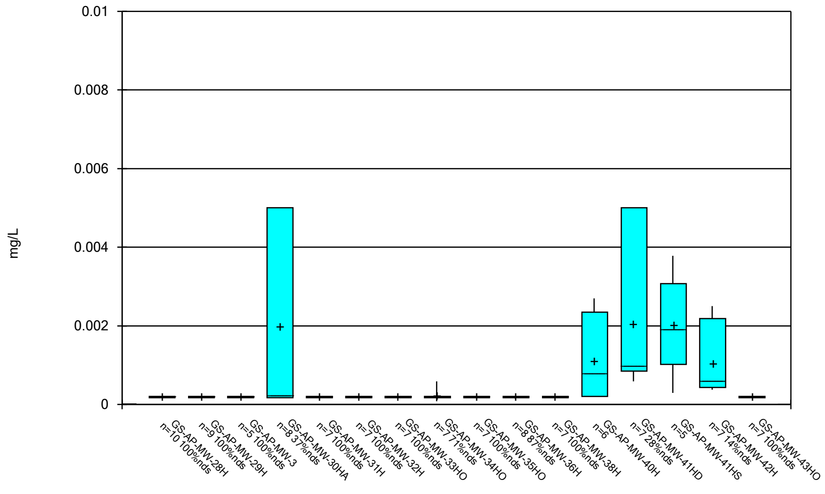


Constituent: Cobalt   Analysis Run 5/23/2023 3:45 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot

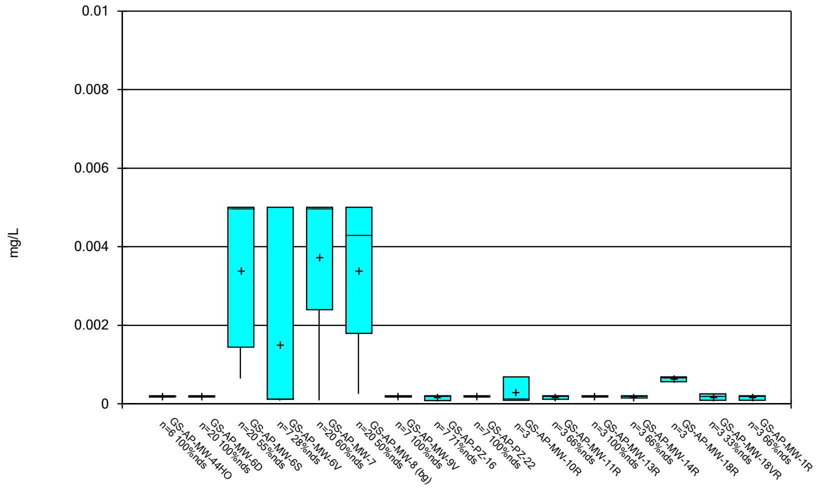


Constituent: Cobalt   Analysis Run 5/23/2023 3:45 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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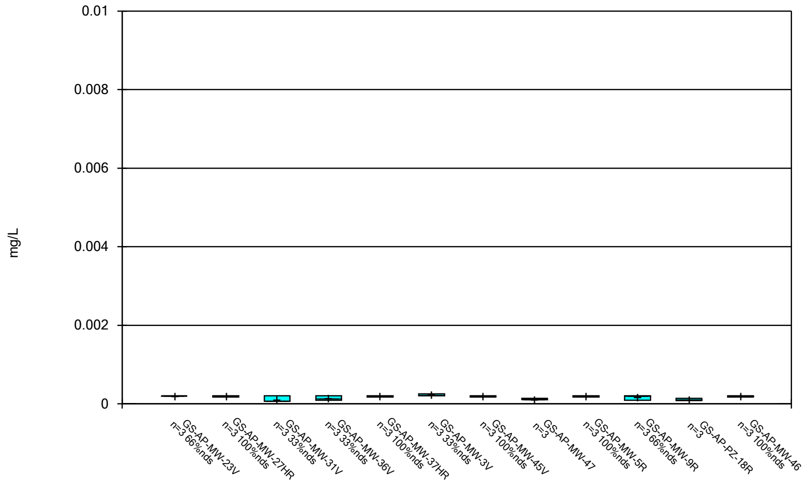
Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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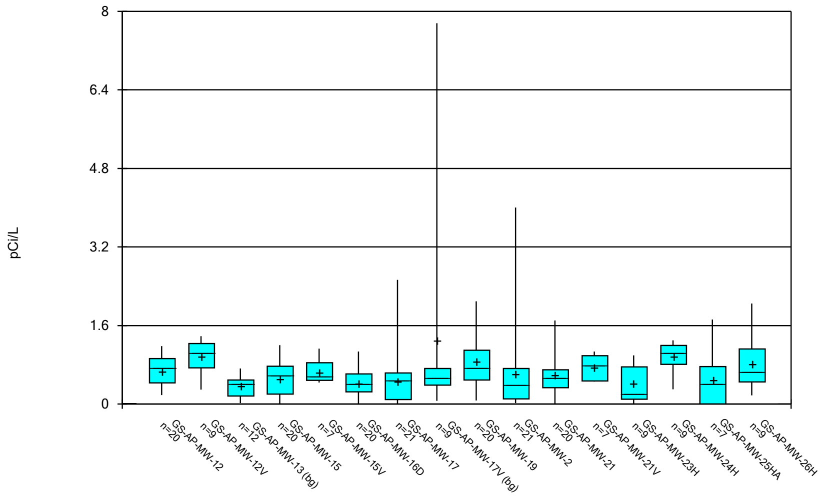
Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot

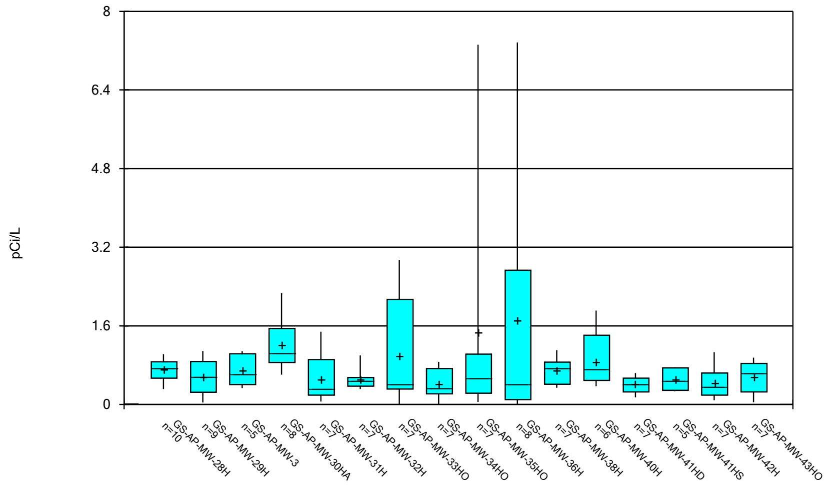


Constituent: Combined Radium 226 + 228 Analysis Run 5/23/2023 3:45 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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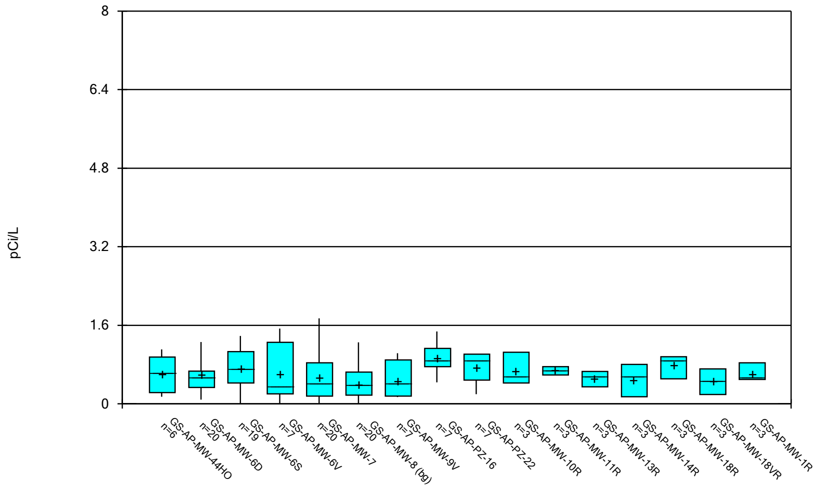
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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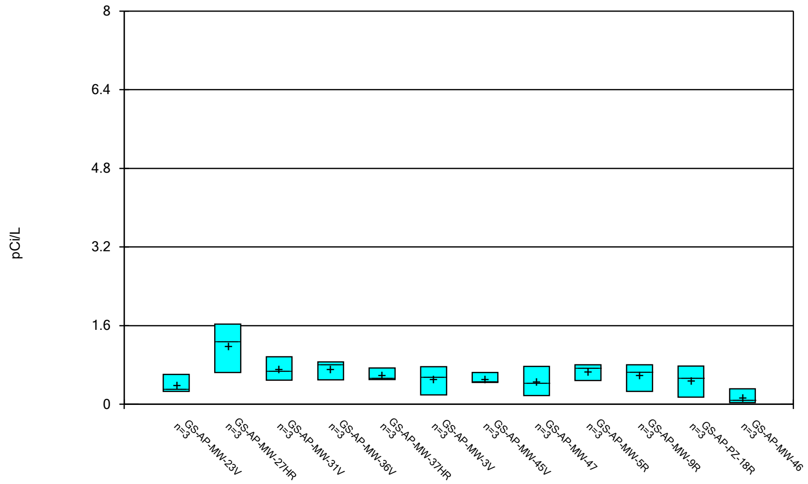
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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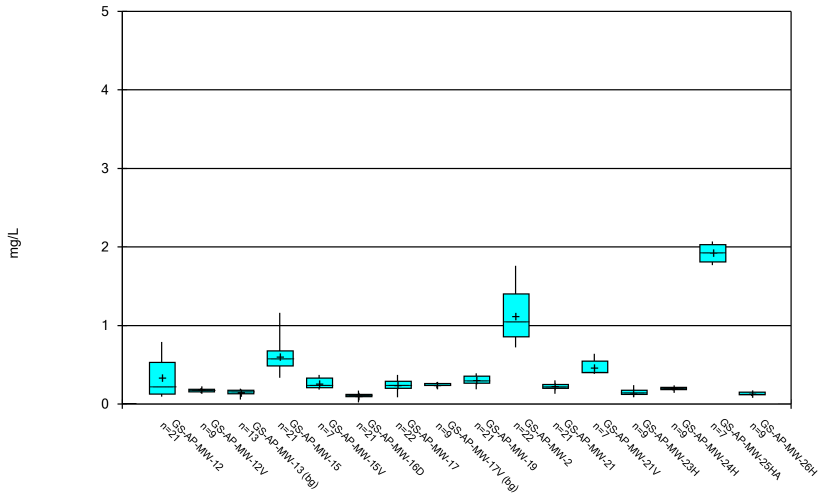
Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot

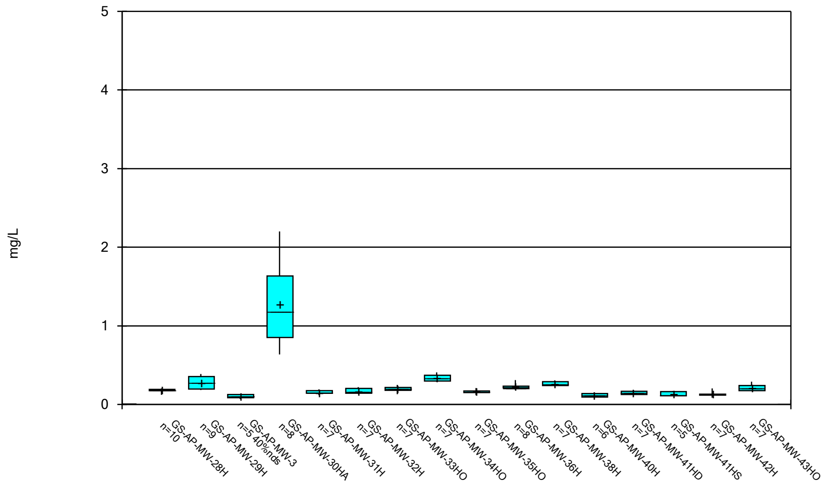


Constituent: Fluoride Analysis Run 5/23/2023 3:45 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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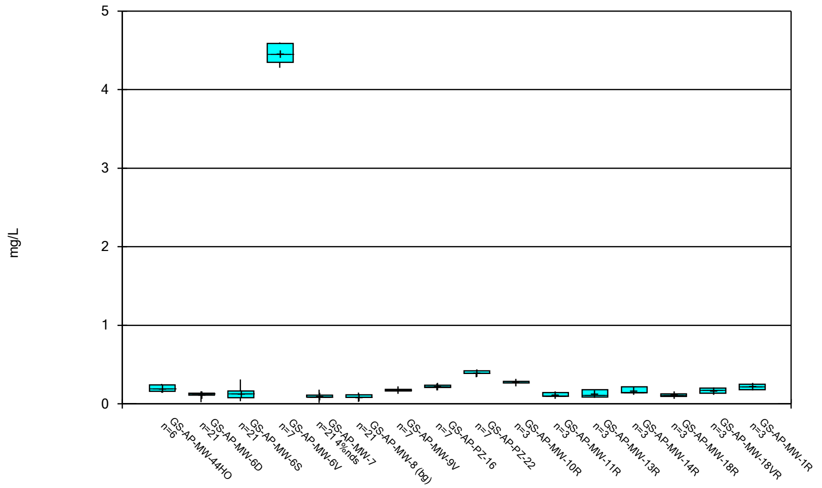
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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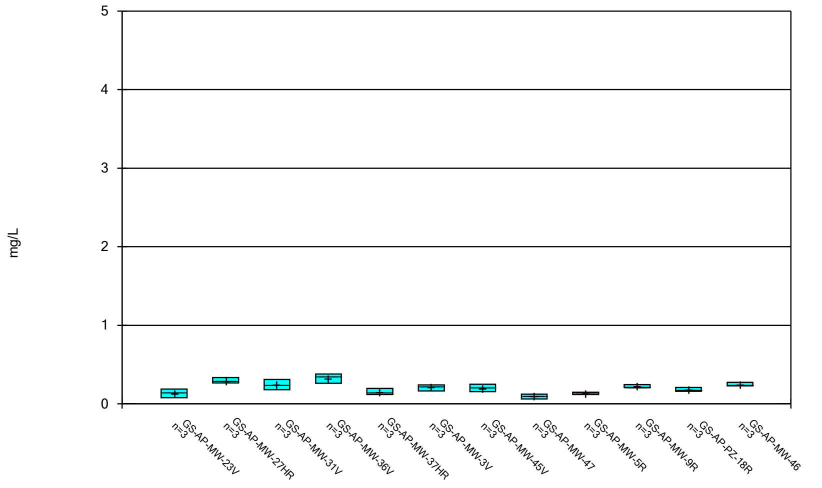
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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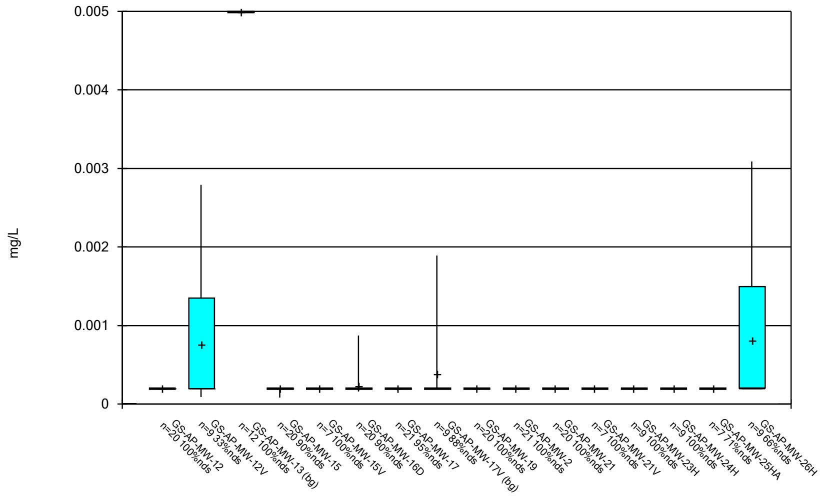
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot

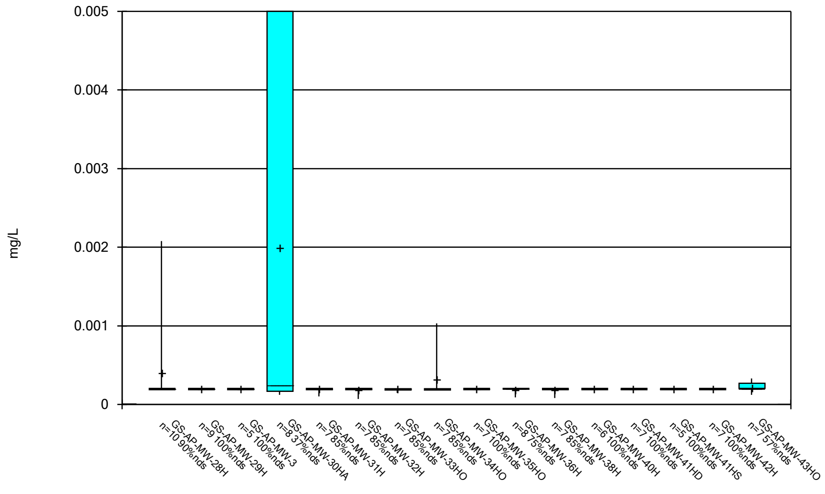


Constituent: Lead   Analysis Run 5/23/2023 3:45 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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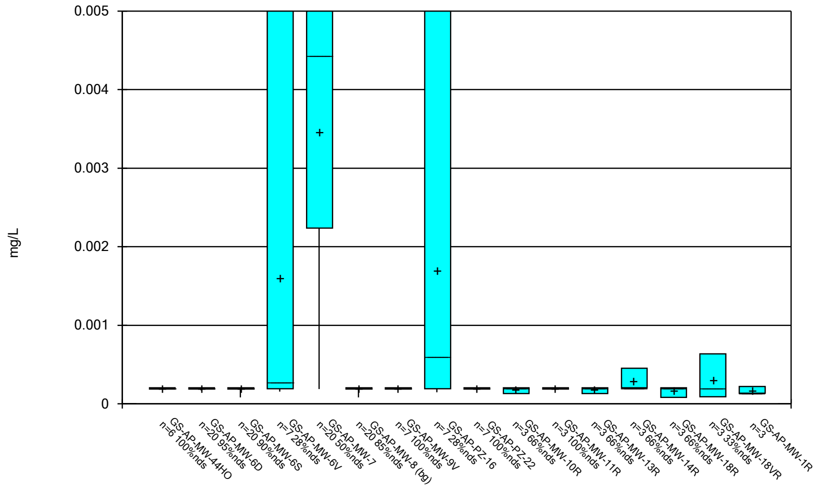
Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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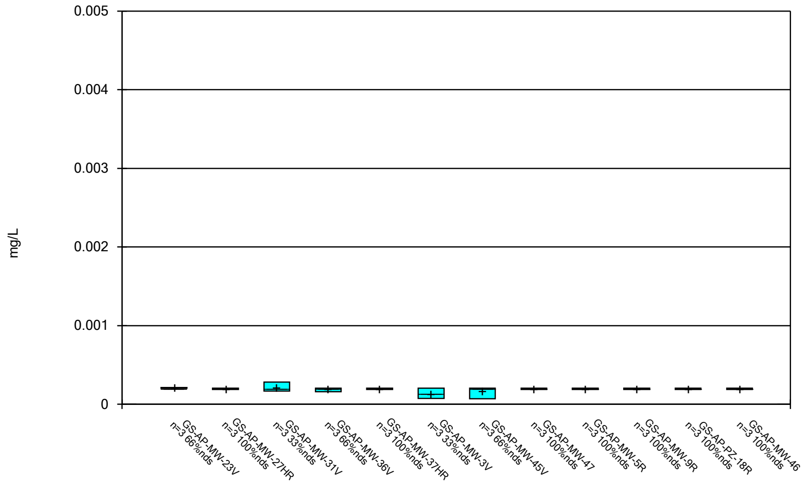
Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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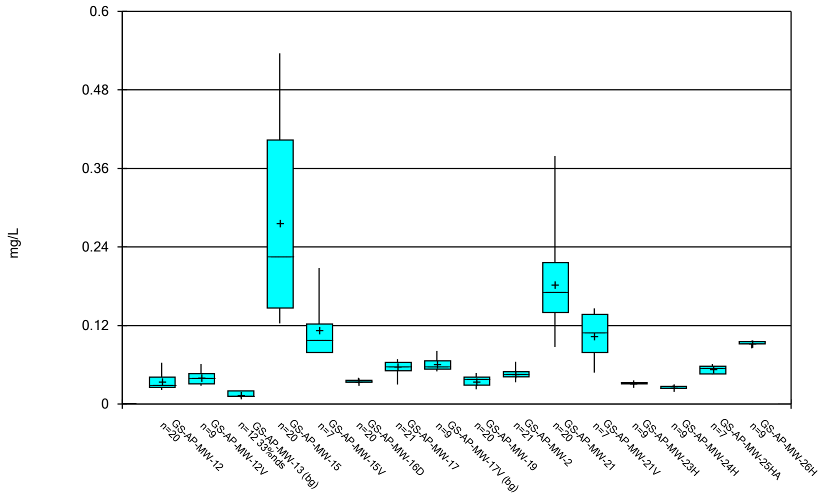
Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot

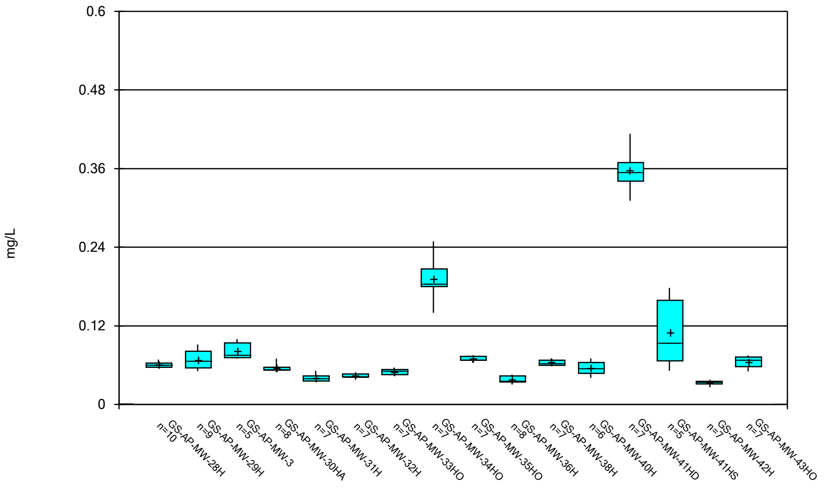


Constituent: Lithium Analysis Run 5/23/2023 3:45 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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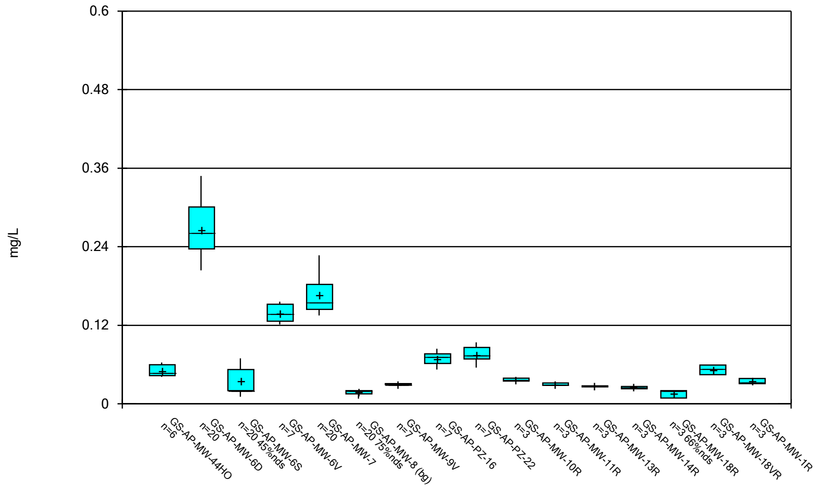
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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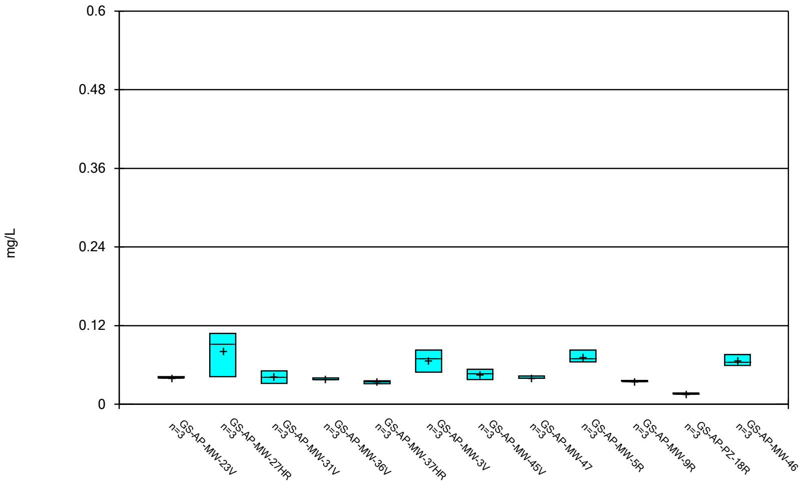
Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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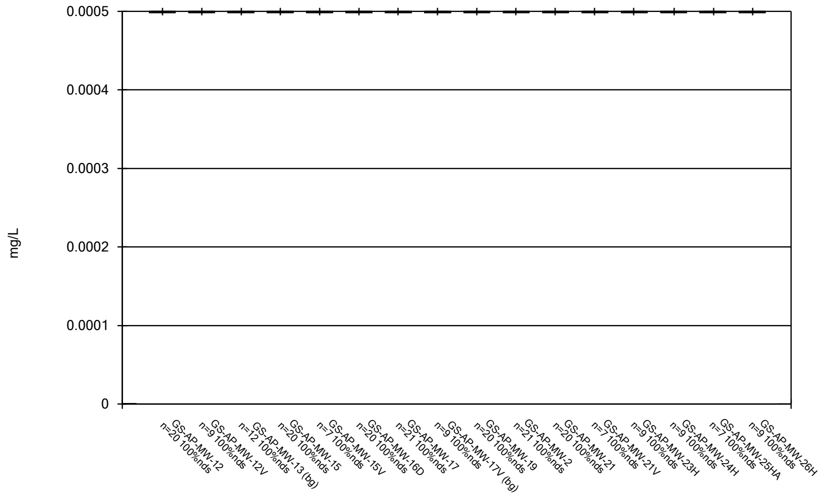
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot

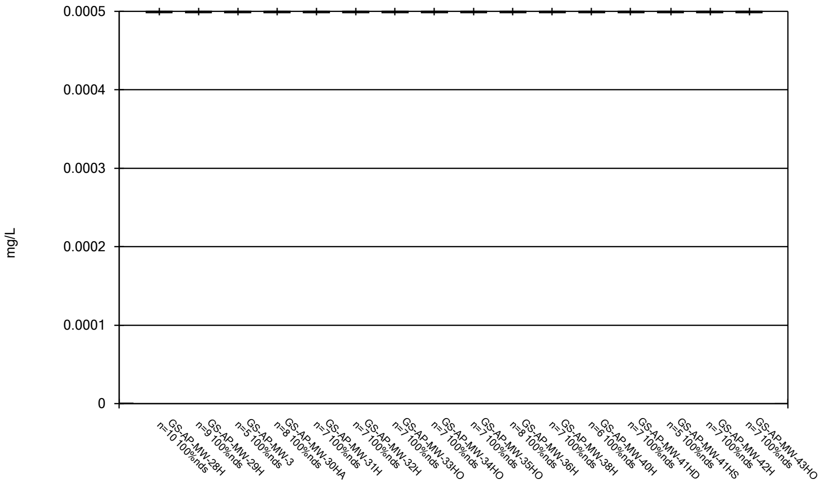


Constituent: Mercury   Analysis Run 5/23/2023 3:45 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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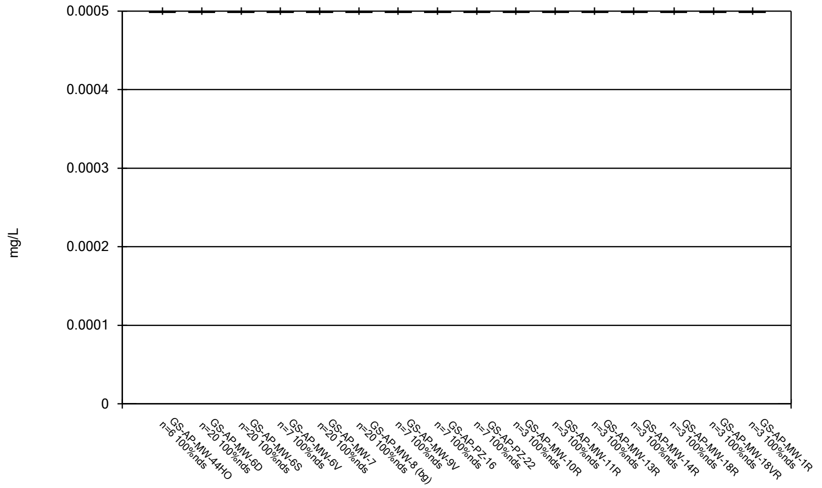
Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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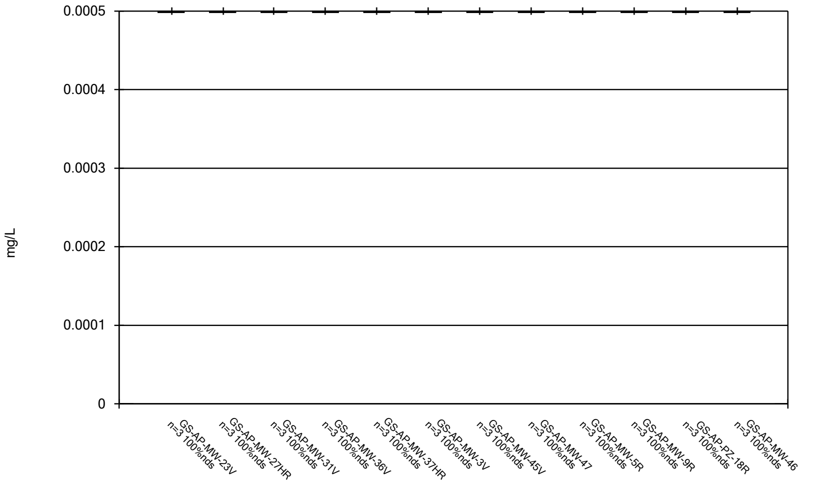
Box & Whiskers Plot



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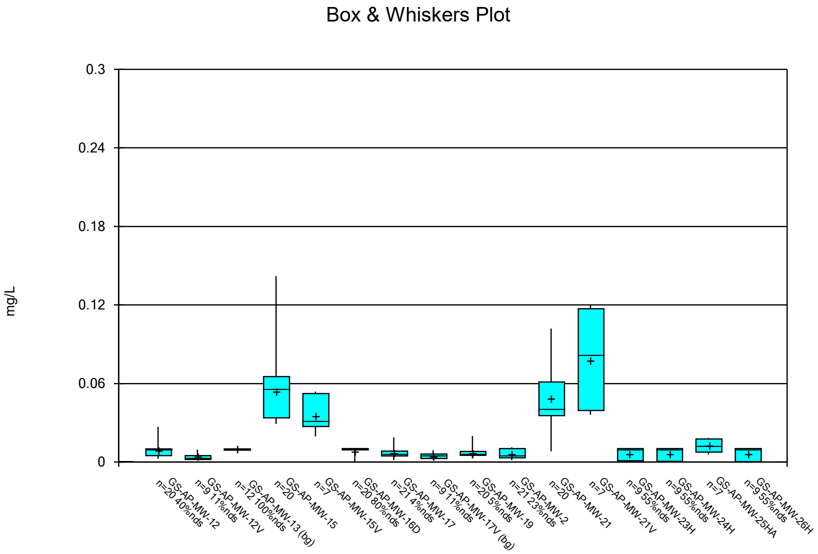
Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

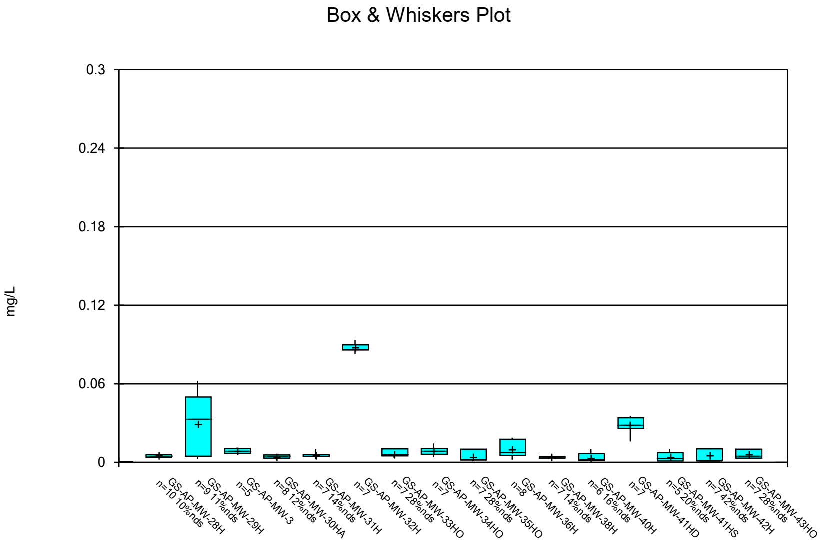
Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG



Constituent: Molybdenum   Analysis Run 5/23/2023 3:46 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

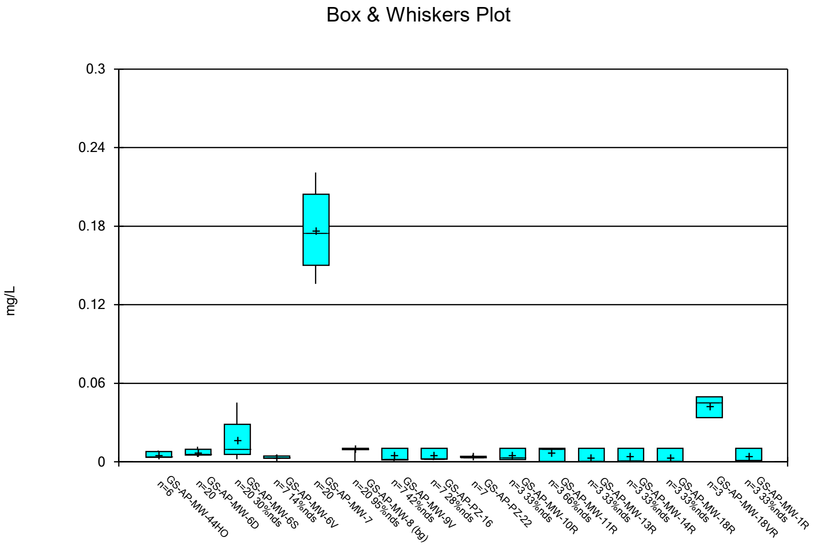
Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG



Constituent: Molybdenum   Analysis Run 5/23/2023 3:46 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG



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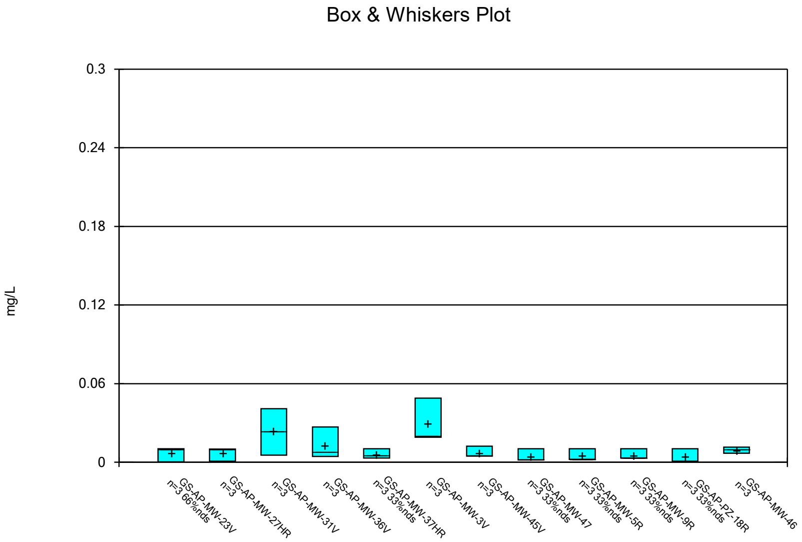
Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG



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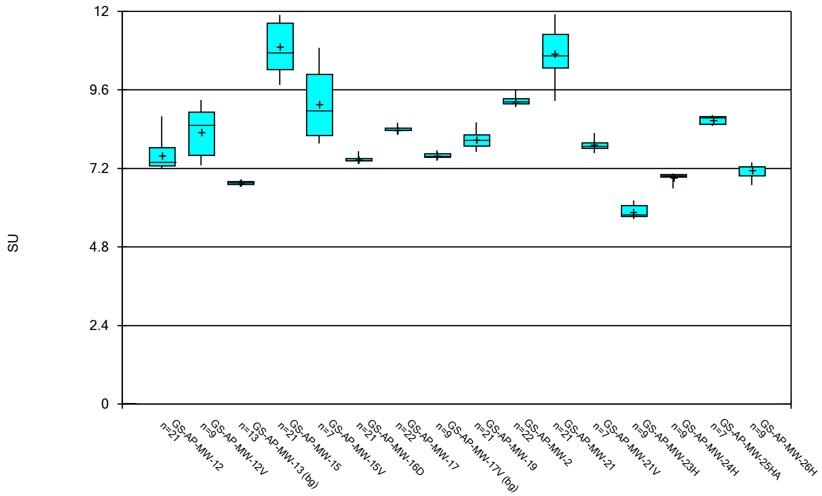
Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot

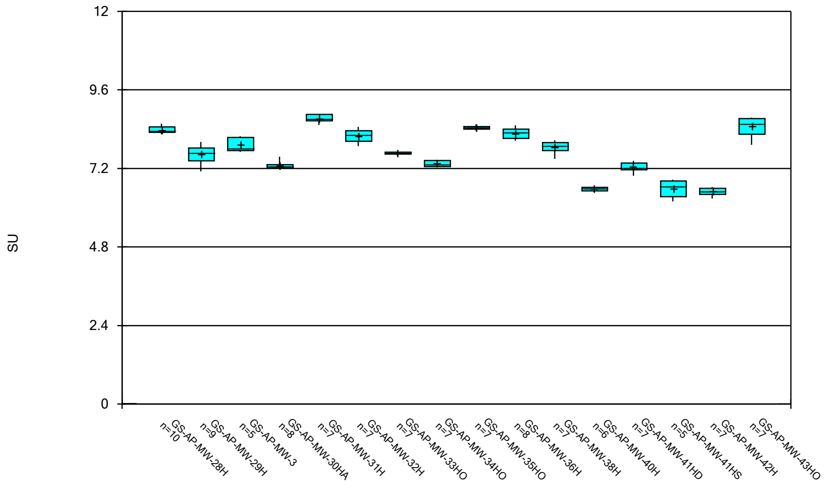


Constituent: pH   Analysis Run 5/23/2023 3:46 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

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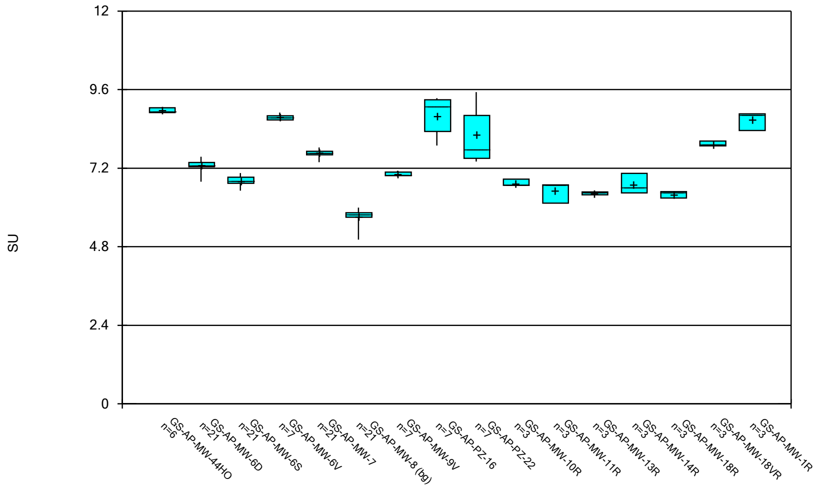

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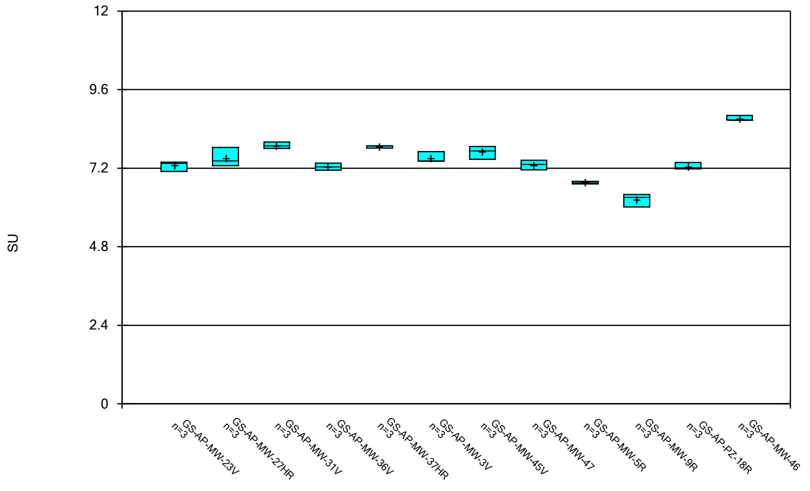
Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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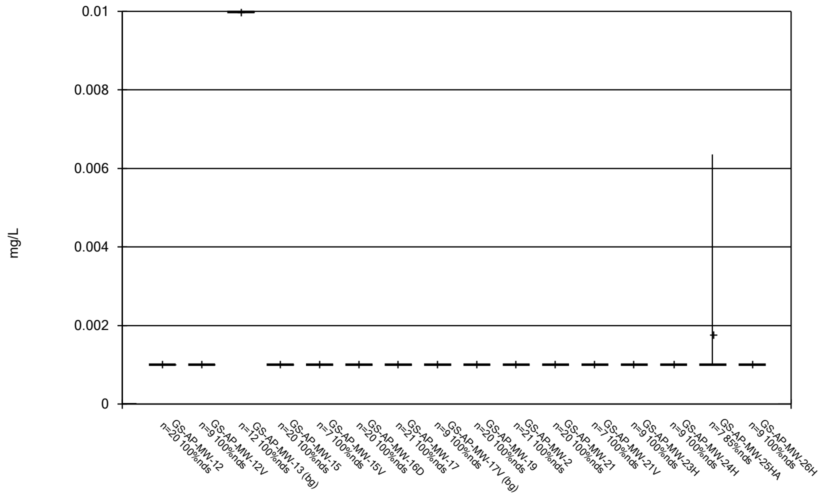
Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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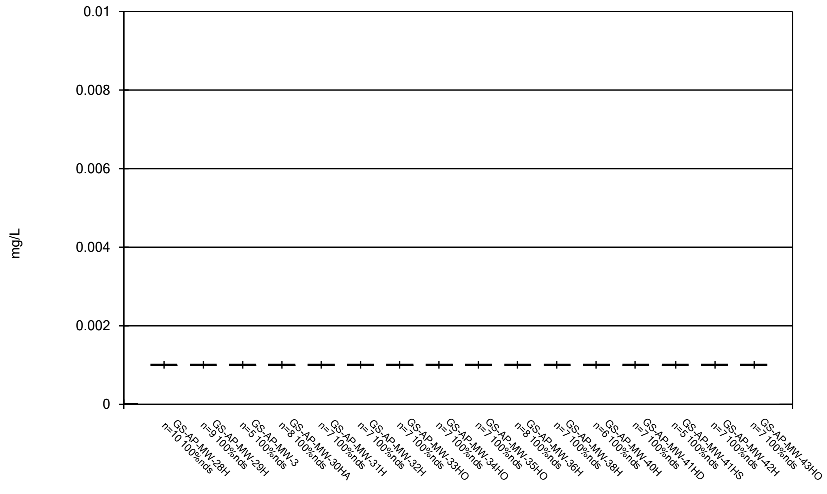
Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot

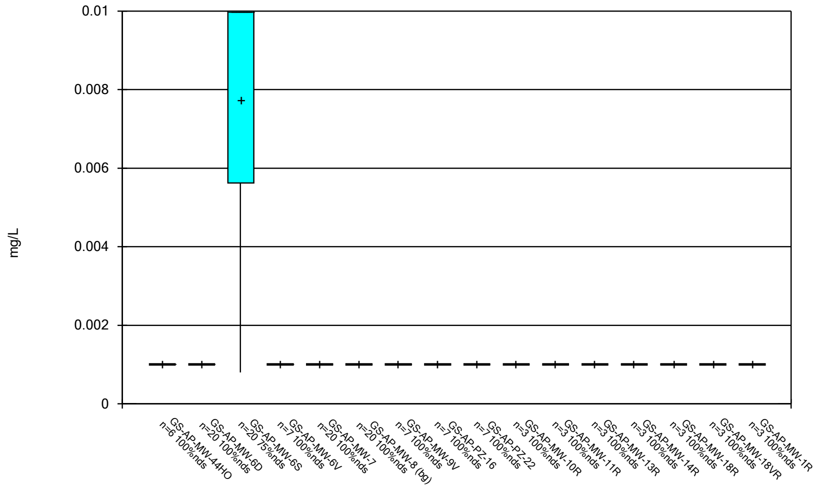


Constituent: Selenium   Analysis Run 5/23/2023 3:46 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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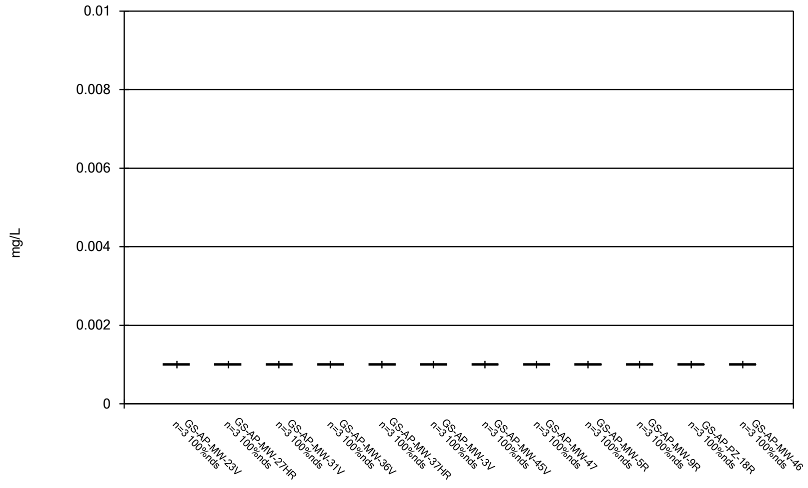
Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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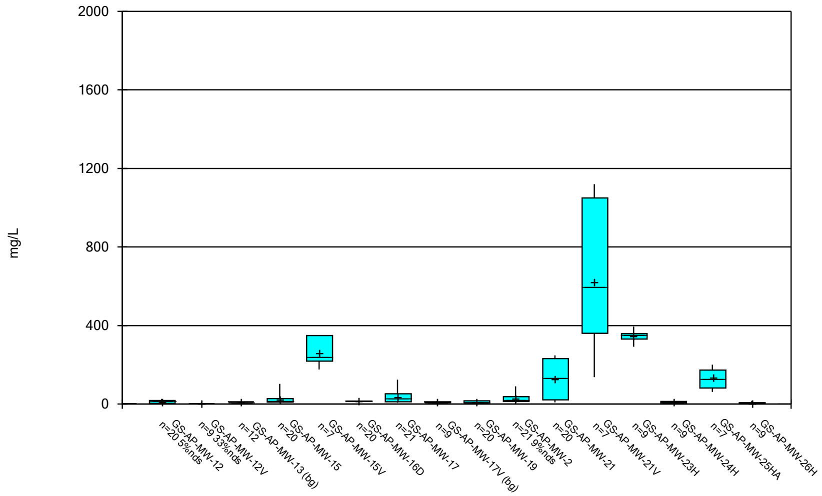

Constituent: Sulfate   Analysis Run 5/23/2023 3:46 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

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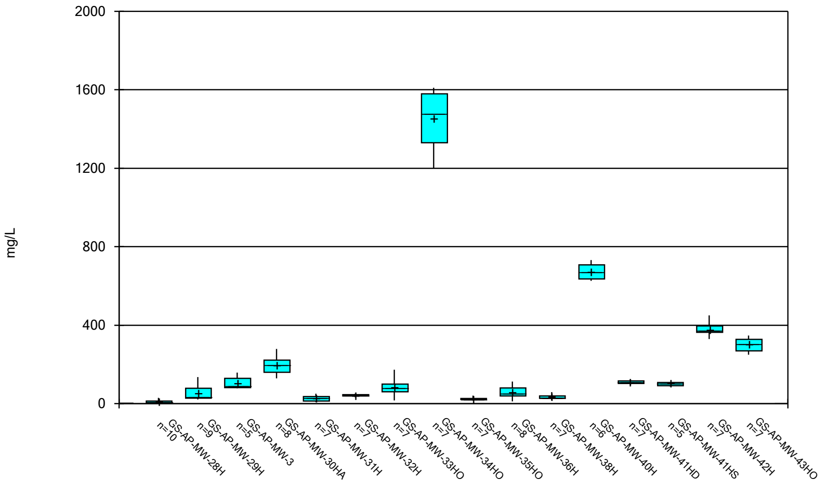

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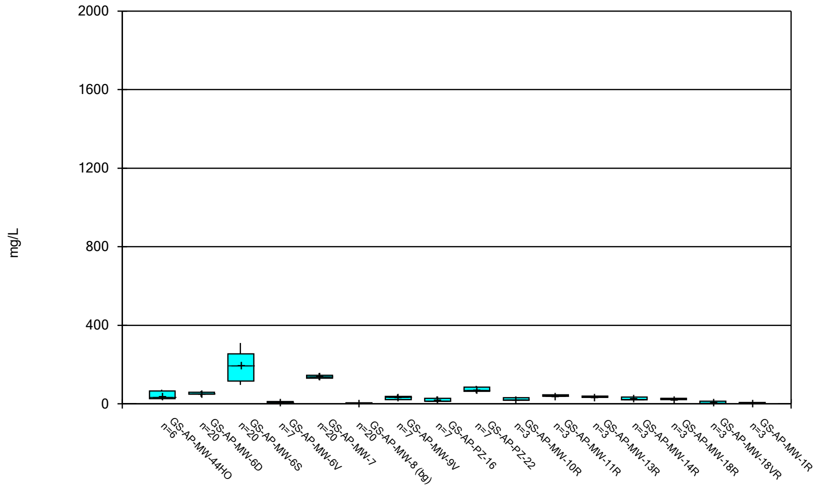
Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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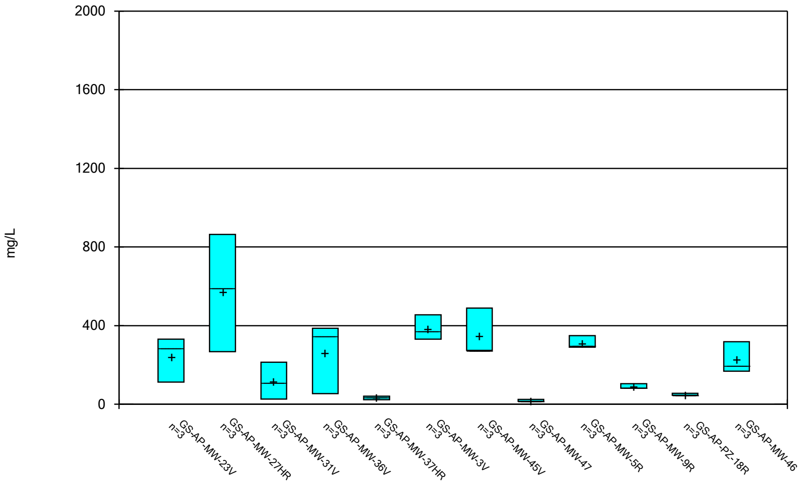
Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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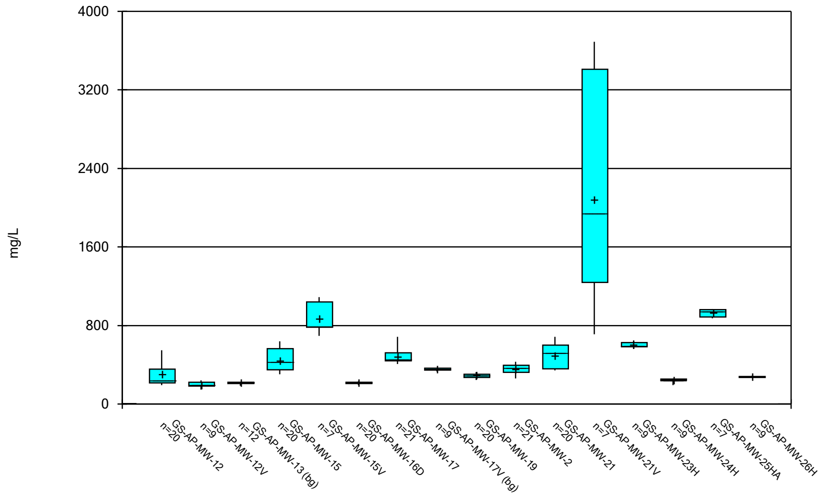
Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot

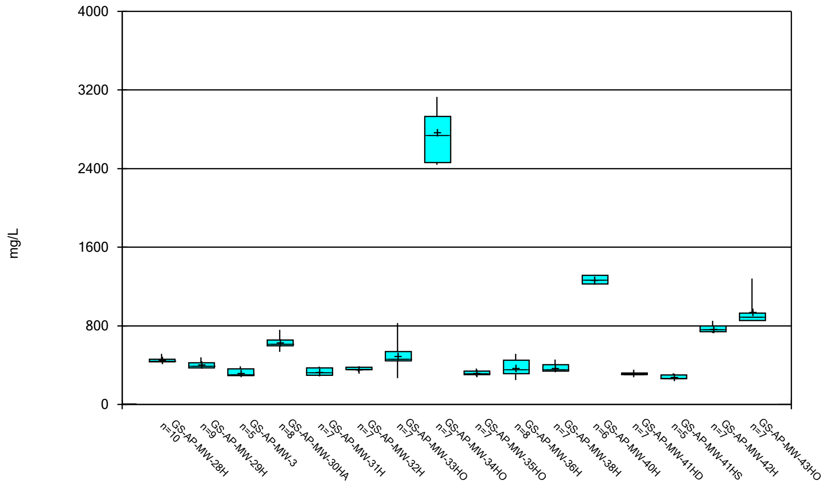


Constituent: TDS Analysis Run 5/23/2023 3:46 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot

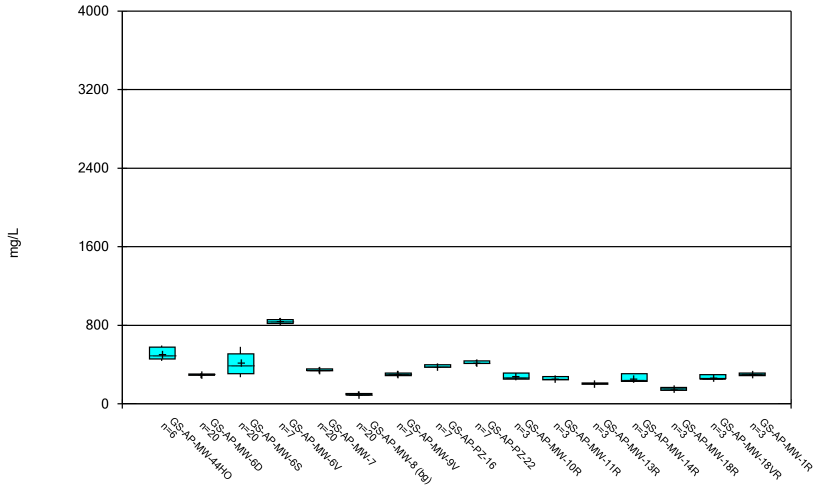


Constituent: TDS Analysis Run 5/23/2023 3:46 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

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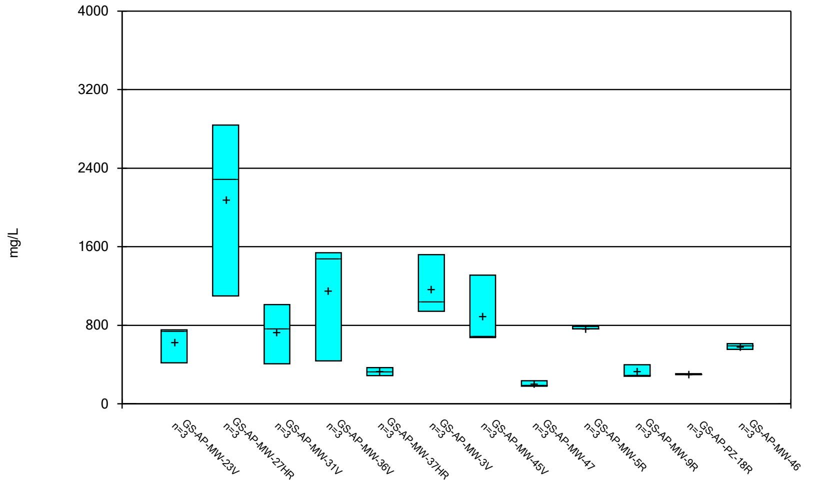
Box & Whiskers Plot

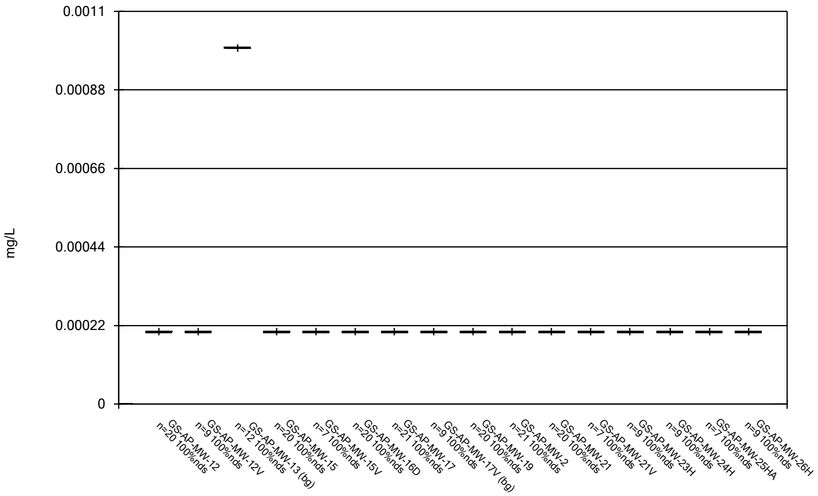


Constituent: TDS Analysis Run 5/23/2023 3:46 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot

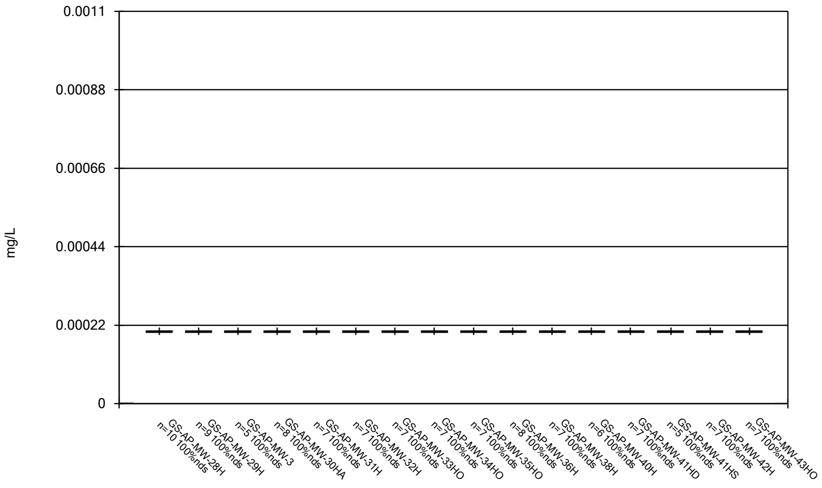


Constituent: Thallium   Analysis Run 5/23/2023 3:46 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot

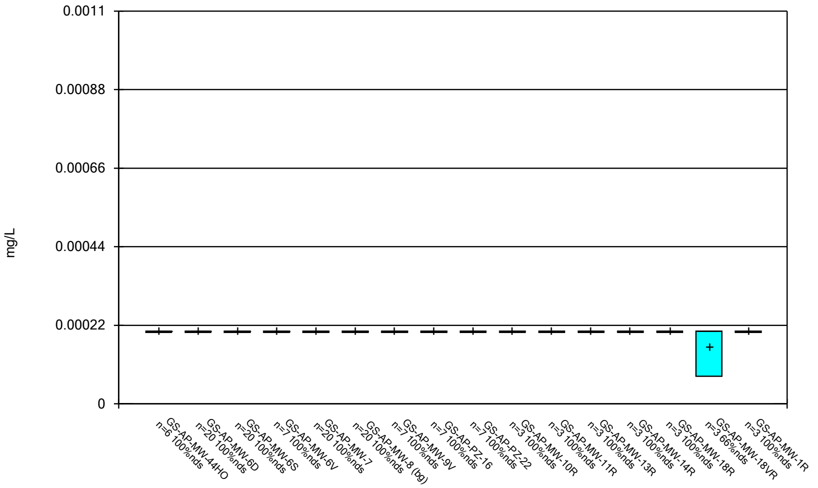


Constituent: Thallium   Analysis Run 5/23/2023 3:46 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot

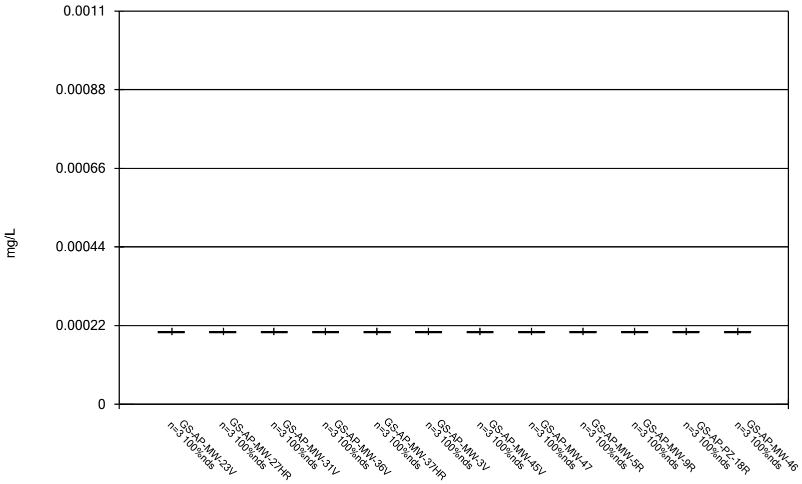


Constituent: Thallium   Analysis Run 5/23/2023 3:46 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Thallium   Analysis Run 5/23/2023 3:46 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

FIGURE C.

Outlier Summary

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond   Printed 5/23/2023, 4:26 PM

	GS-AP-MW-21 Boron (mg/L)
8/2/2016	0.176 (o)

FIGURE D.

Appendix III Interwell Prediction Limits - Significant Results

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond   Printed 5/23/2023, 4:31 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	GS-AP-MW-21	0.1015	n/a	3/21/2023	0.13	Yes	41	n/a	n/a	75.61	n/a	n/a	0.001065	NP Inter (NDs) 1 of 2
Boron (mg/L)	GS-AP-MW-6D	0.1015	n/a	3/14/2023	1.32	Yes	41	n/a	n/a	75.61	n/a	n/a	0.001065	NP Inter (NDs) 1 of 2
Boron (mg/L)	GS-AP-MW-6S	0.1015	n/a	3/14/2023	0.935	Yes	41	n/a	n/a	75.61	n/a	n/a	0.001065	NP Inter (NDs) 1 of 2
Boron (mg/L)	GS-AP-MW-7	0.1015	n/a	3/14/2023	1.64	Yes	41	n/a	n/a	75.61	n/a	n/a	0.001065	NP Inter (NDs) 1 of 2
Calcium (mg/L)	GS-AP-MW-6D	48.1	n/a	3/14/2023	52.4	Yes	41	n/a	n/a	0	n/a	n/a	0.001065	NP Inter (normality) 1 of 2
Calcium (mg/L)	GS-AP-MW-6S	48.1	n/a	3/14/2023	50.9	Yes	41	n/a	n/a	0	n/a	n/a	0.001065	NP Inter (normality) 1 of 2
Chloride (mg/L)	GS-AP-MW-15	4.354	n/a	3/20/2023	5.41	Yes	41	3.392	0.4601	0	None	No	0.0006839	Param Inter 1 of 2
Chloride (mg/L)	GS-AP-MW-17	4.354	n/a	3/22/2023	5.96	Yes	41	3.392	0.4601	0	None	No	0.0006839	Param Inter 1 of 2
Chloride (mg/L)	GS-AP-MW-19	4.354	n/a	3/21/2023	5.22	Yes	41	3.392	0.4601	0	None	No	0.0006839	Param Inter 1 of 2
Chloride (mg/L)	GS-AP-MW-21	4.354	n/a	3/21/2023	38.5	Yes	41	3.392	0.4601	0	None	No	0.0006839	Param Inter 1 of 2
Chloride (mg/L)	GS-AP-MW-6D	4.354	n/a	3/14/2023	9.66	Yes	41	3.392	0.4601	0	None	No	0.0006839	Param Inter 1 of 2
Chloride (mg/L)	GS-AP-MW-6S	4.354	n/a	3/14/2023	18.5	Yes	41	3.392	0.4601	0	None	No	0.0006839	Param Inter 1 of 2
Chloride (mg/L)	GS-AP-MW-7	4.354	n/a	3/14/2023	7.98	Yes	41	3.392	0.4601	0	None	No	0.0006839	Param Inter 1 of 2
Fluoride (mg/L)	GS-AP-MW-15	0.2808	n/a	3/20/2023	0.333	Yes	43	0.1417	0.06675	0	None	No	0.0006839	Param Inter 1 of 2
Fluoride (mg/L)	GS-AP-MW-2	0.2808	n/a	3/22/2023	0.72	Yes	43	0.1417	0.06675	0	None	No	0.0006839	Param Inter 1 of 2
pH (SU)	GS-AP-MW-12	7.76	5.02	3/22/2023	8.15	Yes	43	n/a	n/a	0	n/a	n/a	0.00198	NP Inter (normality) 1 of 2
pH (SU)	GS-AP-MW-12V	7.76	5.02	3/22/2023	9	Yes	43	n/a	n/a	0	n/a	n/a	0.00198	NP Inter (normality) 1 of 2
pH (SU)	GS-AP-MW-15	7.76	5.02	3/20/2023	11.26	Yes	43	n/a	n/a	0	n/a	n/a	0.00198	NP Inter (normality) 1 of 2
pH (SU)	GS-AP-MW-17	7.76	5.02	3/22/2023	8.56	Yes	43	n/a	n/a	0	n/a	n/a	0.00198	NP Inter (normality) 1 of 2
pH (SU)	GS-AP-MW-19	7.76	5.02	3/21/2023	7.85	Yes	43	n/a	n/a	0	n/a	n/a	0.00198	NP Inter (normality) 1 of 2
pH (SU)	GS-AP-MW-2	7.76	5.02	3/22/2023	9.27	Yes	43	n/a	n/a	0	n/a	n/a	0.00198	NP Inter (normality) 1 of 2
pH (SU)	GS-AP-MW-21	7.76	5.02	3/21/2023	9.56	Yes	43	n/a	n/a	0	n/a	n/a	0.00198	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GS-AP-MW-12	15.2	n/a	3/22/2023	18.3	Yes	41	n/a	n/a	0	n/a	n/a	0.001065	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GS-AP-MW-19	15.2	n/a	3/21/2023	16.4	Yes	41	n/a	n/a	0	n/a	n/a	0.001065	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GS-AP-MW-21	15.2	n/a	3/21/2023	238	Yes	41	n/a	n/a	0	n/a	n/a	0.001065	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GS-AP-MW-6D	15.2	n/a	3/14/2023	57.5	Yes	41	n/a	n/a	0	n/a	n/a	0.001065	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GS-AP-MW-6S	15.2	n/a	3/14/2023	96.1	Yes	41	n/a	n/a	0	n/a	n/a	0.001065	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GS-AP-MW-7	15.2	n/a	3/14/2023	130	Yes	41	n/a	n/a	0	n/a	n/a	0.001065	NP Inter (normality) 1 of 2
TDS (mg/L)	GS-AP-MW-15	368	n/a	3/20/2023	444	Yes	41	n/a	n/a	0	n/a	n/a	0.001065	NP Inter (normality) 1 of 2
TDS (mg/L)	GS-AP-MW-17	368	n/a	3/22/2023	441	Yes	41	n/a	n/a	0	n/a	n/a	0.001065	NP Inter (normality) 1 of 2
TDS (mg/L)	GS-AP-MW-21	368	n/a	3/21/2023	606	Yes	41	n/a	n/a	0	n/a	n/a	0.001065	NP Inter (normality) 1 of 2

Appendix III Interwell Prediction Limits - All Results

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond Printed 5/23/2023, 4:31 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	GS-AP-MW-12	0.1015	n/a	3/22/2023	0.1015ND	No	41	n/a	n/a	75.61	n/a	n/a	0.001065	NP Inter (NDs) 1 of 2
Boron (mg/L)	GS-AP-MW-12V	0.1015	n/a	3/22/2023	0.1015ND	No	41	n/a	n/a	75.61	n/a	n/a	0.001065	NP Inter (NDs) 1 of 2
Boron (mg/L)	GS-AP-MW-15	0.1015	n/a	3/20/2023	0.0308J	No	41	n/a	n/a	75.61	n/a	n/a	0.001065	NP Inter (NDs) 1 of 2
Boron (mg/L)	GS-AP-MW-16D	0.1015	n/a	3/21/2023	0.1015ND	No	41	n/a	n/a	75.61	n/a	n/a	0.001065	NP Inter (NDs) 1 of 2
Boron (mg/L)	GS-AP-MW-17	0.1015	n/a	3/22/2023	0.0727J	No	41	n/a	n/a	75.61	n/a	n/a	0.001065	NP Inter (NDs) 1 of 2
Boron (mg/L)	GS-AP-MW-19	0.1015	n/a	3/21/2023	0.0334J	No	41	n/a	n/a	75.61	n/a	n/a	0.001065	NP Inter (NDs) 1 of 2
Boron (mg/L)	GS-AP-MW-2	0.1015	n/a	3/22/2023	0.0989J	No	41	n/a	n/a	75.61	n/a	n/a	0.001065	NP Inter (NDs) 1 of 2
Boron (mg/L)	**GS-AP-MW-21**	**0.1015**	**n/a**	**3/21/2023**	**0.13**	**Yes**	**41**	**n/a**	**n/a**	**75.61**	**n/a**	**n/a**	**0.001065**	**NP Inter (NDs) 1 of 2**
Boron (mg/L)	**GS-AP-MW-6D**	**0.1015**	**n/a**	**3/14/2023**	**1.32**	**Yes**	**41**	**n/a**	**n/a**	**75.61**	**n/a**	**n/a**	**0.001065**	**NP Inter (NDs) 1 of 2**
Boron (mg/L)	**GS-AP-MW-6S**	**0.1015**	**n/a**	**3/14/2023**	**0.935**	**Yes**	**41**	**n/a**	**n/a**	**75.61**	**n/a**	**n/a**	**0.001065**	**NP Inter (NDs) 1 of 2**
Boron (mg/L)	**GS-AP-MW-7**	**0.1015**	**n/a**	**3/14/2023**	**1.64**	**Yes**	**41**	**n/a**	**n/a**	**75.61**	**n/a**	**n/a**	**0.001065**	**NP Inter (NDs) 1 of 2**
Calcium (mg/L)	GS-AP-MW-12	48.1	n/a	3/22/2023	36.4	No	41	n/a	n/a	0	n/a	n/a	0.001065	NP Inter (normality) 1 of 2
Calcium (mg/L)	GS-AP-MW-12V	48.1	n/a	3/22/2023	38	No	41	n/a	n/a	0	n/a	n/a	0.001065	NP Inter (normality) 1 of 2
Calcium (mg/L)	GS-AP-MW-15	48.1	n/a	3/20/2023	6.6	No	41	n/a	n/a	0	n/a	n/a	0.001065	NP Inter (normality) 1 of 2
Calcium (mg/L)	GS-AP-MW-16D	48.1	n/a	3/21/2023	32	No	41	n/a	n/a	0	n/a	n/a	0.001065	NP Inter (normality) 1 of 2
Calcium (mg/L)	GS-AP-MW-17	48.1	n/a	3/22/2023	2.07	No	41	n/a	n/a	0	n/a	n/a	0.001065	NP Inter (normality) 1 of 2
Calcium (mg/L)	GS-AP-MW-19	48.1	n/a	3/21/2023	46.9	No	41	n/a	n/a	0	n/a	n/a	0.001065	NP Inter (normality) 1 of 2
Calcium (mg/L)	GS-AP-MW-2	48.1	n/a	3/22/2023	0.4J	No	41	n/a	n/a	0	n/a	n/a	0.001065	NP Inter (normality) 1 of 2
Calcium (mg/L)	GS-AP-MW-21	48.1	n/a	3/21/2023	2.74	No	41	n/a	n/a	0	n/a	n/a	0.001065	NP Inter (normality) 1 of 2
Calcium (mg/L)	**GS-AP-MW-6D**	**48.1**	**n/a**	**3/14/2023**	**52.4**	**Yes**	**41**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.001065**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**GS-AP-MW-6S**	**48.1**	**n/a**	**3/14/2023**	**50.9**	**Yes**	**41**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.001065**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	GS-AP-MW-7	48.1	n/a	3/14/2023	11	No	41	n/a	n/a	0	n/a	n/a	0.001065	NP Inter (normality) 1 of 2
Chloride (mg/L)	GS-AP-MW-12	4.354	n/a	3/22/2023	2.73	No	41	3.392	0.4601	0	None	No	0.0006839	Param Inter 1 of 2
Chloride (mg/L)	GS-AP-MW-12V	4.354	n/a	3/22/2023	3.77	No	41	3.392	0.4601	0	None	No	0.0006839	Param Inter 1 of 2
Chloride (mg/L)	**GS-AP-MW-15**	**4.354**	**n/a**	**3/20/2023**	**5.41**	**Yes**	**41**	**3.392**	**0.4601**	**0**	**None**	**No**	**0.0006839**	**Param Inter 1 of 2**
Chloride (mg/L)	GS-AP-MW-16D	4.354	n/a	3/21/2023	3.72	No	41	3.392	0.4601	0	None	No	0.0006839	Param Inter 1 of 2
Chloride (mg/L)	**GS-AP-MW-17**	**4.354**	**n/a**	**3/22/2023**	**5.96**	**Yes**	**41**	**3.392**	**0.4601**	**0**	**None**	**No**	**0.0006839**	**Param Inter 1 of 2**
Chloride (mg/L)	**GS-AP-MW-19**	**4.354**	**n/a**	**3/21/2023**	**5.22**	**Yes**	**41**	**3.392**	**0.4601**	**0**	**None**	**No**	**0.0006839**	**Param Inter 1 of 2**
Chloride (mg/L)	GS-AP-MW-2	4.354	n/a	3/22/2023	4.23	No	41	3.392	0.4601	0	None	No	0.0006839	Param Inter 1 of 2
Chloride (mg/L)	**GS-AP-MW-21**	**4.354**	**n/a**	**3/21/2023**	**38.5**	**Yes**	**41**	**3.392**	**0.4601**	**0**	**None**	**No**	**0.0006839**	**Param Inter 1 of 2**
Chloride (mg/L)	**GS-AP-MW-6D**	**4.354**	**n/a**	**3/14/2023**	**9.66**	**Yes**	**41**	**3.392**	**0.4601**	**0**	**None**	**No**	**0.0006839**	**Param Inter 1 of 2**
Chloride (mg/L)	**GS-AP-MW-6S**	**4.354**	**n/a**	**3/14/2023**	**18.5**	**Yes**	**41**	**3.392**	**0.4601**	**0**	**None**	**No**	**0.0006839**	**Param Inter 1 of 2**
Chloride (mg/L)	**GS-AP-MW-7**	**4.354**	**n/a**	**3/14/2023**	**7.98**	**Yes**	**41**	**3.392**	**0.4601**	**0**	**None**	**No**	**0.0006839**	**Param Inter 1 of 2**
Fluoride (mg/L)	GS-AP-MW-12	0.2808	n/a	3/22/2023	0.0941J	No	43	0.1417	0.06675	0	None	No	0.0006839	Param Inter 1 of 2
Fluoride (mg/L)	GS-AP-MW-12V	0.2808	n/a	3/22/2023	0.138	No	43	0.1417	0.06675	0	None	No	0.0006839	Param Inter 1 of 2
Fluoride (mg/L)	**GS-AP-MW-15**	**0.2808**	**n/a**	**3/20/2023**	**0.333**	**Yes**	**43**	**0.1417**	**0.06675**	**0**	**None**	**No**	**0.0006839**	**Param Inter 1 of 2**
Fluoride (mg/L)	GS-AP-MW-16D	0.2808	n/a	3/21/2023	0.0849J	No	43	0.1417	0.06675	0	None	No	0.0006839	Param Inter 1 of 2
Fluoride (mg/L)	GS-AP-MW-17	0.2808	n/a	3/22/2023	0.183	No	43	0.1417	0.06675	0	None	No	0.0006839	Param Inter 1 of 2
Fluoride (mg/L)	GS-AP-MW-19	0.2808	n/a	3/21/2023	0.24	No	43	0.1417	0.06675	0	None	No	0.0006839	Param Inter 1 of 2
Fluoride (mg/L)	**GS-AP-MW-2**	**0.2808**	**n/a**	**3/22/2023**	**0.72**	**Yes**	**43**	**0.1417**	**0.06675**	**0**	**None**	**No**	**0.0006839**	**Param Inter 1 of 2**
Fluoride (mg/L)	GS-AP-MW-21	0.2808	n/a	3/21/2023	0.194	No	43	0.1417	0.06675	0	None	No	0.0006839	Param Inter 1 of 2
Fluoride (mg/L)	GS-AP-MW-6D	0.2808	n/a	3/14/2023	0.122J	No	43	0.1417	0.06675	0	None	No	0.0006839	Param Inter 1 of 2
Fluoride (mg/L)	GS-AP-MW-6S	0.2808	n/a	3/14/2023	0.153	No	43	0.1417	0.06675	0	None	No	0.0006839	Param Inter 1 of 2
Fluoride (mg/L)	GS-AP-MW-7	0.2808	n/a	3/14/2023	0.177	No	43	0.1417	0.06675	0	None	No	0.0006839	Param Inter 1 of 2
pH (SU)	**GS-AP-MW-12**	**7.76**	**5.02**	**3/22/2023**	**8.15**	**Yes**	**43**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.00198**	**NP Inter (normality) 1 of 2**
pH (SU)	**GS-AP-MW-12V**	**7.76**	**5.02**	**3/22/2023**	**9**	**Yes**	**43**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.00198**	**NP Inter (normality) 1 of 2**
pH (SU)	**GS-AP-MW-15**	**7.76**	**5.02**	**3/20/2023**	**11.26**	**Yes**	**43**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.00198**	**NP Inter (normality) 1 of 2**
pH (SU)	GS-AP-MW-16D	7.76	5.02	3/21/2023	7.51	No	43	n/a	n/a	0	n/a	n/a	0.00198	NP Inter (normality) 1 of 2
pH (SU)	**GS-AP-MW-17**	**7.76**	**5.02**	**3/22/2023**	**8.56**	**Yes**	**43**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.00198**	**NP Inter (normality) 1 of 2**
pH (SU)	**GS-AP-MW-19**	**7.76**	**5.02**	**3/21/2023**	**7.85**	**Yes**	**43**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.00198**	**NP Inter (normality) 1 of 2**
pH (SU)	**GS-AP-MW-2**	**7.76**	**5.02**	**3/22/2023**	**9.27**	**Yes**	**43**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.00198**	**NP Inter (normality) 1 of 2**
pH (SU)	**GS-AP-MW-21**	**7.76**	**5.02**	**3/21/2023**	**9.56**	**Yes**	**43**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.00198**	**NP Inter (normality) 1 of 2**
pH (SU)	GS-AP-MW-6D	7.76	5.02	3/14/2023	7.33	No	43	n/a	n/a	0	n/a	n/a	0.00198	NP Inter (normality) 1 of 2
pH (SU)	GS-AP-MW-6S	7.76	5.02	3/14/2023	7.04	No	43	n/a	n/a	0	n/a	n/a	0.00198	NP Inter (normality) 1 of 2
pH (SU)	GS-AP-MW-7	7.76	5.02	3/14/2023	7.67	No	43	n/a	n/a	0	n/a	n/a	0.00198	NP Inter (normality) 1 of 2

Appendix III Interwell Prediction Limits - All Results

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond Printed 5/23/2023, 4:31 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Sulfate (mg/L)	**GS-AP-MW-12**	**15.2**	**n/a**	**3/22/2023**	**18.3**	**Yes**	**41**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.001065**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	GS-AP-MW-12V	15.2	n/a	3/22/2023	1.52J	No	41	n/a	n/a	0	n/a	n/a	0.001065	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GS-AP-MW-15	15.2	n/a	3/20/2023	6.57	No	41	n/a	n/a	0	n/a	n/a	0.001065	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GS-AP-MW-16D	15.2	n/a	3/21/2023	14.7	No	41	n/a	n/a	0	n/a	n/a	0.001065	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GS-AP-MW-17	15.2	n/a	3/22/2023	7	No	41	n/a	n/a	0	n/a	n/a	0.001065	NP Inter (normality) 1 of 2
Sulfate (mg/L)	**GS-AP-MW-19**	**15.2**	**n/a**	**3/21/2023**	**16.4**	**Yes**	**41**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.001065**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	GS-AP-MW-2	15.2	n/a	3/22/2023	8.17	No	41	n/a	n/a	0	n/a	n/a	0.001065	NP Inter (normality) 1 of 2
Sulfate (mg/L)	**GS-AP-MW-21**	**15.2**	**n/a**	**3/21/2023**	**238**	**Yes**	**41**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.001065**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**GS-AP-MW-6D**	**15.2**	**n/a**	**3/14/2023**	**57.5**	**Yes**	**41**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.001065**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**GS-AP-MW-6S**	**15.2**	**n/a**	**3/14/2023**	**96.1**	**Yes**	**41**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.001065**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**GS-AP-MW-7**	**15.2**	**n/a**	**3/14/2023**	**130**	**Yes**	**41**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.001065**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	GS-AP-MW-12	368	n/a	3/22/2023	203	No	41	n/a	n/a	0	n/a	n/a	0.001065	NP Inter (normality) 1 of 2
TDS (mg/L)	GS-AP-MW-12V	368	n/a	3/22/2023	182	No	41	n/a	n/a	0	n/a	n/a	0.001065	NP Inter (normality) 1 of 2
TDS (mg/L)	**GS-AP-MW-15**	**368**	**n/a**	**3/20/2023**	**444**	**Yes**	**41**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.001065**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	GS-AP-MW-16D	368	n/a	3/21/2023	221	No	41	n/a	n/a	0	n/a	n/a	0.001065	NP Inter (normality) 1 of 2
TDS (mg/L)	**GS-AP-MW-17**	**368**	**n/a**	**3/22/2023**	**441**	**Yes**	**41**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.001065**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	GS-AP-MW-19	368	n/a	3/21/2023	320	No	41	n/a	n/a	0	n/a	n/a	0.001065	NP Inter (normality) 1 of 2
TDS (mg/L)	GS-AP-MW-2	368	n/a	3/22/2023	297	No	41	n/a	n/a	0	n/a	n/a	0.001065	NP Inter (normality) 1 of 2
TDS (mg/L)	**GS-AP-MW-21**	**368**	**n/a**	**3/21/2023**	**606**	**Yes**	**41**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.001065**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	GS-AP-MW-6D	368	n/a	3/14/2023	300	No	41	n/a	n/a	0	n/a	n/a	0.001065	NP Inter (normality) 1 of 2
TDS (mg/L)	GS-AP-MW-6S	368	n/a	3/14/2023	298	No	41	n/a	n/a	0	n/a	n/a	0.001065	NP Inter (normality) 1 of 2
TDS (mg/L)	GS-AP-MW-7	368	n/a	3/14/2023	340	No	41	n/a	n/a	0	n/a	n/a	0.001065	NP Inter (normality) 1 of 2

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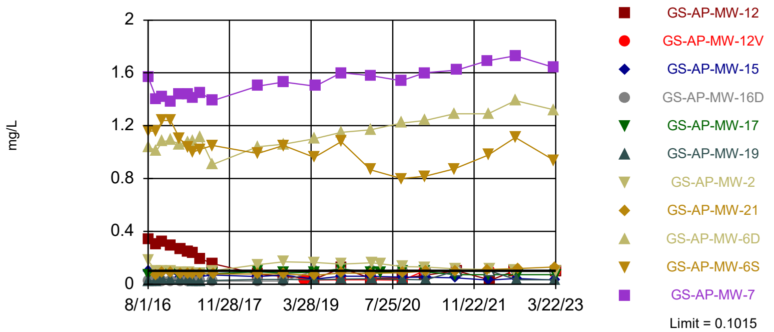
Hollow symbols indicate censored values.

Exceeds Limit: GS-AP-MW-21, GS-AP-MW-6D, GS-AP-MW-6S, GS-AP-MW-7

Prediction Limit

Interwell Non-parametric



Limit = 0.1015

Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 41 background values. 75.61% NDs. Annual per-constituent alpha = 0.02317. Individual comparison alpha = 0.001065 (1 of 2). Comparing 11 points to limit.

Constituent: Boron Analysis Run 5/23/2023 4:30 PM View: Appendix III
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

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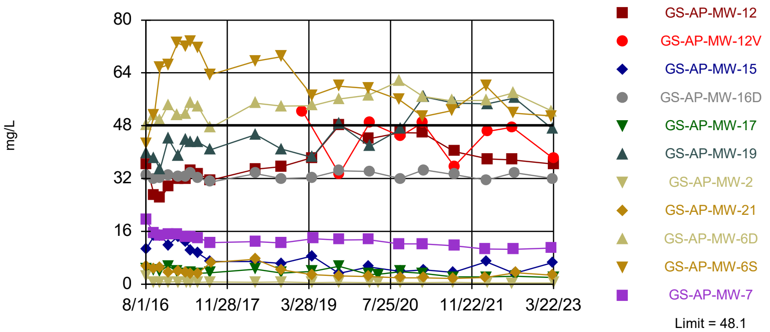
Exceeds Limit: GS-AP-MW-6D, GS-AP-MW-6S

Prediction Limit

Interwell Non-parametric



Limit = 48.1

Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 41 background values. Annual per-constituent alpha = 0.02317. Individual comparison alpha = 0.001065 (1 of 2). Comparing 11 points to limit.

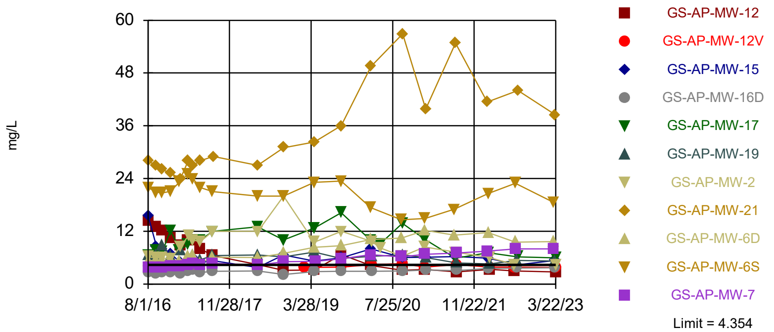
Constituent: Calcium Analysis Run 5/23/2023 4:30 PM View: Appendix III
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Exceeds Limit: GS-AP-MW-15, GS-AP-MW-17, GS-AP-MW-19, GS-AP-MW-21, GS-AP-MW-6D, GS-AP-MW-6S, GS-AP-MW-7

Prediction Limit

Interwell Parametric



Limit = 4.354

Background Data Summary: Mean=3.392, Std. Dev.=0.4601, n=41. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9597, critical = 0.92. Kappa = 2.091 (c=7, w=11, 1 of 2, event alpha = 0.05132). Report alpha = 0.007498. Individual comparison alpha = 0.0006839. Comparing 11 points to limit.

Constituent: Chloride Analysis Run 5/23/2023 4:30 PM View: Appendix III
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

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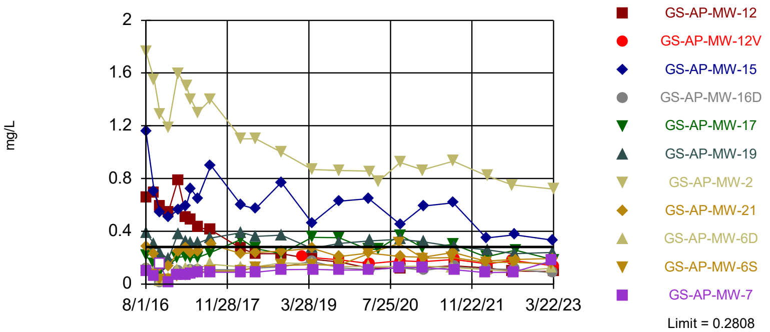
Hollow symbols indicate censored values.

Exceeds Limit: GS-AP-MW-15, GS-AP-MW-2

Prediction Limit

Interwell Parametric



Limit = 0.2808

Background Data Summary: Mean=0.1417, Std. Dev.=0.06675, n=43. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9372, critical = 0.923. Kappa = 2.083 (c=7, w=11, 1 of 2, event alpha = 0.05132). Report alpha = 0.007498. Individual comparison alpha = 0.0006839. Comparing 11 points to limit.

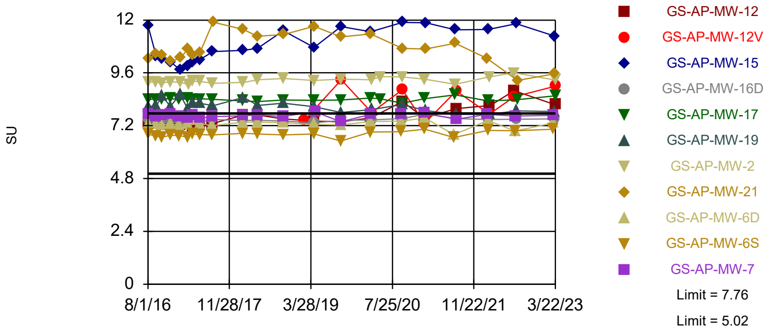
Constituent: Fluoride Analysis Run 5/23/2023 4:30 PM View: Appendix III
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Exceeds Limits: GS-AP-MW-12, GS-AP-MW-12V, GS-AP-MW-15, GS-AP-MW-17, GS-AP-MW-19, GS-AP-MW-2, GS-AP-MW-21

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limits are highest and lowest of 43 background values. Annual per-constituent alpha = 0.04311. Individual comparison alpha = 0.00198 (1 of 2). Comparing 11 points to limit.

Constituent: pH Analysis Run 5/23/2023 4:30 PM View: Appendix III

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

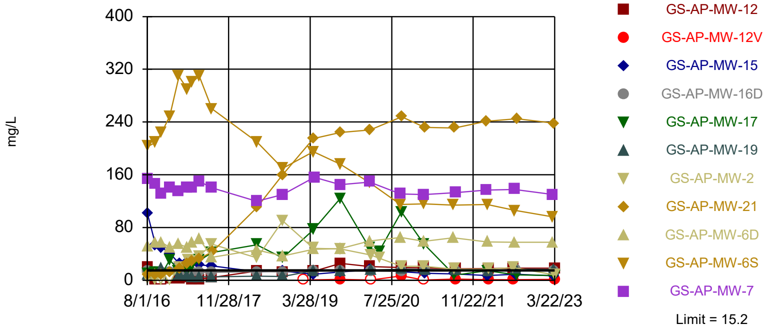
Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Exceeds Limit: GS-AP-MW-12, GS-AP-MW-19, GS-AP-MW-21, GS-AP-MW-6D, GS-AP-MW-6S, GS-AP-MW-7

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 41 background values. Annual per-constituent alpha = 0.02317. Individual comparison alpha = 0.001065 (1 of 2). Comparing 11 points to limit.

Constituent: Sulfate Analysis Run 5/23/2023 4:30 PM View: Appendix III

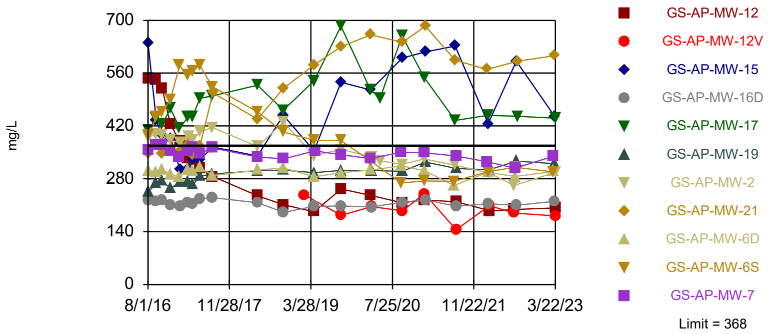
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Exceeds Limit: GS-AP-MW-15, GS-AP-MW-17, GS-AP-MW-21

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 41 background values. Annual per-constituent alpha = 0.02317. Individual comparison alpha = 0.001065 (1 of 2). Comparing 11 points to limit.

Constituent: TDS Analysis Run 5/23/2023 4:30 PM View: Appendix III

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 5/23/2023 4:31 PM View: Appendix III

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-16D	GS-AP-MW-19	GS-AP-MW-15	GS-AP-MW-17	GS-AP-MW-7	GS-AP-MW-2	GS-AP-MW-13 (bg)	GS-AP-MW-12	GS-AP-MW-6D
8/1/2016	0.0266 (J)	0.0279 (J)	0.0955 (J)	0.0712 (J)					
8/2/2016					1.57	0.178	<0.1015		
8/3/2016								0.34	1.04
9/19/2016	0.0262 (J)			0.0716 (J)		0.0937 (J)			
9/20/2016			0.0706 (J)				<0.1015	0.299	1.01
9/21/2016		0.0235 (J)			1.4				
10/24/2016		0.0444 (J)		0.0858 (J)	1.42	0.0986 (J)			1.08
10/25/2016	0.0273 (J)		0.0849 (J)				<0.1015	0.323	
10/26/2016									
12/12/2016					1.38				1.09
12/13/2016	0.0258 (J)	0.0285 (J)		0.0875 (J)		0.0965 (J)	<0.1015	0.294	
12/14/2016			0.0914 (J)						
2/6/2017				0.0729 (J)	1.44				1.06
2/7/2017		0.03 (J)							
2/8/2017	0.0249 (J)		0.0524 (J)			0.0896 (J)	<0.1015	0.264	
3/27/2017				0.0706 (J)					1.07
3/28/2017		0.0309 (J)	0.0532 (J)		1.44				
3/29/2017	0.0247 (J)						<0.1015	0.246	
3/30/2017						0.0871 (J)			
4/24/2017				0.0737 (J)	1.41				1.08
4/26/2017	0.0264 (J)	0.0273 (J)	0.0598 (J)			0.0818 (J)	<0.1015	0.234	
6/5/2017				0.0767 (J)					
6/6/2017	0.0247 (J)	0.0212 (J)	0.0576 (J)			0.0805 (J)			1.11
6/7/2017					1.45		<0.1015	0.194	
8/21/2017					1.39	0.102			0.906
8/22/2017	0.0246 (J)	0.0294 (J)	0.0702 (J)	0.0786 (J)			<0.1015	0.156	
8/23/2017									
5/14/2018									1.04
5/15/2018			0.0567 (J)	0.0953 (J)	1.5		<0.1015	0.0781 (J)	
5/16/2018	0.0247 (J)	0.0356 (J)				0.147			
10/15/2018			0.07 (J)	0.0842 (J)	1.53				1.06
10/16/2018		0.0363 (J)				0.169		0.057 (J)	
10/17/2018	0.0251 (J)						<0.1015		
2/20/2019									
2/21/2019									
4/16/2019							<0.1015	0.0385 (J)	1.1
4/17/2019	<0.1015	0.0336 (J)	0.0388 (J)	0.0916 (J)		0.165			
4/23/2019					1.5				
9/23/2019				0.116					1.15
9/24/2019	<0.1015	0.0375 (J)	0.0607 (J)		1.6				
9/25/2019						0.153		0.122	
3/16/2020				0.0894 (J)					
3/17/2020					1.58				1.17
3/18/2020			0.0596 (J)					0.0449 (J)	
3/24/2020	<0.1015	0.0398 (J)							
3/25/2020						0.163			
5/12/2020				0.0862 (J)					
5/13/2020						0.154			
9/16/2020					1.54				
9/17/2020									1.22
9/21/2020				0.102					
9/22/2020	<0.1015	0.037 (J)				0.133			

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 5/23/2023 4:31 PM View: Appendix III

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-16D	GS-AP-MW-19	GS-AP-MW-15	GS-AP-MW-17	GS-AP-MW-7	GS-AP-MW-2	GS-AP-MW-13 (bg)	GS-AP-MW-12	GS-AP-MW-6D
9/23/2020			0.0537 (J)					0.0446 (J)	
2/1/2021						0.13		0.0672 (J)	
2/2/2021				0.0946 (J)	1.6				
2/3/2021									1.24
2/8/2021		0.0336 (J)							
2/9/2021			0.0521 (J)						
2/10/2021	<0.1015								
7/27/2021									1.29
8/2/2021									
8/3/2021			0.0491 (J)	0.0729 (J)					
8/4/2021						0.117			
8/9/2021	<0.1015				1.62			<0.1015	
8/10/2021		<0.1015							
2/8/2022					1.69				
2/14/2022				0.073 (J)					1.29
2/15/2022	<0.1015								
2/16/2022			0.0323 (J)						
2/22/2022		<0.1015				0.112			
2/23/2022									
2/28/2022								0.0305 (J)	
7/19/2022						0.106		<0.1015	
7/20/2022									
7/25/2022					1.73				1.39
7/26/2022									
8/2/2022	<0.1015		0.0426 (J)						
8/3/2022		0.0329 (J)							
8/8/2022				0.0717 (J)					
8/9/2022									
8/10/2022									
3/14/2023					1.64				1.32
3/20/2023			0.0308 (J)						
3/21/2023	<0.1015	0.0334 (J)							
3/22/2023				0.0727 (J)		0.0989 (J)		<0.1015	
3/27/2023									

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 5/23/2023 4:31 PM View: Appendix III
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-8 (bg)	GS-AP-MW-6S	GS-AP-MW-21	GS-AP-MW-17V ...	GS-AP-MW-12V
8/1/2016					
8/2/2016			0.176 (o)		
8/3/2016	0.0239 (J)	1.16			
9/19/2016					
9/20/2016		1.16			
9/21/2016	<0.1015		0.0723 (J)		
10/24/2016					
10/25/2016	<0.1015		0.0867 (J)		
10/26/2016		1.24			
12/12/2016		1.24			
12/13/2016	<0.1015				
12/14/2016			0.092 (J)		
2/6/2017	<0.1015	1.1			
2/7/2017					
2/8/2017			0.0803 (J)		
3/27/2017		1.04			
3/28/2017	<0.1015		0.0804 (J)		
3/29/2017					
3/30/2017					
4/24/2017	<0.1015	1			
4/26/2017			0.0801 (J)		
6/5/2017					
6/6/2017		1.02	0.0795 (J)		
6/7/2017	<0.1015				
8/21/2017	<0.1015	1.05			
8/22/2017					
8/23/2017			0.0764 (J)		
5/14/2018		0.99			
5/15/2018	<0.1015		0.0769 (J)		
5/16/2018					
10/15/2018		1.05			
10/16/2018	<0.1015		0.0764 (J)		
10/17/2018					
2/20/2019				0.0337 (J)	
2/21/2019					0.0303 (J)
4/16/2019	<0.1015	0.961			
4/17/2019			0.0675 (J)		
4/23/2019					
9/23/2019		1.08			
9/24/2019	<0.1015		0.0843 (J)	0.0532 (J)	
9/25/2019					0.0347 (J)
3/16/2020					
3/17/2020		0.867			
3/18/2020	<0.1015		0.0824 (J)		
3/24/2020					0.0343 (J)
3/25/2020				0.0482 (J)	
5/12/2020					
5/13/2020					
9/16/2020		0.8			
9/17/2020					
9/21/2020	<0.1015				
9/22/2020					

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 5/23/2023 4:31 PM View: Appendix III
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-8 (bg)	GS-AP-MW-6S	GS-AP-MW-21	GS-AP-MW-17V ...	GS-AP-MW-12V
9/23/2020			0.0871 (J)	0.0478 (J)	0.0322 (J)
2/1/2021					<0.1015
2/2/2021	<0.1015			0.0396 (J)	
2/3/2021		0.817			
2/8/2021			0.0991 (J)		
2/9/2021					
2/10/2021					
7/27/2021		0.873			
8/2/2021				0.0368 (J)	
8/3/2021					
8/4/2021			0.0993 (J)		
8/9/2021					<0.1015
8/10/2021	<0.1015				
2/8/2022			0.111		
2/14/2022		0.978		0.0386 (J)	
2/15/2022					
2/16/2022	<0.1015				
2/22/2022					
2/23/2022					<0.1015
2/28/2022					
7/19/2022					
7/20/2022					<0.1015
7/25/2022					
7/26/2022		1.11			
8/2/2022	<0.1015				
8/3/2022					
8/8/2022					
8/9/2022				0.0418 (J)	
8/10/2022			0.119		
3/14/2023		0.935			
3/20/2023					
3/21/2023			0.13		
3/22/2023				0.0379 (J)	<0.1015
3/27/2023	<0.1015				

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 5/23/2023 4:31 PM View: Appendix III

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-16D	GS-AP-MW-19	GS-AP-MW-15	GS-AP-MW-17	GS-AP-MW-7	GS-AP-MW-2	GS-AP-MW-13 (bg)	GS-AP-MW-21	GS-AP-MW-8 (bg)
8/1/2016	33	39.6	10.5	4.52					
8/2/2016					19.4	2.25	47.2	5.29	
8/3/2016									6.85
9/19/2016	31.7			4.3		0.724			
9/20/2016			14.7				46.3		
9/21/2016		38.1			15.4			4.51	11.7
10/24/2016		34.7		4.02	14.8	0.635			
10/25/2016	32.2		14.7				46.6	4.92	10.8
10/26/2016									
12/12/2016					15				
12/13/2016	33.1	44		5.5		0.714	43.1		5.86
12/14/2016			11.9					3.5	
2/6/2017				3.79	14.9				9.76
2/7/2017		39							
2/8/2017	32.7		14.4			0.722	47.5	3.75	
3/27/2017				3.13					
3/28/2017		43.9	12.9		14.3			3.63	5.28
3/29/2017	32.7						46.8		
3/30/2017						0.686			
4/24/2017				3.41	14.5				6.89
4/26/2017	33.8	42.8	10.4			0.646	48.1	3.3	
6/5/2017				3.32					
6/6/2017	32.2	43.1	9.41			0.569		3.24	
6/7/2017					14.1		44.4		3.58
8/21/2017					12.6	0.634			3.38
8/22/2017	30.9	40.7	6.89	3.52			42.9		
8/23/2017								6.6	
5/14/2018									
5/15/2018			6.86	4.53	12.9		44.3	7.57	4.25
5/16/2018	33.5	45.3				0.588			
10/15/2018			6.28	3.38	12.5				
10/16/2018		40.9				0.714		4.4	3.21
10/17/2018	32						41.8		
2/20/2019									
2/21/2019									
4/16/2019							38.6		4.43
4/17/2019	32.3	38.4	8.53	3.86		0.511		2.88	
4/23/2019					13.8				
9/23/2019				5.43					
9/24/2019	34.3	48.4	3.26		13.4			2.47	7.24
9/25/2019						0.581			
3/16/2020				3					
3/17/2020					13.5				
3/18/2020			5.25					2.35	4.51
3/24/2020	34.1	41.7							
3/25/2020						0.518			
5/12/2020				2.95					
5/13/2020						0.493 (J)			
9/16/2020					12.2				
9/17/2020									
9/21/2020				3.73					5.19
9/22/2020	32	46.9				0.503			

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 5/23/2023 4:31 PM View: Appendix III

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-16D	GS-AP-MW-19	GS-AP-MW-15	GS-AP-MW-17	GS-AP-MW-7	GS-AP-MW-2	GS-AP-MW-13 (bg)	GS-AP-MW-21	GS-AP-MW-8 (bg)
9/23/2020			3.83					1.96	
2/1/2021						0.517			
2/2/2021				3.3	12.2				4.35
2/3/2021									
2/8/2021		56.8						1.95	
2/9/2021			4.38						
2/10/2021	34.6								
7/27/2021									
8/2/2021									
8/3/2021			3.55	2.17					
8/4/2021						0.564		1.76	
8/9/2021	33.2				11.6				
8/10/2021		54.8							4.47
2/8/2022					10.7			1.98	
2/14/2022				2.17					
2/15/2022	31.5								
2/16/2022			6.76						4.42
2/22/2022		54.6				0.413			
2/23/2022									
2/28/2022									
7/19/2022						0.359 (J)			
7/20/2022									
7/25/2022					10.6				
7/26/2022									
8/2/2022	33.799999		3.31						5.28
8/3/2022		56.400002							
8/8/2022				2.44					
8/9/2022									
8/10/2022								3.49	
3/14/2023					11				
3/20/2023			6.6						
3/21/2023	32	46.9						2.74	
3/22/2023				2.07		0.4 (J)			
3/27/2023									4.77

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 5/23/2023 4:31 PM View: Appendix III

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-6S	GS-AP-MW-12	GS-AP-MW-6D	GS-AP-MW-17V ...	GS-AP-MW-12V
8/1/2016					
8/2/2016					
8/3/2016	42.5	36.1	48.1		
9/19/2016					
9/20/2016	51.1	27	51.2		
9/21/2016					
10/24/2016			49.5		
10/25/2016		26.1			
10/26/2016	65.6				
12/12/2016	66.5		54.3		
12/13/2016		29.4			
12/14/2016					
2/6/2017	73.1		51.2		
2/7/2017					
2/8/2017		31.9			
3/27/2017	71.9		51.4		
3/28/2017					
3/29/2017		31.8			
3/30/2017					
4/24/2017	73.5		54.7		
4/26/2017		34.6			
6/5/2017					
6/6/2017	71.8		53.9		
6/7/2017		33.4			
8/21/2017	63.5		47.3		
8/22/2017		31.5			
8/23/2017					
5/14/2018	67.5		54.8		
5/15/2018		34.8			
5/16/2018					
10/15/2018	68.9		53.9		
10/16/2018		35.6			
10/17/2018					
2/20/2019				30.6	
2/21/2019					52.3
4/16/2019	57.1	38.3	54		
4/17/2019					
4/23/2019					
9/23/2019	60		56.1		
9/24/2019				29.7	
9/25/2019		48.1			33.4
3/16/2020					
3/17/2020	59.3		57.2		
3/18/2020		44			
3/24/2020					48.9
3/25/2020				31.1	
5/12/2020					
5/13/2020					
9/16/2020	55.9				
9/17/2020			61.5		
9/21/2020					
9/22/2020					

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 5/23/2023 4:31 PM View: Appendix III
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-6S	GS-AP-MW-12	GS-AP-MW-6D	GS-AP-MW-17V ...	GS-AP-MW-12V
9/23/2020		45.9		29.3	44.8
2/1/2021		45.8			48.9
2/2/2021				31.8	
2/3/2021	50.7		56.9		
2/8/2021					
2/9/2021					
2/10/2021					
7/27/2021	52.6		55.5		
8/2/2021				33	
8/3/2021					
8/4/2021					
8/9/2021		40.2			35.7
8/10/2021					
2/8/2022					
2/14/2022	60.1		55.7	30.1	
2/15/2022					
2/16/2022					
2/22/2022					
2/23/2022					46.3
2/28/2022		37.9			
7/19/2022		37.599998			
7/20/2022					47.5
7/25/2022			57.900002		
7/26/2022	51.799999				
8/2/2022					
8/3/2022					
8/8/2022					
8/9/2022				31.4	
8/10/2022					
3/14/2023	50.900002		52.4		
3/20/2023					
3/21/2023					
3/22/2023		36.4		29.6	38
3/27/2023					

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 5/23/2023 4:31 PM View: Appendix III

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-16D	GS-AP-MW-19	GS-AP-MW-15	GS-AP-MW-17	GS-AP-MW-7	GS-AP-MW-2	GS-AP-MW-13 (bg)	GS-AP-MW-21	GS-AP-MW-8 (bg)
8/1/2016	2.6	6.67	15.6	6.47					
8/2/2016					3.7	6.15	2.91	28.1	
8/3/2016									3.21
9/19/2016	2.51			7.78		5.98			
9/20/2016			8.6				2.94		
9/21/2016		6.54			3.74			26.8	2.95
10/24/2016		8.77		7.29	3.75	5.93			
10/25/2016	2.53		7.96				2.94	26	3.03
10/26/2016									
12/12/2016					4.06				
12/13/2016	2.53	6.16		12.2		5.7	2.93		3.21
12/14/2016			6.94					25.3	
2/6/2017				7.68	3.92				3
2/7/2017		7.57							
2/8/2017	2.5		4.96			8.44	2.85	23.8	
3/27/2017				9					
3/28/2017		5.9	5.2		4.3			28	3.3
3/29/2017	2.9						3.4		
3/30/2017						11			
4/24/2017				10	4.6				3.8
4/26/2017	3.2	6.5	6			10	3.7	27	
6/5/2017				10					
6/6/2017	2.6	5.5	4.9			9.6		28	
6/7/2017					4.3		3.3		3.5
8/21/2017					4.7	12			3.6
8/22/2017	2.9	6.5	5.3	12			3.4		
8/23/2017								29	
5/14/2018									
5/15/2018			3.8	13	4.3		3.2	27	3.3
5/16/2018	3	6.6				12			
10/15/2018			6.6	10	5.1				
10/16/2018		6.2				20		31	3.3
10/17/2018	2.2						2.3		
2/20/2019									
2/21/2019									
4/16/2019							3.23		3.69
4/17/2019	2.82	7.27	5.2	12.7		9.5		32.3	
4/23/2019					5.16				
9/23/2019				16.2					
9/24/2019	2.9	5.83	5.96		5.76			36	3.21
9/25/2019						12			
3/16/2020				9.95					
3/17/2020					6.65				
3/18/2020			8					49.5	4.35
3/24/2020	2.88	6.29							
3/25/2020						9.7			
5/12/2020				9.16					
5/13/2020						8.25			
9/16/2020					6.17				
9/17/2020									
9/21/2020				13.8					3.22
9/22/2020	2.94	6.6				6.33			

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 5/23/2023 4:31 PM View: Appendix III

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-16D	GS-AP-MW-19	GS-AP-MW-15	GS-AP-MW-17	GS-AP-MW-7	GS-AP-MW-2	GS-AP-MW-13 (bg)	GS-AP-MW-21	GS-AP-MW-8 (bg)
9/23/2020			6					56.9	
2/1/2021						8.42			
2/2/2021				10.2	6.76				3.85
2/3/2021									
2/8/2021		6						39.8	
2/9/2021			6.12						
2/10/2021	3.19								
7/27/2021									
8/2/2021									
8/3/2021			6.22	5.88					
8/4/2021						7.25		54.8	
8/9/2021	3.08				7.03				
8/10/2021		4.83							4.04
2/8/2022					7.475 (D)			41.4	
2/14/2022				7.15					
2/15/2022	3.58								
2/16/2022			5.86						4.42
2/22/2022		4.59				6.05			
2/23/2022									
2/28/2022									
7/19/2022						4.42			
7/20/2022									
7/25/2022					7.9725 (D)				
7/26/2022									
8/2/2022	3.65		4.36						4.35
8/3/2022		5.35							
8/8/2022				6.21					
8/9/2022									
8/10/2022								44	
3/14/2023					7.98				
3/20/2023			5.41						
3/21/2023	3.72	5.22						38.5	
3/22/2023				5.96		4.23			
3/27/2023									4.17

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 5/23/2023 4:31 PM View: Appendix III

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-6S	GS-AP-MW-12	GS-AP-MW-6D	GS-AP-MW-17V ...	GS-AP-MW-12V
8/1/2016					
8/2/2016					
8/3/2016	21.9	14.5	5.2		
9/19/2016					
9/20/2016	20.9	12.9	5.31		
9/21/2016					
10/24/2016			5.4		
10/25/2016		12.2			
10/26/2016	20.7				
12/12/2016	21.1		5.46		
12/13/2016		10.4			
12/14/2016					
2/6/2017	23.3		5.28		
2/7/2017					
2/8/2017		8.77			
3/27/2017	25		6.4		
3/28/2017					
3/29/2017		10			
3/30/2017					
4/24/2017	24		6.5		
4/26/2017		9.8			
6/5/2017					
6/6/2017	22		4.7		
6/7/2017		8			
8/21/2017	21		6.1		
8/22/2017		6.5			
8/23/2017					
5/14/2018	20		6		
5/15/2018		4.4			
5/16/2018					
10/15/2018	20		7		
10/16/2018		3.1			
10/17/2018					
2/20/2019				3.56	
2/21/2019					3.77
4/16/2019	23.1	3.22	8.36		
4/17/2019					
4/23/2019					
9/23/2019	23.4		8.72		
9/24/2019				3.69	
9/25/2019		6.68			3.84
3/16/2020					
3/17/2020	17.4		10.1		
3/18/2020		4.22			
3/24/2020					4.46
3/25/2020				3.72	
5/12/2020					
5/13/2020					
9/16/2020	14.6				
9/17/2020			10.5		
9/21/2020					
9/22/2020					

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 5/23/2023 4:31 PM View: Appendix III

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-6S	GS-AP-MW-12	GS-AP-MW-6D	GS-AP-MW-17V ...	GS-AP-MW-12V
9/23/2020		3.15		3.74	4.63
2/1/2021		3.32			3.86
2/2/2021				3.49	
2/3/2021	14.9		12.2		
2/8/2021					
2/9/2021					
2/10/2021					
7/27/2021	17		11.1		
8/2/2021				3.12	
8/3/2021					
8/4/2021					
8/9/2021		2.75			4.44
8/10/2021					
2/8/2022					
2/14/2022	20.6		11.7	3.26	
2/15/2022					
2/16/2022					
2/22/2022					
2/23/2022					3.83
2/28/2022		3.34			
7/19/2022		2.99			
7/20/2022					3.85
7/25/2022			9.533 (D)		
7/26/2022	22.9				
8/2/2022					
8/3/2022					
8/8/2022					
8/9/2022				3.09	
8/10/2022					
3/14/2023	18.5		9.66		
3/20/2023					
3/21/2023					
3/22/2023		2.73		2.8	3.77
3/27/2023					

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 5/23/2023 4:31 PM View: Appendix III

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-16D	GS-AP-MW-15	GS-AP-MW-19	GS-AP-MW-17	GS-AP-MW-21	GS-AP-MW-2	GS-AP-MW-13 (bg)	GS-AP-MW-7	GS-AP-MW-8 (bg)
8/1/2016	0.117 (J)	1.16	0.385	0.214 (J)					
8/2/2016					0.282 (J)	1.76	0.161 (J)	0.098 (J)	
8/3/2016									0.125 (J)
9/19/2016	0.078 (J)			0.151 (J)		1.55			
9/20/2016		0.7					0.122 (J)		
9/21/2016			0.303		0.231 (J)			0.061 (J)	0.098 (J)
10/24/2016			0.24 (J)	0.086 (J)		1.29		<0.3	
10/25/2016	0.018 (J)	0.544			0.137 (J)		0.058 (J)		0.025 (J)
10/26/2016									
12/12/2016								0.01 (J)	
12/13/2016	0.035 (J)		0.188 (J)	0.14 (J)		1.19	0.072 (J)		0.045 (J)
12/14/2016		0.51			0.131 (J)				
2/6/2017				0.2				0.07 (J)	0.1
2/7/2017			0.38						
2/8/2017	0.1	0.56			0.25	1.6	0.16		
3/27/2017				0.21					
3/28/2017		0.59	0.32		0.27			0.07 (J)	0.08 (J)
3/29/2017	0.08 (J)						0.14		
3/30/2017						1.5			
4/24/2017				0.2				0.08 (J)	0.09 (J)
4/26/2017	0.11	0.72	0.31		0.24	1.4	0.16		
6/5/2017				0.2					
6/6/2017	0.11	0.65	0.31		0.25	1.3			
6/7/2017							0.15	0.09 (J)	0.08 (J)
8/21/2017						1.4		0.09 (J)	0.08 (J)
8/22/2017	0.11	0.9	0.35	0.24			0.18		
8/23/2017					0.3				
2/19/2018				0.34				0.09 (J)	0.08 (J)
2/20/2018		0.6			0.23		0.17		
2/21/2018	0.11		0.39			1.1			
5/14/2018									
5/15/2018		0.57		0.27	0.24		0.17	0.09 (J)	0.1
5/16/2018	0.12		0.36			1.1			
10/15/2018		0.77		0.23				0.11	
10/16/2018			0.37		0.25	1			0.09 (J)
10/17/2018	0.13						0.19		
2/20/2019									
2/21/2019									
4/16/2019							0.197		0.143
4/17/2019	0.171	0.463	0.27	0.354	0.272	0.868			
4/23/2019								0.111	
9/23/2019				0.351					
9/24/2019	0.124	0.628	0.307		0.209			0.106	0.128
9/25/2019						0.86			
3/16/2020				0.261					
3/17/2020								0.107	
3/18/2020		0.647			0.234				0.108
3/24/2020	0.109		0.327						
3/25/2020						0.855			
5/12/2020				0.263					
5/13/2020						0.777			
9/16/2020								0.126	

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 5/23/2023 4:31 PM View: Appendix III

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-16D	GS-AP-MW-15	GS-AP-MW-19	GS-AP-MW-17	GS-AP-MW-21	GS-AP-MW-2	GS-AP-MW-13 (bg)	GS-AP-MW-7	GS-AP-MW-8 (bg)
9/17/2020									
9/21/2020				0.371					0.125
9/22/2020	0.123		0.339			0.921			
9/23/2020		0.452			0.208				
2/1/2021						0.865			
2/2/2021				0.276				0.124	0.114
2/3/2021									
2/8/2021			0.319		0.203				
2/9/2021		0.591							
2/10/2021	0.103								
7/27/2021									
8/2/2021									
8/3/2021		0.615		0.3					
8/4/2021					0.24	0.932			
8/9/2021	0.131							0.11	
8/10/2021			0.283						0.0924 (J)
2/8/2022					0.175			0.0872 (JD)	
2/14/2022				0.206					
2/15/2022	0.114								
2/16/2022		0.349							0.0616 (J)
2/22/2022			0.259			0.819			
2/23/2022									
2/28/2022									
7/19/2022						0.752			
7/20/2022									
7/25/2022								0.0896 (JD)	
7/26/2022									
8/2/2022	0.112 (J)	0.373							0.0815 (J)
8/3/2022			0.231						
8/8/2022				0.257					
8/9/2022									
8/10/2022					0.186				
3/14/2023								0.177	
3/20/2023		0.333							
3/21/2023	0.0849 (J)		0.24		0.194				
3/22/2023				0.183		0.72			
3/27/2023									0.112 (J)

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 5/23/2023 4:31 PM View: Appendix III

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-6D	GS-AP-MW-6S	GS-AP-MW-12	GS-AP-MW-17V ...	GS-AP-MW-12V
8/1/2016					
8/2/2016					
8/3/2016	0.127 (J)	0.099 (J)	0.656		
9/19/2016					
9/20/2016	0.087 (J)	0.074 (J)	0.691		
9/21/2016					
10/24/2016	0.019 (J)				
10/25/2016			0.588		
10/26/2016		0.032 (J)			
12/12/2016	0.043 (J)	0.034 (J)			
12/13/2016			0.545		
12/14/2016					
2/6/2017	0.11	0.06 (J)			
2/7/2017					
2/8/2017			0.79		
3/27/2017	0.12	0.07 (J)			
3/28/2017					
3/29/2017			0.51		
3/30/2017					
4/24/2017	0.11	0.08 (J)			
4/26/2017			0.49		
6/5/2017					
6/6/2017	0.12	0.09 (J)			
6/7/2017			0.43		
8/21/2017	0.15	0.1			
8/22/2017			0.41		
8/23/2017					
2/19/2018	0.13	0.1			
2/20/2018			0.27		
2/21/2018					
5/14/2018	0.13	0.13			
5/15/2018			0.23		
5/16/2018					
10/15/2018	0.16	0.14			
10/16/2018			0.23		
10/17/2018					
2/20/2019				0.239	
2/21/2019					0.205
4/16/2019	0.156	0.147	0.188		
4/17/2019					
4/23/2019					
9/23/2019	0.132	0.142			
9/24/2019				0.245	
9/25/2019			0.168		0.185
3/16/2020					
3/17/2020	0.132	0.231			
3/18/2020			0.122		
3/24/2020					0.155
3/25/2020				0.243	
5/12/2020					
5/13/2020					
9/16/2020		0.308			

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 5/23/2023 4:31 PM View: Appendix III
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-6D	GS-AP-MW-6S	GS-AP-MW-12	GS-AP-MW-17V ...	GS-AP-MW-12V
9/17/2020	0.133				
9/21/2020					
9/22/2020					
9/23/2020			0.12	0.278	0.176
2/1/2021			0.126		0.169
2/2/2021				0.244	
2/3/2021	0.135	0.195			
2/8/2021					
2/9/2021					
2/10/2021					
7/27/2021	0.127	0.2			
8/2/2021				0.276	
8/3/2021					
8/4/2021					
8/9/2021			0.139		0.187
8/10/2021					
2/8/2022					
2/14/2022	0.108	0.164		0.237	
2/15/2022					
2/16/2022					
2/22/2022					
2/23/2022					0.153
2/28/2022			0.12		
7/19/2022			0.0983 (J)		
7/20/2022					0.18
7/25/2022	0.0978 (JD)				
7/26/2022		0.164			
8/2/2022					
8/3/2022					
8/8/2022					
8/9/2022				0.245	
8/10/2022					
3/14/2023	0.122 (J)	0.153			
3/20/2023					
3/21/2023					
3/22/2023			0.0941 (J)	0.198	0.138
3/27/2023					

Prediction Limit

Constituent: pH (SU)   Analysis Run 5/23/2023 4:31 PM   View: Appendix III

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

	GS-AP-MW-16D	GS-AP-MW-15	GS-AP-MW-19	GS-AP-MW-17	GS-AP-MW-21	GS-AP-MW-2	GS-AP-MW-13 (bg)	GS-AP-MW-7	GS-AP-MW-8 (bg)
8/1/2016	7.53	11.74	8.05	8.39					
8/2/2016					10.26	9.18	6.8	7.72	
8/3/2016									5.84
9/19/2016	7.5			8.42		9.18			
9/20/2016		10.33					6.8		
9/21/2016			8.14		10.45			7.6	5.99
10/24/2016			8.55	8.42		9.14		7.68	
10/25/2016	7.44	10.24			10.42		6.85		5.94
10/26/2016									
12/12/2016								7.72	
12/13/2016	7.45		8.08	8.43		9.2	6.8		5.84
12/14/2016		10.09			10.12				
2/6/2017				8.38				7.64	5.9
2/7/2017			8.61						
2/8/2017	7.41	9.75			10.28	9.17	6.76		
3/27/2017				8.43					
3/28/2017		9.9	7.94		10.67			7.58	5.67
3/29/2017	7.44						6.76		
3/30/2017						9.08			
4/24/2017				8.39				7.68	5.79
4/26/2017	7.47	10.08	8.26		10.42	9.22	6.71		
6/5/2017				8.42					
6/6/2017	7.37	10.2	8.23		10.51	9.22			
6/7/2017							6.71	7.56	5.71
8/21/2017						9.12		7.61	5.7
8/22/2017	7.48	10.57	8.1	8.4			6.84		
8/23/2017					11.91				
2/19/2018				8.33				7.65	5.78
2/20/2018		10.63			11.57		6.77		
2/21/2018	7.44		8.48			9.17			
5/14/2018									
5/15/2018		10.71		8.3	11.26		6.8	7.69	5.84
5/16/2018	7.45		8.12			9.28			
10/15/2018		11.51		8.37				7.62	
10/16/2018			8.22		11.34	9.35			5.75
10/17/2018	7.41						6.67		
2/20/2019									
2/21/2019									
4/16/2019							6.64		5.76
4/17/2019	7.33	10.76	8.06	8.36	11.71	9.26			
4/23/2019								7.83	
9/23/2019				8.37					
9/24/2019	7.43	11.7	7.8		11.24			7.38	5.27
9/25/2019						9.31			
3/16/2020				8.45					
3/17/2020								7.72	
3/18/2020		11.47			11.37				5.81
3/24/2020	7.46		7.93						
3/25/2020						9.29			
5/12/2020				8.42					
5/13/2020						9.43			
9/16/2020								7.74	

Prediction Limit

Constituent: pH (SU)   Analysis Run 5/23/2023 4:31 PM   View: Appendix III
Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

	GS-AP-MW-16D	GS-AP-MW-15	GS-AP-MW-19	GS-AP-MW-17	GS-AP-MW-21	GS-AP-MW-2	GS-AP-MW-13 (bg)	GS-AP-MW-7	GS-AP-MW-8 (bg)
9/17/2020									
9/21/2020				8.22					5.75
9/22/2020	7.52		8.17			9.41			
9/23/2020		11.89			10.71				
2/1/2021						9.31			
2/2/2021				8.43				7.77	5.69
2/3/2021									
2/8/2021			7.89		10.69				
2/9/2021		11.88							
2/10/2021	7.73								
7/27/2021									
8/2/2021									
8/3/2021		11.56		8.6					
8/4/2021					10.95	9.08			
8/9/2021	7.53							7.49	
8/10/2021			7.72						5.02
2/8/2022					10.26			7.71	
2/14/2022				8.32					
2/15/2022	7.48								
2/16/2022		11.57							5.8
2/22/2022			7.71			9.42			
2/23/2022									
2/28/2022									
7/19/2022						9.6			
7/20/2022									
7/25/2022								7.64 (D)	
7/26/2022									
8/2/2022	7.49	11.84							5.78
8/3/2022			7.87						
8/8/2022				8.38					
8/9/2022									
8/10/2022					9.26				
3/14/2023								7.67	
3/20/2023		11.26							
3/21/2023	7.51		7.85		9.56				
3/22/2023				8.56		9.27			
3/27/2023									5.82

Prediction Limit

Constituent: pH (SU)   Analysis Run 5/23/2023 4:31 PM   View: Appendix III

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

	GS-AP-MW-6D	GS-AP-MW-6S	GS-AP-MW-12	GS-AP-MW-17V ...	GS-AP-MW-12V
8/1/2016					
8/2/2016					
8/3/2016	7.27	6.81	7.36		
9/19/2016					
9/20/2016	7.27	6.72	7.28		
9/21/2016					
10/24/2016	7.25				
10/25/2016			7.23		
10/26/2016		6.68			
12/12/2016	7.26	6.76			
12/13/2016			7.27		
12/14/2016					
2/6/2017	7.24	6.75			
2/7/2017					
2/8/2017			7.25		
3/27/2017	7.29	6.67			
3/28/2017					
3/29/2017			7.34		
3/30/2017					
4/24/2017	7.46	6.81			
4/26/2017			7.19		
6/5/2017					
6/6/2017	7.29	6.8			
6/7/2017			7.24		
8/21/2017	7.21	6.78			
8/22/2017			7.31		
8/23/2017					
2/19/2018	7.36	6.85			
2/20/2018			7.69		
2/21/2018					
5/14/2018	7.36	6.82			
5/15/2018			7.69		
5/16/2018					
10/15/2018	7.33	6.78			
10/16/2018			7.51		
10/17/2018					
2/20/2019				7.76	
2/21/2019					7.46
4/16/2019	7.26	6.82	7.41		
4/17/2019					
4/23/2019					
9/23/2019	7.23	6.51			
9/24/2019				7.65	
9/25/2019			7.38		9.29
3/16/2020					
3/17/2020	7.39	6.92			
3/18/2020			7.56		
3/24/2020					7.8
3/25/2020				7.63	
5/12/2020					
5/13/2020					
9/16/2020		6.93			

Prediction Limit

Constituent: pH (SU) Analysis Run 5/23/2023 4:31 PM View: Appendix III
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-6D	GS-AP-MW-6S	GS-AP-MW-12	GS-AP-MW-17V ...	GS-AP-MW-12V
9/17/2020	7.41				
9/21/2020					
9/22/2020					
9/23/2020			8.3	7.53	8.84
2/1/2021			7.55		7.3
2/2/2021				7.58	
2/3/2021	7.55	7.05			
2/8/2021					
2/9/2021					
2/10/2021					
7/27/2021	6.79	6.67			
8/2/2021				7.65	
8/3/2021					
8/4/2021					
8/9/2021			7.98		8.77
8/10/2021					
2/8/2022					
2/14/2022	7.43	6.99		7.43	
2/15/2022					
2/16/2022					
2/22/2022					
2/23/2022					7.73
2/28/2022			8.12		
7/19/2022			8.79		
7/20/2022					8.52
7/25/2022	6.95 (D)				
7/26/2022		6.97			
8/2/2022					
8/3/2022					
8/8/2022					
8/9/2022				7.55	
8/10/2022					
3/14/2023	7.33	7.04			
3/20/2023					
3/21/2023					
3/22/2023			8.15	7.61	9
3/27/2023					

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 5/23/2023 4:31 PM View: Appendix III
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-16D	GS-AP-MW-19	GS-AP-MW-15	GS-AP-MW-17	GS-AP-MW-7	GS-AP-MW-2	GS-AP-MW-13 (bg)	GS-AP-MW-21	GS-AP-MW-8 (bg)
8/1/2016	13.4	9.02	102	9.56					
8/2/2016					154	2.87	12	9.14	
8/3/2016									4.2
9/19/2016	12.9			12.7		1.22			
9/20/2016			53.3				11.2		
9/21/2016		8.38			146			8.71	4.27
10/24/2016		18.5		8.58	131	<1			
10/25/2016	11.6		49.8				10.1	8.54	2.78
10/26/2016									
12/12/2016					141				
12/13/2016	12.7	7.4		31		<1	11.4		3.18
12/14/2016			40.9					11.5	
2/6/2017				14.7	135				3.74
2/7/2017		8.16							
2/8/2017	12.2		25			19.4	10.9	17	
3/27/2017				14					
3/28/2017		6.4	27		140			25	3.4 (J)
3/29/2017	12						11		
3/30/2017						31			
4/24/2017				22	140				2.7 (J)
4/26/2017	13	4.6 (J)	29			29	11	28	
6/5/2017				30					
6/6/2017	12	5.2	23			37		33	
6/7/2017					150		11		2.7 (J)
8/21/2017					140	55			3.9 (J)
8/22/2017	12	5.3	22	42			11		
8/23/2017								43	
5/14/2018									
5/15/2018			13	54	120		11	110	2.5 (J)
5/16/2018	13	6				34			
10/15/2018			14	34	130				
10/16/2018		5.6				90		160	2.4 (J)
10/17/2018	13						12		
2/20/2019									
2/21/2019									
4/16/2019							12.1		4.53
4/17/2019	14.1	14.3	9.02	76.6		48.6		215	
4/23/2019					156				
9/23/2019				124					
9/24/2019	14.1	13.8	12.4		145			224	6.61
9/25/2019						47.7			
3/16/2020				48.6					
3/17/2020					149				
3/18/2020			15.9					228	4.86
3/24/2020	14.1	15.2							
3/25/2020						38.5			
5/12/2020				44.4					
5/13/2020						33.6			
9/16/2020					131				
9/17/2020									
9/21/2020				104					4.69
9/22/2020	13.6	16.9				21.5			

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 5/23/2023 4:31 PM View: Appendix III

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-16D	GS-AP-MW-19	GS-AP-MW-15	GS-AP-MW-17	GS-AP-MW-7	GS-AP-MW-2	GS-AP-MW-13 (bg)	GS-AP-MW-21	GS-AP-MW-8 (bg)
9/23/2020			13.2					248	
2/1/2021						21.3			
2/2/2021				55.1	130				4.83
2/3/2021									
2/8/2021		16.2						232	
2/9/2021			10.6						
2/10/2021	15.8								
7/27/2021									
8/2/2021									
8/3/2021			9.77	7.58					
8/4/2021						16.8		231	
8/9/2021	14.4				133				
8/10/2021		15.2							3.77
2/8/2022					137 (D)			241	
2/14/2022				14.4					
2/15/2022	14.7								
2/16/2022			7.37						4.68
2/22/2022		13.7				17.1			
2/23/2022									
2/28/2022									
7/19/2022						19.4			
7/20/2022									
7/25/2022					137.75 (D)				
7/26/2022									
8/2/2022	15.6		9.11						4.18
8/3/2022		17.1							
8/8/2022				8.35					
8/9/2022									
8/10/2022								245	
3/14/2023					130				
3/20/2023			6.57						
3/21/2023	14.7	16.4						238	
3/22/2023				7		8.17			
3/27/2023									4.41

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 5/23/2023 4:31 PM View: Appendix III
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-6S	GS-AP-MW-12	GS-AP-MW-6D	GS-AP-MW-17V ...	GS-AP-MW-12V
8/1/2016					
8/2/2016					
8/3/2016	203	19.2	52		
9/19/2016					
9/20/2016	209	1.42	56		
9/21/2016					
10/24/2016			57.5		
10/25/2016		<1			
10/26/2016	224				
12/12/2016	249		50		
12/13/2016		3.21			
12/14/2016					
2/6/2017	309		54.9		
2/7/2017					
2/8/2017		3.3			
3/27/2017	290		50		
3/28/2017					
3/29/2017		3.8 (J)			
3/30/2017					
4/24/2017	300		56		
4/26/2017		1.4 (J)			
6/5/2017					
6/6/2017	310		63		
6/7/2017		1.7 (J)			
8/21/2017	260		35		
8/22/2017		4.2 (J)			
8/23/2017					
5/14/2018	210		46		
5/15/2018		14			
5/16/2018					
10/15/2018	170		37		
10/16/2018		13			
10/17/2018					
2/20/2019				15.2	
2/21/2019					<1
4/16/2019	195	13.3	46.8		
4/17/2019					
4/23/2019					
9/23/2019	176		47.9		
9/24/2019				11.8	
9/25/2019		25.5			1.61
3/16/2020					
3/17/2020	148		59.5		
3/18/2020		20.8			
3/24/2020					<1
3/25/2020				9.69	
5/12/2020					
5/13/2020					
9/16/2020	115				
9/17/2020			65.1		
9/21/2020					
9/22/2020					

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 5/23/2023 4:31 PM View: Appendix III

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-6S	GS-AP-MW-12	GS-AP-MW-6D	GS-AP-MW-17V ...	GS-AP-MW-12V
9/23/2020		19.1		11.1	6.56
2/1/2021		18.7			<1
2/2/2021				8.81	
2/3/2021	116		58.9		
2/8/2021					
2/9/2021					
2/10/2021					
7/27/2021	114		64.4		
8/2/2021				10.2	
8/3/2021					
8/4/2021					
8/9/2021		17.3			1.85
8/10/2021					
2/8/2022					
2/14/2022	115		58.3	9.09	
2/15/2022					
2/16/2022					
2/22/2022					
2/23/2022					0.741 (J)
2/28/2022		17.9			
7/19/2022		18.5			
7/20/2022					1.08 (J)
7/25/2022			57.6 (D)		
7/26/2022	106				
8/2/2022					
8/3/2022					
8/8/2022					
8/9/2022				8.13	
8/10/2022					
3/14/2023	96.099998		57.5		
3/20/2023					
3/21/2023					
3/22/2023		18.3		10.6	1.52 (J)
3/27/2023					

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: TDS (mg/L) Analysis Run 5/23/2023 4:31 PM View: Appendix III

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-16D	GS-AP-MW-19	GS-AP-MW-15	GS-AP-MW-17	GS-AP-MW-7	GS-AP-MW-2	GS-AP-MW-13 (bg)	GS-AP-MW-21	GS-AP-MW-8 (bg)
8/1/2016	222	245	640	408					
8/2/2016					358	390	221	348	
8/3/2016									113
9/19/2016	220			441		398			
9/20/2016			434				221		
9/21/2016		267			370			368	128
10/24/2016		275		424	370	395			
10/25/2016	223		394				226	348	121
10/26/2016									
12/12/2016					353				
12/13/2016	211	255		466		381	211		101
12/14/2016			387					352	
2/6/2017				414	338				108
2/7/2017		272							
2/8/2017	206		303			376	212	352	
3/27/2017				444					
3/28/2017		271	305		352			370	91
3/29/2017	215						217		
3/30/2017						391			
4/24/2017				446	362				89.3
4/26/2017	212	265	329			384	202	342	
6/5/2017				493					
6/6/2017	227	287	331			404		367	
6/7/2017					348		218		84
8/21/2017					362	416			91.3
8/22/2017	230	293	364	500			224		
8/23/2017								508	
5/14/2018									
5/15/2018			340	528	338		209	438	94.7
5/16/2018	216	301				365			
10/15/2018			448	462	333				
10/16/2018		303				430		520	76.7
10/17/2018	191						208		
2/20/2019									
2/21/2019									
4/16/2019							185		92
4/17/2019	207	296	354	540		341		582	
4/23/2019					354				
9/23/2019				684					
9/24/2019	208	302	536		344			630	109
9/25/2019						358			
3/16/2020				516					
3/17/2020					334				
3/18/2020			515					661	90.7
3/24/2020	205	302							
3/25/2020						337			
5/12/2020				493					
5/13/2020						328			
9/16/2020					351				
9/17/2020									
9/21/2020				658					94
9/22/2020	218	300				318			

Prediction Limit

Constituent: TDS (mg/L) Analysis Run 5/23/2023 4:31 PM View: Appendix III

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-16D	GS-AP-MW-19	GS-AP-MW-15	GS-AP-MW-17	GS-AP-MW-7	GS-AP-MW-2	GS-AP-MW-13 (bg)	GS-AP-MW-21	GS-AP-MW-8 (bg)
9/23/2020			600					642	
2/1/2021						333			
2/2/2021				548	349				98.7
2/3/2021									
2/8/2021		324						684	
2/9/2021			616						
2/10/2021	224								
7/27/2021									
8/2/2021									
8/3/2021			632	435					
8/4/2021						316		594	
8/9/2021	207				340				
8/10/2021		307							101
2/8/2022					325 (D)			570	
2/14/2022				448					
2/15/2022	214								
2/16/2022			426						90.7
2/22/2022		304				295			
2/23/2022									
2/28/2022									
7/19/2022						262			
7/20/2022									
7/25/2022					308.25 (D)				
7/26/2022									
8/2/2022	210		592						97.300003
8/3/2022		327							
8/8/2022				446					
8/9/2022									
8/10/2022								592	
3/14/2023					340				
3/20/2023			444						
3/21/2023	221	320						606	
3/22/2023				441		297			
3/27/2023									100

Prediction Limit

Constituent: TDS (mg/L) Analysis Run 5/23/2023 4:31 PM View: Appendix III

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-6S	GS-AP-MW-12	GS-AP-MW-6D	GS-AP-MW-17V ...	GS-AP-MW-12V
8/1/2016					
8/2/2016					
8/3/2016	394	546	302		
9/19/2016					
9/20/2016	444	542	298		
9/21/2016					
10/24/2016			306		
10/25/2016		518			
10/26/2016	456				
12/12/2016	491		291		
12/13/2016		424			
12/14/2016					
2/6/2017	580		285		
2/7/2017					
2/8/2017		379			
3/27/2017	554		305		
3/28/2017					
3/29/2017		334			
3/30/2017					
4/24/2017	566		301		
4/26/2017		332			
6/5/2017					
6/6/2017	580		311		
6/7/2017		308			
8/21/2017	524		289		
8/22/2017		286			
8/23/2017					
5/14/2018	458		303		
5/15/2018		235			
5/16/2018					
10/15/2018	404		309		
10/16/2018		211			
10/17/2018					
2/20/2019				346	
2/21/2019					237
4/16/2019	382	193	285		
4/17/2019					
4/23/2019					
9/23/2019	381		296		
9/24/2019				365	
9/25/2019		253			183
3/16/2020					
3/17/2020	328		303		
3/18/2020		236			
3/24/2020					206
3/25/2020				364	
5/12/2020					
5/13/2020					
9/16/2020	269				
9/17/2020			314		
9/21/2020					
9/22/2020					

Prediction Limit

Constituent: TDS (mg/L) Analysis Run 5/23/2023 4:31 PM View: Appendix III

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-6S	GS-AP-MW-12	GS-AP-MW-6D	GS-AP-MW-17V ...	GS-AP-MW-12V
9/23/2020		216		368	195
2/1/2021		224			240
2/2/2021				356	
2/3/2021	274		301		
2/8/2021					
2/9/2021					
2/10/2021					
7/27/2021	273		262		
8/2/2021				333	
8/3/2021					
8/4/2021					
8/9/2021		219			145
8/10/2021					
2/8/2022					
2/14/2022	299		297	365	
2/15/2022					
2/16/2022					
2/22/2022					
2/23/2022					209
2/28/2022		195			
7/19/2022		199			
7/20/2022					189
7/25/2022			286 (D)		
7/26/2022	311				
8/2/2022					
8/3/2022					
8/8/2022					
8/9/2022				344	
8/10/2022					
3/14/2023	298		300		
3/20/2023					
3/21/2023					
3/22/2023		203		344	182
3/27/2023					

FIGURE E.

Trend Tests - Prediction Limit Exceedances - Significant Results

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond Printed 5/23/2023, 4:36 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	**GS-AP-MW-6D**	**0.04647**	**132**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**GS-AP-MW-6S**	**-0.04856**	**-95**	**-81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**GS-AP-MW-7**	**0.04541**	**129**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**GS-AP-MW-6D**	**1.074**	**102**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**GS-AP-MW-19**	**-0.2304**	**-88**	**-81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**GS-AP-MW-21**	**3.053**	**122**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**GS-AP-MW-6D**	**1.136**	**136**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**GS-AP-MW-7**	**0.6751**	**177**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**GS-AP-MW-8 (bg)**	**0.1849**	**113**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Fluoride (mg/L)	**GS-AP-MW-13 (bg)**	**0.02914**	**48**	**43**	**Yes**	**13**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Fluoride (mg/L)	**GS-AP-MW-2**	**-0.1368**	**-177**	**-92**	**Yes**	**22**	**0**	**n/a**	**n/a**	**0.01**	**NP**
pH (SU)	**GS-AP-MW-12**	**0.1358**	**127**	**87**	**Yes**	**21**	**0**	**n/a**	**n/a**	**0.01**	**NP**
pH (SU)	**GS-AP-MW-15**	**0.2831**	**108**	**87**	**Yes**	**21**	**0**	**n/a**	**n/a**	**0.01**	**NP**
pH (SU)	**GS-AP-MW-19**	**-0.06565**	**-100**	**-87**	**Yes**	**21**	**0**	**n/a**	**n/a**	**0.01**	**NP**
pH (SU)	**GS-AP-MW-2**	**0.0442**	**110**	**92**	**Yes**	**22**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**GS-AP-MW-12**	**2.876**	**90**	**81**	**Yes**	**20**	**5**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**GS-AP-MW-21**	**44.45**	**168**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**GS-AP-MW-6S**	**-25.11**	**-117**	**-81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
TDS (mg/L)	**GS-AP-MW-21**	**47.98**	**124**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**

Trend Tests - Prediction Limit Exceedances - All Results

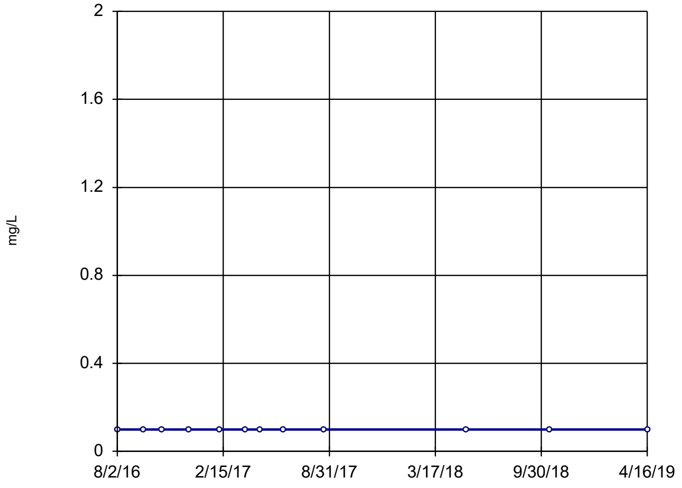
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond Printed 5/23/2023, 4:36 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	GS-AP-MW-13 (bg)	0	0	38	No	12	100	n/a	n/a	0.01	NP
Boron (mg/L)	GS-AP-MW-17V (bg)	-0.002946	-10	-25	No	9	0	n/a	n/a	0.01	NP
Boron (mg/L)	GS-AP-MW-21	0.004489	74	74	No	19	0	n/a	n/a	0.01	NP
Boron (mg/L)	**GS-AP-MW-6D**	**0.04647**	**132**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**GS-AP-MW-6S**	**-0.04856**	**-95**	**-81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**GS-AP-MW-7**	**0.04541**	**129**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	GS-AP-MW-8 (bg)	0	19	81	No	20	95	n/a	n/a	0.01	NP
Calcium (mg/L)	GS-AP-MW-13 (bg)	-2.607	-32	-38	No	12	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GS-AP-MW-17V (bg)	0.1233	2	25	No	9	0	n/a	n/a	0.01	NP
Calcium (mg/L)	**GS-AP-MW-6D**	**1.074**	**102**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	GS-AP-MW-6S	-2.481	-62	-81	No	20	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GS-AP-MW-8 (bg)	-0.414	-55	-81	No	20	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GS-AP-MW-13 (bg)	0.1178	10	38	No	12	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GS-AP-MW-15	-0.2407	-44	-81	No	20	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GS-AP-MW-17	-0.008633	-3	-87	No	21	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GS-AP-MW-17V (bg)	-0.2328	-22	-25	No	9	0	n/a	n/a	0.01	NP
Chloride (mg/L)	**GS-AP-MW-19**	**-0.2304**	**-88**	**-81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**GS-AP-MW-21**	**3.053**	**122**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**GS-AP-MW-6D**	**1.136**	**136**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	GS-AP-MW-6S	-0.572	-57	-81	No	20	0	n/a	n/a	0.01	NP
Chloride (mg/L)	**GS-AP-MW-7**	**0.6751**	**177**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**GS-AP-MW-8 (bg)**	**0.1849**	**113**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Fluoride (mg/L)	**GS-AP-MW-13 (bg)**	**0.02914**	**48**	**43**	**Yes**	**13**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Fluoride (mg/L)	GS-AP-MW-15	-0.04036	-72	-87	No	21	0	n/a	n/a	0.01	NP
Fluoride (mg/L)	GS-AP-MW-17V (bg)	-0.001533	-5	-25	No	9	0	n/a	n/a	0.01	NP
Fluoride (mg/L)	**GS-AP-MW-2**	**-0.1368**	**-177**	**-92**	**Yes**	**22**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Fluoride (mg/L)	GS-AP-MW-8 (bg)	0.002916	39	87	No	21	0	n/a	n/a	0.01	NP
pH (SU)	**GS-AP-MW-12**	**0.1358**	**127**	**87**	**Yes**	**21**	**0**	**n/a**	**n/a**	**0.01**	**NP**
pH (SU)	GS-AP-MW-12V	0.116	4	25	No	9	0	n/a	n/a	0.01	NP
pH (SU)	GS-AP-MW-13 (bg)	-0.05825	-34	-43	No	13	0	n/a	n/a	0.01	NP
pH (SU)	**GS-AP-MW-15**	**0.2831**	**108**	**87**	**Yes**	**21**	**0**	**n/a**	**n/a**	**0.01**	**NP**
pH (SU)	GS-AP-MW-17	0	-5	-92	No	22	0	n/a	n/a	0.01	NP
pH (SU)	GS-AP-MW-17V (bg)	-0.03831	-15	-25	No	9	0	n/a	n/a	0.01	NP
pH (SU)	**GS-AP-MW-19**	**-0.06565**	**-100**	**-87**	**Yes**	**21**	**0**	**n/a**	**n/a**	**0.01**	**NP**
pH (SU)	**GS-AP-MW-2**	**0.0442**	**110**	**92**	**Yes**	**22**	**0**	**n/a**	**n/a**	**0.01**	**NP**
pH (SU)	GS-AP-MW-21	0.03279	10	87	No	21	0	n/a	n/a	0.01	NP
pH (SU)	GS-AP-MW-8 (bg)	-0.02608	-65	-87	No	21	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	**GS-AP-MW-12**	**2.876**	**90**	**81**	**Yes**	**20**	**5**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	GS-AP-MW-13 (bg)	0.01849	11	38	No	12	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GS-AP-MW-17V (bg)	-1.088	-18	-25	No	9	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GS-AP-MW-19	1.346	61	81	No	20	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	**GS-AP-MW-21**	**44.45**	**168**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	GS-AP-MW-6D	0.849	39	81	No	20	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	**GS-AP-MW-6S**	**-25.11**	**-117**	**-81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	GS-AP-MW-7	-1.43	-47	-81	No	20	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GS-AP-MW-8 (bg)	0.1674	43	81	No	20	0	n/a	n/a	0.01	NP
TDS (mg/L)	GS-AP-MW-13 (bg)	-7.182	-29	-38	No	12	0	n/a	n/a	0.01	NP
TDS (mg/L)	GS-AP-MW-15	25.05	62	81	No	20	0	n/a	n/a	0.01	NP
TDS (mg/L)	GS-AP-MW-17	11.59	61	87	No	21	0	n/a	n/a	0.01	NP
TDS (mg/L)	GS-AP-MW-17V (bg)	-3.729	-10	-25	No	9	0	n/a	n/a	0.01	NP
TDS (mg/L)	**GS-AP-MW-21**	**47.98**	**124**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
TDS (mg/L)	GS-AP-MW-8 (bg)	-1.48	-32	-81	No	20	0	n/a	n/a	0.01	NP

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

GS-AP-MW-13 (bg)



n = 12

Slope = 0
units per year.

Mann-Kendall
statistic = 0
critical = 38

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron   Analysis Run 5/23/2023 4:34 PM   View: Appendix III - Trend Tests
Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

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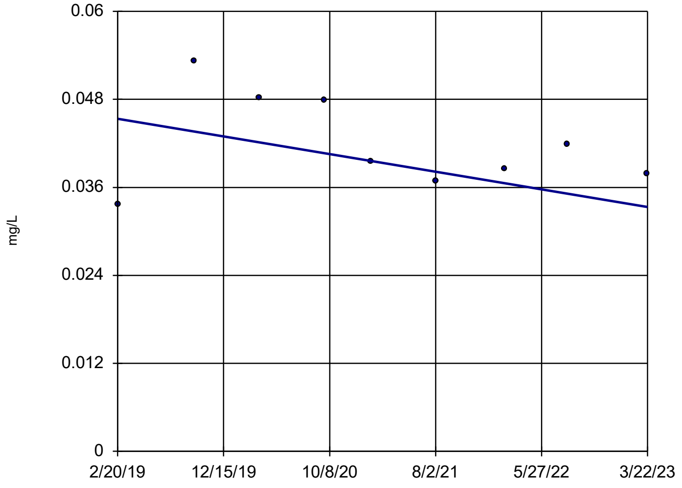
Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Sen's Slope Estimator

GS-AP-MW-17V (bg)



n = 9

Slope = -0.002946
units per year.

Mann-Kendall
statistic = -10
critical = -25

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron   Analysis Run 5/23/2023 4:34 PM   View: Appendix III - Trend Tests
Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

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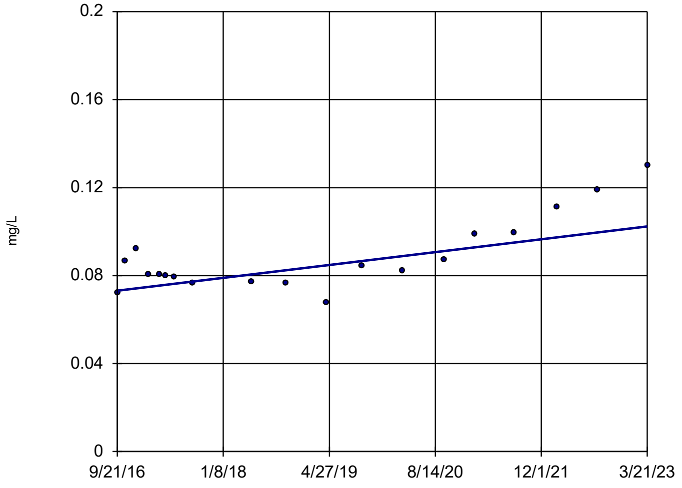
Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Sen's Slope Estimator

GS-AP-MW-21



n = 19

Slope = 0.004489
units per year.

Mann-Kendall
statistic = 74
critical = 74

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron   Analysis Run 5/23/2023 4:35 PM   View: Appendix III - Trend Tests
Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

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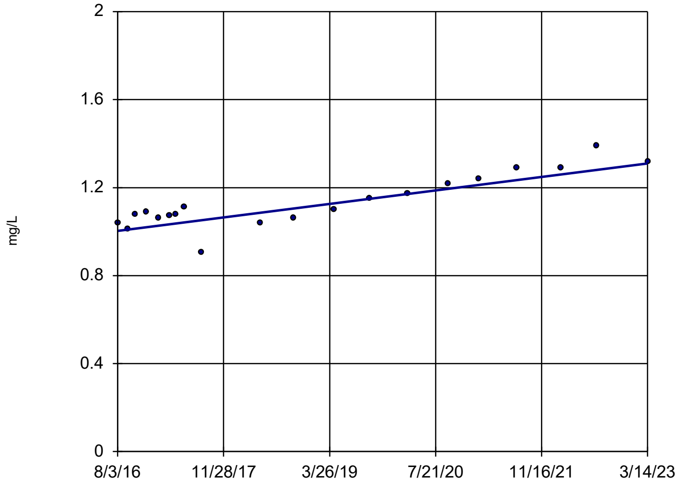
Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Sen's Slope Estimator

GS-AP-MW-6D



n = 20

Slope = 0.04647
units per year.

Mann-Kendall
statistic = 132
critical = 81

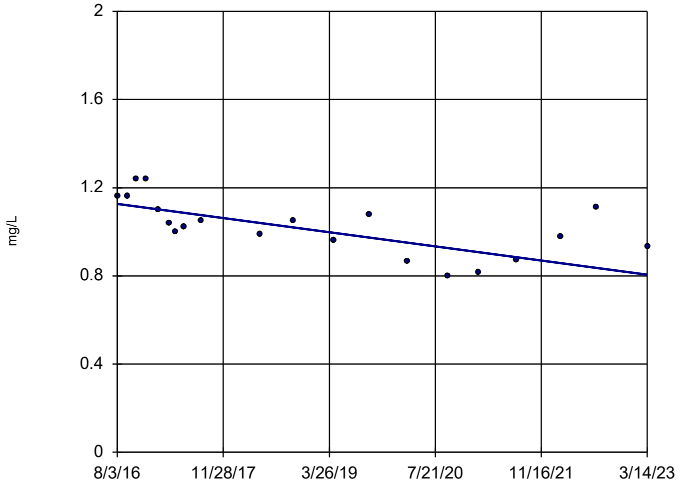
Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron   Analysis Run 5/23/2023 4:35 PM   View: Appendix III - Trend Tests
Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Sen's Slope Estimator

GS-AP-MW-6S



n = 20

Slope = -0.04856
units per year.

Mann-Kendall
statistic = -95
critical = -81

Decreasing trend
significant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Boron   Analysis Run 5/23/2023 4:35 PM   View: Appendix III - Trend Tests
Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

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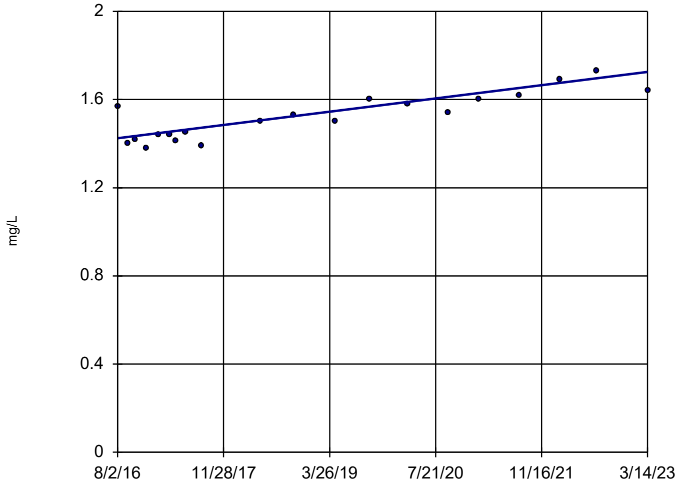
Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Sen's Slope Estimator

GS-AP-MW-7



n = 20

Slope = 0.04541
units per year.

Mann-Kendall
statistic = 129
critical = 81

Increasing trend
significant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Boron   Analysis Run 5/23/2023 4:35 PM   View: Appendix III - Trend Tests
Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

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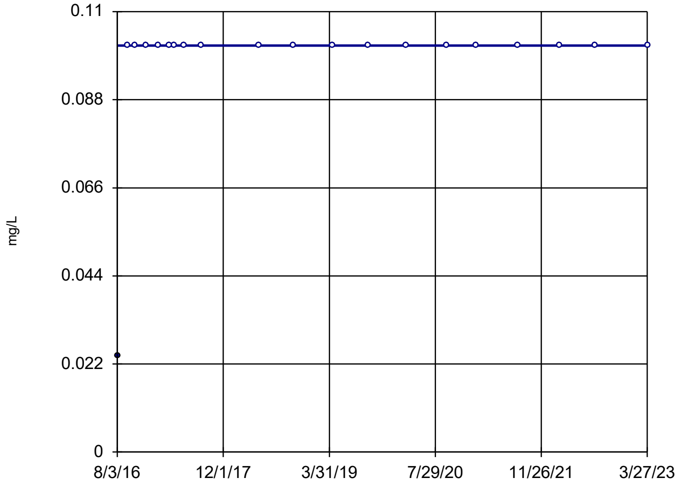
Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

GS-AP-MW-8 (bg)



n = 20

Slope = 0
units per year.

Mann-Kendall
statistic = 19
critical = 81

Trend not significant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Boron   Analysis Run 5/23/2023 4:35 PM   View: Appendix III - Trend Tests
Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

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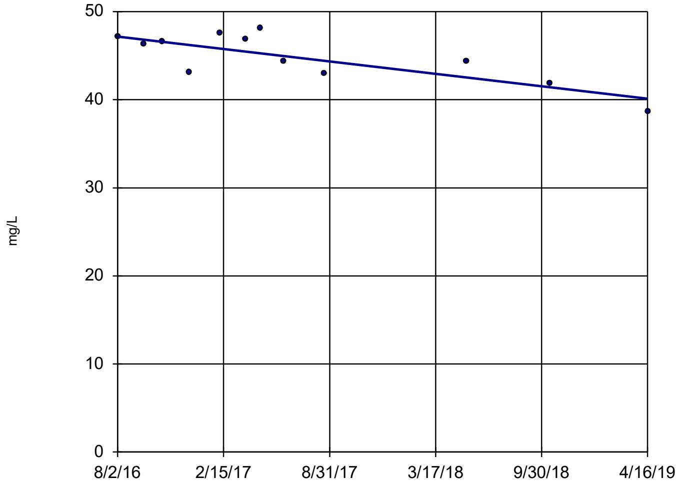
Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Sen's Slope Estimator

GS-AP-MW-13 (bg)



n = 12

Slope = -2.607
units per year.

Mann-Kendall
statistic = -32
critical = -38

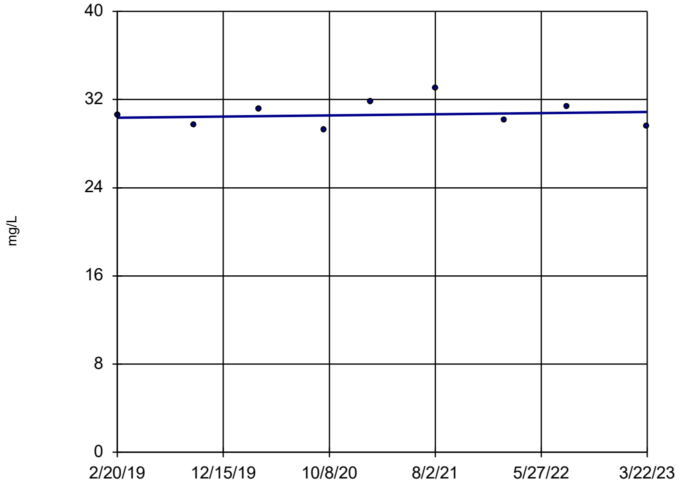
Trend not significant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Calcium   Analysis Run 5/23/2023 4:35 PM   View: Appendix III - Trend Tests
Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Sen's Slope Estimator

GS-AP-MW-17V (bg)



n = 9

Slope = 0.1233 units per year.

Mann-Kendall statistic = 2
critical = 25

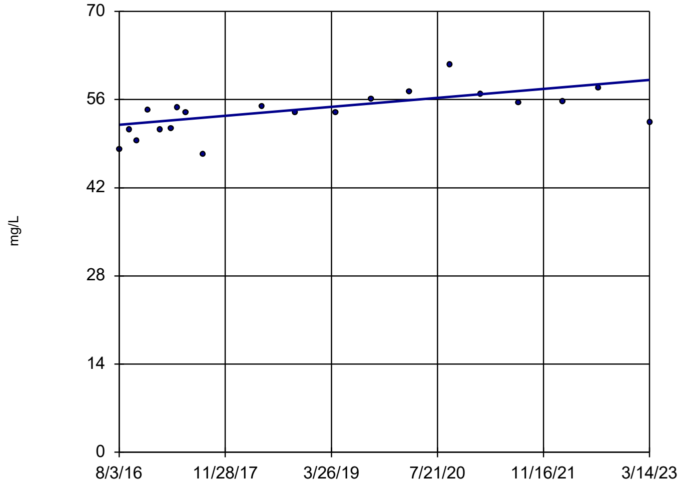
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 5/23/2023 4:35 PM View: Appendix III - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Sen's Slope Estimator

GS-AP-MW-6D



n = 20

Slope = 1.074 units per year.

Mann-Kendall statistic = 102
critical = 81

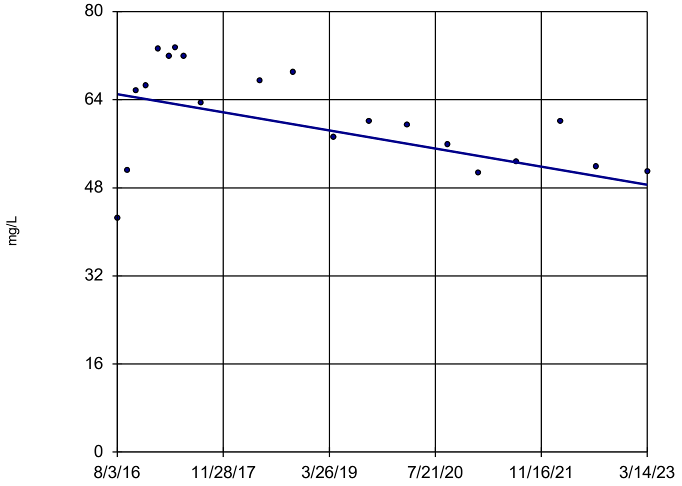
Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 5/23/2023 4:35 PM View: Appendix III - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Sen's Slope Estimator

GS-AP-MW-6S



n = 20

Slope = -2.481 units per year.

Mann-Kendall statistic = -62
critical = -81

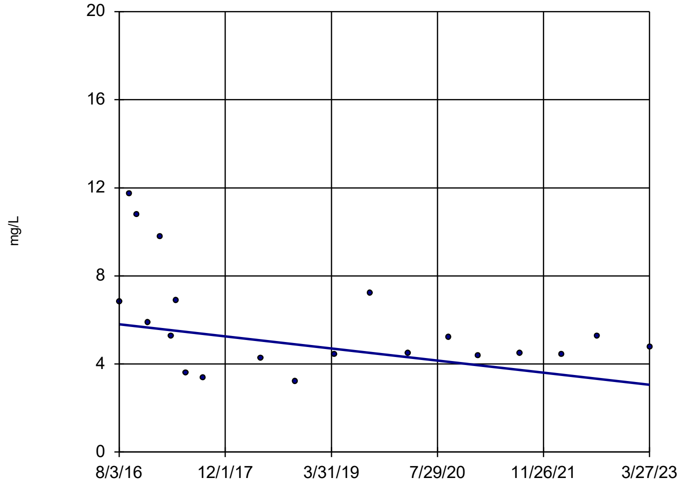
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 5/23/2023 4:35 PM View: Appendix III - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Sen's Slope Estimator

GS-AP-MW-8 (bg)



n = 20

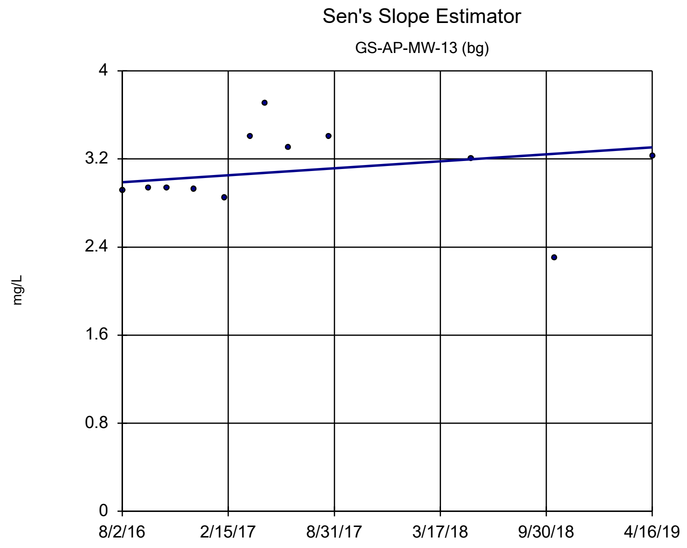
Slope = -0.414 units per year.

Mann-Kendall statistic = -55
critical = -81

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 5/23/2023 4:35 PM View: Appendix III - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG



n = 12

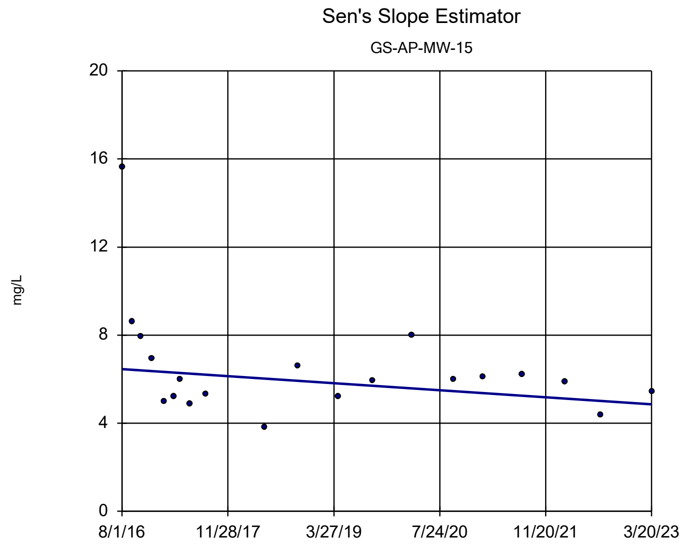
Slope = 0.1178
units per year.

Mann-Kendall
statistic = 10
critical = 38

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 5/23/2023 4:35 PM View: Appendix III - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG



n = 20

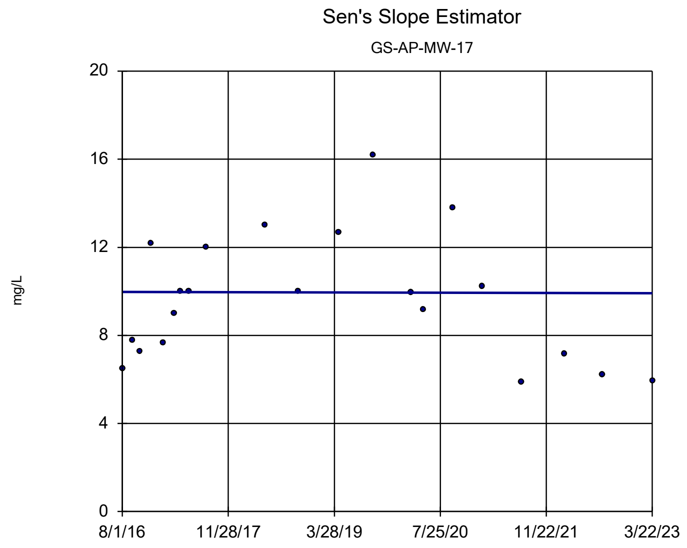
Slope = -0.2407
units per year.

Mann-Kendall
statistic = -44
critical = -81

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 5/23/2023 4:35 PM View: Appendix III - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG



n = 21

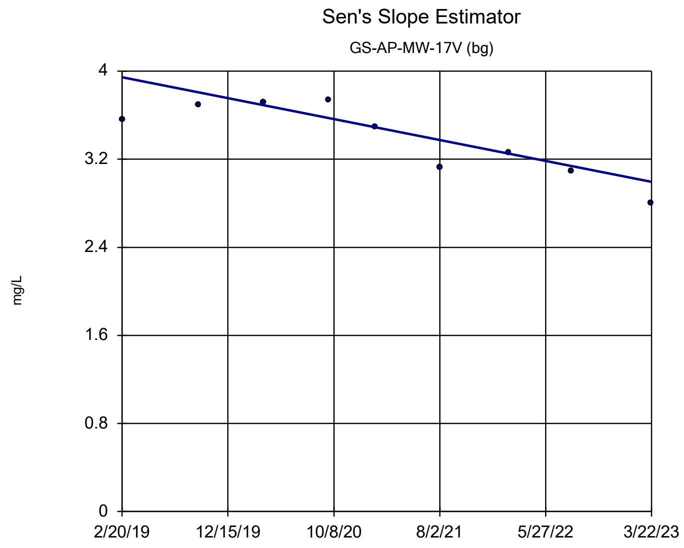
Slope = -0.008633
units per year.

Mann-Kendall
statistic = -3
critical = -87

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 5/23/2023 4:35 PM View: Appendix III - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG



n = 9

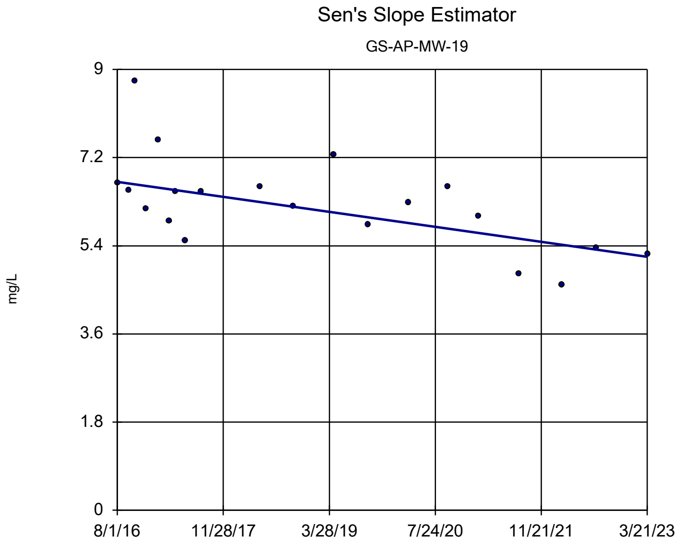
Slope = -0.2328
units per year.

Mann-Kendall
statistic = -22
critical = -25

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 5/23/2023 4:35 PM View: Appendix III - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG



n = 20

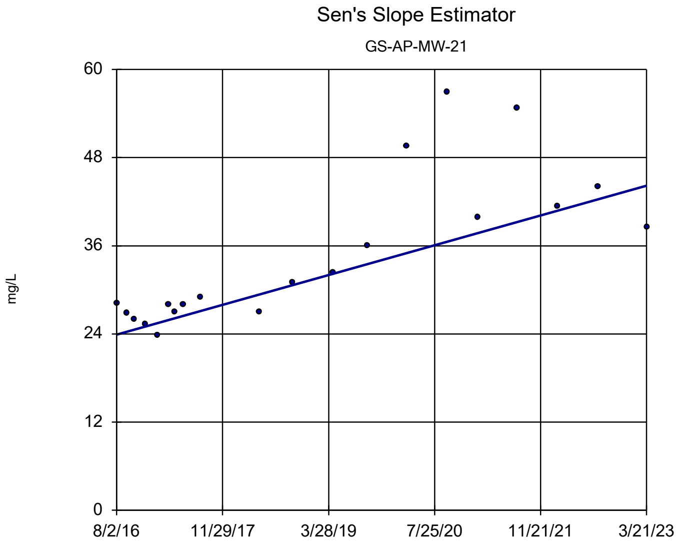
Slope = -0.2304 units per year.

Mann-Kendall statistic = -88 critical = -81

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 5/23/2023 4:35 PM View: Appendix III - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG



n = 20

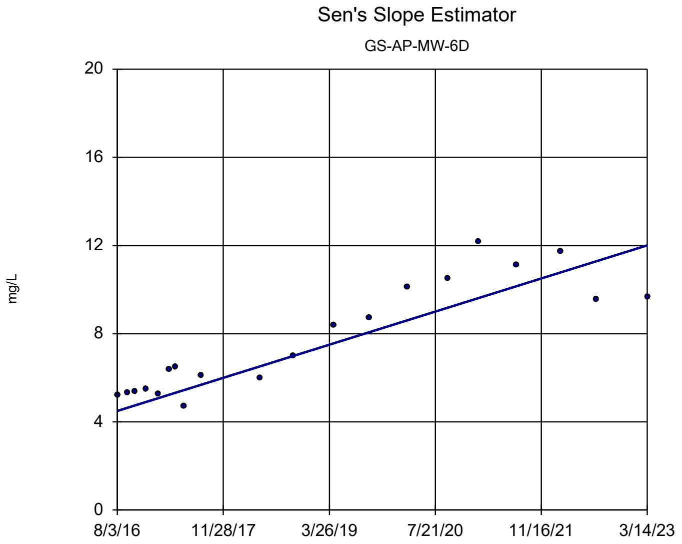
Slope = 3.053 units per year.

Mann-Kendall statistic = 122 critical = 81

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 5/23/2023 4:35 PM View: Appendix III - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG



n = 20

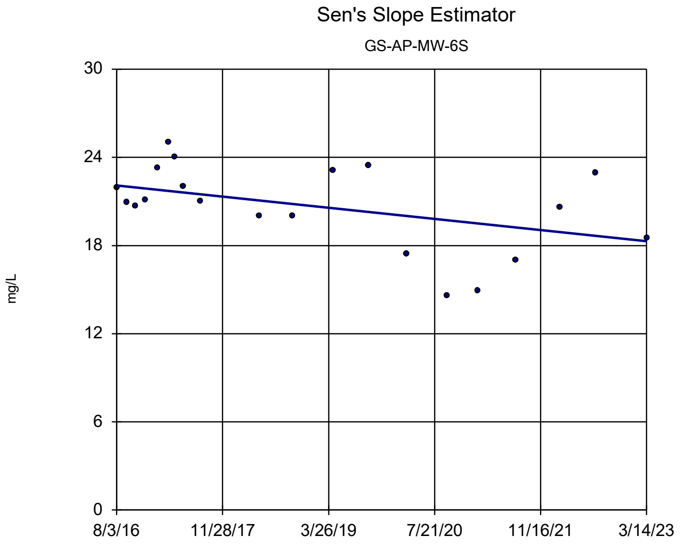
Slope = 1.136 units per year.

Mann-Kendall statistic = 136 critical = 81

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 5/23/2023 4:35 PM View: Appendix III - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG



n = 20

Slope = -0.572 units per year.

Mann-Kendall statistic = -57 critical = -81

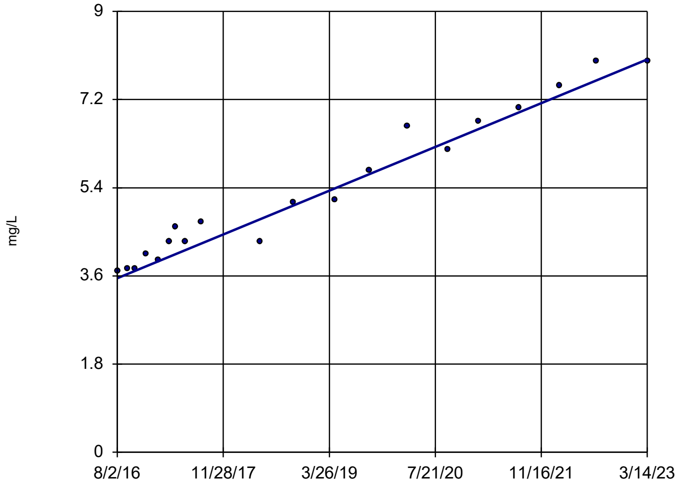
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 5/23/2023 4:35 PM View: Appendix III - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Sen's Slope Estimator

GS-AP-MW-7



n = 20

Slope = 0.6751
units per year.

Mann-Kendall
statistic = 177
critical = 81

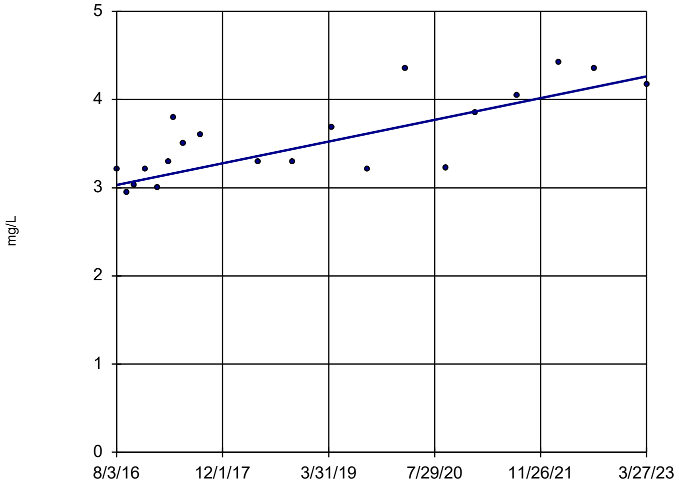
Increasing trend
significant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Chloride Analysis Run 5/23/2023 4:35 PM View: Appendix III - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Sen's Slope Estimator

GS-AP-MW-8 (bg)



n = 20

Slope = 0.1849
units per year.

Mann-Kendall
statistic = 113
critical = 81

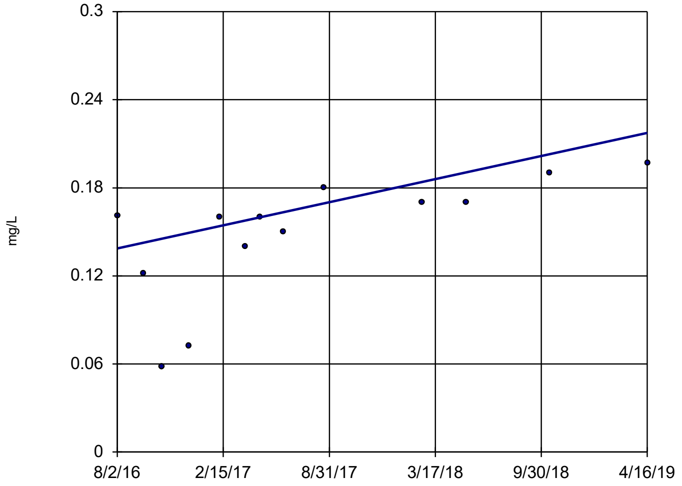
Increasing trend
significant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Chloride Analysis Run 5/23/2023 4:35 PM View: Appendix III - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Sen's Slope Estimator

GS-AP-MW-13 (bg)



n = 13

Slope = 0.02914
units per year.

Mann-Kendall
statistic = 48
critical = 43

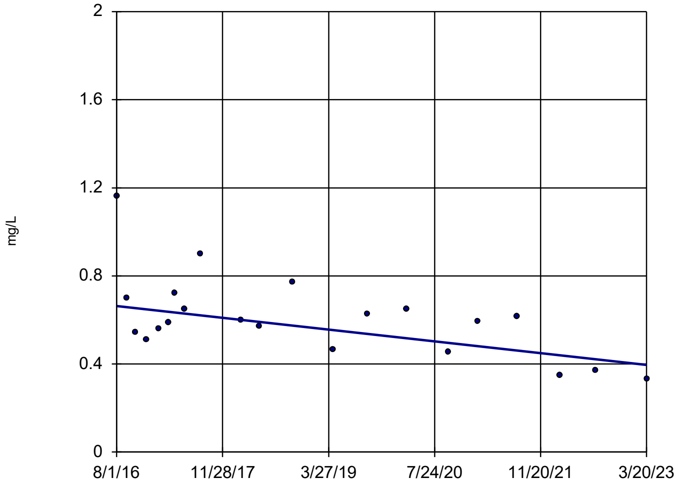
Increasing trend
significant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Fluoride Analysis Run 5/23/2023 4:35 PM View: Appendix III - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Sen's Slope Estimator

GS-AP-MW-15



n = 21

Slope = -0.04036
units per year.

Mann-Kendall
statistic = -72
critical = -87

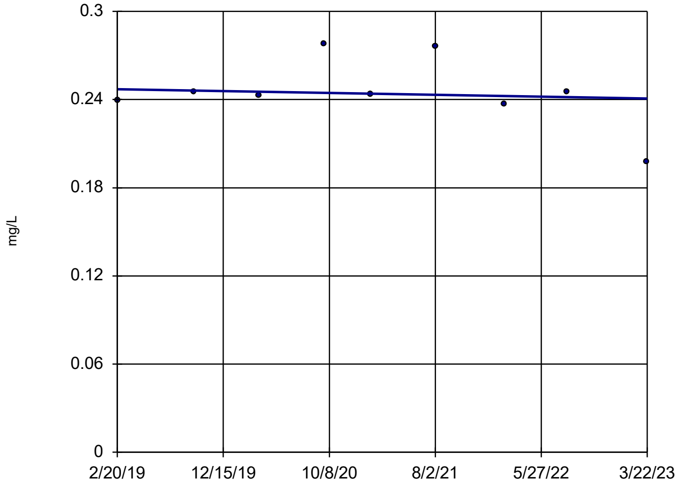
Trend not significant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Fluoride Analysis Run 5/23/2023 4:35 PM View: Appendix III - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Sen's Slope Estimator

GS-AP-MW-17V (bg)



n = 9

Slope = -0.001533 units per year.

Mann-Kendall statistic = -5 critical = -25

Trend not significant at 99% confidence level (α = 0.005 per tail).

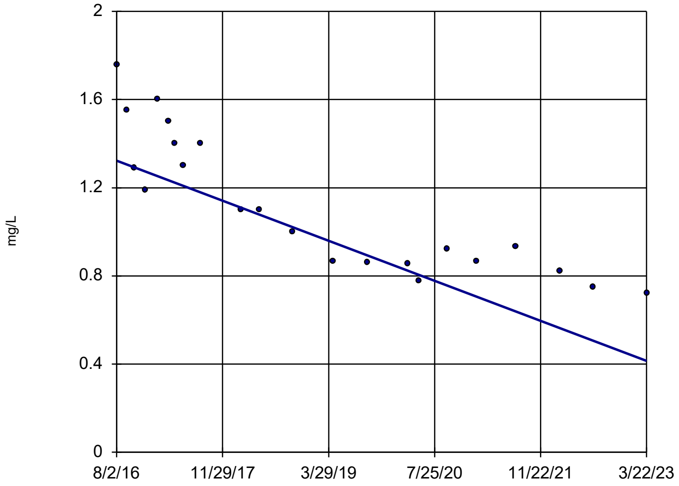
Constituent: Fluoride Analysis Run 5/23/2023 4:35 PM View: Appendix III - Trend Tests

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Sen's Slope Estimator

GS-AP-MW-2



n = 22

Slope = -0.1368 units per year.

Mann-Kendall statistic = -177 critical = -92

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

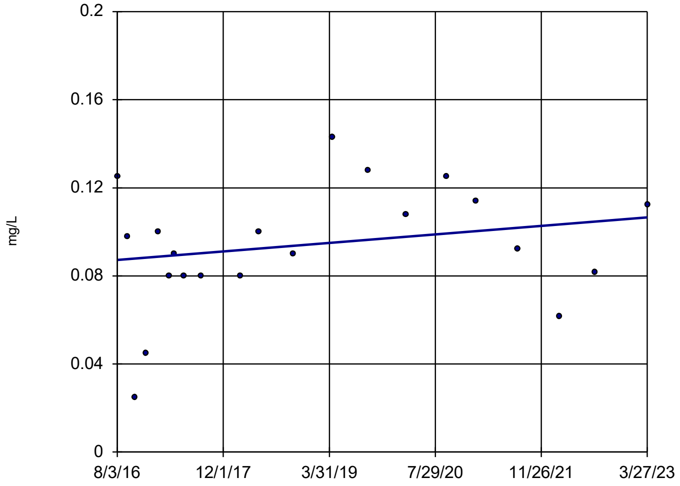
Constituent: Fluoride Analysis Run 5/23/2023 4:35 PM View: Appendix III - Trend Tests

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Sen's Slope Estimator

GS-AP-MW-8 (bg)



n = 21

Slope = 0.002916 units per year.

Mann-Kendall statistic = 39 critical = 87

Trend not significant at 99% confidence level (α = 0.005 per tail).

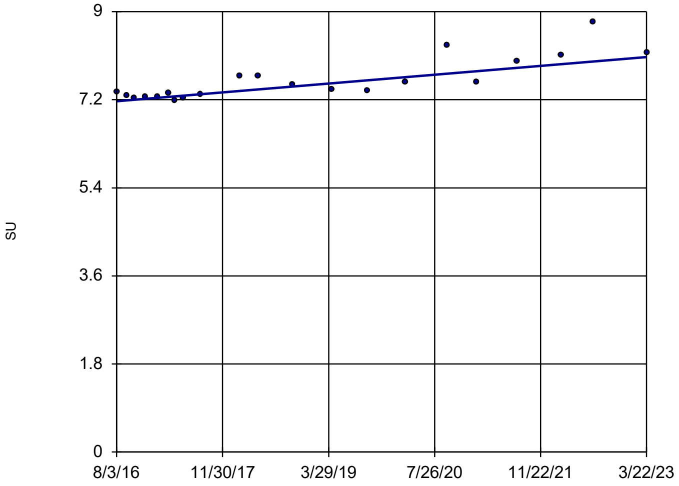
Constituent: Fluoride Analysis Run 5/23/2023 4:35 PM View: Appendix III - Trend Tests

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Sen's Slope Estimator

GS-AP-MW-12



n = 21

Slope = 0.1358 units per year.

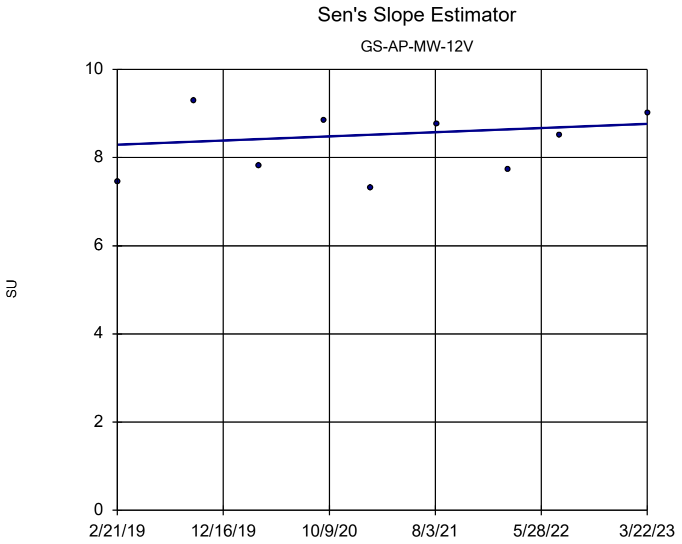
Mann-Kendall statistic = 127 critical = 87

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: pH Analysis Run 5/23/2023 4:35 PM View: Appendix III - Trend Tests

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG


Sen's Slope Estimator

GS-AP-MW-12V

n = 9

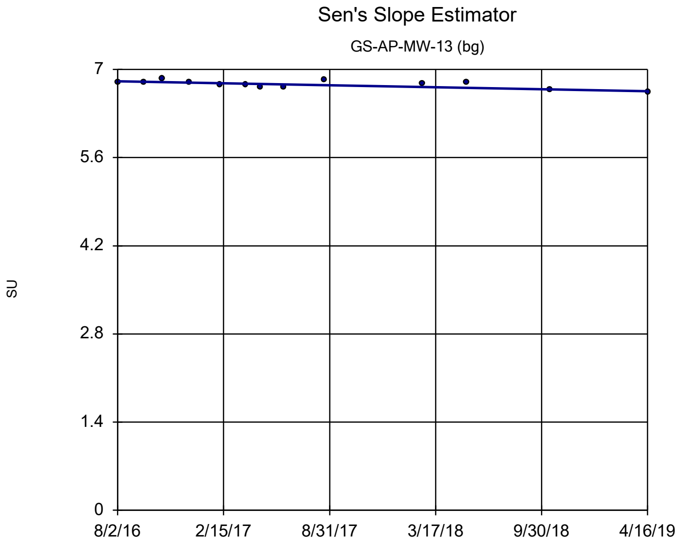
Slope = 0.116
units per year.

Mann-Kendall
statistic = 4
critical = 25

Trend not significant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: pH Analysis Run 5/23/2023 4:35 PM View: Appendix III - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG


Sen's Slope Estimator

GS-AP-MW-13 (bg)

n = 13

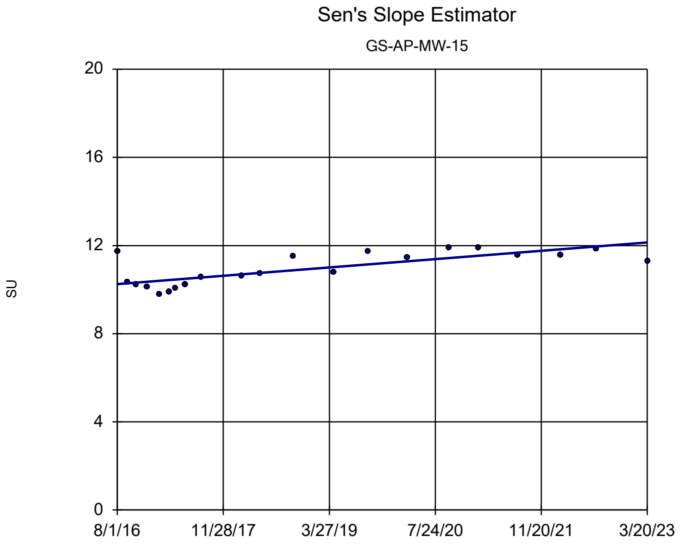
Slope = -0.05825
units per year.

Mann-Kendall
statistic = -34
critical = -43

Trend not significant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: pH Analysis Run 5/23/2023 4:35 PM View: Appendix III - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG


Sen's Slope Estimator

GS-AP-MW-15

n = 21

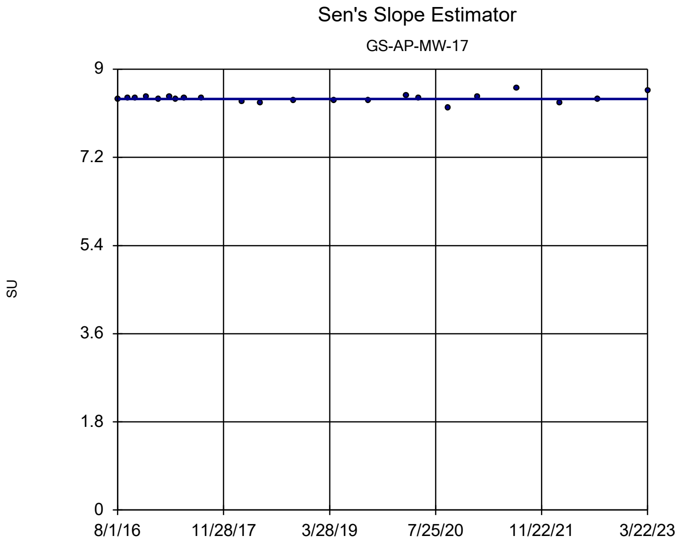
Slope = 0.2831
units per year.

Mann-Kendall
statistic = 108
critical = 87

Increasing trend
significant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: pH Analysis Run 5/23/2023 4:35 PM View: Appendix III - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG


Sen's Slope Estimator

GS-AP-MW-17

n = 22

Slope = 0
units per year.

Mann-Kendall
statistic = -5
critical = -92

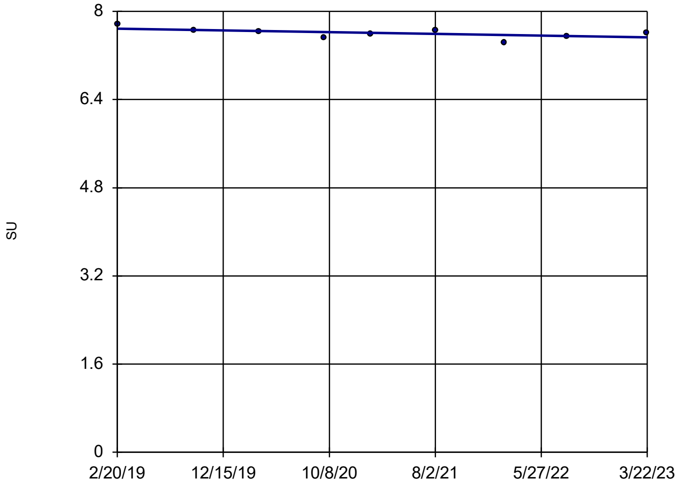
Trend not significant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: pH Analysis Run 5/23/2023 4:35 PM View: Appendix III - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Sen's Slope Estimator

GS-AP-MW-17V (bg)



n = 9

Slope = -0.03831 units per year.

Mann-Kendall statistic = -15 critical = -25

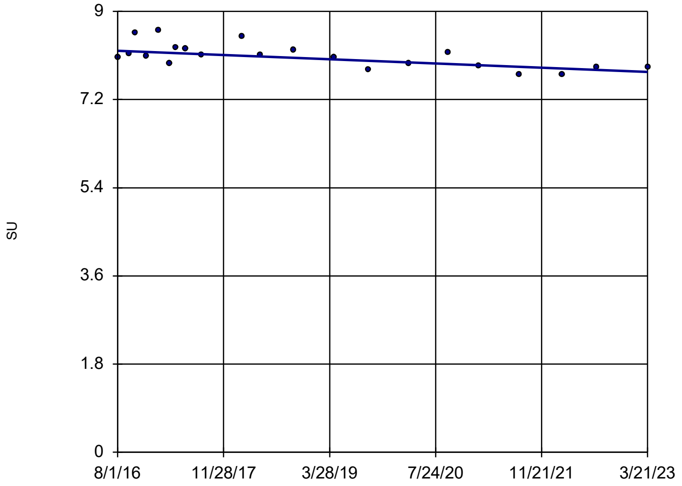
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: pH Analysis Run 5/23/2023 4:35 PM View: Appendix III - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Sen's Slope Estimator

GS-AP-MW-19



n = 21

Slope = -0.06565 units per year.

Mann-Kendall statistic = -100 critical = -87

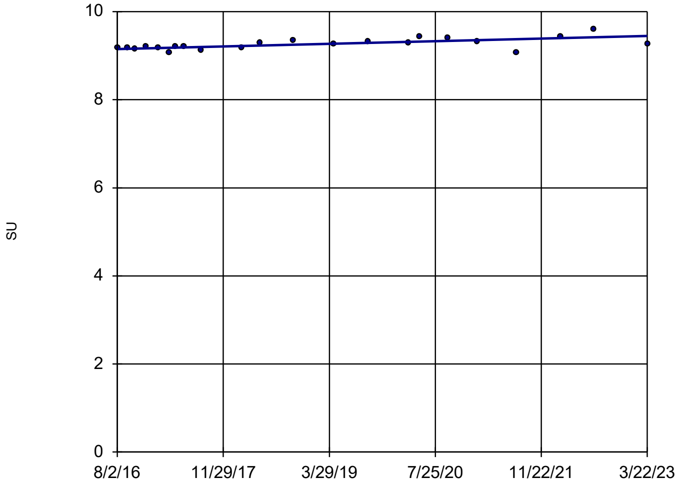
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: pH Analysis Run 5/23/2023 4:35 PM View: Appendix III - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Sen's Slope Estimator

GS-AP-MW-2



n = 22

Slope = 0.0442 units per year.

Mann-Kendall statistic = 110 critical = 92

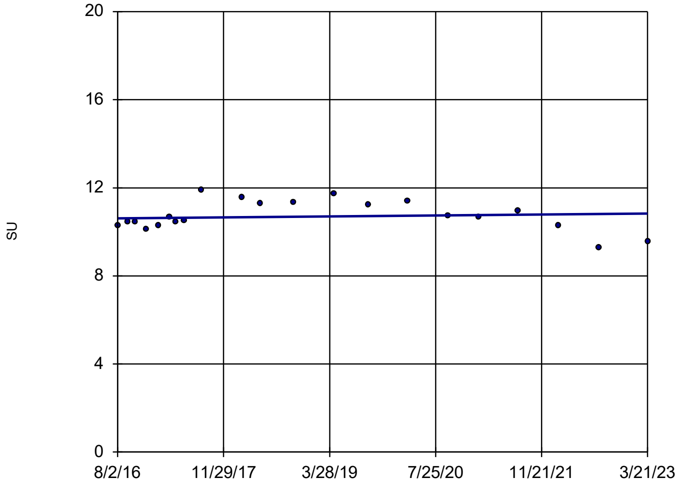
Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: pH Analysis Run 5/23/2023 4:35 PM View: Appendix III - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Sen's Slope Estimator

GS-AP-MW-21



n = 21

Slope = 0.03279 units per year.

Mann-Kendall statistic = 10 critical = 87

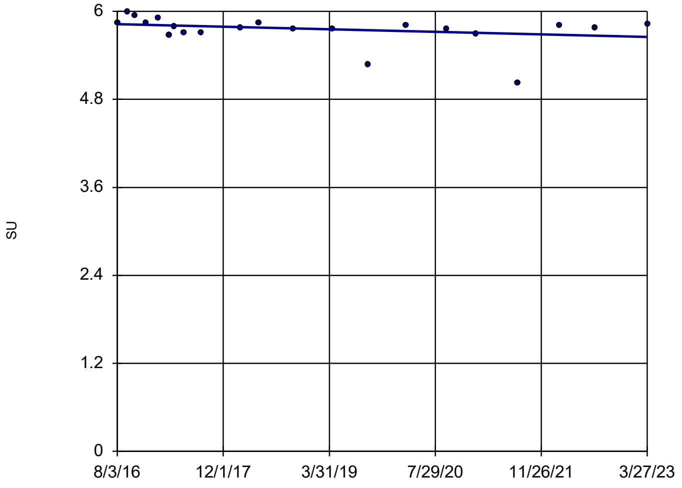
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: pH Analysis Run 5/23/2023 4:35 PM View: Appendix III - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Sen's Slope Estimator

GS-AP-MW-8 (bg)



n = 21

Slope = -0.02608 units per year.

Mann-Kendall statistic = -65 critical = -87

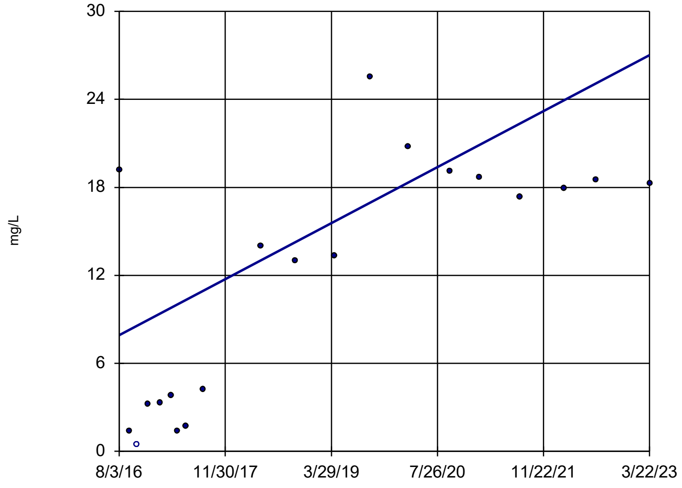
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: pH Analysis Run 5/23/2023 4:35 PM View: Appendix III - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

GS-AP-MW-12



n = 20

Slope = 2.876 units per year.

Mann-Kendall statistic = 90 critical = 81

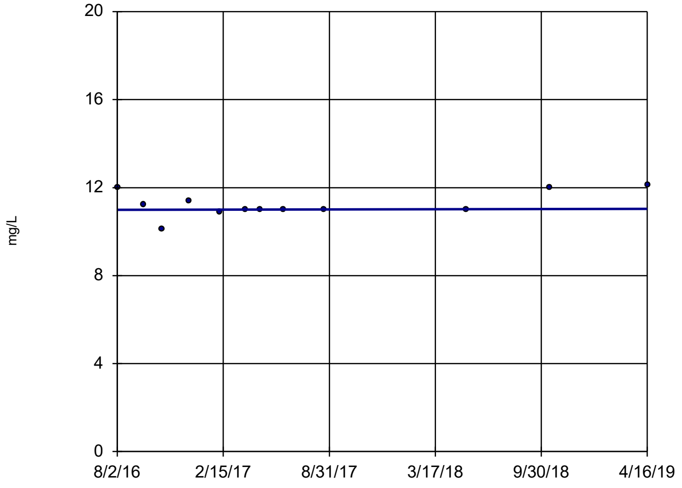
Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 5/23/2023 4:35 PM View: Appendix III - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Sen's Slope Estimator

GS-AP-MW-13 (bg)



n = 12

Slope = 0.01849 units per year.

Mann-Kendall statistic = 11 critical = 38

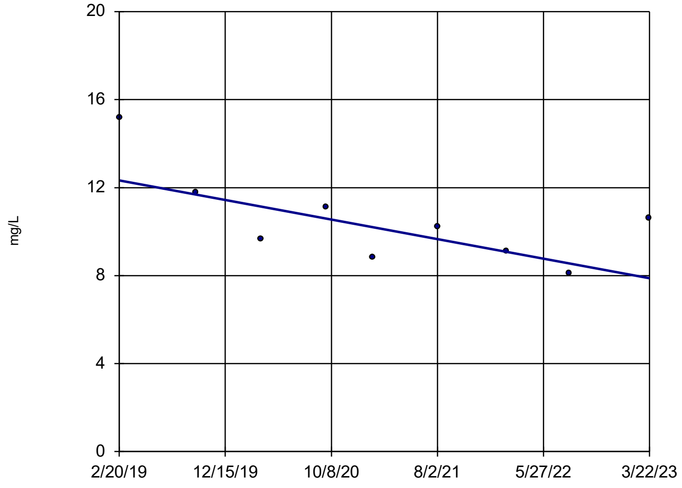
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 5/23/2023 4:35 PM View: Appendix III - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Sen's Slope Estimator

GS-AP-MW-17V (bg)



n = 9

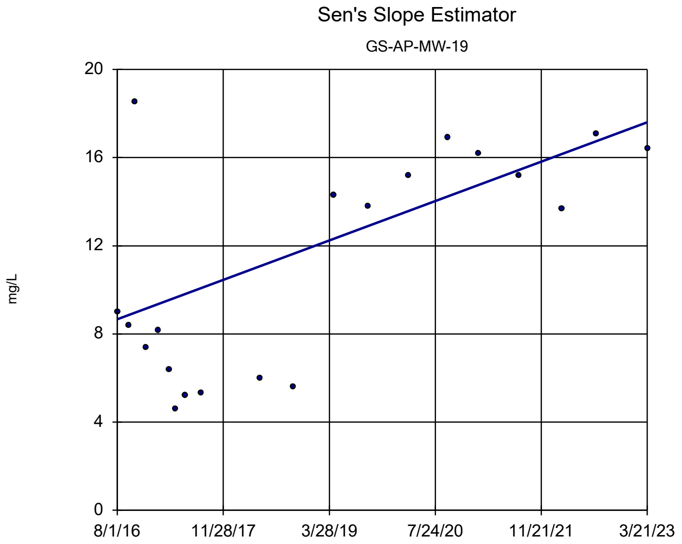
Slope = -1.088 units per year.

Mann-Kendall statistic = -18 critical = -25

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 5/23/2023 4:35 PM View: Appendix III - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG



n = 20

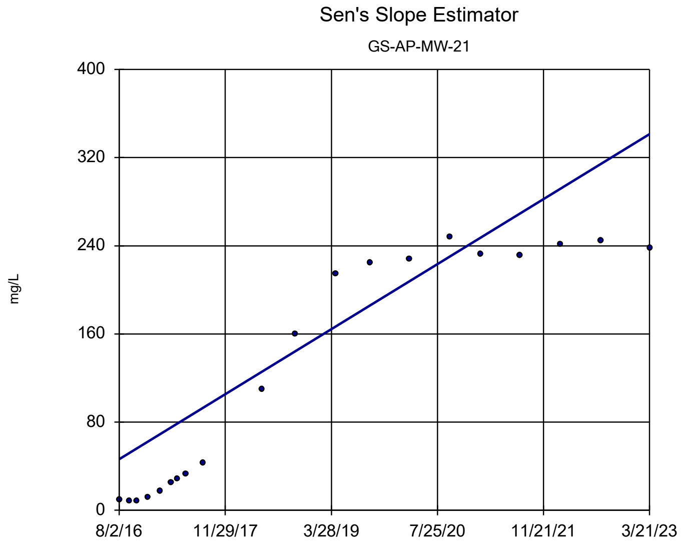
Slope = 1.346
units per year.

Mann-Kendall
statistic = 61
critical = 81

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 5/23/2023 4:35 PM View: Appendix III - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG



n = 20

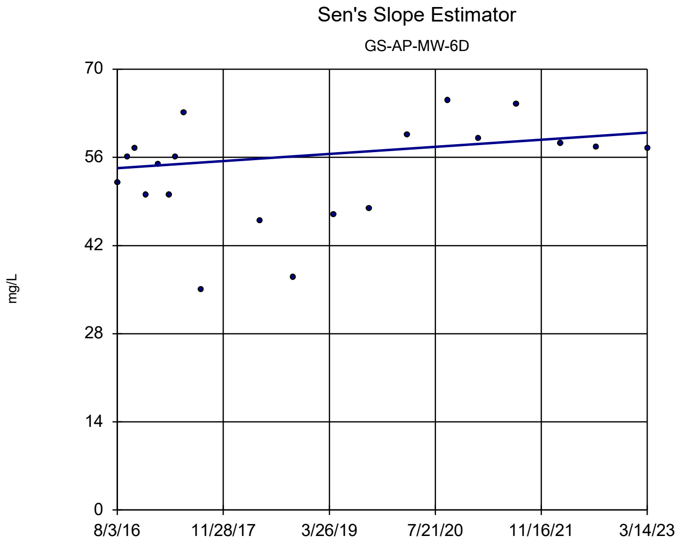
Slope = 44.45
units per year.

Mann-Kendall
statistic = 168
critical = 81

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 5/23/2023 4:35 PM View: Appendix III - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG



n = 20

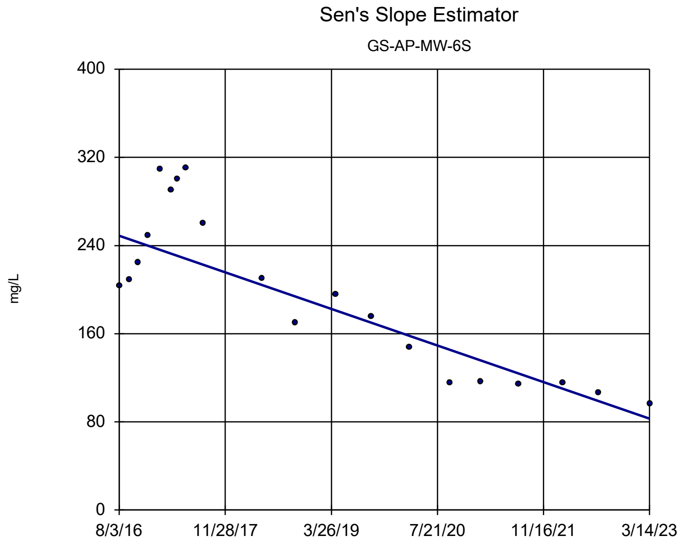
Slope = 0.849
units per year.

Mann-Kendall
statistic = 39
critical = 81

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 5/23/2023 4:35 PM View: Appendix III - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG



n = 20

Slope = -25.11
units per year.

Mann-Kendall
statistic = -117
critical = -81

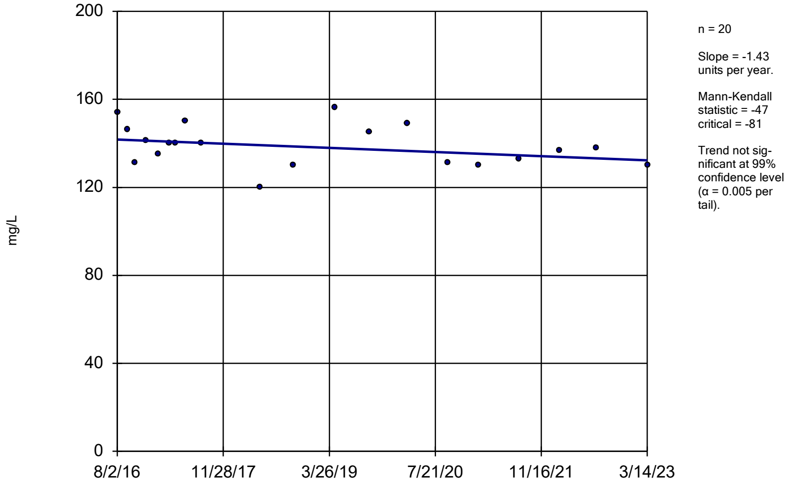
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 5/23/2023 4:35 PM View: Appendix III - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Sen's Slope Estimator

GS-AP-MW-7

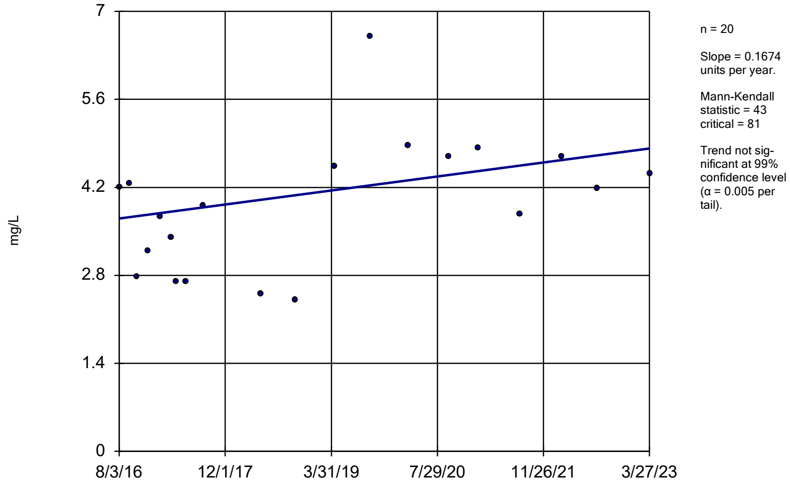


Constituent: Sulfate Analysis Run 5/23/2023 4:35 PM View: Appendix III - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Sen's Slope Estimator

GS-AP-MW-8 (bg)

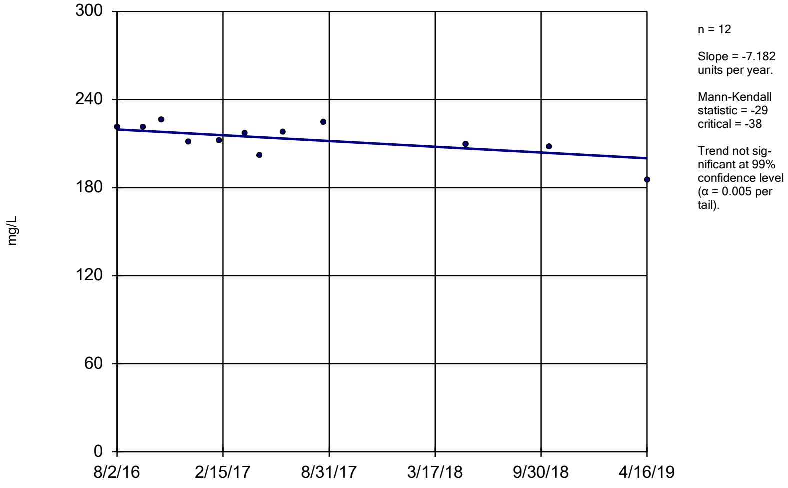


Constituent: Sulfate Analysis Run 5/23/2023 4:35 PM View: Appendix III - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Sen's Slope Estimator

GS-AP-MW-13 (bg)

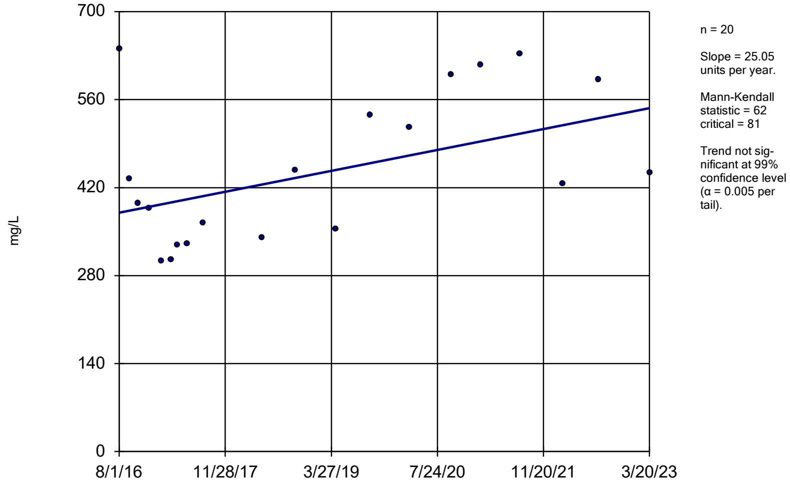


Constituent: TDS Analysis Run 5/23/2023 4:35 PM View: Appendix III - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

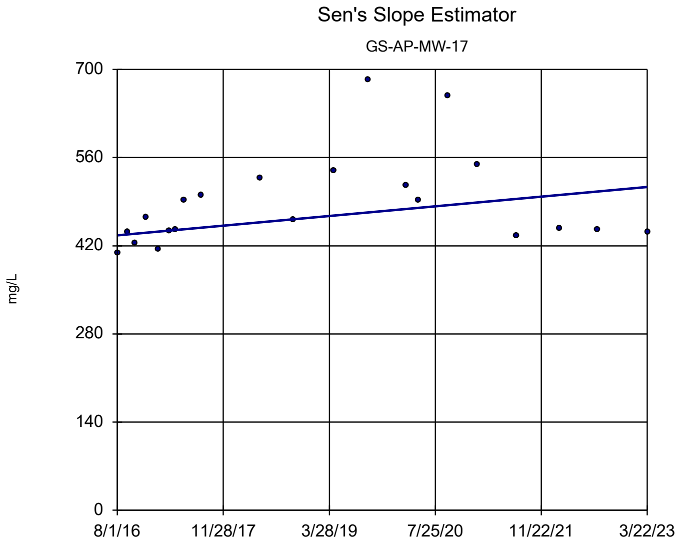
Sen's Slope Estimator

GS-AP-MW-15



Constituent: TDS Analysis Run 5/23/2023 4:35 PM View: Appendix III - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG



n = 21

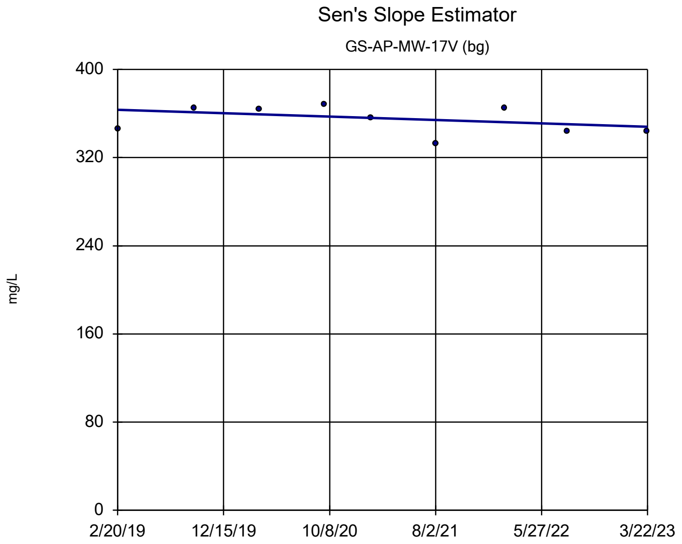
Slope = 11.59
units per year.

Mann-Kendall
statistic = 61
critical = 87

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: TDS Analysis Run 5/23/2023 4:35 PM View: Appendix III - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG



n = 9

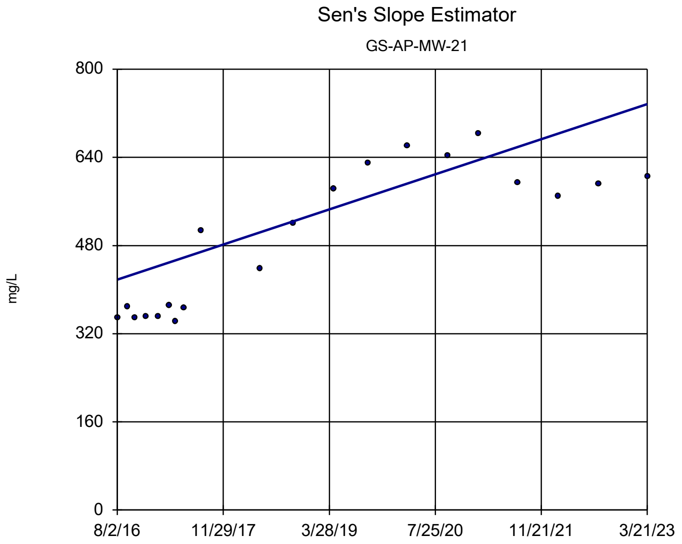
Slope = -3.729
units per year.

Mann-Kendall
statistic = -10
critical = -25

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: TDS Analysis Run 5/23/2023 4:35 PM View: Appendix III - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG



n = 20

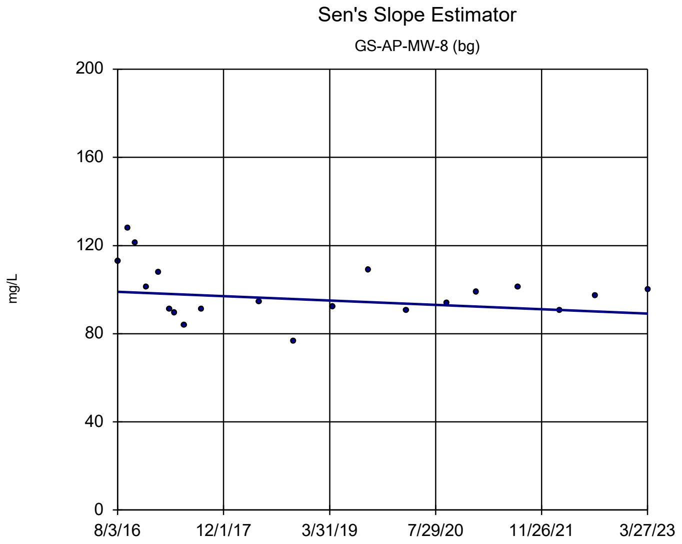
Slope = 47.98
units per year.

Mann-Kendall
statistic = 124
critical = 81

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: TDS Analysis Run 5/23/2023 4:35 PM View: Appendix III - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG



n = 20

Slope = -1.48
units per year.

Mann-Kendall
statistic = -32
critical = -81

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: TDS Analysis Run 5/23/2023 4:35 PM View: Appendix III - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

FIGURE F.

Upper Tolerance Limits

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond Printed 1/3/2022, 11:49 PM

Constituent	Well	Upper Lim.	Date	Observ.	Sig.	Bg N	%NDs	Transform	Alpha	Method
Antimony (mg/L)	n/a	0.00115	n/a	n/a	n/a	35	94.29	n/a	0.1661	NP Inter
Arsenic (mg/L)	n/a	0.005	n/a	n/a	n/a	35	71.43	n/a	0.1661	NP Inter
Barium (mg/L)	n/a	0.353	n/a	n/a	n/a	35	0	n/a	0.1661	NP Inter
Beryllium (mg/L)	n/a	0.00102	n/a	n/a	n/a	35	100	n/a	0.1661	NP Inter
Cadmium (mg/L)	n/a	0.0002	n/a	n/a	n/a	35	100	n/a	0.1661	NP Inter
Chromium (mg/L)	n/a	0.01	n/a	n/a	n/a	35	77.14	n/a	0.1661	NP Inter
Cobalt (mg/L)	n/a	0.00362	n/a	n/a	n/a	35	80	n/a	0.1661	NP Inter
Combined Radium 226 + 228 (pCi/L)	n/a	1.25	n/a	n/a	n/a	35	0	n/a	0.1661	NP Inter
Fluoride (mg/L)	n/a	0.278	n/a	n/a	n/a	37	0	n/a	0.1499	NP Inter
Lead (mg/L)	n/a	0.00189	n/a	n/a	n/a	35	91.43	n/a	0.1661	NP Inter
Lithium (mg/L)	n/a	0.0809	n/a	n/a	n/a	35	54.29	n/a	0.1661	NP Inter
Mercury (mg/L)	n/a	0.0005	n/a	n/a	n/a	35	100	n/a	0.1661	NP Inter
Molybdenum (mg/L)	n/a	0.00906	n/a	n/a	n/a	35	82.86	n/a	0.1661	NP Inter
Selenium (mg/L)	n/a	0.00102	n/a	n/a	n/a	35	100	n/a	0.1661	NP Inter
Thallium (mg/L)	n/a	0.0002	n/a	n/a	n/a	35	100	n/a	0.1661	NP Inter

FIGURE G.

GORGAS ASH POND GWPS

Analyte	Units	Background	GWPS
Antimony	mg/L	0.00115	0.006
Arsenic	mg/L	0.005	0.01
Barium	mg/L	0.353	2
Beryllium	mg/L	0.00102	0.004
Cadmium	mg/L	0.0002	0.005
Chromium	mg/L	0.01	0.1
Cobalt	mg/L	0.00362	0.006
Combined Radium-226/228	pCi/L	1.25	5
Fluoride	mg/L	0.278	4
Lead	mg/L	0.00189	0.015
Lithium	mg/L	0.0809	0.0809
Mercury	mg/L	0.0005	0.002
Molybdenum	mg/L	0.00906	0.1
Selenium	mg/L	0.00102	0.05
Thallium	mg/L	0.0002	0.002

Notes:

1. mg/L - Milligrams per liter
2. pCi/L - Picocuries per liter
3. The background limits were used as the groundwater protection standard (GWPS) when appropriate under 40 CFR §257.95(h), ADEM Rule 335-13-15-.06(h), and the ADEM Variance.
4. GWPS established during second semi-annual sampling event in 2021.

FIGURE H.

Confidence Intervals - Significant Results

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond   Printed 5/23/2023, 4:45 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Arsenic (mg/L)	**GS-AP-MW-6D**	**0.1159**	**0.09376**	**0.01**	**Yes**	**8**	**0.1048**	**0.01045**	**0**	**None**	**No**	**0.01**	**Param.**
Arsenic (mg/L)	**GS-AP-MW-7**	**0.285**	**0.233**	**0.01**	**Yes**	**8**	**0.2699**	**0.0188**	**0**	**None**	**No**	**0.004**	**NP (normality)**
Lithium (mg/L)	**GS-AP-MW-15**	**0.5314**	**0.3154**	**0.0809**	**Yes**	**8**	**0.4234**	**0.1019**	**0**	**None**	**No**	**0.01**	**Param.**
Lithium (mg/L)	**GS-AP-MW-21**	**0.3049**	**0.08531**	**0.0809**	**Yes**	**8**	**0.1951**	**0.1036**	**0**	**None**	**No**	**0.01**	**Param.**
Lithium (mg/L)	**GS-AP-MW-6D**	**0.3324**	**0.2803**	**0.0809**	**Yes**	**8**	**0.3064**	**0.02458**	**0**	**None**	**No**	**0.01**	**Param.**
Lithium (mg/L)	**GS-AP-MW-7**	**0.216**	**0.1595**	**0.0809**	**Yes**	**8**	**0.1878**	**0.02661**	**0**	**None**	**No**	**0.01**	**Param.**
Molybdenum (mg/L)	**GS-AP-MW-7**	**0.2207**	**0.1905**	**0.1**	**Yes**	**8**	**0.2056**	**0.01424**	**0**	**None**	**No**	**0.01**	**Param.**

Confidence Intervals - All Results

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond   Printed 5/23/2023, 4:45 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	GS-AP-MW-12	0.00423	0.0008468	0.006	No	8	0.002539	0.001596	12.5	None	No	0.01	Param.
Antimony (mg/L)	GS-AP-MW-12V	0.001744	0.0004721	0.006	No	8	0.001086	0.0006756	12.5	None	sqrt(x)	0.01	Param.
Antimony (mg/L)	GS-AP-MW-15	0.0008948	0.0006595	0.006	No	8	0.0008366	0.0001506	25	Kaplan-Meier	No	0.01	Param.
Antimony (mg/L)	GS-AP-MW-15V	0.00278	0.000886	0.006	No	7	0.001833	0.0007972	0	None	No	0.01	Param.
Antimony (mg/L)	GS-AP-MW-21V	0.001015	0.000661	0.006	No	7	0.0009381	0.0001401	71.43	None	No	0.008	NP (NDs)
Arsenic (mg/L)	GS-AP-MW-12	0.00974	0.001757	0.01	No	8	0.005749	0.003766	0	None	No	0.01	Param.
Arsenic (mg/L)	GS-AP-MW-12V	0.001985	0.0008747	0.01	No	8	0.001417	0.0005776	0	None	sqrt(x)	0.01	Param.
Arsenic (mg/L)	GS-AP-MW-15	0.01827	0.006279	0.01	No	8	0.01227	0.005655	0	None	No	0.01	Param.
Arsenic (mg/L)	GS-AP-MW-15V	0.01621	0.004898	0.01	No	7	0.01055	0.004762	0	None	No	0.01	Param.
Arsenic (mg/L)	GS-AP-MW-16D	0.000491	0.0001	0.01	No	8	0.0002158	0.000119	62.5	None	No	0.004	NP (NDs)
Arsenic (mg/L)	GS-AP-MW-17	0.0055	0.00086	0.01	No	8	0.002497	0.001875	0	None	No	0.004	NP (normality)
Arsenic (mg/L)	GS-AP-MW-19	0.003047	0.001313	0.01	No	8	0.00218	0.0008175	0	None	No	0.01	Param.
Arsenic (mg/L)	GS-AP-MW-2	0.000203	0.000083	0.01	No	8	0.000188	0.00004243	87.5	None	No	0.004	NP (NDs)
Arsenic (mg/L)	GS-AP-MW-21	0.005	0.00046	0.01	No	8	0.002199	0.00232	37.5	None	No	0.004	NP (normality)
Arsenic (mg/L)	GS-AP-MW-21V	0.01245	0.001034	0.01	No	7	0.006744	0.004807	0	None	No	0.01	Param.
Arsenic (mg/L)	GS-AP-MW-3	0.000204	0.0001188	0.01	No	5	0.0001614	0.00002543	0	None	No	0.01	Param.
Arsenic (mg/L)	**GS-AP-MW-6D**	**0.1159**	**0.09376**	**0.01**	**Yes**	**8**	**0.1048**	**0.01045**	**0**	**None**	**No**	**0.01**	**Param.**
Arsenic (mg/L)	**GS-AP-MW-7**	**0.285**	**0.233**	**0.01**	**Yes**	**8**	**0.2699**	**0.0188**	**0**	**None**	**No**	**0.004**	**NP (normality)**
Arsenic (mg/L)	GS-AP-MW-9V	0.005	0.000101	0.01	No	7	0.001577	0.00234	28.57	None	No	0.008	NP (normality)
Barium (mg/L)	GS-AP-MW-12	0.2099	0.1816	2	No	8	0.1958	0.01333	0	None	No	0.01	Param.
Barium (mg/L)	GS-AP-MW-12V	1.469	1.086	2	No	8	1.278	0.1803	0	None	No	0.01	Param.
Barium (mg/L)	GS-AP-MW-15	0.276	0.0913	2	No	8	0.1612	0.07086	0	None	No	0.004	NP (normality)
Barium (mg/L)	GS-AP-MW-15V	0.2283	0.1508	2	No	7	0.1896	0.03264	0	None	No	0.01	Param.
Barium (mg/L)	GS-AP-MW-16D	0.3519	0.3226	2	No	8	0.3373	0.0138	0	None	No	0.01	Param.
Barium (mg/L)	GS-AP-MW-17	0.128	0.0835	2	No	8	0.09648	0.01458	0	None	No	0.004	NP (normality)
Barium (mg/L)	GS-AP-MW-19	0.3575	0.319	2	No	8	0.3383	0.01813	0	None	No	0.01	Param.
Barium (mg/L)	GS-AP-MW-2	0.06348	0.04662	2	No	8	0.05505	0.007951	0	None	No	0.01	Param.
Barium (mg/L)	GS-AP-MW-21	0.1545	0.1155	2	No	8	0.135	0.01843	0	None	No	0.01	Param.
Barium (mg/L)	GS-AP-MW-21V	0.06447	0.03625	2	No	7	0.05036	0.01188	0	None	No	0.01	Param.
Barium (mg/L)	GS-AP-MW-3	0.6444	0.4562	2	No	5	0.556	0.05641	0	None	x^2	0.01	Param.
Barium (mg/L)	GS-AP-MW-6D	0.7435	0.4057	2	No	8	0.5746	0.1593	0	None	No	0.01	Param.
Barium (mg/L)	GS-AP-MW-7	0.1383	0.05941	2	No	8	0.09888	0.03724	0	None	No	0.01	Param.
Barium (mg/L)	GS-AP-MW-9V	0.2016	0.1584	2	No	7	0.18	0.01817	0	None	No	0.01	Param.
Chromium (mg/L)	GS-AP-MW-12	0.001015	0.00031	0.1	No	8	0.0008403	0.0003236	75	None	No	0.004	NP (NDs)
Chromium (mg/L)	GS-AP-MW-12V	0.00475	0.0003803	0.1	No	8	0.00243	0.002462	0	None	sqrt(x)	0.01	Param.
Chromium (mg/L)	GS-AP-MW-15	0.01	0.000384	0.1	No	8	0.004162	0.004837	37.5	None	No	0.004	NP (normality)
Chromium (mg/L)	GS-AP-MW-15V	0.003733	0.0003099	0.1	No	7	0.001862	0.002443	14.29	None	ln(x)	0.01	Param.
Chromium (mg/L)	GS-AP-MW-16D	0.00107	0.00025	0.1	No	8	0.0008078	0.0003235	50	None	No	0.004	NP (normality)
Chromium (mg/L)	GS-AP-MW-17	0.0009186	0.0002299	0.1	No	8	0.0009618	0.000719	50	Kaplan-Meier	ln(x)	0.01	Param.
Chromium (mg/L)	GS-AP-MW-19	0.001015	0.000258	0.1	No	8	0.0007581	0.0003569	62.5	None	No	0.004	NP (NDs)
Chromium (mg/L)	GS-AP-MW-2	0.01	0.000254	0.1	No	8	0.004065	0.004918	37.5	None	No	0.004	NP (normality)
Chromium (mg/L)	GS-AP-MW-21	0.01	0.0004	0.1	No	8	0.004101	0.004887	37.5	None	No	0.004	NP (normality)
Chromium (mg/L)	GS-AP-MW-21V	0.01	0.000218	0.1	No	7	0.003224	0.004645	28.57	None	No	0.008	NP (normality)
Chromium (mg/L)	GS-AP-MW-3	0.0003441	0.0002239	0.1	No	5	0.000284	0.00003585	0	None	No	0.01	Param.
Chromium (mg/L)	GS-AP-MW-6D	0.001015	0.00024	0.1	No	8	0.0006381	0.0004033	50	None	No	0.004	NP (normality)
Chromium (mg/L)	GS-AP-MW-7	0.005988	0.0006755	0.1	No	8	0.003331	0.002506	12.5	None	No	0.01	Param.
Chromium (mg/L)	GS-AP-MW-9V	0.00102	0.000228	0.1	No	7	0.000591	0.0004026	42.86	None	No	0.008	NP (normality)
Cobalt (mg/L)	GS-AP-MW-12V	0.00277	0.00013	0.006	No	8	0.000679	0.000927	50	None	No	0.004	NP (normality)
Cobalt (mg/L)	GS-AP-MW-15	0.000203	0.00009	0.006	No	8	0.0001889	0.00003995	87.5	None	No	0.004	NP (NDs)
Cobalt (mg/L)	GS-AP-MW-16D	0.000252	0.00009	0.006	No	8	0.000195	0.00004576	75	None	No	0.004	NP (NDs)
Cobalt (mg/L)	GS-AP-MW-17	0.000203	0.000102	0.006	No	8	0.0001904	0.00003571	87.5	None	No	0.004	NP (NDs)
Cobalt (mg/L)	GS-AP-MW-7	0.003565	0.0001409	0.006	No	8	0.001853	0.001615	12.5	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-12	1.061	0.577	5	No	8	0.8188	0.2281	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-12V	1.313	0.7841	5	No	8	1.048	0.2493	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-15	1.007	0.3833	5	No	8	0.6953	0.2943	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-15V	0.9154	0.4046	5	No	7	0.6431	0.2519	0	None	ln(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-16D	0.9409	0.2246	5	No	8	0.5828	0.3379	0	None	No	0.01	Param.

Confidence Intervals - All Results

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond Printed 5/23/2023, 4:45 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-17	1.362	0.04652	5	No	8	0.6542	0.8035	0	None	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-19	1.563	0.3792	5	No	8	0.9709	0.5582	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-2	1.439	0.1208	5	No	8	0.8254	1.298	0	None	ln(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-21	0.8409	0.2643	5	No	8	0.5526	0.272	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-21V	1.037	0.446	5	No	7	0.7413	0.2486	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-3	1.235	0.1503	5	No	5	0.6926	0.3236	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-6D	0.9916	0.4087	5	No	8	0.7001	0.275	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-7	1.37	0.2806	5	No	8	0.8255	0.5141	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-9V	0.9114	0.03692	5	No	7	0.4741	0.3681	0	None	No	0.01	Param.
Fluoride (mg/L)	GS-AP-MW-12	0.148	0.09888	4	No	8	0.1234	0.02315	0	None	No	0.01	Param.
Fluoride (mg/L)	GS-AP-MW-12V	0.1865	0.1493	4	No	8	0.1679	0.01754	0	None	No	0.01	Param.
Fluoride (mg/L)	GS-AP-MW-15	0.647	0.333	4	No	8	0.4985	0.1355	0	None	No	0.004	NP (normality)
Fluoride (mg/L)	GS-AP-MW-15V	0.3431	0.1766	4	No	7	0.2599	0.07008	0	None	No	0.01	Param.
Fluoride (mg/L)	GS-AP-MW-16D	0.1279	0.09735	4	No	8	0.1126	0.0144	0	None	No	0.01	Param.
Fluoride (mg/L)	GS-AP-MW-17	0.3252	0.204	4	No	8	0.2646	0.05716	0	None	No	0.01	Param.
Fluoride (mg/L)	GS-AP-MW-19	0.3318	0.2445	4	No	8	0.2881	0.04117	0	None	No	0.01	Param.
Fluoride (mg/L)	GS-AP-MW-2	0.9119	0.7484	4	No	8	0.8301	0.07714	0	None	No	0.01	Param.
Fluoride (mg/L)	GS-AP-MW-21	0.2297	0.1825	4	No	8	0.2061	0.02225	0	None	No	0.01	Param.
Fluoride (mg/L)	GS-AP-MW-21V	0.5831	0.3529	4	No	7	0.468	0.09692	0	None	No	0.01	Param.
Fluoride (mg/L)	GS-AP-MW-3	0.1157	0.06491	4	No	5	0.1042	0.0231	40	Kaplan-Meier	No	0.01	Param.
Fluoride (mg/L)	GS-AP-MW-6D	0.1357	0.1108	4	No	8	0.1234	0.01353	0	None	x^4	0.01	Param.
Fluoride (mg/L)	GS-AP-MW-7	0.1446	0.08786	4	No	8	0.1159	0.02836	0	None	sqrt(x)	0.01	Param.
Fluoride (mg/L)	GS-AP-MW-9V	0.1851	0.1606	4	No	7	0.1729	0.01032	0	None	No	0.01	Param.
Lead (mg/L)	GS-AP-MW-12V	0.001616	0.00007196	0.015	No	8	0.000832	0.0009452	25	Kaplan-Meier	sqrt(x)	0.01	Param.
Lead (mg/L)	GS-AP-MW-15	0.000203	0.00008	0.015	No	8	0.0001732	0.00005526	75	Kaplan-Meier	No	0.004	NP (NDs)
Lead (mg/L)	GS-AP-MW-16D	0.000873	0.00016	0.015	No	8	0.0002814	0.0002395	75	Kaplan-Meier	No	0.004	NP (NDs)
Lead (mg/L)	GS-AP-MW-17	0.000203	0.000175	0.015	No	8	0.0001995	0.000009899	87.5	Kaplan-Meier	No	0.004	NP (NDs)
Lead (mg/L)	GS-AP-MW-6D	0.000203	0.000171	0.015	No	8	0.000199	0.00001131	87.5	Kaplan-Meier	No	0.004	NP (NDs)
Lead (mg/L)	GS-AP-MW-7	0.003199	0.0003887	0.015	No	8	0.001794	0.001325	12.5	None	No	0.01	Param.
Lithium (mg/L)	GS-AP-MW-12	0.05328	0.02374	0.0809	No	8	0.03851	0.01393	0	None	No	0.01	Param.
Lithium (mg/L)	GS-AP-MW-12V	0.05082	0.02808	0.0809	No	8	0.03945	0.01073	0	None	No	0.01	Param.
Lithium (mg/L)	**GS-AP-MW-15**	**0.5314**	**0.3154**	**0.0809**	**Yes**	**8**	**0.4234**	**0.1019**	**0**	**None**	**No**	**0.01**	**Param.**
Lithium (mg/L)	GS-AP-MW-15V	0.1628	0.06999	0.0809	No	7	0.114	0.04463	0	None	x^(1/3)	0.01	Param.
Lithium (mg/L)	GS-AP-MW-16D	0.03636	0.03289	0.0809	No	8	0.03463	0.001639	0	None	No	0.01	Param.
Lithium (mg/L)	GS-AP-MW-17	0.06643	0.05767	0.0809	No	8	0.06205	0.004133	0	None	No	0.01	Param.
Lithium (mg/L)	GS-AP-MW-19	0.04383	0.03119	0.0809	No	8	0.03751	0.005963	0	None	No	0.01	Param.
Lithium (mg/L)	GS-AP-MW-2	0.0443	0.03492	0.0809	No	8	0.03961	0.004426	0	None	No	0.01	Param.
Lithium (mg/L)	**GS-AP-MW-21**	**0.3049**	**0.08531**	**0.0809**	**Yes**	**8**	**0.1951**	**0.1036**	**0**	**None**	**No**	**0.01**	**Param.**
Lithium (mg/L)	GS-AP-MW-21V	0.1458	0.06199	0.0809	No	7	0.1039	0.0353	0	None	No	0.01	Param.
Lithium (mg/L)	GS-AP-MW-3	0.1018	0.06046	0.0809	No	5	0.08114	0.01234	0	None	No	0.01	Param.
Lithium (mg/L)	**GS-AP-MW-6D**	**0.3324**	**0.2803**	**0.0809**	**Yes**	**8**	**0.3064**	**0.02458**	**0**	**None**	**No**	**0.01**	**Param.**
Lithium (mg/L)	**GS-AP-MW-7**	**0.216**	**0.1595**	**0.0809**	**Yes**	**8**	**0.1878**	**0.02661**	**0**	**None**	**No**	**0.01**	**Param.**
Lithium (mg/L)	GS-AP-MW-9V	0.03082	0.02895	0.0809	No	7	0.02989	0.0007904	0	None	No	0.01	Param.
Molybdenum (mg/L)	GS-AP-MW-12	0.009159	0.004197	0.1	No	8	0.006625	0.002485	12.5	None	sqrt(x)	0.01	Param.
Molybdenum (mg/L)	GS-AP-MW-12V	0.006755	0.001196	0.1	No	8	0.003976	0.002622	12.5	None	No	0.01	Param.
Molybdenum (mg/L)	GS-AP-MW-15	0.07168	0.04393	0.1	No	8	0.0573	0.01671	0	None	x^3	0.01	Param.
Molybdenum (mg/L)	GS-AP-MW-15V	0.05048	0.0198	0.1	No	7	0.03514	0.01292	0	None	No	0.01	Param.
Molybdenum (mg/L)	GS-AP-MW-16D	0.01015	0.00014	0.1	No	8	0.005342	0.005146	50	None	No	0.004	NP (normality)
Molybdenum (mg/L)	GS-AP-MW-17	0.006435	0.001877	0.1	No	8	0.004156	0.00215	12.5	None	No	0.01	Param.
Molybdenum (mg/L)	GS-AP-MW-19	0.006026	0.002878	0.1	No	8	0.004452	0.001485	12.5	None	No	0.01	Param.
Molybdenum (mg/L)	GS-AP-MW-2	0.004382	0.001744	0.1	No	8	0.003063	0.001245	12.5	None	No	0.01	Param.
Molybdenum (mg/L)	GS-AP-MW-21	0.07228	0.006121	0.1	No	8	0.0392	0.03121	0	None	No	0.01	Param.
Molybdenum (mg/L)	GS-AP-MW-21V	0.1202	0.03513	0.1	No	7	0.07766	0.0358	0	None	No	0.01	Param.
Molybdenum (mg/L)	GS-AP-MW-3	0.01187	0.005476	0.1	No	5	0.008672	0.001908	0	None	No	0.01	Param.
Molybdenum (mg/L)	GS-AP-MW-6D	0.01114	0.008589	0.1	No	8	0.009864	0.001203	0	None	No	0.01	Param.
Molybdenum (mg/L)	**GS-AP-MW-7**	**0.2207**	**0.1905**	**0.1**	**Yes**	**8**	**0.2056**	**0.01424**	**0**	**None**	**No**	**0.01**	**Param.**
Molybdenum (mg/L)	GS-AP-MW-9V	0.002871	0.0007248	0.1	No	7	0.005334	0.004553	42.86	Kaplan-Meier	x^(1/3)	0.01	Param.

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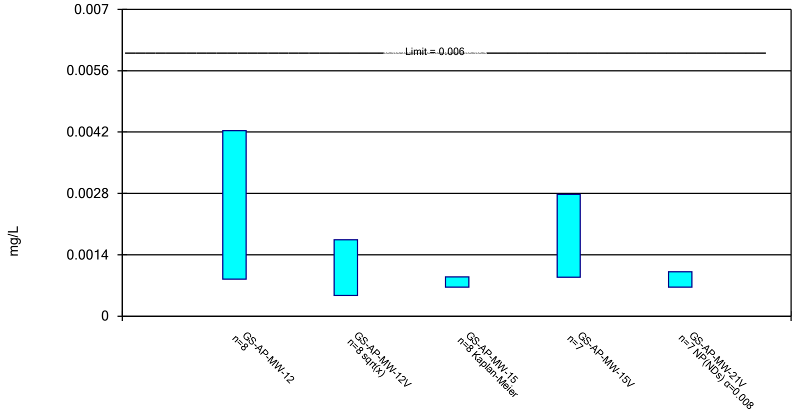
Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Antimony Analysis Run 5/23/2023 4:43 PM View: Appendix IV - Confidence Intervals
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

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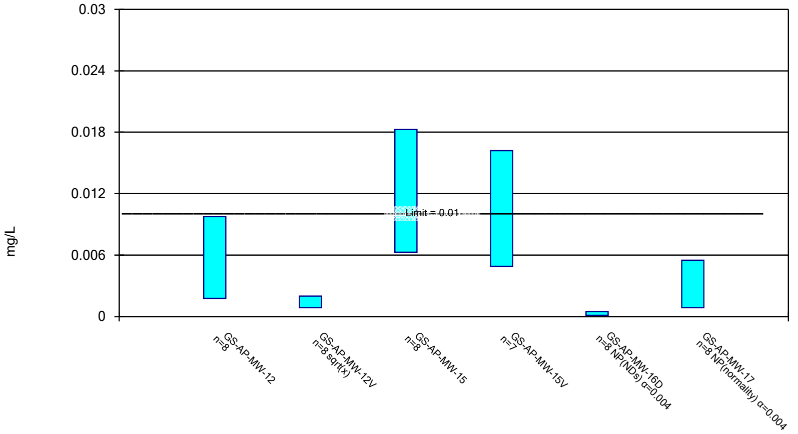
Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Arsenic Analysis Run 5/23/2023 4:43 PM View: Appendix IV - Confidence Intervals
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

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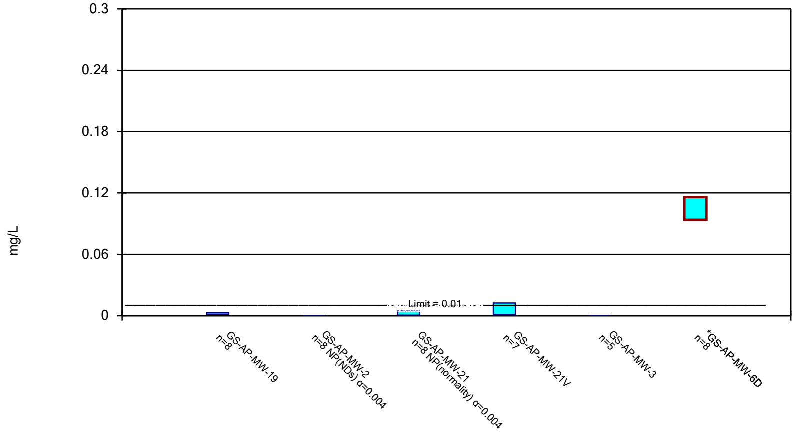
Parametric and Non-Parametric (NP) Confidence Interval

Compliance limit is exceeded.* Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



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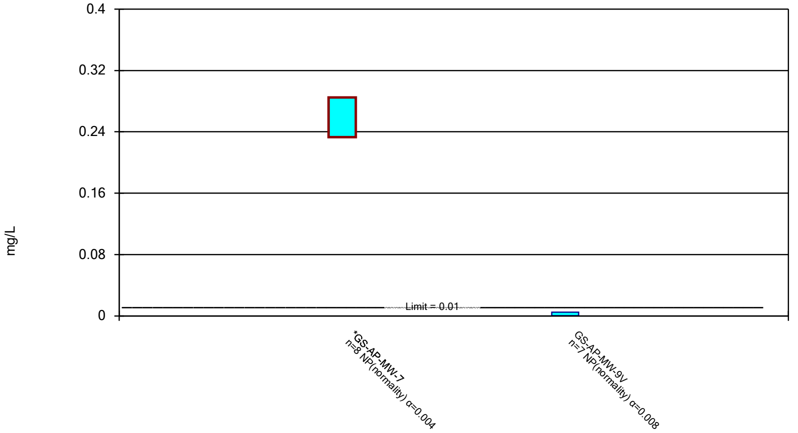
Non-Parametric Confidence Interval

Compliance limit is exceeded.*



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Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

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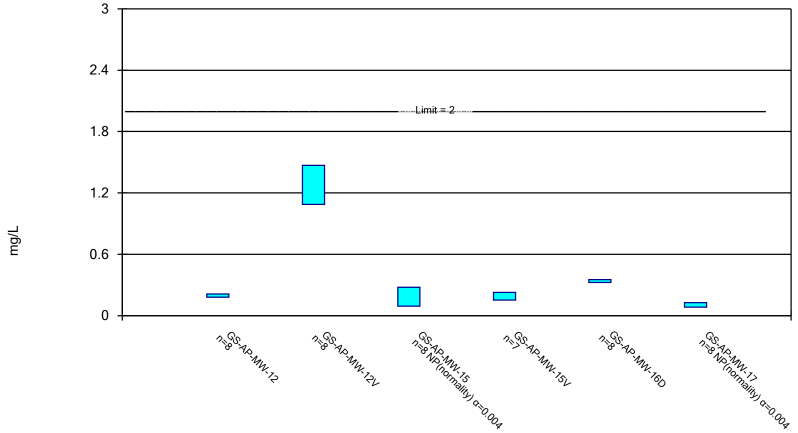
Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Barium Analysis Run 5/23/2023 4:43 PM View: Appendix IV - Confidence Intervals
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

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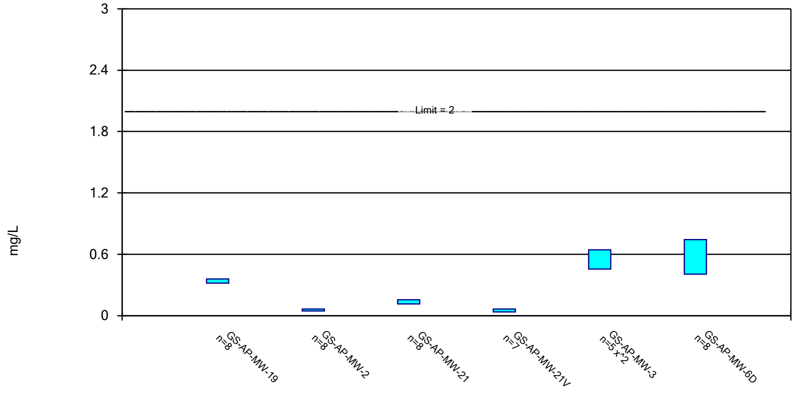
Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



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Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

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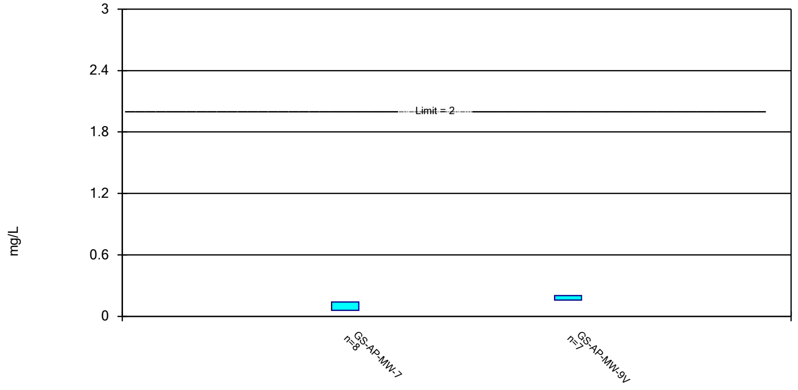
Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



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Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

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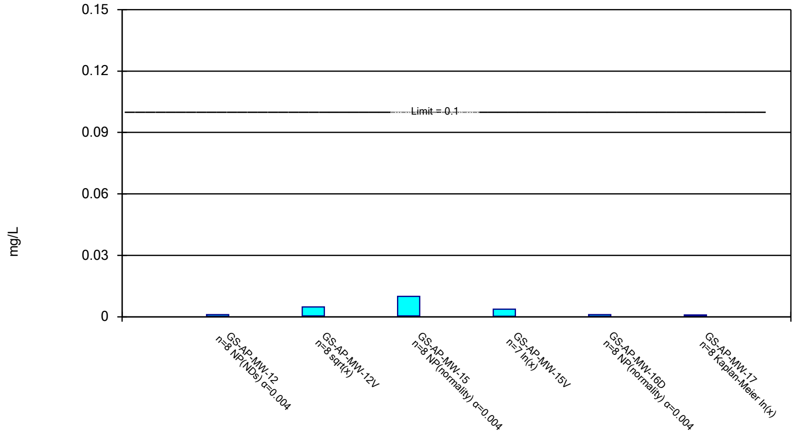
Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



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Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

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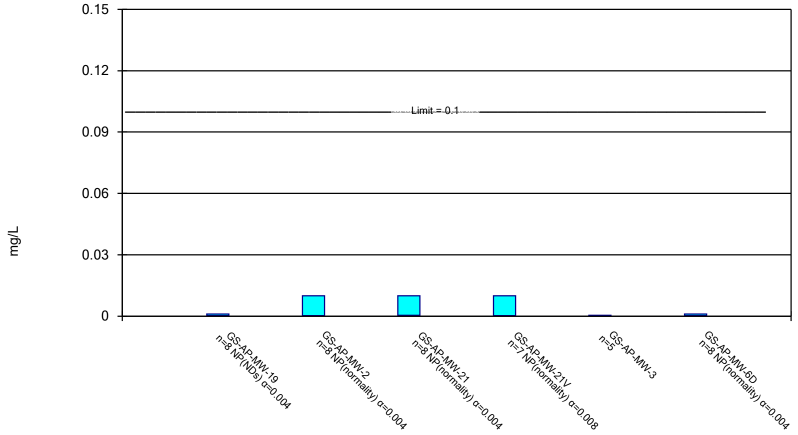
Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



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Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

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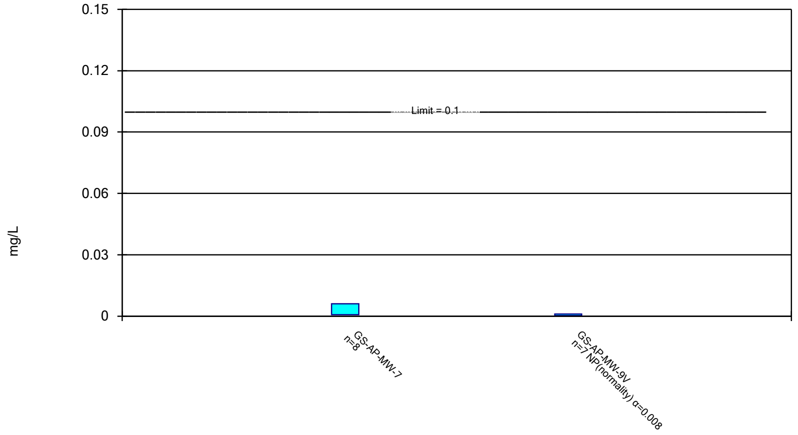
Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.

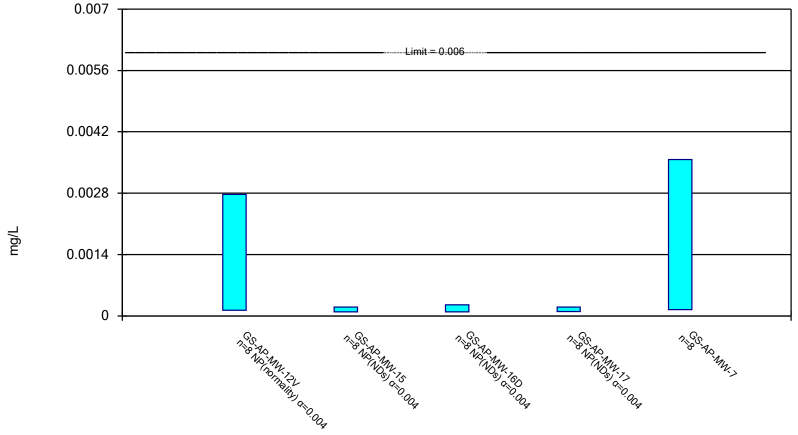


Constituent: Chromium Analysis Run 5/23/2023 4:43 PM View: Appendix IV - Confidence Intervals
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.

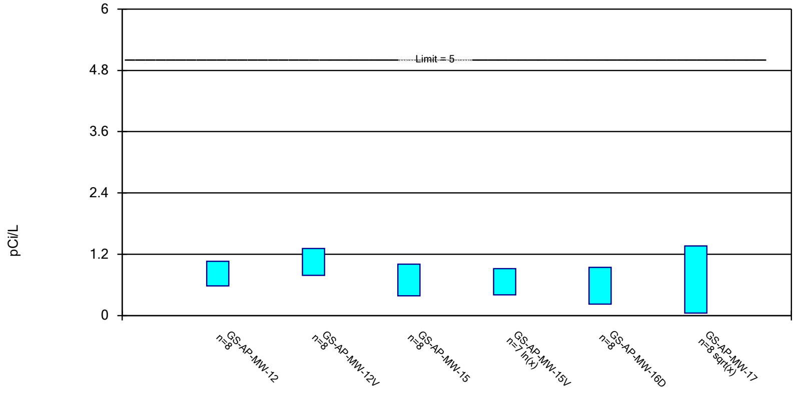


Constituent: Cobalt Analysis Run 5/23/2023 4:43 PM View: Appendix IV - Confidence Intervals
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.

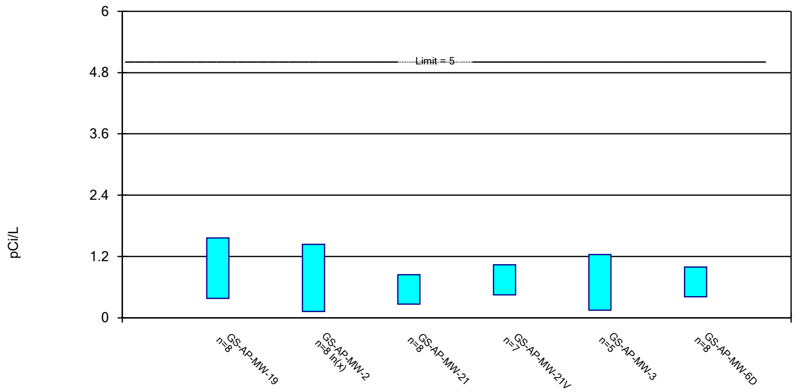


Constituent: Combined Radium 226 + 228 Analysis Run 5/23/2023 4:43 PM View: Appendix IV - Confiden
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Combined Radium 226 + 228   Analysis Run 5/23/2023 4:43 PM   View: Appendix IV - Confiden

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

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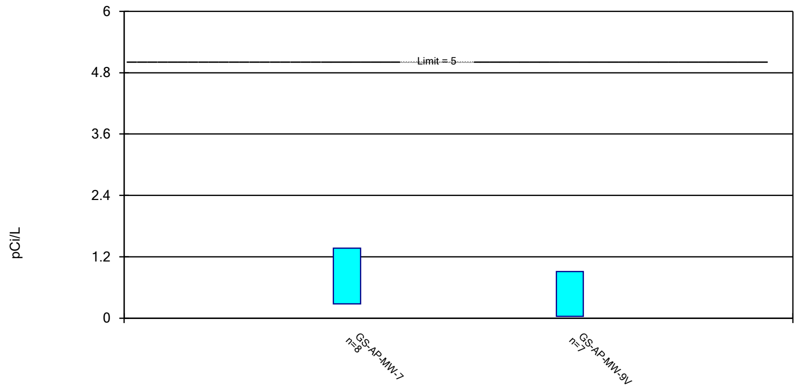
Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Combined Radium 226 + 228   Analysis Run 5/23/2023 4:43 PM   View: Appendix IV - Confiden

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

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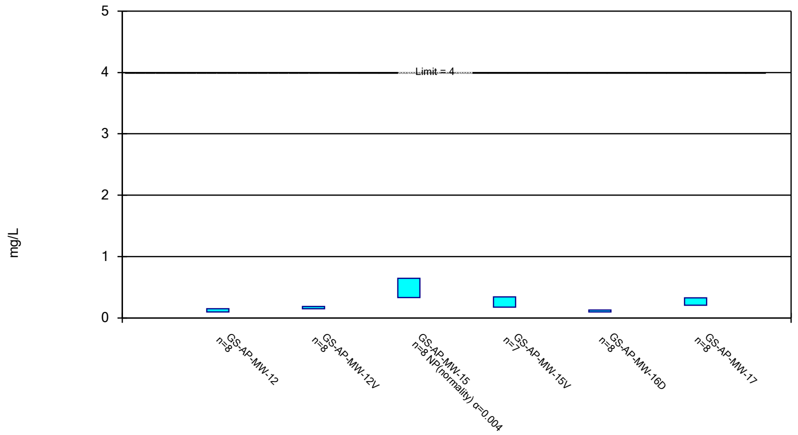
Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Fluoride   Analysis Run 5/23/2023 4:43 PM   View: Appendix IV - Confidence Intervals

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

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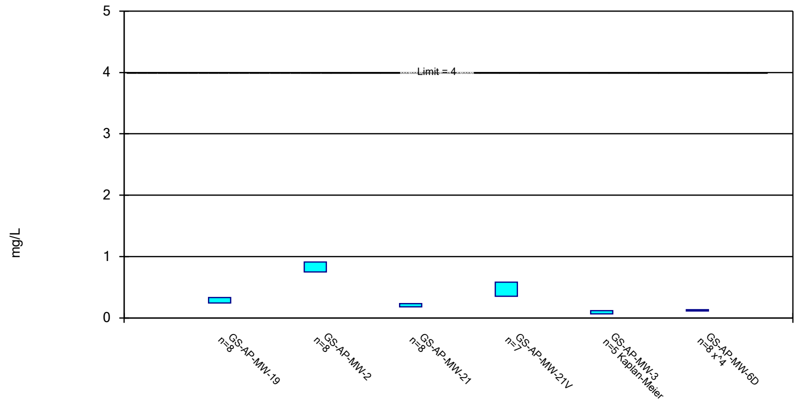
Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



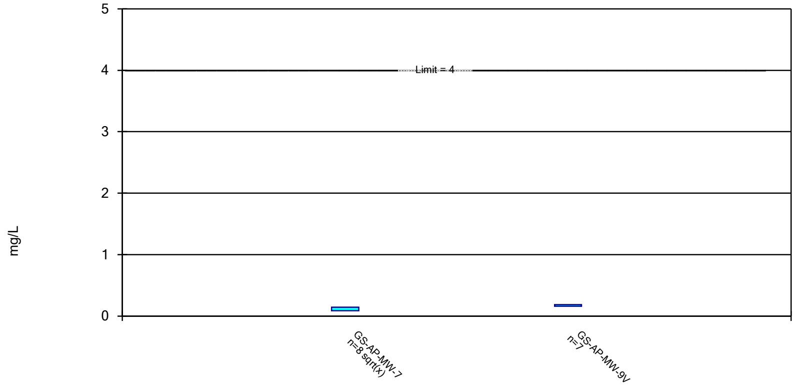
Constituent: Fluoride   Analysis Run 5/23/2023 4:43 PM   View: Appendix IV - Confidence Intervals

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.

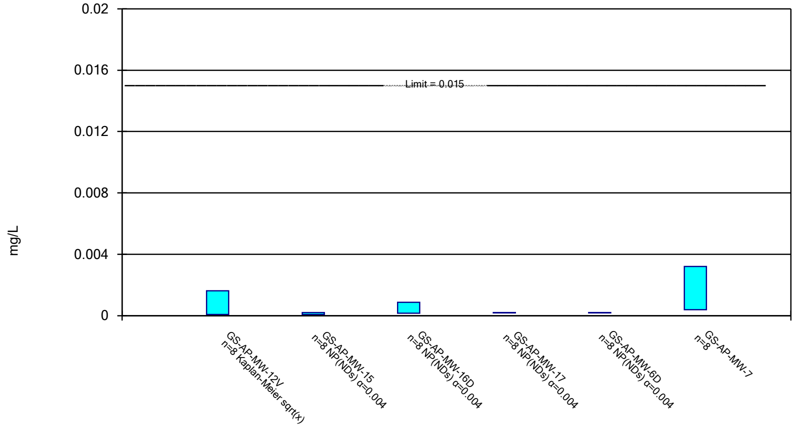


Constituent: Fluoride Analysis Run 5/23/2023 4:43 PM View: Appendix IV - Confidence Intervals
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.

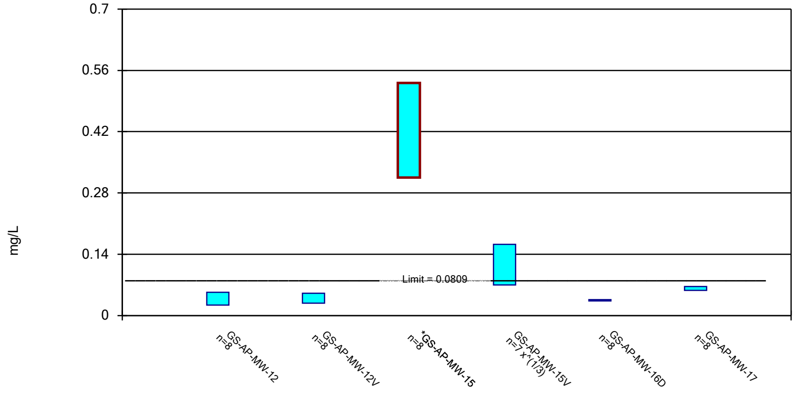


Constituent: Lead Analysis Run 5/23/2023 4:43 PM View: Appendix IV - Confidence Intervals
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Parametric Confidence Interval

Compliance limit is exceeded.* Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.

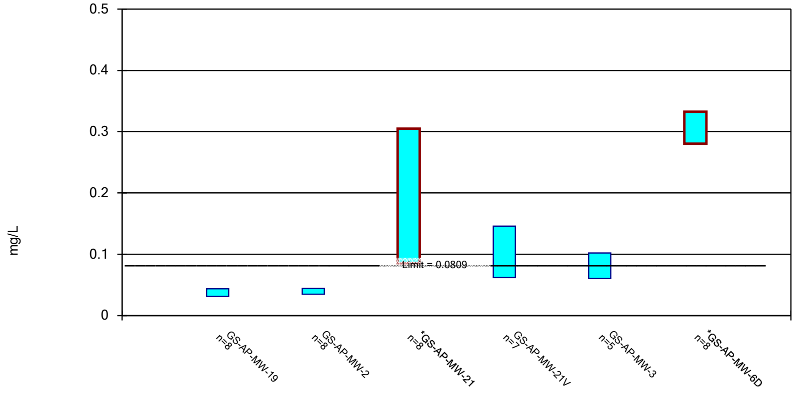


Constituent: Lithium Analysis Run 5/23/2023 4:43 PM View: Appendix IV - Confidence Intervals
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Parametric Confidence Interval

Compliance limit is exceeded.* Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.

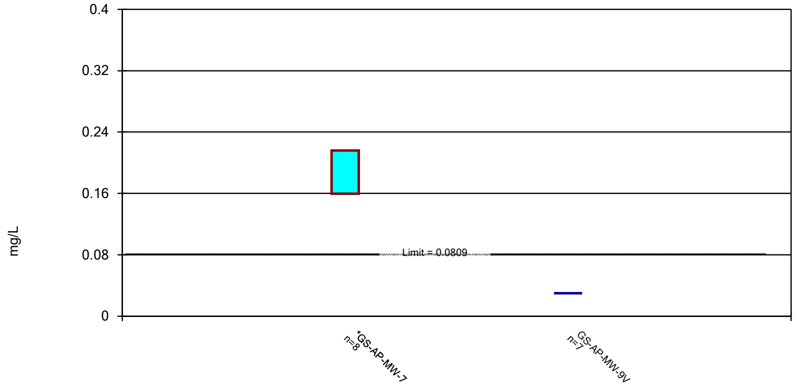


Constituent: Lithium Analysis Run 5/23/2023 4:43 PM View: Appendix IV - Confidence Intervals
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Parametric Confidence Interval

Compliance limit is exceeded.* Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Lithium   Analysis Run 5/23/2023 4:43 PM   View: Appendix IV - Confidence Intervals
Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

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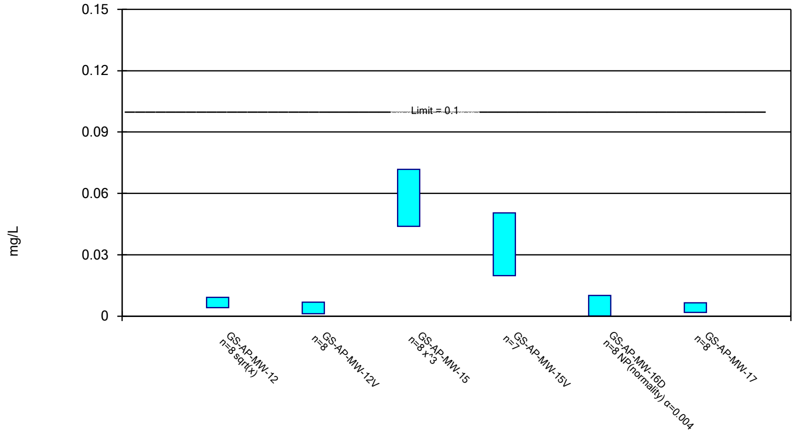
Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Molybdenum   Analysis Run 5/23/2023 4:43 PM   View: Appendix IV - Confidence Intervals
Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

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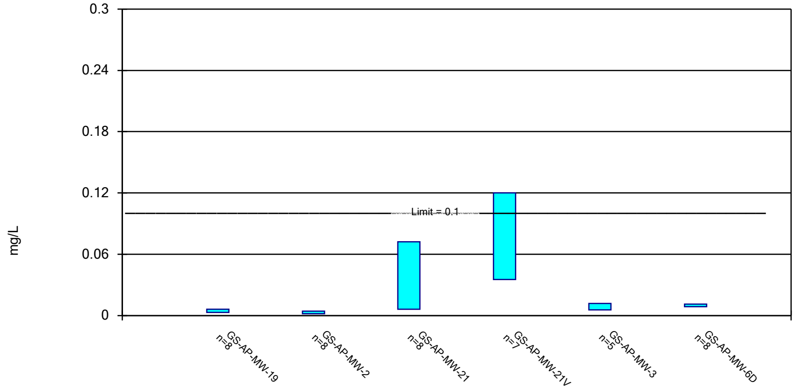
Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Molybdenum   Analysis Run 5/23/2023 4:44 PM   View: Appendix IV - Confidence Intervals
Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

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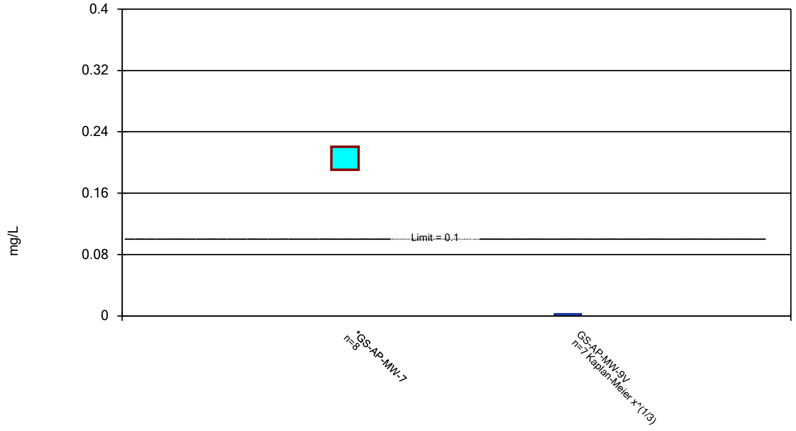
Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Parametric Confidence Interval

Compliance limit is exceeded.* Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Molybdenum   Analysis Run 5/23/2023 4:44 PM   View: Appendix IV - Confidence Intervals
Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

Confidence Interval

Constituent: Antimony (mg/L)   Analysis Run 5/23/2023 4:45 PM   View: Appendix IV - Confidence Intervals

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

	GS-AP-MW-12	GS-AP-MW-12V	GS-AP-MW-15	GS-AP-MW-15V	GS-AP-MW-21V
9/24/2019			<0.001015		
9/25/2019	<0.003	0.0025 (J)			
3/18/2020	0.0022 (J)		0.000976 (J)	0.0028 (J)	
3/23/2020					0.000831 (J)
3/24/2020		0.00128 (J)			
9/21/2020				0.0028 (J)	
9/23/2020	0.00202 (J)	0.00152 (J)	0.000844 (J)		<0.001015
2/1/2021	0.000518 (J)	0.000861 (J)			
2/9/2021			0.00075 (J)	0.00237	0.000661 (J)
8/3/2021			0.00065 (J)	0.00097 (J)	
8/9/2021	0.00179	0.00089 (J)			
8/11/2021					<0.001015
2/8/2022					<0.001015
2/16/2022			0.00078 (J)	0.00113	
2/23/2022		0.00055 (J)			
2/28/2022	0.00415				
7/19/2022	0.00556				
7/20/2022		0.000577 (J)			
8/2/2022			0.000663 (J)	0.00143	
8/9/2022					<0.001015
3/20/2023			<0.001015	0.00133	
3/21/2023					<0.001015
3/22/2023	0.00257	<0.001015			
Mean	0.002539	0.001086	0.0008366	0.001833	0.0009381
Std. Dev.	0.001596	0.0006756	0.0001506	0.0007972	0.0001401
Upper Lim.	0.00423	0.001744	0.0008948	0.00278	0.001015
Lower Lim.	0.0008468	0.0004721	0.0006595	0.000886	0.000661

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Arsenic (mg/L)   Analysis Run 5/23/2023 4:45 PM   View: Appendix IV - Confidence Intervals

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

	GS-AP-MW-12	GS-AP-MW-12V	GS-AP-MW-15	GS-AP-MW-15V	GS-AP-MW-16D	GS-AP-MW-17
9/24/2019			0.011		<0.000203	
9/25/2019	0.0135	0.00129 (J)				
3/16/2020						0.00268 (J)
3/18/2020	0.00693		0.0217	0.011		
3/24/2020		0.00266 (J)			<0.000203	
5/12/2020						0.00326 (J)
9/21/2020				0.0167		0.0055
9/22/2020					<0.000203	
9/23/2020	0.00616	0.00176 (J)	0.0165			
2/1/2021	0.00747	0.00154				
2/2/2021						0.00478
2/9/2021			0.0145	0.0165		
2/10/2021					0.000491	
8/3/2021			0.0139	0.0105		0.00086
8/9/2021	0.00308	0.00112			0.0001 (J)	
2/14/2022						0.00112
2/15/2022					0.00012 (J)	
2/16/2022			0.00592	0.0081		
2/23/2022		0.00102				
2/28/2022	0.00343					
7/19/2022	0.00407					
7/20/2022		0.00102				
8/2/2022			0.0104	0.00733	<0.000203	
8/8/2022						0.000878
3/20/2023			0.00427	0.00375		
3/21/2023					<0.000203	
3/22/2023	0.00135	0.000929				0.000896
Mean	0.005749	0.001417	0.01227	0.01055	0.0002158	0.002497
Std. Dev.	0.003766	0.0005776	0.005655	0.004762	0.000119	0.001875
Upper Lim.	0.00974	0.001985	0.01827	0.01621	0.000491	0.0055
Lower Lim.	0.001757	0.0008747	0.006279	0.004898	0.0001	0.00086

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Arsenic (mg/L) Analysis Run 5/23/2023 4:45 PM View: Appendix IV - Confidence Intervals
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-19	GS-AP-MW-2	GS-AP-MW-21	GS-AP-MW-21V	GS-AP-MW-3	GS-AP-MW-6D
9/23/2019						0.0876
9/24/2019	0.00289 (J)		<0.005			
3/17/2020						0.105
3/18/2020			<0.005			
3/23/2020				0.0159		
3/24/2020	0.00313 (J)					
3/25/2020		<0.000203				
5/13/2020		<0.000203				
9/17/2020						0.0931
9/22/2020	0.00313 (J)	<0.000203				
9/23/2020			<0.005	0.01		
2/1/2021		<0.000203				
2/3/2021						0.104
2/8/2021	0.00178		0.000624			
2/9/2021				0.0063		
2/17/2021					0.000168 (J)	
7/27/2021						0.107
8/3/2021					0.00014 (J)	
8/4/2021		<0.000203	0.00054			
8/10/2021	0.00133					
8/11/2021				0.00161		
2/8/2022			0.00046	0.00551		
2/14/2022						0.12
2/16/2022					0.0002 (J)	
2/22/2022	0.00098	<0.000203				
7/19/2022		8.3E-05 (J)				
7/20/2022					0.000137 (J)	
7/25/2022						0.114
8/3/2022	0.00223					
8/9/2022				0.00345		
8/10/2022			0.000495			
3/14/2023						0.108
3/21/2023	0.00197		0.000472	0.00444	0.000162 (J)	
3/22/2023		<0.000203				
Mean	0.00218	0.000188	0.002199	0.006744	0.0001614	0.1048
Std. Dev.	0.0008175	4.243E-05	0.00232	0.004807	2.543E-05	0.01045
Upper Lim.	0.003047	0.000203	0.005	0.01245	0.000204	0.1159
Lower Lim.	0.001313	8.3E-05	0.00046	0.001034	0.0001188	0.09376

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Arsenic (mg/L)   Analysis Run 5/23/2023 4:45 PM   View: Appendix IV - Confidence Intervals

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

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	GS-AP-MW-7	GS-AP-MW-9V
9/24/2019	0.233	
3/17/2020	0.285	
3/23/2020		<0.005
9/16/2020	0.282	
9/22/2020		<0.005
2/2/2021	0.275	0.000101 (J)
8/9/2021	0.282	
8/10/2021		0.00032
2/8/2022	0.281	
2/21/2022		0.00021
7/19/2022		0.000252
7/25/2022	0.272	
3/14/2023	0.249	
3/27/2023		0.000153 (J)
Mean	0.2699	0.001577
Std. Dev.	0.0188	0.00234
Upper Lim.	0.285	0.005
Lower Lim.	0.233	0.000101

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Barium (mg/L)   Analysis Run 5/23/2023 4:45 PM   View: Appendix IV - Confidence Intervals

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

	GS-AP-MW-12	GS-AP-MW-12V	GS-AP-MW-15	GS-AP-MW-15V	GS-AP-MW-16D	GS-AP-MW-17
9/24/2019			0.0913		0.342	
9/25/2019	0.202	1.06				
3/16/2020						0.0883
3/18/2020	0.195		0.14	0.155		
3/24/2020		1.43			0.323	
5/12/2020						0.0941
9/21/2020				0.18		0.128
9/22/2020					0.342	
9/23/2020	0.193	1.27	0.119			
2/1/2021	0.201	1.6				
2/2/2021						0.107
2/9/2021			0.132	0.2		
2/10/2021					0.356	
8/3/2021			0.129	0.164		0.0889
8/9/2021	0.194	1.07			0.334	
2/14/2022						0.0945
2/15/2022					0.322	
2/16/2022			0.271	0.2		
2/23/2022		1.34				
2/28/2022	0.173					
7/19/2022	0.188					
7/20/2022		1.21				
8/2/2022			0.131	0.253	0.355	
8/8/2022						0.0875
3/20/2023			0.276	0.175		
3/21/2023					0.324	
3/22/2023	0.22	1.24				0.0835
Mean	0.1958	1.278	0.1612	0.1896	0.3373	0.09648
Std. Dev.	0.01333	0.1803	0.07086	0.03264	0.0138	0.01458
Upper Lim.	0.2099	1.469	0.276	0.2283	0.3519	0.128
Lower Lim.	0.1816	1.086	0.0913	0.1508	0.3226	0.0835

Confidence Interval

Constituent: Barium (mg/L) Analysis Run 5/23/2023 4:45 PM View: Appendix IV - Confidence Intervals

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-19	GS-AP-MW-2	GS-AP-MW-21	GS-AP-MW-21V	GS-AP-MW-3	GS-AP-MW-6D
9/23/2019						0.903
9/24/2019	0.356		0.114			
3/17/2020						0.638
3/18/2020			0.105			
3/23/2020				0.0574		
3/24/2020	0.324					
3/25/2020		0.0602				
5/13/2020		0.0528				
9/17/2020						0.378
9/22/2020	0.337	0.0563				
9/23/2020			0.157	0.0438		
2/1/2021		0.0578				
2/3/2021						0.443
2/8/2021	0.36		0.151			
2/9/2021				0.028		
2/17/2021					0.59	
7/27/2021						0.488
8/3/2021					0.589	
8/4/2021		0.0702	0.148			
8/10/2021	0.343					
8/11/2021				0.0535		
2/8/2022			0.143	0.0631		
2/14/2022						0.599
2/16/2022					0.498	
2/22/2022	0.334	0.0501				
7/19/2022		0.0474				
7/20/2022					0.492	
7/25/2022						0.544
8/3/2022	0.348					
8/9/2022				0.0477		
8/10/2022			0.135			
3/14/2023						0.604
3/21/2023	0.304		0.127	0.059	0.611	
3/22/2023		0.0456				
Mean	0.3383	0.05505	0.135	0.05036	0.556	0.5746
Std. Dev.	0.01813	0.007951	0.01843	0.01188	0.05641	0.1593
Upper Lim.	0.3575	0.06348	0.1545	0.06447	0.6444	0.7435
Lower Lim.	0.319	0.04662	0.1155	0.03625	0.4562	0.4057

Confidence Interval

Constituent: Barium (mg/L) Analysis Run 5/23/2023 4:45 PM View: Appendix IV - Confidence Intervals
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-7	GS-AP-MW-9V
9/24/2019	0.0834	
3/17/2020	0.174	
3/23/2020		0.215
9/16/2020	0.124	
9/22/2020		0.187
2/2/2021	0.115	0.17
8/9/2021	0.0891	
8/10/2021		0.165
2/8/2022	0.0747	
2/21/2022		0.161
7/19/2022		0.178
7/25/2022	0.0677	
3/14/2023	0.0631	
3/27/2023		0.184
Mean	0.09888	0.18
Std. Dev.	0.03724	0.01817
Upper Lim.	0.1383	0.2016
Lower Lim.	0.05941	0.1584

Confidence Interval

Constituent: Chromium (mg/L) Analysis Run 5/23/2023 4:45 PM View: Appendix IV - Confidence Intervals
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-12	GS-AP-MW-12V	GS-AP-MW-15	GS-AP-MW-15V	GS-AP-MW-16D	GS-AP-MW-17
9/24/2019			<0.01		<0.001015	
9/25/2019	<0.001015	0.00202 (J)				
3/16/2020						<0.001015
3/18/2020	<0.001015		<0.01	0.00716 (J)		
3/24/2020		0.00774 (J)			<0.001015	
5/12/2020						<0.001015
9/21/2020				0.00239 (J)		<0.001015
9/22/2020					<0.001015	
9/23/2020	<0.001015	0.00362 (J)	<0.01			
2/1/2021	<0.001015	0.00311				
2/2/2021						0.00255
2/9/2021			0.00072 (J)	0.00142		
2/10/2021					0.00107	
8/3/2021			0.0008 (J)	0.00051 (J)		0.00041 (J)
8/9/2021	0.00031 (J)	0.00146			0.00068 (J)	
2/14/2022						0.00034 (J)
2/15/2022					0.00025 (J)	
2/16/2022			0.00048 (J)	0.00062 (J)		
2/23/2022		0.00061 (J)				
2/28/2022	<0.001015					
7/19/2022	0.000322 (J)					
7/20/2022		0.000485 (J)				
8/2/2022			0.000913 (J)	0.000427 (J)	0.000402 (J)	
8/8/2022						0.000334 (J)
3/20/2023			0.000384 (J)	<0.001015		
3/21/2023					<0.001015	
3/22/2023	<0.001015	0.000396 (J)				<0.001015
Mean	0.0008403	0.00243	0.004162	0.001862	0.0008078	0.0009618
Std. Dev.	0.0003236	0.002462	0.004837	0.002443	0.0003235	0.000719
Upper Lim.	0.001015	0.00475	0.01	0.003733	0.00107	0.0009186
Lower Lim.	0.00031	0.0003803	0.000384	0.0003099	0.00025	0.0002299

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Chromium (mg/L) Analysis Run 5/23/2023 4:45 PM View: Appendix IV - Confidence Intervals

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-19	GS-AP-MW-2	GS-AP-MW-21	GS-AP-MW-21V	GS-AP-MW-3	GS-AP-MW-6D
9/23/2019						<0.001015
9/24/2019	<0.001015		<0.01			
3/17/2020						<0.001015
3/18/2020			<0.01			
3/23/2020				<0.01		
3/24/2020	<0.001015					
3/25/2020		<0.01				
5/13/2020		<0.01				
9/17/2020						<0.001015
9/22/2020	<0.001015	<0.01				
9/23/2020			<0.01	<0.01		
2/1/2021		0.000505 (J)				
2/3/2021						0.000264 (J)
2/8/2021	0.000258 (J)		0.000705 (J)			
2/9/2021				0.000218 (J)		
2/17/2021					0.000326 (J)	
7/27/2021						0.00024 (J)
8/3/2021					0.00027 (J)	
8/4/2021		0.00085 (J)	0.00042 (J)			
8/10/2021	0.00032 (J)					
8/11/2021				0.00134		
2/8/2022			0.0004 (J)	0.00041 (J)		
2/14/2022						0.00024 (J)
2/16/2022					0.00027 (J)	
2/22/2022	<0.001015	0.00044 (J)				
7/19/2022		0.000469 (J)				
7/20/2022					0.000315 (J)	
7/25/2022						0.000301 (J)
8/3/2022	0.000412 (J)					
8/9/2022				0.000378 (J)		
8/10/2022			0.000827 (J)			
3/14/2023						<0.001015
3/21/2023	<0.001015		0.000459 (J)	0.000223 (J)	0.000239 (J)	
3/22/2023		0.000254 (J)				
Mean	0.0007581	0.004065	0.004101	0.003224	0.000284	0.0006381
Std. Dev.	0.0003569	0.004918	0.004887	0.004645	3.585E-05	0.0004033
Upper Lim.	0.001015	0.01	0.01	0.01	0.0003441	0.001015
Lower Lim.	0.000258	0.000254	0.0004	0.000218	0.0002239	0.00024

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Chromium (mg/L)   Analysis Run 5/23/2023 4:45 PM   View: Appendix IV - Confidence Intervals

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

	GS-AP-MW-7	GS-AP-MW-9V
9/24/2019	<0.01	
3/17/2020	0.0076 (J)	
3/23/2020		<0.00102
9/16/2020	0.00482 (J)	
9/22/2020		<0.00102
2/2/2021	0.00435	0.000228 (J)
8/9/2021	0.00234	
8/10/2021		0.00029 (J)
2/8/2022	0.00103	
2/21/2022		<0.00102
7/19/2022		0.000323 (J)
7/25/2022	0.00103	
3/14/2023	0.000482 (J)	
3/27/2023		0.000236 (J)
Mean	0.003331	0.000591
Std. Dev.	0.002506	0.0004026
Upper Lim.	0.005988	0.00102
Lower Lim.	0.0006755	0.000228

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Cobalt (mg/L) Analysis Run 5/23/2023 4:45 PM View: Appendix IV - Confidence Intervals
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-12V	GS-AP-MW-15	GS-AP-MW-16D	GS-AP-MW-17	GS-AP-MW-7
9/24/2019		<0.000203	<0.000203		<0.005
9/25/2019	<0.000203				
3/16/2020				<0.000203	
3/17/2020					0.00476 (J)
3/18/2020		<0.000203			
3/24/2020	0.00277 (J)		<0.000203		
5/12/2020				<0.000203	
9/16/2020					0.00301 (J)
9/21/2020				<0.000203	
9/22/2020			<0.000203		
9/23/2020	<0.000203	<0.000203			
2/1/2021	0.00129				
2/2/2021				0.000102 (J)	0.00248
2/9/2021		<0.000203			
2/10/2021			0.000252		
8/3/2021		9E-05 (J)		<0.000203	
8/9/2021	0.00043		9E-05 (J)		0.0011
2/8/2022					0.00051
2/14/2022				<0.000203	
2/15/2022			<0.000203		
2/16/2022		<0.000203			
2/23/2022	0.00013 (J)				
7/20/2022	<0.000203				
7/25/2022					0.000372
8/2/2022		<0.000203	<0.000203		
8/8/2022				<0.000203	
3/14/2023					9.22E-05 (J)
3/20/2023		<0.000203			
3/21/2023			<0.000203		
3/22/2023	<0.000203			<0.000203	
Mean	0.000679	0.0001889	0.000195	0.0001904	0.001853
Std. Dev.	0.000927	3.995E-05	4.576E-05	3.571E-05	0.001615
Upper Lim.	0.00277	0.000203	0.000252	0.000203	0.003565
Lower Lim.	0.00013	9E-05	9E-05	0.000102	0.0001409

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 5/23/2023 4:45 PM View: Appendix IV - Confidence Intervals
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-12	GS-AP-MW-12V	GS-AP-MW-15	GS-AP-MW-15V	GS-AP-MW-16D	GS-AP-MW-17
9/24/2019			0.951		-0.033 (U)	
9/25/2019	0.442 (U)	1.03				
3/16/2020						0.185 (U)
3/18/2020	0.605		0.939	0.566 (U)		
3/24/2020		0.877 (U)			0.636	
5/12/2020						0.0339 (U)
9/21/2020				0.494 (U)		0.651 (U)
9/22/2020					0.59 (U)	
9/23/2020	0.811 (U)	1.38	0.547 (U)			
2/1/2021	0.946 (U)	0.944 (U)				
2/2/2021						2.53
2/9/2021			0.442 (U)	0.55 (U)		
2/10/2021					0.285 (U)	
8/3/2021			0.65 (U)	1.13 (U)		0.667 (U)
8/9/2021	0.907 (U)	1.0895 (UD)			1.07 (U)	
2/14/2022						0.523 (U)
2/15/2022					0.557 (U)	
2/16/2022			0.234 (U)	0.841 (U)		
2/23/2022		1.3				
2/28/2022	0.725 (U)					
7/19/2022	0.934 (U)					
7/20/2022		0.596 (U)				
8/2/2022			1.12	0.437 (U)	0.696 (U)	
8/8/2022						0.0413 (U)
3/20/2023			0.679 (U)	0.484 (U)		
3/21/2023					0.861 (U)	
3/22/2023	1.18	1.17				0.602 (U)
Mean	0.8188	1.048	0.6953	0.6431	0.5828	0.6542
Std. Dev.	0.2281	0.2493	0.2943	0.2519	0.3379	0.8035
Upper Lim.	1.061	1.313	1.007	0.9154	0.9409	1.362
Lower Lim.	0.577	0.7841	0.3833	0.4046	0.2246	0.04652

Confidence Interval

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 5/23/2023 4:45 PM View: Appendix IV - Confidence Intervals

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-19	GS-AP-MW-2	GS-AP-MW-21	GS-AP-MW-21V	GS-AP-MW-3	GS-AP-MW-6D
9/23/2019						0.677
9/24/2019	0.664		1.08			
3/17/2020						0.629
3/18/2020			0.732			
3/23/2020				0.982		
3/24/2020	1.07					
3/25/2020		4				
5/13/2020		0.289 (U)				
9/17/2020						0.32 (U)
9/22/2020	2.09	0.712				
9/23/2020			0.468 (U)	0.563 (U)		
2/1/2021		0.518 (U)				
2/3/2021						0.647 (U)
2/8/2021	0.947 (U)		0.667 (U)			
2/9/2021				0.867 (U)		
2/17/2021					0.331 (U)	
7/27/2021						0.919 (U)
8/3/2021					0.978 (U)	
8/4/2021		0.502 (U)	0.337 (U)			
8/10/2021	1.42 (U)					
8/11/2021				0.782 (U)		
2/8/2022			0.529 (U)	0.467 (U)		
2/14/2022						1.24
2/16/2022					0.601 (U)	
2/22/2022	0.639 (U)	0.21 (U)				
7/19/2022		0.306 (U)				
7/20/2022					0.473 (U)	
7/25/2022						0.513 (U)
8/3/2022	0.53 (U)					
8/9/2022				0.458 (U)		
8/10/2022			0.395 (U)			
3/14/2023						0.656 (U)
3/21/2023	0.407 (U)		0.213 (U)	1.07 (U)	1.08	
3/22/2023		0.0664 (U)				
Mean	0.9709	0.8254	0.5526	0.7413	0.6926	0.7001
Std. Dev.	0.5582	1.298	0.272	0.2486	0.3236	0.275
Upper Lim.	1.563	1.439	0.8409	1.037	1.235	0.9916
Lower Lim.	0.3792	0.1208	0.2643	0.446	0.1503	0.4087

Confidence Interval

Constituent: Combined Radium 226 + 228 (pCi/L)   Analysis Run 5/23/2023 4:45 PM   View: Appendix IV - Confidence Intervals

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

	GS-AP-MW-7	GS-AP-MW-9V
9/24/2019	0.618 (U)	
3/17/2020	1.2	
3/23/2020		0.156 (U)
9/16/2020	1.74	
9/22/2020		0.536 (U)
2/2/2021	0.373 (U)	0.154 (U)
8/9/2021	1.28 (UD)	
8/10/2021		0.895 (U)
2/8/2022	0.587 (UD)	
2/21/2022		0.134 (U)
7/19/2022		1.03
7/25/2022	0.455 (U)	
3/14/2023	0.351 (U)	
3/27/2023		0.414 (U)
Mean	0.8255	0.4741
Std. Dev.	0.5141	0.3681
Upper Lim.	1.37	0.9114
Lower Lim.	0.2806	0.03692

Confidence Interval

Constituent: Fluoride (mg/L) Analysis Run 5/23/2023 4:45 PM View: Appendix IV - Confidence Intervals

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-12	GS-AP-MW-12V	GS-AP-MW-15	GS-AP-MW-15V	GS-AP-MW-16D	GS-AP-MW-17
9/24/2019			0.628		0.124	
9/25/2019	0.168	0.185				
3/16/2020						0.261
3/18/2020	0.122		0.647	0.243		
3/24/2020		0.155			0.109	
5/12/2020						0.263
9/21/2020				0.372		0.371
9/22/2020					0.123	
9/23/2020	0.12	0.176	0.452			
2/1/2021	0.126	0.169				
2/2/2021						0.276
2/9/2021			0.591	0.329		
2/10/2021					0.103	
8/3/2021			0.615	0.278		0.3
8/9/2021	0.139	0.187			0.131	
2/14/2022						0.206
2/15/2022					0.114	
2/16/2022			0.349	0.208		
2/23/2022		0.153				
2/28/2022	0.12					
7/19/2022	0.0983 (J)					
7/20/2022		0.18				
8/2/2022			0.373	0.206	0.112 (J)	
8/8/2022						0.257
3/20/2023			0.333	0.183		
3/21/2023					0.0849 (J)	
3/22/2023	0.0941 (J)	0.138				0.183
Mean	0.1234	0.1679	0.4985	0.2599	0.1126	0.2646
Std. Dev.	0.02315	0.01754	0.1355	0.07008	0.0144	0.05716
Upper Lim.	0.148	0.1865	0.647	0.3431	0.1279	0.3252
Lower Lim.	0.09888	0.1493	0.333	0.1766	0.09735	0.204

Confidence Interval

Constituent: Fluoride (mg/L) Analysis Run 5/23/2023 4:45 PM View: Appendix IV - Confidence Intervals
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-19	GS-AP-MW-2	GS-AP-MW-21	GS-AP-MW-21V	GS-AP-MW-3	GS-AP-MW-6D
9/23/2019						0.132
9/24/2019	0.307		0.209			
3/17/2020						0.132
3/18/2020			0.234			
3/23/2020				0.494		
3/24/2020	0.327					
3/25/2020		0.855				
5/13/2020		0.777				
9/17/2020						0.133
9/22/2020	0.339	0.921				
9/23/2020			0.208	0.641		
2/1/2021		0.865				
2/3/2021						0.135
2/8/2021	0.319		0.203			
2/9/2021				0.546		
2/17/2021					0.1	
7/27/2021						0.127
8/3/2021					0.102	
8/4/2021		0.932	0.24			
8/10/2021	0.283					
8/11/2021				0.41		
2/8/2022			0.175	0.398		
2/14/2022						0.108
2/16/2022					<0.125	
2/22/2022	0.259	0.819				
7/19/2022		0.752				
7/20/2022					<0.125	
7/25/2022						0.0978 (JD)
8/3/2022	0.231					
8/9/2022				0.406		
8/10/2022			0.186			
3/14/2023						0.122 (J)
3/21/2023	0.24		0.194	0.381	0.0689 (J)	
3/22/2023		0.72				
Mean	0.2881	0.8301	0.2061	0.468	0.1042	0.1234
Std. Dev.	0.04117	0.07714	0.02225	0.09692	0.0231	0.01353
Upper Lim.	0.3318	0.9119	0.2297	0.5831	0.1157	0.1357
Lower Lim.	0.2445	0.7484	0.1825	0.3529	0.06491	0.1108

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Fluoride (mg/L)   Analysis Run 5/23/2023 4:45 PM   View: Appendix IV - Confidence Intervals

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

	GS-AP-MW-7	GS-AP-MW-9V
9/24/2019	0.106	
3/17/2020	0.107	
3/23/2020		0.187
9/16/2020	0.126	
9/22/2020		0.174
2/2/2021	0.124	0.183
8/9/2021	0.11	
8/10/2021		0.166
2/8/2022	0.0872 (JD)	
2/21/2022		0.177
7/19/2022		0.159
7/25/2022	0.0896 (JD)	
3/14/2023	0.177	
3/27/2023		0.164
Mean	0.1159	0.1729
Std. Dev.	0.02836	0.01032
Upper Lim.	0.1446	0.1851
Lower Lim.	0.08786	0.1606

Confidence Interval

Constituent: Lead (mg/L) Analysis Run 5/23/2023 4:45 PM View: Appendix IV - Confidence Intervals
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-12V	GS-AP-MW-15	GS-AP-MW-16D	GS-AP-MW-17	GS-AP-MW-6D	GS-AP-MW-7
9/23/2019					<0.000203	
9/24/2019		<0.000203	<0.000203			<0.005
9/25/2019	<0.000203					
3/16/2020				<0.000203		
3/17/2020					<0.000203	0.00386 (J)
3/18/2020		<0.000203				
3/24/2020	0.00279 (J)		<0.000203			
5/12/2020				<0.000203		
9/16/2020						0.00295 (J)
9/17/2020					<0.000203	
9/21/2020				<0.000203		
9/22/2020			<0.000203			
9/23/2020	0.0014 (J)	<0.000203				
2/1/2021	0.0013					
2/2/2021				0.000175 (J)		0.00243
2/3/2021					<0.000203	
2/9/2021		8.74E-05 (J)				
2/10/2021			0.000873			
7/27/2021					<0.000203	
8/3/2021		8E-05 (J)		<0.000203		
8/9/2021	0.00048		0.00016 (J)			0.00119
2/8/2022						0.0008
2/14/2022				<0.000203	<0.000203	
2/15/2022			<0.000203			
2/16/2022		<0.000203				
2/23/2022	0.00019 (J)					
7/20/2022	<0.000203					
7/25/2022					0.000171 (J)	0.000431
8/2/2022		<0.000203	<0.000203			
8/8/2022				<0.000203		
3/14/2023					<0.000203	0.000188 (J)
3/20/2023		<0.000203				
3/21/2023			<0.000203			
3/22/2023	8.97E-05 (J)			<0.000203		
Mean	0.000832	0.0001732	0.0002814	0.0001995	0.000199	0.001794
Std. Dev.	0.0009452	5.526E-05	0.0002395	9.899E-06	1.131E-05	0.001325
Upper Lim.	0.001616	0.000203	0.000873	0.000203	0.000203	0.003199
Lower Lim.	7.196E-05	8E-05	0.00016	0.000175	0.000171	0.0003887

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Lithium (mg/L)   Analysis Run 5/23/2023 4:45 PM   View: Appendix IV - Confidence Intervals
Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

	GS-AP-MW-12	GS-AP-MW-12V	GS-AP-MW-15	GS-AP-MW-15V	GS-AP-MW-16D	GS-AP-MW-17
9/24/2019			0.469		0.0362	
9/25/2019	0.028	0.0611				
3/16/2020						0.0665
3/18/2020	0.0297		0.378	0.208		
3/24/2020		0.0462			0.035	
5/12/2020						0.0602
9/21/2020				0.116		0.0579
9/22/2020					0.0343	
9/23/2020	0.0279	0.0409	0.414			
2/1/2021	0.0249	0.0384				
2/2/2021						0.0634
2/9/2021			0.493	0.122		
2/10/2021					0.0376	
8/3/2021			0.536	0.0986		0.068
8/9/2021	0.0354	0.0398			0.0326	
2/14/2022						0.0572
2/15/2022					0.033	
2/16/2022			0.263	0.0788		
2/23/2022		0.0279				
2/28/2022	0.0523					
7/19/2022	0.0631					
7/20/2022		0.0309				
8/2/2022			0.529	0.096	0.0343	
8/8/2022						0.0646
3/20/2023			0.305	0.0787		
3/21/2023					0.034	
3/22/2023	0.0468	0.0304				0.0586
Mean	0.03851	0.03945	0.4234	0.114	0.03463	0.06205
Std. Dev.	0.01393	0.01073	0.1019	0.04463	0.001639	0.004133
Upper Lim.	0.05328	0.05082	0.5314	0.1628	0.03636	0.06643
Lower Lim.	0.02374	0.02808	0.3154	0.06999	0.03289	0.05767

Confidence Interval

Constituent: Lithium (mg/L) Analysis Run 5/23/2023 4:45 PM View: Appendix IV - Confidence Intervals
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-19	GS-AP-MW-2	GS-AP-MW-21	GS-AP-MW-21V	GS-AP-MW-3	GS-AP-MW-6D
9/23/2019						0.264
9/24/2019	0.0392		0.276			
3/17/2020						0.292
3/18/2020			0.379			
3/23/2020				0.146		
3/24/2020	0.0417					
3/25/2020		0.0434				
5/13/2020		0.0409				
9/17/2020						0.299
9/22/2020	0.0435	0.0395				
9/23/2020			0.179	0.137		
2/1/2021		0.0445				
2/3/2021						0.312
2/8/2021	0.0368		0.239			
2/9/2021				0.124		
2/17/2021					0.0995	
7/27/2021						0.326
8/3/2021					0.088	
8/4/2021		0.0443	0.213			
8/10/2021	0.0305					
8/11/2021				0.048		
2/8/2022			0.0996	0.0835		
2/14/2022						0.302
2/16/2022					0.0732	
2/22/2022	0.0266	0.0354				
7/19/2022		0.033				
7/20/2022					0.07	
7/25/2022						0.348
8/3/2022	0.0416					
8/9/2022				0.0789		
8/10/2022			0.0868			
3/14/2023						0.308
3/21/2023	0.0402		0.0884	0.11	0.075	
3/22/2023		0.0359				
Mean	0.03751	0.03961	0.1951	0.1039	0.08114	0.3064
Std. Dev.	0.005963	0.004426	0.1036	0.0353	0.01234	0.02458
Upper Lim.	0.04383	0.0443	0.3049	0.1458	0.1018	0.3324
Lower Lim.	0.03119	0.03492	0.08531	0.06199	0.06046	0.2803

Confidence Interval

Constituent: Lithium (mg/L) Analysis Run 5/23/2023 4:45 PM View: Appendix IV - Confidence Intervals
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-7	GS-AP-MW-9V
9/24/2019	0.156	
3/17/2020	0.161	
3/23/2020		0.0309
9/16/2020	0.16	
9/22/2020		0.0293
2/2/2021	0.183	0.0299
8/9/2021	0.205	
8/10/2021		0.031
2/8/2022	0.203	
2/21/2022		0.0293
7/19/2022		0.029
7/25/2022	0.227	
3/14/2023	0.207	
3/27/2023		0.0298
Mean	0.1878	0.02989
Std. Dev.	0.02661	0.0007904
Upper Lim.	0.216	0.03082
Lower Lim.	0.1595	0.02895

Confidence Interval

Constituent: Molybdenum (mg/L)   Analysis Run 5/23/2023 4:45 PM   View: Appendix IV - Confidence Intervals

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

	GS-AP-MW-12	GS-AP-MW-12V	GS-AP-MW-15	GS-AP-MW-15V	GS-AP-MW-16D	GS-AP-MW-17
9/24/2019			0.0597		<0.01015	
9/25/2019	<0.01	0.00942 (J)				
3/16/2020						0.00504 (J)
3/18/2020	0.00444 (J)		0.0673	0.0327		
3/24/2020		0.00454 (J)			<0.01015	
5/12/2020						0.00436 (J)
9/21/2020				0.0538		0.00776 (J)
9/22/2020					<0.01015	
9/23/2020	0.00577 (J)	0.00463 (J)	0.0744			
2/1/2021	0.00792	0.00164				
2/2/2021						0.00538
2/9/2021			0.0644	0.0522		
2/10/2021					0.00014 (J)	
8/3/2021			0.0663	0.0311		0.00157
8/9/2021	0.00452	0.00302			0.00069	
2/14/2022						0.00252
2/15/2022					0.00032	
2/16/2022			0.0306	0.0272		
2/23/2022		0.00144				
2/28/2022	0.00903					
7/19/2022	0.0112					
7/20/2022		0.00204				
8/2/2022			0.0642	0.0295	0.000984	
8/8/2022						0.00154
3/20/2023			0.0315	0.0195		
3/21/2023					<0.01015	
3/22/2023	0.00512 (J)	<0.01015				<0.01015
Mean	0.006625	0.003976	0.0573	0.03514	0.005342	0.004156
Std. Dev.	0.002485	0.002622	0.01671	0.01292	0.005146	0.00215
Upper Lim.	0.009159	0.006755	0.07168	0.05048	0.01015	0.006435
Lower Lim.	0.004197	0.001196	0.04393	0.0198	0.00014	0.001877

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Molybdenum (mg/L) Analysis Run 5/23/2023 4:45 PM View: Appendix IV - Confidence Intervals

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-19	GS-AP-MW-2	GS-AP-MW-21	GS-AP-MW-21V	GS-AP-MW-3	GS-AP-MW-6D
9/23/2019						0.00758 (J)
9/24/2019	0.00562 (J)		0.0613			
3/17/2020						0.00959 (J)
3/18/2020			0.102			
3/23/2020				0.117		
3/24/2020	0.00605 (J)					
3/25/2020		0.00343 (J)				
5/13/2020		0.00224 (J)				
9/17/2020						0.00924 (J)
9/22/2020	0.0063 (J)	0.00308 (J)				
9/23/2020			0.0404	0.12		
2/1/2021		0.00427				
2/3/2021						0.0095
2/8/2021	0.00366		0.0396			
2/9/2021				0.0983		
2/17/2021					0.0113	
7/27/2021						0.0101
8/3/2021					0.00977	
8/4/2021		0.00168	0.0367			
8/10/2021	0.00269					
8/11/2021				0.0394		
2/8/2022			0.0153	0.0819		
2/14/2022						0.0115
2/16/2022					0.00722	
2/22/2022	0.00267	0.00327				
7/19/2022		0.00146				
7/20/2022					0.0066	
7/25/2022						0.011
8/3/2022	0.00355					
8/9/2022				0.0509		
8/10/2022			0.00802			
3/14/2023						0.0104
3/21/2023	<0.01015		0.0103	0.0361	0.00847 (J)	
3/22/2023		<0.01015				
Mean	0.004452	0.003063	0.0392	0.07766	0.008672	0.009864
Std. Dev.	0.001485	0.001245	0.03121	0.0358	0.001908	0.001203
Upper Lim.	0.006026	0.004382	0.07228	0.1202	0.01187	0.01114
Lower Lim.	0.002878	0.001744	0.006121	0.03513	0.005476	0.008589

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Molybdenum (mg/L) Analysis Run 5/23/2023 4:45 PM View: Appendix IV - Confidence Intervals

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-7	GS-AP-MW-9V
9/24/2019	0.178	
3/17/2020	0.193	
3/23/2020		<0.01015
9/16/2020	0.215	
9/22/2020		<0.01015
2/2/2021	0.202	0.000538
8/9/2021	0.207	
8/10/2021		0.00269
2/8/2022	0.221	
2/21/2022		0.0022
7/19/2022		0.00146
7/25/2022	0.214	
3/14/2023	0.215	
3/27/2023		<0.01015
Mean	0.2056	0.005334
Std. Dev.	0.01424	0.004553
Upper Lim.	0.2207	0.002871
Lower Lim.	0.1905	0.0007248

ND substitution: RL or RL/2 if <15% NDs.

GROUNDWATER STATS
CONSULTING

November 17, 2023

Southern Company Services
Attn: Mr. Greg Budd
3535 Colonnade Parkway
Birmingham, AL 35243

Re: Plant Gorgas Ash Pond
2nd Semi-Annual Statistical Analysis – September 2023 Sample Event

Dear Mr. Budd,

Groundwater Stats Consulting, formerly the statistical consulting division of Sanitas Technologies, is pleased to provide the statistical analysis of groundwater data for the 2nd Semi-Annual September 2023 sample event for Alabama Power Company's Plant Gorgas Ash Pond. The analysis complies with the federal rule for the Disposal of Coal Combustion Residuals (CCR) from Electric Utilities (CCR Rule, 2015) as well as with the United States Environmental Protection Agency Unified Guidance (2009).

Sampling began at site for the CCR program in 2016. The monitoring well network, as provided by Southern Company Services, consists of the following:

- **Upgradient wells:** GS-AP-MW-8, GS-AP-MW-13, GS-AP-MW-17V, and GS-AP-MW-18R
- **Downgradient wells:** GS-AP-MW-1R, GS-AP-MW-2, GS-AP-MW-3, GS-AP-MW-3V, GS-AP-MW-5R, GS-AP-MW-6S, GS-AP-MW-6D, GS-AP-MW-7, GSA-AP-MW-9R, GS-AP-MW-9V, GS-AP-MW-10R, GS-AP-MW-11R, GS-AP-MW-12, GS-AP-MW-12V, GS-AP-MW-13R, GS-AP-MW-14R, GS-AP-MW-15, GS-AP-MW-15V, GS-AP-MW-16D, GS-AP-MW-17, GS-AP-MW-18VR, GS-AP-MW-19, GS-AP-MW-21, GS-AP-MW-21V, GS-AP-MW-45V, GS-AP-MW-46, and GS-AP-MW-47
- **Delineation wells:** GS-AP-PZ-16, GS-AP-PZ-18R, GS-AP-PZ-22, GS-AP-MW-23H, GS-AP-MW-23V, GS-AP-MW-24H, GS-AP-MW-25HA, GS-AP-MW-26H, GS-AP-MW-27HR, GS-AP-MW-28H, GS-AP-MW-29H, GS-AP-MW-30HA, GS-AP-MW-31H, GS-AP-MW-31V, GS-AP-MW-32H, GS-AP-MW-33HO,

GS-AP-MW-34HO, GS-AP-MW-35HO, GS-AP-MW-36H, GS-AP-MW-36V, GS-AP-MW-37HR, GS-AP-MW-38H, GS-AP-MW-39H, GS-AP-MW-40HO, GS-AP-MW-41HD, GS-AP-MW-41HS, GS-AP-MW-42H, GS-AP-MW-43HO, GS-AP-MW-44HO, and GS-AP-MW-6V

  - **Piezometers:** GS-AP-MW-1, GS-AP-MW-4, GS-AP-MW-7V, GS-AP-MW-7VR, GS-AP-MW-16S, GS-AP-MW-20, GS-AP-MW-25H, GS-AP-MW-27H, GS-AP-MW-30H, and GS-AP-MW-30HS

Note that data from delineation wells were plotted on time series graphs and box plots, but do not require formal statistics. Additionally, the list of piezometers is included above for recordkeeping purposes, but data are not analyzed in this analysis.

The following downgradient and delineation wells were added to the network after 2016:

- **2019 Downgradient Wells:** GS-AP-MW-9V, GS-AP-MW-15V, and GS-AP-MW-21V
- **2021 Downgradient Wells:** GS-AP-MW-1R, GS-AP-MW-3V, GS-AP-MW-5R, GS-AP-MW-9R, GS-AP-MW-10R, GS-AP-MW-11R, GS-AP-MW-13R, GS-AP-MW-18VR, GS-AP-MW-45V, GS-AP-MW-46, and GS-AP-MW-47
- **2021 Delineation Wells:** GS-AP-PZ-18R, GS-AP-MW-23V, GS-AP-MW-27HR, GS-AP-MW-31V, GS-AP-MW-36V, and GS-AP-MW-37HR

Data from these newer wells are plotted on the time series graphs and box plots. Statistical analyses for new downgradient wells are performed for Appendix III constituents when the minimum required 8 samples are available and for Appendix IV constituents when the minimum 4 samples are available.

Upgradient well GS-AP-MW-13 was abandoned in April 2019; however, data from this well is used for constructing interwell statistical limits as historical concentrations represent the groundwater quality upgradient of the facility. Additionally, new upgradient well GS-AP-MW-18R, which was first sampled in has been sampled at least four times. Data from both of these upgradient wells are plotted on the time series graphs and box plots and are used for the purpose of constructing statistical limits.

Data were sent electronically to Groundwater Stats Consulting, and the statistical analysis was prepared according to the Statistical Analysis Plan approved by Dr. Kirk Cameron, PhD Statistician with MacStat Consulting, primary author of the USEPA Unified Guidance, and Senior Advisor to Groundwater Stats Consulting. The analysis was reviewed by Andrew Collins, Project Manager of Groundwater Stats Consulting.

The CCR program consists of the following constituents:

> **Appendix III** (Detection Monitoring) - boron, calcium, chloride, fluoride, pH, sulfate, and TDS
> **Appendix IV** (Assessment Monitoring) - antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, combined radium 226 + 228, fluoride, lead, lithium, mercury, molybdenum, selenium, and thallium

Note that when there are no detections present in downgradient wells for a given constituent, statistical analyses are not required. A list of Appendix IV downgradient well/constituent pairs containing 100% non-detects follows this letter.

Time series plots for Appendix III and IV parameters at all wells are provided for the purpose of screening data at these wells (Figure A). A substitution of the most recent reporting limit is used for non-detect data. Additionally, a separate section of box plots is included for all constituents at upgradient and downgradient wells (Figure B). The time series plots are used to initially screen for suspected outliers and trends, while the box plots provide visual representation of variation within individual wells and between all wells.

In earlier analyses, data at all wells were evaluated for the following: 1) outliers; 2) trends; 3) most appropriate statistical method for Appendix III parameters based on analysis of the spatial variability of groundwater quality data among wells upgradient of the facility; and 4) eligibility of downgradient wells when intrawell statistical methods are recommended. Power curves are provided in this report to demonstrate that the selected statistical methods for Appendix III parameters comply with the USEPA Unified Guidance. The EPA suggests that the selected statistical method should provide at least 55% power at 3 standard deviations or at least 80% power at 4 standard deviations. Power curves are based on the following statistical methods and site/data characteristics:

- Semi-Annual Sampling
- Interwell Prediction Limits with 1-of-2 resample plan
- # Background Samples: 47
- # Constituents: 7
- # Downgradient wells: 14

Summary of Statistical Methods – Appendix III Parameters

Based on the earlier evaluation described above, the following statistical methods were selected:

- Interwell prediction limits, combined with a 1-of-2 resample plan for boron, calcium, chloride, fluoride, pH, sulfate, and TDS

Parametric prediction limits are utilized when the screened historical data follow a normal or transformed-normal distribution. When data cannot be normalized or the majority of data are non-detects, a nonparametric test is utilized. While the annual false positive rate associated with parametric limits is fixed at 10% as recommended by the EPA Unified Guidance (2009), the false positive rate associated with nonparametric limits is not fixed and depends upon the available background sample size, number of future comparisons, and verification resample plan. The distribution of data is tested using the Shapiro-Wilk/Shapiro-Francia test for normality. After testing for normality and performing any adjustments as discussed below (US EPA, 2009), data are analyzed using either parametric or non-parametric prediction limits as appropriate.

- No statistical analyses are required on wells and analytes containing 100% non-detects (USEPA Unified Guidance, 2009, Chapter 6).
- When data contain <15% non-detects, simple substitution of one-half the reporting limit is utilized in the statistical analysis. The reporting limit utilized for non-detects is the most recent practical quantification limit (PQL) as reported by the laboratory.
- When data contain between 15-50% non-detects, the Kaplan-Meier non-detect adjustment is applied to the background data for parametric limits. This technique adjusts the mean and standard deviation of the historical concentrations to account for concentrations below the reporting limit.
- Nonparametric prediction limits are used on data containing greater than 50% non-detects.

Natural systems continuously evolve due to physical changes made to the environment. Examples include capping a landfill, paving areas near a well, or lining a drainage channel to prevent erosion. Periodic updating of background statistical limits is necessary to accommodate these types of changes. In the interwell case, prediction limits are updated with upgradient well data following each sampling event after screening for any new outliers. While not required for this report, in some cases, deselecting the earlier portion of data may be necessary prior to construction of limits so that resulting statistical limits are conservative (lower) from a regulatory perspective and capable of rapidly detecting changes in groundwater quality. Even though the data are excluded from the calculation, the values will continue to be reported and shown in tables and graphs.

Background Update Summary – Conducted in September 2023

Interwell prediction limits, which compare the most recent sample from each downgradient well to statistical limits constructed from pooled upgradient well data, are updated during each sample event. Data from upgradient wells are periodically re-screened for newly developing trends, which may require adjustment of the background period to eliminate the trend, as well as for outliers over the entire record. The formal screening, which was conducted during this analysis, is described below. As discussed in the Statistical Analysis Plan (August 2020), interwell prediction limits are used to evaluate boron, calcium, chloride, fluoride, sulfate, pH, and TDS.

Outlier Analysis

Prior to performing prediction limits, proposed background data through September 2023 were reviewed to identify any newly suspected outliers at upgradient wells for boron, calcium, chloride, fluoride, pH, sulfate, and TDS. Both Tukey's Test and visual screening are used to identify potential outliers. Tukey's outlier test did not identify any potential outliers among upgradient wells for Appendix III parameters; therefore, no values were flagged as outliers (Figure C).

During this analysis, a previously flagged value for boron at downgradient well GS-AP-MW-21 was unflagged since remaining concentrations within this well were of similar value and was no longer deemed spurious. Since this value is from a downgradient well, it does not have any impact on generating interwell statistical limits.

When present, outliers are flagged with "o" and excluded to reduce variation, better represent background conditions, and provide limits that are conservative from a regulatory perspective. As mentioned above, flagged data are displayed in a lighter font and as a disconnected symbol on the time series reports, as well as in a lighter font on the accompanying data pages. A summary of Tukey's test results follows this letter (Figure C).

Trend Test Evaluation

The Sen's Slope/Mann Kendall trend test was used to evaluate the entire record of data from upgradient wells for all parameters which utilize interwell prediction limits to see if concentrations are increasing, decreasing, or stable at the 99% confidence level (Figure D). Note that upgradient well GS-AP-MW-18R was not included in any trend test evaluations because this well has been sampled a maximum of 4 times and a minimum of 6 samples are required for Sen's Slope/Mann Kendall trend test to achieve meaningful results. When statistically significant increasing trends are identified in upgradient wells, the earlier portion of data is deselected prior to construction of interwell statistical limits if the trending data would result in statistical limits that are not conservative from a regulatory perspective. Statistically significant trends were noted for the following well/constituent pairs:

Increasing:
- Chloride: GS-AP-MW-8
- Fluoride: GS-AM-MW-13

Decreasing:
- None

No adjustments were required, however, because the magnitudes of the trends were low relative to the average concentrations in background. A summary of the results follows this letter.

Evaluation of Appendix III Parameters – September 2023

Background (upgradient) well data were re-assessed for potential outliers through visual screening and Tukey's outlier test during this analysis and no values were identified; therefore, no additional values were flagged. Values in background which have been flagged as outliers may be seen in a lighter font and as a disconnected symbol on the graphs. A summary of previously flagged outliers follows this report (Figure C).

Interwell Prediction Limits

Interwell prediction limits combined with a 1-of-2 verification strategy were constructed for boron, calcium, chloride, fluoride, sulfate, pH, and TDS (Figure E). Interwell prediction limits pool upgradient well data through September 2023 to establish a background limit for an individual constituent. The September 2023 sample from each downgradient well is compared to the background limits to determine whether initial exceedances are present.

In the event of an initial exceedance of compliance well data, the 1-of-2 resample plan allows for collection of one additional sample to determine whether the initial exceedance is confirmed. When the resample confirms the initial exceedance, a statistically significant increase (SSI) is identified, and further research is required to identify the cause of the exceedance (i.e., impact from the site, natural variation, or an off-site source). If a resample falls within the statistical limit, the initial exceedance is considered to be a false positive result; therefore, no further action is necessary. A summary of the prediction limit results may be found in the Prediction Limit Summary tables following this letter. Exceedances for interwell prediction limits were identified for several well/constituent pairs:

- Boron: GS-AP-MW-6D, GS-AP-MW-6S, GS-AP-MW-7, GS-AP-MW-21, and GS-AP-MW-21
- Calcium: GS-AP-MW-6D, GS-AP-MW-6S, GS-AP-MW-9V and GS-AP-MW-19
- Chloride: GS-AP-MW-2, GS-AP-MW-6D, GS-AP-MW-6S, GS-AP-MW-7, GS-AP-MW-9V, GS-AP-MW-12V, GS-AP-MW-15, GS-AP-MW-15V, GS-AP-MW-17, GS-AP-MW-19, GS-AP-MW-21, and GS-AP-MW-21V
- Fluoride: GS-AP-MW-2, GS-AP-MW-15, and GS-AP-MW-21V
- pH: GS-AP-MW-2, GS-AP-MW-12, GS-AP-MW-12V, GS-AP-MW-15, GS-AP-MW-17, and GS-AP-MW-21
- Sulfate: GS-AP-MW-6D, GS-AP-MW-6S, GS-AP-MW-7, GS-AP-MW-9V, GS-AP-MW-15V, GS-AP-MW-21, and GS-AP-MW-21V
- TDS: GS-AP-MW-2, GS-AP-MW-9V, GS-AP-MW-15, GS-AP-MW-15V, GS-AP-MW-17, GS-AP-MW-21, and GS-AP-MW-21V

Trend Test Evaluation

When prediction limit exceedances are identified in downgradient wells, data are further evaluated using the Sen’s Slope/Mann Kendall trend test to determine whether concentrations are statistically increasing, decreasing, or stable at the 99% confidence level (Figure E). Upgradient wells are included in the trend analyses for all parameters found to exceed their prediction limit in downgradient wells to identify whether similar patterns exist upgradient of the site. The existence of similar trends in both upgradient and downgradient wells is an indication of natural variability in groundwater that is unrelated to practices at the site. As mentioned above, upgradient well GS-AP-MW-18R was not included with any trend test evaluations. A summary of the trend test results follows this letter. Statistically significant trends were identified for the following well/constituent pairs:

Increasing:

- Boron: GS-AP-MW-6D and GS-AP-MW-7
- Calcium: GS-AP-MW-6D, GS-AP-MW-9V, and GS-AP-MW-19
- Chloride: GS-AP-MW-6D, GS-AP-MW-7, GS-AP-MW-8 (upgradient), GS-AP-MW-9V, and GS-AP-MW-21
- Fluoride: GS-AP-MW-13 (upgradient)
- pH: GS-AP-MW-12 and GS-AP-MW-15
- Sulfate: GS-AP-MW-9V and GS-AP-MW-21
- TDS: GS-AP-MW-21

Decreasing:

- Chloride: GS-AP-MW-19
- Fluoride: GS-AP-MW-2
- Sulfate: GS-AP-MW-6S and GS-AP-MW-15V
- TDS: GS-AP-MW-2

As mentioned above, upgradient well GS-AP-MW-13 has been abandoned since 2019 but is included as a reference for historic upgradient concentrations.

Evaluation of Appendix IV Parameters – September 2023

Prior to evaluating Appendix IV parameters, upgradient well data were screened through visual screening and Tukey's outlier test for potential outliers and extreme trending patterns that would lead to artificially elevated statistical limits. A discussion of those findings is provided below.

Tukey's outlier test on pooled upgradient well data for Appendix IV parameters through September 2023 identified values for combined radium 226 + 228. The highest value for combined radium 226 + 228 at upgradient well GS-AP-MW-17V was flagged in order to construct statistical limits that are conservative from a regulatory perspective. All remaining measurements were similar to concentrations within each respective well and were not flagged as outliers.

Additionally, downgradient well data through September 2023 were screened through visual screening using time series graphs. Since the downgradient well data are used to construct confidence intervals, a regulatory conservative approach is taken in that values that are marginally high relative to the rest of the data are retained unless there is particular justification for excluding them. No outliers were flagged among downgradient wells for Appendix IV parameters. A summary of flagged outliers follows this report (Figure C).

Interwell Upper Tolerance Limits

Background limits were determined using upper tolerance limits (UTLs) constructed from pooled upgradient well data through September 2023. The tolerance limits contain a known fraction (coverage) of the background population with a known level of confidence. The tolerance limits contain a known fraction (coverage) of the background population with a known level of confidence. As requested by ADEM to eliminate variation among screened upgradient well data, nonparametric tolerance limits, which use the highest value in background as the statistical limit, were constructed (Figure G). A summary of the upper tolerance limits follows this letter. The confidence and coverage levels for nonparametric tolerance limits are dependent upon the number of background samples.

Groundwater Protection Standards

These background limits were then compared to the Maximum Contaminant Levels (MCLs) for each parameter, and the higher of the two was used as the GWPS (Figure H) in the confidence interval comparisons described below.

In accordance with Alabama Department of Environmental Management (ADEM), the Groundwater Protections Standards (GWPS) were updated during this 2023 2nd semi-annual statistical analysis. The GWPS will be updated again during the 2025 2nd semi-annual statistical analysis. The methodology used to create these GWPS is described below.

Confidence Intervals

Confidence intervals were then constructed on downgradient wells using a maximum of the most recent 8 samples through September 2023 for each of the Appendix IV parameters. Confidence intervals were included for newer wells with a minimum of 4 samples (Figure I). These intervals were either parametric or nonparametric confidence intervals depending on the data distribution and percentage of non-detects. When data followed a normal or transformed-normal distribution, parametric confidence intervals were used for Appendix IV parameters. Nonparametric confidence intervals, which use the highest and lowest values as interval limits when n=8, were constructed when data did not follow a normal or transformed-normal distribution or when there were greater than 50% non-detects. The lower confidence limit, which is constructed with 99% confidence for parametric confidence intervals, is compared to the GWPS prepared as described above. The confidence level associated with nonparametric confidence intervals is dependent upon the number samples available.

Note that due to smaller sample sizes (n<8), the lower confidence limit resulted in a negative number for several constituents among newer downgradient wells when constructed with parametric confidence intervals. Therefore, a non-parametric confidence interval, which is bound by reported high and low measurements within a given well, was constructed for this particular case and follows the confidence intervals constructed for all other downgradient wells (Figure I). This is a more conservative approach in that the lower confidence limit reflects the lowest reported measurement in the data set rather than a negative number.

As mentioned above, well/constituent pairs containing 100% non-detects for the most recent 8 samples did not require statistics; therefore, they were deselected prior to construction of confidence intervals. A list of those deselected well/constituent pairs follows this report. Each confidence interval was compared with the corresponding GWPS. Only when the entire confidence interval is above the GWPS is the well/constituent pair considered to exceed its respective standard. Both a tabular summary and graphical presentation of the confidence interval results follow this letter. Exceedances were noted for the following well/constituent pairs:

- Arsenic: GS-AP-MW-6D, GS-AP-MW-7, GS-AP-MW-13R, and GS-AP-MW-46
- Lithium: GS-AP-MW-6D, GS-AP-MW-7 and GS-AP-MW-15
- Molybdenum: GS-AP-MW-7

Trend Test Evaluation – Appendix IV

When confidence interval exceedances are identified in downgradient wells, data are further evaluated using the Sen's Slope/Mann Kendall trend test to determine whether concentrations are statistically increasing, decreasing, or stable at the 95% confidence level (Figure J). Utilizing the 95% confidence level for trend tests readily identifies significant trends and is more sensitive than the 99% confidence level without drastically increasing the false negative rate. Upgradient wells are included in the trend analyses for all parameters found to exceed their prediction limit in downgradient wells. When similar patterns exist upgradient of the site, it is an indication of variability in groundwater which may be unrelated to practices at the site. As mentioned above, upgradient well GS-AP-MW-18R was not included with any trend test evaluations Statistically significant trends were identified for the following well/constituent pairs:

Increasing:

- Arsenic: GS-AP-MW-6D and GS-AP-MW-7
- Lithium: GS-AP-MW-6D, GS-AP-MW-7, and GS-AP-MW-15 and GN-AP-MW-20
- Molybdenum: GS-AP-MW-7

Decreasing:

- Lithium: GS-AP-MW-8 and GS-AP-MW-17V (both upgradient)

Note that the statistically significant decreasing trend for lithium in upgradient well GS-AP-MW-8 indicates a zero slope which represents only the median slope of all possible pairwise slopes within this record. A summary of the trend test results follows this letter.

Thank you for the opportunity to assist you in the statistical analysis of groundwater quality for Gorgas Ash Pond. If you have any questions or comments, please feel free to contact us.

For Groundwater Stats Consulting,

Abdul Diane

Abdul Diane
Groundwater Analyst

A Collins

Andrew T. Collins
Project Manager

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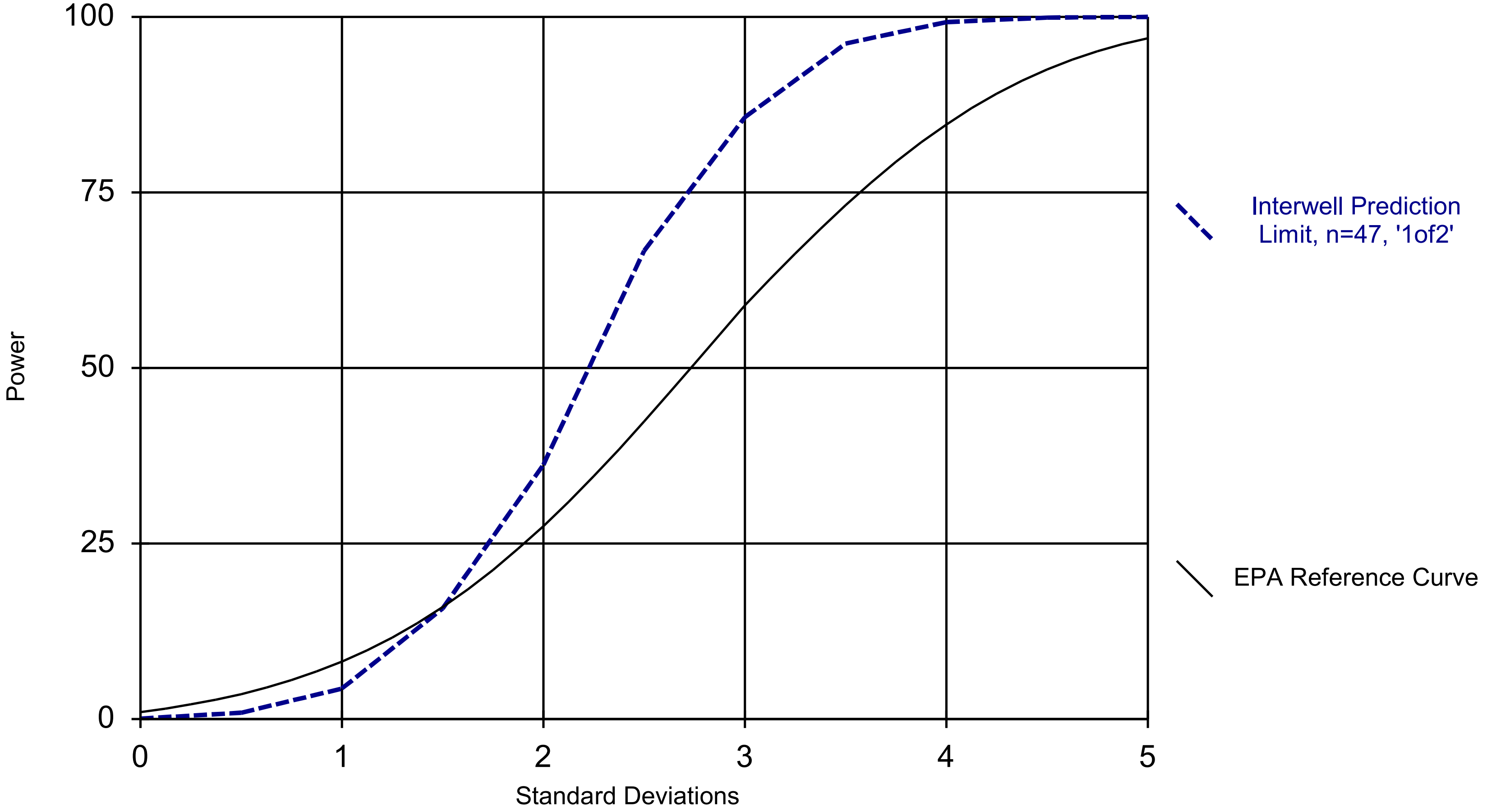
Interwell Power Curve



Kappa = 2.13, based on 14 compliance wells and 7 constituents, evaluated semi-annually (this report reflects annual total).

Analysis Run 11/16/2023 3:50 PM View: Appendix III

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

100% Non-Detects: Appendix IV Downgradient

Analysis Run 11/16/2023 5:26 PM View: Appendix IV

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Antimony (mg/L)

GS-AP-MW-16D, GS-AP-MW-17, GS-AP-MW-19, GS-AP-MW-2, GS-AP-MW-21, GS-AP-MW-3, GS-AP-MW-6D, GS-AP-MW-7, GS-AP-MW-9V, GS-AP-MW-10R, GS-AP-MW-11R, GS-AP-MW-13R, GS-AP-MW-14R, GS-AP-MW-18VR, GS-AP-MW-1R, GS-AP-MW-3V, GS-AP-MW-45V, GS-AP-MW-47, GS-AP-MW-5R, GS-AP-MW-9R

Beryllium (mg/L)

GS-AP-MW-12, GS-AP-MW-12V, GS-AP-MW-15, GS-AP-MW-15V, GS-AP-MW-16D, GS-AP-MW-17, GS-AP-MW-19, GS-AP-MW-2, GS-AP-MW-21, GS-AP-MW-21V, GS-AP-MW-3, GS-AP-MW-6D, GS-AP-MW-6S, GS-AP-MW-7, GS-AP-MW-9V, GS-AP-MW-10R, GS-AP-MW-11R, GS-AP-MW-13R, GS-AP-MW-14R, GS-AP-MW-18VR, GS-AP-MW-1R, GS-AP-MW-3V, GS-AP-MW-45V, GS-AP-MW-47, GS-AP-MW-5R, GS-AP-MW-9R, GS-AP-MW-46

Cadmium (mg/L)

GS-AP-MW-12, GS-AP-MW-12V, GS-AP-MW-15, GS-AP-MW-15V, GS-AP-MW-16D, GS-AP-MW-17, GS-AP-MW-19, GS-AP-MW-2, GS-AP-MW-21, GS-AP-MW-21V, GS-AP-MW-3, GS-AP-MW-6D, GS-AP-MW-6S, GS-AP-MW-7, GS-AP-MW-9V, GS-AP-MW-10R, GS-AP-MW-11R, GS-AP-MW-13R, GS-AP-MW-14R, GS-AP-MW-1R, GS-AP-MW-3V, GS-AP-MW-45V, GS-AP-MW-47, GS-AP-MW-5R, GS-AP-MW-9R, GS-AP-MW-46

Cobalt (mg/L)

GS-AP-MW-12, GS-AP-MW-15V, GS-AP-MW-19, GS-AP-MW-2, GS-AP-MW-21, GS-AP-MW-21V, GS-AP-MW-3, GS-AP-MW-6D, GS-AP-MW-9V, GS-AP-MW-13R, GS-AP-MW-5R, GS-AP-MW-46

Lead (mg/L)

GS-AP-MW-12, GS-AP-MW-15V, GS-AP-MW-19, GS-AP-MW-2, GS-AP-MW-21, GS-AP-MW-21V, GS-AP-MW-9V, GS-AP-MW-47, GS-AP-MW-5R, GS-AP-MW-9R, GS-AP-MW-46

Mercury (mg/L)

GS-AP-MW-12, GS-AP-MW-12V, GS-AP-MW-15, GS-AP-MW-15V, GS-AP-MW-16D, GS-AP-MW-17, GS-AP-MW-19, GS-AP-MW-2, GS-AP-MW-21, GS-AP-MW-21V, GS-AP-MW-3, GS-AP-MW-6D, GS-AP-MW-6S, GS-AP-MW-7, GS-AP-MW-9V, GS-AP-MW-10R, GS-AP-MW-11R, GS-AP-MW-13R, GS-AP-MW-14R, GS-AP-MW-18VR, GS-AP-MW-1R, GS-AP-MW-3V, GS-AP-MW-45V, GS-AP-MW-47, GS-AP-MW-5R, GS-AP-MW-9R, GS-AP-MW-46

Selenium (mg/L)

GS-AP-MW-12, GS-AP-MW-12V, GS-AP-MW-15, GS-AP-MW-15V, GS-AP-MW-16D, GS-AP-MW-17, GS-AP-MW-19, GS-AP-MW-2, GS-AP-MW-21, GS-AP-MW-21V, GS-AP-MW-3, GS-AP-MW-6D, GS-AP-MW-7, GS-AP-MW-9V, GS-AP-MW-10R, GS-AP-MW-11R, GS-AP-MW-13R, GS-AP-MW-14R, GS-AP-MW-18VR, GS-AP-MW-1R, GS-AP-MW-3V, GS-AP-MW-45V, GS-AP-MW-47, GS-AP-MW-5R, GS-AP-MW-9R, GS-AP-MW-46

Thallium (mg/L)

GS-AP-MW-12, GS-AP-MW-12V, GS-AP-MW-15, GS-AP-MW-15V, GS-AP-MW-16D, GS-AP-MW-17, GS-AP-MW-19, GS-AP-MW-2, GS-AP-MW-21, GS-AP-MW-21V, GS-AP-MW-3, GS-AP-MW-6D, GS-AP-MW-6S, GS-AP-MW-7, GS-AP-MW-9V, GS-AP-MW-10R, GS-AP-MW-11R, GS-AP-MW-13R, GS-AP-MW-14R, GS-AP-MW-1R, GS-AP-MW-3V, GS-AP-MW-45V, GS-AP-MW-47, GS-AP-MW-5R, GS-AP-MW-9R, GS-AP-MW-46

Upgradient Wells Trend Tests - Significant Results

Plant Gorgas   Data: Gorgas Ash Pond   Printed 11/6/2023, 7:13 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Chloride (mg/L)	**GS-AP-MW-8 (bg)**	**0.1651**	**99**	**87**	**Yes**	**21**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Fluoride (mg/L)	**GS-AP-MW-13 (bg)**	**0.02914**	**48**	**43**	**Yes**	**13**	**0**	**n/a**	**n/a**	**0.01**	**NP**

Upgradient Wells Trend Tests - All Results

Plant Gorgas Data: Gorgas Ash Pond Printed 11/6/2023, 7:13 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	GS-AP-MW-13 (bg)	0	0	38	No	12	100	n/a	n/a	0.01	NP
Boron (mg/L)	GS-AP-MW-17V (bg)	-0.002694	-11	-30	No	10	0	n/a	n/a	0.01	NP
Boron (mg/L)	GS-AP-MW-8 (bg)	0	20	87	No	21	95.24	n/a	n/a	0.01	NP
Calcium (mg/L)	GS-AP-MW-13 (bg)	-2.607	-32	-38	No	12	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GS-AP-MW-17V (bg)	0.1203	4	30	No	10	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GS-AP-MW-8 (bg)	-0.2946	-47	-87	No	21	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GS-AP-MW-13 (bg)	0.1178	10	38	No	12	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GS-AP-MW-17V (bg)	-0.2384	-29	-30	No	10	0	n/a	n/a	0.01	NP
Chloride (mg/L)	**GS-AP-MW-8 (bg)**	**0.1651**	**99**	**87**	**Yes**	**21**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Fluoride (mg/L)	**GS-AP-MW-13 (bg)**	**0.02914**	**48**	**43**	**Yes**	**13**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Fluoride (mg/L)	GS-AP-MW-17V (bg)	0.00066	3	30	No	10	0	n/a	n/a	0.01	NP
Fluoride (mg/L)	GS-AP-MW-8 (bg)	0.002865	46	92	No	22	0	n/a	n/a	0.01	NP
pH (SU)	GS-AP-MW-13 (bg)	-0.05825	-34	-43	No	13	0	n/a	n/a	0.01	NP
pH (SU)	GS-AP-MW-17V (bg)	-0.02446	-15	-30	No	10	0	n/a	n/a	0.01	NP
pH (SU)	GS-AP-MW-8 (bg)	-0.0333	-82	-92	No	22	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GS-AP-MW-13 (bg)	0.01849	11	38	No	12	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GS-AP-MW-17V (bg)	-0.7	-15	-30	No	10	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GS-AP-MW-8 (bg)	0.2514	63	87	No	21	0	n/a	n/a	0.01	NP
TDS (mg/L)	GS-AP-MW-13 (bg)	-7.182	-29	-38	No	12	0	n/a	n/a	0.01	NP
TDS (mg/L)	GS-AP-MW-17V (bg)	-5.63	-17	-30	No	10	0	n/a	n/a	0.01	NP
TDS (mg/L)	GS-AP-MW-8 (bg)	-1.421	-39	-87	No	21	0	n/a	n/a	0.01	NP

Appendix III - Interwell Prediction Limits - Significant Results

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond Printed 11/16/2023, 2:00 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	**GS-AP-MW-21**	**0.1015**	**n/a**	**9/5/2023**	**0.14**	**Yes**	**47**	**n/a**	**n/a**	**76.6**	**n/a**	**n/a**	**0.000831**	**NP Inter (NDs) 1 of 2**
Boron (mg/L)	**GS-AP-MW-21V**	**0.1015**	**n/a**	**9/5/2023**	**0.103**	**Yes**	**47**	**n/a**	**n/a**	**76.6**	**n/a**	**n/a**	**0.000831**	**NP Inter (NDs) 1 of 2**
Boron (mg/L)	**GS-AP-MW-6D**	**0.1015**	**n/a**	**9/5/2023**	**1.36**	**Yes**	**47**	**n/a**	**n/a**	**76.6**	**n/a**	**n/a**	**0.000831**	**NP Inter (NDs) 1 of 2**
Boron (mg/L)	**GS-AP-MW-6S**	**0.1015**	**n/a**	**9/5/2023**	**1.16**	**Yes**	**47**	**n/a**	**n/a**	**76.6**	**n/a**	**n/a**	**0.000831**	**NP Inter (NDs) 1 of 2**
Boron (mg/L)	**GS-AP-MW-7**	**0.1015**	**n/a**	**9/11/2023**	**1.71**	**Yes**	**47**	**n/a**	**n/a**	**76.6**	**n/a**	**n/a**	**0.000831**	**NP Inter (NDs) 1 of 2**
Calcium (mg/L)	**GS-AP-MW-19**	**48.1**	**n/a**	**9/19/2023**	**53.5**	**Yes**	**47**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.000831**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**GS-AP-MW-6D**	**48.1**	**n/a**	**9/5/2023**	**53.9**	**Yes**	**47**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.000831**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**GS-AP-MW-6S**	**48.1**	**n/a**	**9/5/2023**	**55.7**	**Yes**	**47**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.000831**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**GS-AP-MW-9V**	**48.1**	**n/a**	**9/13/2023**	**56**	**Yes**	**47**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.000831**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	**GS-AP-MW-12V**	**4.38**	**n/a**	**9/13/2023**	**4.38**	**Yes**	**47**	**3.389**	**0.4653**	**0**	**None**	**No**	**0.0005374**	**Param Inter 1 of 2**
Chloride (mg/L)	**GS-AP-MW-15**	**4.38**	**n/a**	**9/11/2023**	**5.04**	**Yes**	**47**	**3.389**	**0.4653**	**0**	**None**	**No**	**0.0005374**	**Param Inter 1 of 2**
Chloride (mg/L)	**GS-AP-MW-15V**	**4.38**	**n/a**	**9/11/2023**	**83.9**	**Yes**	**47**	**3.389**	**0.4653**	**0**	**None**	**No**	**0.0005374**	**Param Inter 1 of 2**
Chloride (mg/L)	**GS-AP-MW-17**	**4.38**	**n/a**	**9/11/2023**	**7.59**	**Yes**	**47**	**3.389**	**0.4653**	**0**	**None**	**No**	**0.0005374**	**Param Inter 1 of 2**
Chloride (mg/L)	**GS-AP-MW-19**	**4.38**	**n/a**	**9/19/2023**	**4.82**	**Yes**	**47**	**3.389**	**0.4653**	**0**	**None**	**No**	**0.0005374**	**Param Inter 1 of 2**
Chloride (mg/L)	**GS-AP-MW-2**	**4.38**	**n/a**	**9/18/2023**	**6.28**	**Yes**	**47**	**3.389**	**0.4653**	**0**	**None**	**No**	**0.0005374**	**Param Inter 1 of 2**
Chloride (mg/L)	**GS-AP-MW-21**	**4.38**	**n/a**	**9/5/2023**	**36.6**	**Yes**	**47**	**3.389**	**0.4653**	**0**	**None**	**No**	**0.0005374**	**Param Inter 1 of 2**
Chloride (mg/L)	**GS-AP-MW-21V**	**4.38**	**n/a**	**9/5/2023**	**380**	**Yes**	**47**	**3.389**	**0.4653**	**0**	**None**	**No**	**0.0005374**	**Param Inter 1 of 2**
Chloride (mg/L)	**GS-AP-MW-6D**	**4.38**	**n/a**	**9/5/2023**	**9.14**	**Yes**	**47**	**3.389**	**0.4653**	**0**	**None**	**No**	**0.0005374**	**Param Inter 1 of 2**
Chloride (mg/L)	**GS-AP-MW-6S**	**4.38**	**n/a**	**9/5/2023**	**19.2**	**Yes**	**47**	**3.389**	**0.4653**	**0**	**None**	**No**	**0.0005374**	**Param Inter 1 of 2**
Chloride (mg/L)	**GS-AP-MW-7**	**4.38**	**n/a**	**9/11/2023**	**8.17**	**Yes**	**47**	**3.389**	**0.4653**	**0**	**None**	**No**	**0.0005374**	**Param Inter 1 of 2**
Chloride (mg/L)	**GS-AP-MW-9V**	**4.38**	**n/a**	**9/13/2023**	**45.8**	**Yes**	**47**	**3.389**	**0.4653**	**0**	**None**	**No**	**0.0005374**	**Param Inter 1 of 2**
Fluoride (mg/L)	**GS-AP-MW-15**	**0.3057**	**n/a**	**9/11/2023**	**0.425**	**Yes**	**49**	**0.3655**	**0.08825**	**0**	**None**	**sqrt(x)**	**0.0005374**	**Param Inter 1 of 2**
Fluoride (mg/L)	**GS-AP-MW-2**	**0.3057**	**n/a**	**9/18/2023**	**0.822**	**Yes**	**49**	**0.3655**	**0.08825**	**0**	**None**	**sqrt(x)**	**0.0005374**	**Param Inter 1 of 2**
Fluoride (mg/L)	**GS-AP-MW-21V**	**0.3057**	**n/a**	**9/5/2023**	**0.391**	**Yes**	**49**	**0.3655**	**0.08825**	**0**	**None**	**sqrt(x)**	**0.0005374**	**Param Inter 1 of 2**
pH (SU)	**GS-AP-MW-12**	**7.76**	**5.02**	**9/13/2023**	**8.96**	**Yes**	**49**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.001516**	**NP Inter (normality) 1 of 2**
pH (SU)	**GS-AP-MW-12V**	**7.76**	**5.02**	**9/13/2023**	**8.95**	**Yes**	**49**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.001516**	**NP Inter (normality) 1 of 2**
pH (SU)	**GS-AP-MW-15**	**7.76**	**5.02**	**9/11/2023**	**11.61**	**Yes**	**49**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.001516**	**NP Inter (normality) 1 of 2**
pH (SU)	**GS-AP-MW-17**	**7.76**	**5.02**	**9/11/2023**	**8.19**	**Yes**	**49**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.001516**	**NP Inter (normality) 1 of 2**
pH (SU)	**GS-AP-MW-2**	**7.76**	**5.02**	**9/18/2023**	**9**	**Yes**	**49**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.001516**	**NP Inter (normality) 1 of 2**
pH (SU)	**GS-AP-MW-21**	**7.76**	**5.02**	**9/5/2023**	**9.81**	**Yes**	**49**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.001516**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**GS-AP-MW-15V**	**27**	**n/a**	**9/11/2023**	**140**	**Yes**	**47**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.000831**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**GS-AP-MW-21**	**27**	**n/a**	**9/5/2023**	**214**	**Yes**	**47**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.000831**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**GS-AP-MW-21V**	**27**	**n/a**	**9/5/2023**	**430**	**Yes**	**47**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.000831**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**GS-AP-MW-6D**	**27**	**n/a**	**9/5/2023**	**58.7**	**Yes**	**47**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.000831**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**GS-AP-MW-6S**	**27**	**n/a**	**9/5/2023**	**107**	**Yes**	**47**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.000831**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**GS-AP-MW-7**	**27**	**n/a**	**9/11/2023**	**124**	**Yes**	**47**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.000831**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**GS-AP-MW-9V**	**27**	**n/a**	**9/13/2023**	**85.2**	**Yes**	**47**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.000831**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	**GS-AP-MW-15**	**368**	**n/a**	**9/11/2023**	**565**	**Yes**	**47**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.000831**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	**GS-AP-MW-15V**	**368**	**n/a**	**9/11/2023**	**615**	**Yes**	**47**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.000831**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	**GS-AP-MW-17**	**368**	**n/a**	**9/11/2023**	**480**	**Yes**	**47**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.000831**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	**GS-AP-MW-2**	**368**	**n/a**	**9/18/2023**	**405**	**Yes**	**47**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.000831**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	**GS-AP-MW-21**	**368**	**n/a**	**9/5/2023**	**572**	**Yes**	**47**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.000831**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	**GS-AP-MW-21V**	**368**	**n/a**	**9/5/2023**	**1550**	**Yes**	**47**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.000831**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	**GS-AP-MW-9V**	**368**	**n/a**	**9/13/2023**	**395**	**Yes**	**47**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.000831**	**NP Inter (normality) 1 of 2**

Appendix III - Interwell Prediction Limits - All Results

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond Printed 11/16/2023, 2:00 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	GS-AP-MW-12	0.1015	n/a	9/13/2023	0.1015ND	No	47	n/a	n/a	76.6	n/a	n/a	0.000831	NP Inter (NDs) 1 of 2
Boron (mg/L)	GS-AP-MW-12V	0.1015	n/a	9/13/2023	0.1015ND	No	47	n/a	n/a	76.6	n/a	n/a	0.000831	NP Inter (NDs) 1 of 2
Boron (mg/L)	GS-AP-MW-15	0.1015	n/a	9/11/2023	0.0337J	No	47	n/a	n/a	76.6	n/a	n/a	0.000831	NP Inter (NDs) 1 of 2
Boron (mg/L)	GS-AP-MW-15V	0.1015	n/a	9/11/2023	0.0573J	No	47	n/a	n/a	76.6	n/a	n/a	0.000831	NP Inter (NDs) 1 of 2
Boron (mg/L)	GS-AP-MW-16D	0.1015	n/a	9/12/2023	0.1015ND	No	47	n/a	n/a	76.6	n/a	n/a	0.000831	NP Inter (NDs) 1 of 2
Boron (mg/L)	GS-AP-MW-17	0.1015	n/a	9/11/2023	0.0835J	No	47	n/a	n/a	76.6	n/a	n/a	0.000831	NP Inter (NDs) 1 of 2
Boron (mg/L)	GS-AP-MW-19	0.1015	n/a	9/19/2023	0.0314J	No	47	n/a	n/a	76.6	n/a	n/a	0.000831	NP Inter (NDs) 1 of 2
Boron (mg/L)	GS-AP-MW-2	0.1015	n/a	9/18/2023	0.0952J	No	47	n/a	n/a	76.6	n/a	n/a	0.000831	NP Inter (NDs) 1 of 2
Boron (mg/L)	**GS-AP-MW-21**	**0.1015**	**n/a**	**9/5/2023**	**0.14**	**Yes**	**47**	**n/a**	**n/a**	**76.6**	**n/a**	**n/a**	**0.000831**	**NP Inter (NDs) 1 of 2**
Boron (mg/L)	**GS-AP-MW-21V**	**0.1015**	**n/a**	**9/5/2023**	**0.103**	**Yes**	**47**	**n/a**	**n/a**	**76.6**	**n/a**	**n/a**	**0.000831**	**NP Inter (NDs) 1 of 2**
Boron (mg/L)	**GS-AP-MW-6D**	**0.1015**	**n/a**	**9/5/2023**	**1.36**	**Yes**	**47**	**n/a**	**n/a**	**76.6**	**n/a**	**n/a**	**0.000831**	**NP Inter (NDs) 1 of 2**
Boron (mg/L)	**GS-AP-MW-6S**	**0.1015**	**n/a**	**9/5/2023**	**1.16**	**Yes**	**47**	**n/a**	**n/a**	**76.6**	**n/a**	**n/a**	**0.000831**	**NP Inter (NDs) 1 of 2**
Boron (mg/L)	**GS-AP-MW-7**	**0.1015**	**n/a**	**9/11/2023**	**1.71**	**Yes**	**47**	**n/a**	**n/a**	**76.6**	**n/a**	**n/a**	**0.000831**	**NP Inter (NDs) 1 of 2**
Boron (mg/L)	GS-AP-MW-9V	0.1015	n/a	9/13/2023	0.0414J	No	47	n/a	n/a	76.6	n/a	n/a	0.000831	NP Inter (NDs) 1 of 2
Calcium (mg/L)	GS-AP-MW-12	48.1	n/a	9/13/2023	41.8	No	47	n/a	n/a	0	n/a	n/a	0.000831	NP Inter (normality) 1 of 2
Calcium (mg/L)	GS-AP-MW-12V	48.1	n/a	9/13/2023	39.2	No	47	n/a	n/a	0	n/a	n/a	0.000831	NP Inter (normality) 1 of 2
Calcium (mg/L)	GS-AP-MW-15	48.1	n/a	9/11/2023	5.21	No	47	n/a	n/a	0	n/a	n/a	0.000831	NP Inter (normality) 1 of 2
Calcium (mg/L)	GS-AP-MW-15V	48.1	n/a	9/11/2023	20.3	No	47	n/a	n/a	0	n/a	n/a	0.000831	NP Inter (normality) 1 of 2
Calcium (mg/L)	GS-AP-MW-16D	48.1	n/a	9/12/2023	33.1	No	47	n/a	n/a	0	n/a	n/a	0.000831	NP Inter (normality) 1 of 2
Calcium (mg/L)	GS-AP-MW-17	48.1	n/a	9/11/2023	2.93	No	47	n/a	n/a	0	n/a	n/a	0.000831	NP Inter (normality) 1 of 2
Calcium (mg/L)	**GS-AP-MW-19**	**48.1**	**n/a**	**9/19/2023**	**53.5**	**Yes**	**47**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.000831**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	GS-AP-MW-2	48.1	n/a	9/18/2023	0.668	No	47	n/a	n/a	0	n/a	n/a	0.000831	NP Inter (normality) 1 of 2
Calcium (mg/L)	GS-AP-MW-21	48.1	n/a	9/5/2023	2	No	47	n/a	n/a	0	n/a	n/a	0.000831	NP Inter (normality) 1 of 2
Calcium (mg/L)	GS-AP-MW-21V	48.1	n/a	9/5/2023	39.8	No	47	n/a	n/a	0	n/a	n/a	0.000831	NP Inter (normality) 1 of 2
Calcium (mg/L)	**GS-AP-MW-6D**	**48.1**	**n/a**	**9/5/2023**	**53.9**	**Yes**	**47**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.000831**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**GS-AP-MW-6S**	**48.1**	**n/a**	**9/5/2023**	**55.7**	**Yes**	**47**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.000831**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	GS-AP-MW-7	48.1	n/a	9/11/2023	11.2	No	47	n/a	n/a	0	n/a	n/a	0.000831	NP Inter (normality) 1 of 2
Calcium (mg/L)	**GS-AP-MW-9V**	**48.1**	**n/a**	**9/13/2023**	**56**	**Yes**	**47**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.000831**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	GS-AP-MW-12	4.38	n/a	9/13/2023	3.19	No	47	3.389	0.4653	0	None	No	0.0005374	Param Inter 1 of 2
Chloride (mg/L)	**GS-AP-MW-12V**	**4.38**	**n/a**	**9/13/2023**	**4.38**	**Yes**	**47**	**3.389**	**0.4653**	**0**	**None**	**No**	**0.0005374**	**Param Inter 1 of 2**
Chloride (mg/L)	**GS-AP-MW-15**	**4.38**	**n/a**	**9/11/2023**	**5.04**	**Yes**	**47**	**3.389**	**0.4653**	**0**	**None**	**No**	**0.0005374**	**Param Inter 1 of 2**
Chloride (mg/L)	**GS-AP-MW-15V**	**4.38**	**n/a**	**9/11/2023**	**83.9**	**Yes**	**47**	**3.389**	**0.4653**	**0**	**None**	**No**	**0.0005374**	**Param Inter 1 of 2**
Chloride (mg/L)	GS-AP-MW-16D	4.38	n/a	9/12/2023	4.14	No	47	3.389	0.4653	0	None	No	0.0005374	Param Inter 1 of 2
Chloride (mg/L)	**GS-AP-MW-17**	**4.38**	**n/a**	**9/11/2023**	**7.59**	**Yes**	**47**	**3.389**	**0.4653**	**0**	**None**	**No**	**0.0005374**	**Param Inter 1 of 2**
Chloride (mg/L)	**GS-AP-MW-19**	**4.38**	**n/a**	**9/19/2023**	**4.82**	**Yes**	**47**	**3.389**	**0.4653**	**0**	**None**	**No**	**0.0005374**	**Param Inter 1 of 2**
Chloride (mg/L)	**GS-AP-MW-2**	**4.38**	**n/a**	**9/18/2023**	**6.28**	**Yes**	**47**	**3.389**	**0.4653**	**0**	**None**	**No**	**0.0005374**	**Param Inter 1 of 2**
Chloride (mg/L)	**GS-AP-MW-21**	**4.38**	**n/a**	**9/5/2023**	**36.6**	**Yes**	**47**	**3.389**	**0.4653**	**0**	**None**	**No**	**0.0005374**	**Param Inter 1 of 2**
Chloride (mg/L)	**GS-AP-MW-21V**	**4.38**	**n/a**	**9/5/2023**	**380**	**Yes**	**47**	**3.389**	**0.4653**	**0**	**None**	**No**	**0.0005374**	**Param Inter 1 of 2**
Chloride (mg/L)	**GS-AP-MW-6D**	**4.38**	**n/a**	**9/5/2023**	**9.14**	**Yes**	**47**	**3.389**	**0.4653**	**0**	**None**	**No**	**0.0005374**	**Param Inter 1 of 2**
Chloride (mg/L)	**GS-AP-MW-6S**	**4.38**	**n/a**	**9/5/2023**	**19.2**	**Yes**	**47**	**3.389**	**0.4653**	**0**	**None**	**No**	**0.0005374**	**Param Inter 1 of 2**
Chloride (mg/L)	**GS-AP-MW-7**	**4.38**	**n/a**	**9/11/2023**	**8.17**	**Yes**	**47**	**3.389**	**0.4653**	**0**	**None**	**No**	**0.0005374**	**Param Inter 1 of 2**
Chloride (mg/L)	**GS-AP-MW-9V**	**4.38**	**n/a**	**9/13/2023**	**45.8**	**Yes**	**47**	**3.389**	**0.4653**	**0**	**None**	**No**	**0.0005374**	**Param Inter 1 of 2**
Fluoride (mg/L)	GS-AP-MW-12	0.3057	n/a	9/13/2023	0.0944J	No	49	0.3655	0.08825	0	None	sqrt(x)	0.0005374	Param Inter 1 of 2
Fluoride (mg/L)	GS-AP-MW-12V	0.3057	n/a	9/13/2023	0.129	No	49	0.3655	0.08825	0	None	sqrt(x)	0.0005374	Param Inter 1 of 2
Fluoride (mg/L)	**GS-AP-MW-15**	**0.3057**	**n/a**	**9/11/2023**	**0.425**	**Yes**	**49**	**0.3655**	**0.08825**	**0**	**None**	**sqrt(x)**	**0.0005374**	**Param Inter 1 of 2**
Fluoride (mg/L)	GS-AP-MW-15V	0.3057	n/a	9/11/2023	0.183	No	49	0.3655	0.08825	0	None	sqrt(x)	0.0005374	Param Inter 1 of 2
Fluoride (mg/L)	GS-AP-MW-16D	0.3057	n/a	9/12/2023	0.106J	No	49	0.3655	0.08825	0	None	sqrt(x)	0.0005374	Param Inter 1 of 2
Fluoride (mg/L)	GS-AP-MW-17	0.3057	n/a	9/11/2023	0.269	No	49	0.3655	0.08825	0	None	sqrt(x)	0.0005374	Param Inter 1 of 2
Fluoride (mg/L)	GS-AP-MW-19	0.3057	n/a	9/19/2023	0.211	No	49	0.3655	0.08825	0	None	sqrt(x)	0.0005374	Param Inter 1 of 2
Fluoride (mg/L)	**GS-AP-MW-2**	**0.3057**	**n/a**	**9/18/2023**	**0.822**	**Yes**	**49**	**0.3655**	**0.08825**	**0**	**None**	**sqrt(x)**	**0.0005374**	**Param Inter 1 of 2**
Fluoride (mg/L)	GS-AP-MW-21	0.3057	n/a	9/5/2023	0.188	No	49	0.3655	0.08825	0	None	sqrt(x)	0.0005374	Param Inter 1 of 2
Fluoride (mg/L)	**GS-AP-MW-21V**	**0.3057**	**n/a**	**9/5/2023**	**0.391**	**Yes**	**49**	**0.3655**	**0.08825**	**0**	**None**	**sqrt(x)**	**0.0005374**	**Param Inter 1 of 2**
Fluoride (mg/L)	GS-AP-MW-6D	0.3057	n/a	9/5/2023	0.107J	No	49	0.3655	0.08825	0	None	sqrt(x)	0.0005374	Param Inter 1 of 2
Fluoride (mg/L)	GS-AP-MW-6S	0.3057	n/a	9/5/2023	0.152	No	49	0.3655	0.08825	0	None	sqrt(x)	0.0005374	Param Inter 1 of 2
Fluoride (mg/L)	GS-AP-MW-7	0.3057	n/a	9/11/2023	0.0913J	No	49	0.3655	0.08825	0	None	sqrt(x)	0.0005374	Param Inter 1 of 2
Fluoride (mg/L)	GS-AP-MW-9V	0.3057	n/a	9/13/2023	0.145	No	49	0.3655	0.08825	0	None	sqrt(x)	0.0005374	Param Inter 1 of 2
pH (SU)	**GS-AP-MW-12**	**7.76**	**5.02**	**9/13/2023**	**8.96**	**Yes**	**49**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.001516**	**NP Inter (normality) 1 of 2**
pH (SU)	**GS-AP-MW-12V**	**7.76**	**5.02**	**9/13/2023**	**8.95**	**Yes**	**49**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.001516**	**NP Inter (normality) 1 of 2**
pH (SU)	**GS-AP-MW-15**	**7.76**	**5.02**	**9/11/2023**	**11.61**	**Yes**	**49**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.001516**	**NP Inter (normality) 1 of 2**
pH (SU)	GS-AP-MW-15V	7.76	5.02	9/11/2023	7.64	No	49	n/a	n/a	0	n/a	n/a	0.001516	NP Inter (normality) 1 of 2
pH (SU)	GS-AP-MW-16D	7.76	5.02	9/12/2023	7.22	No	49	n/a	n/a	0	n/a	n/a	0.001516	NP Inter (normality) 1 of 2
pH (SU)	**GS-AP-MW-17**	**7.76**	**5.02**	**9/11/2023**	**8.19**	**Yes**	**49**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.001516**	**NP Inter (normality) 1 of 2**
pH (SU)	GS-AP-MW-19	7.76	5.02	9/19/2023	7.3	No	49	n/a	n/a	0	n/a	n/a	0.001516	NP Inter (normality) 1 of 2
pH (SU)	**GS-AP-MW-2**	**7.76**	**5.02**	**9/18/2023**	**9**	**Yes**	**49**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.001516**	**NP Inter (normality) 1 of 2**
pH (SU)	**GS-AP-MW-21**	**7.76**	**5.02**	**9/5/2023**	**9.81**	**Yes**	**49**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.001516**	**NP Inter (normality) 1 of 2**
pH (SU)	GS-AP-MW-21V	7.76	5.02	9/5/2023	7.68	No	49	n/a	n/a	0	n/a	n/a	0.001516	NP Inter (normality) 1 of 2
pH (SU)	GS-AP-MW-6D	7.76	5.02	9/5/2023	7.23	No	49	n/a	n/a	0	n/a	n/a	0.001516	NP Inter (normality) 1 of 2
pH (SU)	GS-AP-MW-6S	7.76	5.02	9/5/2023	6.69	No	49	n/a	n/a	0	n/a	n/a	0.001516	NP Inter (normality) 1 of 2

Appendix III - Interwell Prediction Limits - All Results

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond Printed 11/16/2023, 2:00 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
pH (SU)	GS-AP-MW-7	7.76	5.02	9/11/2023	7.23	No	49	n/a	n/a	0	n/a	n/a	0.001516	NP Inter (normality) 1 of 2
pH (SU)	GS-AP-MW-9V	7.76	5.02	9/13/2023	6.97	No	49	n/a	n/a	0	n/a	n/a	0.001516	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GS-AP-MW-12	27	n/a	9/13/2023	18.9	No	47	n/a	n/a	0	n/a	n/a	0.000831	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GS-AP-MW-12V	27	n/a	9/13/2023	1.61J	No	47	n/a	n/a	0	n/a	n/a	0.000831	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GS-AP-MW-15	27	n/a	9/11/2023	8.43	No	47	n/a	n/a	0	n/a	n/a	0.000831	NP Inter (normality) 1 of 2
Sulfate (mg/L)	**GS-AP-MW-15V**	**27**	**n/a**	**9/11/2023**	**140**	**Yes**	**47**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.000831**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	GS-AP-MW-16D	27	n/a	9/12/2023	15.3	No	47	n/a	n/a	0	n/a	n/a	0.000831	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GS-AP-MW-17	27	n/a	9/11/2023	23.1	No	47	n/a	n/a	0	n/a	n/a	0.000831	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GS-AP-MW-19	27	n/a	9/19/2023	13.5	No	47	n/a	n/a	0	n/a	n/a	0.000831	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GS-AP-MW-2	27	n/a	9/18/2023	2.96	No	47	n/a	n/a	0	n/a	n/a	0.000831	NP Inter (normality) 1 of 2
Sulfate (mg/L)	**GS-AP-MW-21**	**27**	**n/a**	**9/5/2023**	**214**	**Yes**	**47**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.000831**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**GS-AP-MW-21V**	**27**	**n/a**	**9/5/2023**	**430**	**Yes**	**47**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.000831**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**GS-AP-MW-6D**	**27**	**n/a**	**9/5/2023**	**58.7**	**Yes**	**47**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.000831**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**GS-AP-MW-6S**	**27**	**n/a**	**9/5/2023**	**107**	**Yes**	**47**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.000831**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**GS-AP-MW-7**	**27**	**n/a**	**9/11/2023**	**124**	**Yes**	**47**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.000831**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**GS-AP-MW-9V**	**27**	**n/a**	**9/13/2023**	**85.2**	**Yes**	**47**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.000831**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	GS-AP-MW-12	368	n/a	9/13/2023	208	No	47	n/a	n/a	0	n/a	n/a	0.000831	NP Inter (normality) 1 of 2
TDS (mg/L)	GS-AP-MW-12V	368	n/a	9/13/2023	180	No	47	n/a	n/a	0	n/a	n/a	0.000831	NP Inter (normality) 1 of 2
TDS (mg/L)	**GS-AP-MW-15**	**368**	**n/a**	**9/11/2023**	**565**	**Yes**	**47**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.000831**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	**GS-AP-MW-15V**	**368**	**n/a**	**9/11/2023**	**615**	**Yes**	**47**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.000831**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	GS-AP-MW-16D	368	n/a	9/12/2023	219	No	47	n/a	n/a	0	n/a	n/a	0.000831	NP Inter (normality) 1 of 2
TDS (mg/L)	**GS-AP-MW-17**	**368**	**n/a**	**9/11/2023**	**480**	**Yes**	**47**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.000831**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	GS-AP-MW-19	368	n/a	9/19/2023	335	No	47	n/a	n/a	0	n/a	n/a	0.000831	NP Inter (normality) 1 of 2
TDS (mg/L)	**GS-AP-MW-2**	**368**	**n/a**	**9/18/2023**	**405**	**Yes**	**47**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.000831**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	**GS-AP-MW-21**	**368**	**n/a**	**9/5/2023**	**572**	**Yes**	**47**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.000831**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	**GS-AP-MW-21V**	**368**	**n/a**	**9/5/2023**	**1550**	**Yes**	**47**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.000831**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	GS-AP-MW-6D	368	n/a	9/5/2023	294	No	47	n/a	n/a	0	n/a	n/a	0.000831	NP Inter (normality) 1 of 2
TDS (mg/L)	GS-AP-MW-6S	368	n/a	9/5/2023	307	No	47	n/a	n/a	0	n/a	n/a	0.000831	NP Inter (normality) 1 of 2
TDS (mg/L)	GS-AP-MW-7	368	n/a	9/11/2023	327	No	47	n/a	n/a	0	n/a	n/a	0.000831	NP Inter (normality) 1 of 2
TDS (mg/L)	**GS-AP-MW-9V**	**368**	**n/a**	**9/13/2023**	**395**	**Yes**	**47**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.000831**	**NP Inter (normality) 1 of 2**

Appendix III Trend Tests - Significant Results

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond   Printed 11/16/2023, 1:59 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	**GS-AP-MW-6D**	**0.0464**	**150**	**87**	**Yes**	**21**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**GS-AP-MW-7**	**0.04469**	**147**	**87**	**Yes**	**21**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**GS-AP-MW-19**	**2.31**	**113**	**87**	**Yes**	**21**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**GS-AP-MW-6D**	**0.8922**	**98**	**87**	**Yes**	**21**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**GS-AP-MW-9V**	**2.63**	**22**	**21**	**Yes**	**8**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**GS-AP-MW-19**	**-0.2495**	**-106**	**-87**	**Yes**	**21**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**GS-AP-MW-21**	**2.788**	**128**	**87**	**Yes**	**21**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**GS-AP-MW-6D**	**0.9474**	**142**	**87**	**Yes**	**21**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**GS-AP-MW-7**	**0.6618**	**197**	**87**	**Yes**	**21**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**GS-AP-MW-8 (bg)**	**0.1651**	**99**	**87**	**Yes**	**21**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**GS-AP-MW-9V**	**6.734**	**25**	**21**	**Yes**	**8**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Fluoride (mg/L)	**GS-AP-MW-13 (bg)**	**0.02914**	**48**	**43**	**Yes**	**13**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Fluoride (mg/L)	**GS-AP-MW-2**	**-0.1272**	**-191**	**-98**	**Yes**	**23**	**0**	**n/a**	**n/a**	**0.01**	**NP**
pH (SU)	**GS-AP-MW-12**	**0.1524**	**148**	**92**	**Yes**	**22**	**0**	**n/a**	**n/a**	**0.01**	**NP**
pH (SU)	**GS-AP-MW-15**	**0.2607**	**119**	**92**	**Yes**	**22**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**GS-AP-MW-15V**	**-50.77**	**-22**	**-21**	**Yes**	**8**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**GS-AP-MW-21**	**41.54**	**170**	**87**	**Yes**	**21**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**GS-AP-MW-6S**	**-24**	**-133**	**-87**	**Yes**	**21**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**GS-AP-MW-9V**	**10.38**	**26**	**21**	**Yes**	**8**	**0**	**n/a**	**n/a**	**0.01**	**NP**
TDS (mg/L)	**GS-AP-MW-2**	**-16.07**	**-119**	**-92**	**Yes**	**22**	**0**	**n/a**	**n/a**	**0.01**	**NP**
TDS (mg/L)	**GS-AP-MW-21**	**43.41**	**128**	**87**	**Yes**	**21**	**0**	**n/a**	**n/a**	**0.01**	**NP**

Appendix III Trend Tests - All Results

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond   Printed 11/16/2023, 1:59 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	GS-AP-MW-13 (bg)	0	0	38	No	12	100	n/a	n/a	0.01	NP
Boron (mg/L)	GS-AP-MW-17V (bg)	-0.002694	-11	-30	No	10	0	n/a	n/a	0.01	NP
Boron (mg/L)	GS-AP-MW-21	0.004472	73	87	No	21	0	n/a	n/a	0.01	NP
Boron (mg/L)	GS-AP-MW-21V	-0.007156	-10	-21	No	8	0	n/a	n/a	0.01	NP
Boron (mg/L)	**GS-AP-MW-6D**	**0.0464**	**150**	**87**	**Yes**	**21**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	GS-AP-MW-6S	-0.03848	-81	-87	No	21	0	n/a	n/a	0.01	NP
Boron (mg/L)	**GS-AP-MW-7**	**0.04469**	**147**	**87**	**Yes**	**21**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	GS-AP-MW-8 (bg)	0	20	87	No	21	95.24	n/a	n/a	0.01	NP
Calcium (mg/L)	GS-AP-MW-13 (bg)	-2.607	-32	-38	No	12	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GS-AP-MW-17V (bg)	0.1203	4	30	No	10	0	n/a	n/a	0.01	NP
Calcium (mg/L)	**GS-AP-MW-19**	**2.31**	**113**	**87**	**Yes**	**21**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**GS-AP-MW-6D**	**0.8922**	**98**	**87**	**Yes**	**21**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	GS-AP-MW-6S	-2.355	-70	-87	No	21	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GS-AP-MW-8 (bg)	-0.2946	-47	-87	No	21	0	n/a	n/a	0.01	NP
Calcium (mg/L)	**GS-AP-MW-9V**	**2.63**	**22**	**21**	**Yes**	**8**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	GS-AP-MW-12V	-0.004138	-2	-30	No	10	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GS-AP-MW-13 (bg)	0.1178	10	38	No	12	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GS-AP-MW-15	-0.2465	-56	-87	No	21	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GS-AP-MW-15V	-29.59	-14	-21	No	8	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GS-AP-MW-17	-0.02722	-12	-92	No	22	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GS-AP-MW-17V (bg)	-0.2384	-29	-30	No	10	0	n/a	n/a	0.01	NP
Chloride (mg/L)	**GS-AP-MW-19**	**-0.2495**	**-106**	**-87**	**Yes**	**21**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	GS-AP-MW-2	-0.2901	-38	-92	No	22	0	n/a	n/a	0.01	NP
Chloride (mg/L)	**GS-AP-MW-21**	**2.788**	**128**	**87**	**Yes**	**21**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	GS-AP-MW-21V	-175.6	-12	-21	No	8	0	n/a	n/a	0.01	NP
Chloride (mg/L)	**GS-AP-MW-6D**	**0.9474**	**142**	**87**	**Yes**	**21**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	GS-AP-MW-6S	-0.4845	-67	-87	No	21	0	n/a	n/a	0.01	NP
Chloride (mg/L)	**GS-AP-MW-7**	**0.6618**	**197**	**87**	**Yes**	**21**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**GS-AP-MW-8 (bg)**	**0.1651**	**99**	**87**	**Yes**	**21**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**GS-AP-MW-9V**	**6.734**	**25**	**21**	**Yes**	**8**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Fluoride (mg/L)	**GS-AP-MW-13 (bg)**	**0.02914**	**48**	**43**	**Yes**	**13**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Fluoride (mg/L)	GS-AP-MW-15	-0.03941	-87	-92	No	22	0	n/a	n/a	0.01	NP
Fluoride (mg/L)	GS-AP-MW-17V (bg)	0.00066	3	30	No	10	0	n/a	n/a	0.01	NP
Fluoride (mg/L)	**GS-AP-MW-2**	**-0.1272**	**-191**	**-98**	**Yes**	**23**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Fluoride (mg/L)	GS-AP-MW-21V	-0.03924	-20	-21	No	8	0	n/a	n/a	0.01	NP
Fluoride (mg/L)	GS-AP-MW-8 (bg)	0.002865	46	92	No	22	0	n/a	n/a	0.01	NP
pH (SU)	**GS-AP-MW-12**	**0.1524**	**148**	**92**	**Yes**	**22**	**0**	**n/a**	**n/a**	**0.01**	**NP**
pH (SU)	GS-AP-MW-12V	0.1423	9	30	No	10	0	n/a	n/a	0.01	NP
pH (SU)	GS-AP-MW-13 (bg)	-0.05825	-34	-43	No	13	0	n/a	n/a	0.01	NP
pH (SU)	**GS-AP-MW-15**	**0.2607**	**119**	**92**	**Yes**	**22**	**0**	**n/a**	**n/a**	**0.01**	**NP**
pH (SU)	GS-AP-MW-17	-0.005925	-27	-98	No	23	0	n/a	n/a	0.01	NP
pH (SU)	GS-AP-MW-17V (bg)	-0.02446	-15	-30	No	10	0	n/a	n/a	0.01	NP
pH (SU)	GS-AP-MW-2	0.03952	88	98	No	23	0	n/a	n/a	0.01	NP
pH (SU)	GS-AP-MW-21	-0.03023	-7	-92	No	22	0	n/a	n/a	0.01	NP
pH (SU)	GS-AP-MW-8 (bg)	-0.0333	-82	-92	No	22	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GS-AP-MW-13 (bg)	0.01849	11	38	No	12	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	**GS-AP-MW-15V**	**-50.77**	**-22**	**-21**	**Yes**	**8**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	GS-AP-MW-17V (bg)	-0.7	-15	-30	No	10	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	**GS-AP-MW-21**	**41.54**	**170**	**87**	**Yes**	**21**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	GS-AP-MW-21V	-186.5	-12	-21	No	8	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GS-AP-MW-6D	0.849	49	87	No	21	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	**GS-AP-MW-6S**	**-24**	**-133**	**-87**	**Yes**	**21**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	GS-AP-MW-7	-1.707	-65	-87	No	21	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GS-AP-MW-8 (bg)	0.2514	63	87	No	21	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	**GS-AP-MW-9V**	**10.38**	**26**	**21**	**Yes**	**8**	**0**	**n/a**	**n/a**	**0.01**	**NP**
TDS (mg/L)	GS-AP-MW-13 (bg)	-7.182	-29	-38	No	12	0	n/a	n/a	0.01	NP
TDS (mg/L)	GS-AP-MW-15	25.11	72	87	No	21	0	n/a	n/a	0.01	NP
TDS (mg/L)	GS-AP-MW-15V	-118	-19	-21	No	8	0	n/a	n/a	0.01	NP
TDS (mg/L)	GS-AP-MW-17	8.41	64	92	No	22	0	n/a	n/a	0.01	NP
TDS (mg/L)	GS-AP-MW-17V (bg)	-5.63	-17	-30	No	10	0	n/a	n/a	0.01	NP
TDS (mg/L)	**GS-AP-MW-2**	**-16.07**	**-119**	**-92**	**Yes**	**22**	**0**	**n/a**	**n/a**	**0.01**	**NP**
TDS (mg/L)	**GS-AP-MW-21**	**43.41**	**128**	**87**	**Yes**	**21**	**0**	**n/a**	**n/a**	**0.01**	**NP**
TDS (mg/L)	GS-AP-MW-21V	-606.8	-10	-21	No	8	0	n/a	n/a	0.01	NP
TDS (mg/L)	GS-AP-MW-8 (bg)	-1.421	-39	-87	No	21	0	n/a	n/a	0.01	NP
TDS (mg/L)	GS-AP-MW-9V	27.17	20	21	No	8	0	n/a	n/a	0.01	NP

Upper Tolerance Limits Summary Table

Plant Gorgas   Data: Gorgas Ash Pond   Printed 11/17/2023, 9:26 AM

Constituent	Upper Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	0.00115	n/a	n/a	n/a	47	n/a	n/a	95.74	n/a	n/a	0.08974	NP Inter
Arsenic (mg/L)	0.005	n/a	n/a	n/a	47	n/a	n/a	53.19	n/a	n/a	0.08974	NP Inter
Barium (mg/L)	0.353	n/a	n/a	n/a	47	n/a	n/a	0	n/a	n/a	0.08974	NP Inter
Beryllium (mg/L)	0.001015	n/a	n/a	n/a	47	n/a	n/a	100	n/a	n/a	0.08974	NP Inter
Cadmium (mg/L)	0.000203	n/a	n/a	n/a	47	n/a	n/a	100	n/a	n/a	0.08974	NP Inter
Chromium (mg/L)	0.00405	n/a	n/a	n/a	47	n/a	n/a	63.83	n/a	n/a	0.08974	NP Inter
Cobalt (mg/L)	0.00362	n/a	n/a	n/a	47	n/a	n/a	68.09	n/a	n/a	0.08974	NP Inter
Combined Radium 226 + 228 (pCi/L)	1.25	n/a	n/a	n/a	46	n/a	n/a	0	n/a	n/a	0.09447	NP Inter
Fluoride (mg/L)	0.278	n/a	n/a	n/a	49	n/a	n/a	0	n/a	n/a	0.08099	NP Inter
Lead (mg/L)	0.00189	n/a	n/a	n/a	47	n/a	n/a	89.36	n/a	n/a	0.08974	NP Inter
Lithium (mg/L)	0.0809	n/a	n/a	n/a	47	n/a	n/a	44.68	n/a	n/a	0.08974	NP Inter
Mercury (mg/L)	0.0005	n/a	n/a	n/a	47	n/a	n/a	100	n/a	n/a	0.08974	NP Inter
Molybdenum (mg/L)	0.01015	n/a	n/a	n/a	47	n/a	n/a	76.6	n/a	n/a	0.08974	NP Inter
Selenium (mg/L)	0.001015	n/a	n/a	n/a	47	n/a	n/a	100	n/a	n/a	0.08974	NP Inter
Thallium (mg/L)	0.000203	n/a	n/a	n/a	47	n/a	n/a	100	n/a	n/a	0.08974	NP Inter

GORGAS ASH POND GWPS

Analyte	Units	Background	GWPS
Antimony	mg/L	0.00115	0.006
Arsenic	mg/L	0.005	0.01
Barium	mg/L	0.353	2
Beryllium	mg/L	0.001015	0.004
Cadmium	mg/L	0.000203	0.005
Chromium	mg/L	0.00405	0.1
Cobalt	mg/L	0.00362	0.006
Combined Radium-226/228	pCi/L	1.25	5
Fluoride	mg/L	0.278	4
Lead	mg/L	0.00189	0.015
Lithium	mg/L	0.0809	0.0809
Mercury	mg/L	0.0005	0.002
Molybdenum	mg/L	0.01015	0.1
Selenium	mg/L	0.001015	0.05
Thallium	mg/L	0.000203	0.002

Notes:

1. mg/L - Milligrams per liter
2. pCi/L - Picocuries per liter
3. The background limits were used as the groundwater protection standard (GWPS) when appropriate under 40 CFR §257.95(h), ADEM Rule 335-13-15-.06(h), and the ADEM Variance.
4. GWPS established during second semi-annual sampling event in 2023.

Confidence Intervals Summary Table - Significant Results

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond   Printed 11/16/2023, 3:44 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Arsenic (mg/L)	**GS-AP-MW-13R**	**0.034**	**0.011**	**0.01**	**Yes**	**4**	**0.009889**	**0**	**None**	**No**	**0.0625**	**NP (selected)**
Arsenic (mg/L)	**GS-AP-MW-46**	**0.2098**	**0.03946**	**0.01**	**Yes**	**4**	**0.03751**	**0**	**None**	**No**	**0.01**	**Param.**
Arsenic (mg/L)	**GS-AP-MW-6D**	**0.1151**	**0.09769**	**0.01**	**Yes**	**8**	**0.008205**	**0**	**None**	**No**	**0.01**	**Param.**
Arsenic (mg/L)	**GS-AP-MW-7**	**0.285**	**0.244**	**0.01**	**Yes**	**8**	**0.01589**	**0**	**None**	**No**	**0.004**	**NP (normality)**
Lithium (mg/L)	**GS-AP-MW-15**	**0.517**	**0.2892**	**0.0809**	**Yes**	**8**	**0.1075**	**0**	**None**	**No**	**0.01**	**Param.**
Lithium (mg/L)	**GS-AP-MW-6D**	**0.3307**	**0.2933**	**0.0809**	**Yes**	**8**	**0.01767**	**0**	**None**	**No**	**0.01**	**Param.**
Lithium (mg/L)	**GS-AP-MW-7**	**0.2208**	**0.169**	**0.0809**	**Yes**	**8**	**0.02444**	**0**	**None**	**No**	**0.01**	**Param.**
Molybdenum (mg/L)	**GS-AP-MW-7**	**0.2235**	**0.2002**	**0.1**	**Yes**	**8**	**0.01099**	**0**	**None**	**No**	**0.01**	**Param.**

Confidence Intervals Summary Table - All Results

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond   Printed 11/16/2023, 3:44 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	GS-AP-MW-12	0.004283	0.001009	0.006	No	8	0.001544	0	None	No	0.01	Param.
Antimony (mg/L)	GS-AP-MW-12V	0.001239	0.00054	0.006	No	8	0.0003276	25	Kaplan-Meier	No	0.01	Param.
Antimony (mg/L)	GS-AP-MW-15	0.0009487	0.0005939	0.006	No	8	0.0001674	12.5	None	No	0.01	Param.
Antimony (mg/L)	GS-AP-MW-15V	0.002555	0.001023	0.006	No	8	0.0007626	0	None	x^(1/3)	0.01	Param.
Antimony (mg/L)	GS-AP-MW-21V	0.001015	0.000661	0.006	No	8	0.0001326	75	None	No	0.004	NP (NDs)
Antimony (mg/L)	GS-AP-MW-46	0.001015	0.000764	0.006	No	4	0.0001255	75	Kaplan-Meier	No	0.0625	NP (NDs)
Antimony (mg/L)	GS-AP-MW-6S	0.001028	0.0005511	0.006	No	8	0.0002295	37.5	Kaplan-Meier	No	0.01	Param.
Arsenic (mg/L)	GS-AP-MW-10R	0.00277	0.00047	0.01	No	4	0.001024	0	None	No	0.0625	NP (selected)
Arsenic (mg/L)	GS-AP-MW-11R	0.00378	0.00137	0.01	No	4	0.001113	0	None	No	0.0625	NP (selected)
Arsenic (mg/L)	GS-AP-MW-12	0.006811	0.001489	0.01	No	8	0.002511	0	None	No	0.01	Param.
Arsenic (mg/L)	GS-AP-MW-12V	0.00266	0.000929	0.01	No	8	0.0005996	0	None	No	0.004	NP (normality)
Arsenic (mg/L)	**GS-AP-MW-13R**	**0.034**	**0.011**	**0.01**	**Yes**	**4**	**0.009889**	**0**	**None**	**No**	**0.0625**	**NP (selected)**
Arsenic (mg/L)	GS-AP-MW-14R	0.00231	0.000553	0.01	No	4	0.0007589	0	None	No	0.0625	NP (selected)
Arsenic (mg/L)	GS-AP-MW-15	0.0181	0.005059	0.01	No	8	0.006152	0	None	No	0.01	Param.
Arsenic (mg/L)	GS-AP-MW-15V	0.015	0.004562	0.01	No	8	0.004922	0	None	No	0.01	Param.
Arsenic (mg/L)	GS-AP-MW-16D	0.000491	0.0001	0.01	No	8	0.000119	50	None	No	0.004	NP (normality)
Arsenic (mg/L)	GS-AP-MW-17	0.0055	0.00086	0.01	No	8	0.0019	0	None	No	0.004	NP (normality)
Arsenic (mg/L)	GS-AP-MW-18VR	0.00164	0.000422	0.01	No	4	0.0005482	0	None	No	0.0625	NP (selected)
Arsenic (mg/L)	GS-AP-MW-19	0.002844	0.001093	0.01	No	8	0.0008261	0	None	No	0.01	Param.
Arsenic (mg/L)	GS-AP-MW-1R	0.0004372	0.0001628	0.01	No	4	0.00006043	0	None	No	0.01	Param.
Arsenic (mg/L)	GS-AP-MW-2	0.000203	0.000083	0.01	No	9	0.00004538	77.78	None	No	0.002	NP (NDs)
Arsenic (mg/L)	GS-AP-MW-21	0.005	0.00046	0.01	No	8	0.002071	25	None	No	0.004	NP (normality)
Arsenic (mg/L)	GS-AP-MW-21V	0.01123	0.001595	0.01	No	8	0.004547	0	None	No	0.01	Param.
Arsenic (mg/L)	GS-AP-MW-3	0.0001965	0.0001315	0.01	No	6	0.00002362	0	None	No	0.01	Param.
Arsenic (mg/L)	GS-AP-MW-3V	0.00249	0.000654	0.01	No	4	0.0009059	0	None	No	0.0625	NP (selected)
Arsenic (mg/L)	GS-AP-MW-45V	0.002	0.000618	0.01	No	4	0.0005775	0	None	No	0.0625	NP (selected)
Arsenic (mg/L)	**GS-AP-MW-46**	**0.2098**	**0.03946**	**0.01**	**Yes**	**4**	**0.03751**	**0**	**None**	**No**	**0.01**	**Param.**
Arsenic (mg/L)	GS-AP-MW-47	0.00102	0.00038	0.01	No	4	0.0002923	0	None	No	0.0625	NP (selected)
Arsenic (mg/L)	GS-AP-MW-5R	0.00048	0.000161	0.01	No	4	0.0001451	0	None	No	0.0625	NP (selected)
Arsenic (mg/L)	**GS-AP-MW-6D**	**0.1151**	**0.09769**	**0.01**	**Yes**	**8**	**0.008205**	**0**	**None**	**No**	**0.01**	**Param.**
Arsenic (mg/L)	GS-AP-MW-6S	0.01099	0.006249	0.01	No	8	0.002237	0	None	No	0.01	Param.
Arsenic (mg/L)	**GS-AP-MW-7**	**0.285**	**0.244**	**0.01**	**Yes**	**8**	**0.01589**	**0**	**None**	**No**	**0.004**	**NP (normality)**
Arsenic (mg/L)	GS-AP-MW-9R	0.00713	0.003725	0.01	No	4	0.0007499	0	None	No	0.01	Param.
Arsenic (mg/L)	GS-AP-MW-9V	0.005	0.000101	0.01	No	8	0.002225	25	None	No	0.004	NP (normality)
Barium (mg/L)	GS-AP-MW-10R	0.7714	0.4386	2	No	4	0.07328	0	None	No	0.01	Param.
Barium (mg/L)	GS-AP-MW-11R	0.1441	0.09086	2	No	4	0.01173	0	None	No	0.01	Param.
Barium (mg/L)	GS-AP-MW-12	0.2079	0.1786	2	No	8	0.01385	0	None	No	0.01	Param.
Barium (mg/L)	GS-AP-MW-12V	1.469	1.083	2	No	8	0.182	0	None	No	0.01	Param.
Barium (mg/L)	GS-AP-MW-13R	0.07456	0.05869	2	No	4	0.003494	0	None	No	0.01	Param.
Barium (mg/L)	GS-AP-MW-14R	0.2619	0.1506	2	No	4	0.02451	0	None	No	0.01	Param.
Barium (mg/L)	GS-AP-MW-15	0.276	0.119	2	No	8	0.06527	0	None	No	0.004	NP (normality)
Barium (mg/L)	GS-AP-MW-15V	0.2212	0.1571	2	No	8	0.03025	0	None	No	0.01	Param.
Barium (mg/L)	GS-AP-MW-16D	0.356	0.322	2	No	8	0.01437	0	None	No	0.004	NP (normality)
Barium (mg/L)	GS-AP-MW-17	0.113	0.08286	2	No	8	0.01422	0	None	No	0.01	Param.
Barium (mg/L)	GS-AP-MW-18VR	0.2206	0.06731	2	No	4	0.03563	0	None	sqrt(x)	0.01	Param.
Barium (mg/L)	GS-AP-MW-19	0.3525	0.3163	2	No	8	0.01708	0	None	No	0.01	Param.
Barium (mg/L)	GS-AP-MW-1R	0.08065	0.0496	2	No	4	0.006837	0	None	No	0.01	Param.
Barium (mg/L)	GS-AP-MW-2	0.06632	0.04781	2	No	9	0.009588	0	None	No	0.01	Param.
Barium (mg/L)	GS-AP-MW-21	0.1543	0.1177	2	No	8	0.01731	0	None	No	0.01	Param.
Barium (mg/L)	GS-AP-MW-21V	0.06179	0.03843	2	No	8	0.01102	0	None	No	0.01	Param.
Barium (mg/L)	GS-AP-MW-3	0.657	0.3856	2	No	6	0.09878	0	None	No	0.01	Param.
Barium (mg/L)	GS-AP-MW-3V	0.0815	0.0197	2	No	4	0.02775	0	None	No	0.0625	NP (selected)
Barium (mg/L)	GS-AP-MW-45V	0.0851	0.0207	2	No	4	0.03268	0	None	No	0.0625	NP (selected)
Barium (mg/L)	GS-AP-MW-46	0.07918	0.04772	2	No	4	0.00693	0	None	No	0.01	Param.
Barium (mg/L)	GS-AP-MW-47	1.08	0.1471	2	No	4	0.2055	0	None	No	0.01	Param.
Barium (mg/L)	GS-AP-MW-5R	0.08069	0.03536	2	No	4	0.009982	0	None	No	0.01	Param.
Barium (mg/L)	GS-AP-MW-6D	0.628	0.4382	2	No	8	0.08955	0	None	No	0.01	Param.
Barium (mg/L)	GS-AP-MW-6S	0.1044	0.07335	2	No	8	0.01465	0	None	No	0.01	Param.
Barium (mg/L)	GS-AP-MW-7	0.1378	0.05429	2	No	8	0.03939	0	None	No	0.01	Param.
Barium (mg/L)	GS-AP-MW-9R	0.04644	0.02471	2	No	4	0.004787	0	None	No	0.01	Param.
Barium (mg/L)	GS-AP-MW-9V	0.1971	0.1561	2	No	8	0.01934	0	None	No	0.01	Param.
Cadmium (mg/L)	GS-AP-MW-18VR	0.000203	0.00008	0.005	No	4	0.0000615	75	None	No	0.0625	NP (NDs)
Chromium (mg/L)	GS-AP-MW-10R	0.000488	0.0001095	0.1	No	4	0.00008337	0	None	No	0.01	Param.
Chromium (mg/L)	GS-AP-MW-11R	0.0005329	0.0001197	0.1	No	4	0.0003562	25	Kaplan-Meier	No	0.01	Param.
Chromium (mg/L)	GS-AP-MW-12	0.001015	0.00031	0.1	No	8	0.0003236	75	None	No	0.004	NP (NDs)
Chromium (mg/L)	GS-AP-MW-12V	0.004552	0.0001824	0.1	No	8	0.002583	0	None	sqrt(x)	0.01	Param.
Chromium (mg/L)	GS-AP-MW-13R	0.0003936	0.0001499	0.1	No	4	0.00005368	0	None	No	0.01	Param.
Chromium (mg/L)	GS-AP-MW-14R	0.0007476	0.00007111	0.1	No	4	0.0003375	25	Kaplan-Meier	No	0.01	Param.

Confidence Intervals Summary Table - All Results

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond Printed 11/16/2023, 3:44 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Chromium (mg/L)	GS-AP-MW-15	0.01	0.000384	0.1	No	8	0.004344	25	None	No	0.004	NP (normality)
Chromium (mg/L)	GS-AP-MW-15V	0.002864	0.0002843	0.1	No	8	0.002331	12.5	None	ln(x)	0.01	Param.
Chromium (mg/L)	GS-AP-MW-16D	0.00107	0.000226	0.1	No	8	0.0003685	37.5	None	No	0.004	NP (normality)
Chromium (mg/L)	GS-AP-MW-17	0.001049	0.0001568	0.1	No	8	0.0007592	37.5	Kaplan-Meier	x^(1/3)	0.01	Param.
Chromium (mg/L)	GS-AP-MW-18VR	0.000584	0.000225	0.1	No	4	0.0001782	0	None	No	0.0625	NP (selected)
Chromium (mg/L)	GS-AP-MW-19	0.001015	0.000258	0.1	No	8	0.0003581	50	None	No	0.004	NP (normality)
Chromium (mg/L)	GS-AP-MW-1R	0.0005647	0.0001603	0.1	No	4	0.00008904	0	None	No	0.01	Param.
Chromium (mg/L)	GS-AP-MW-2	0.01	0.000254	0.1	No	9	0.004766	33.33	None	No	0.002	NP (normality)
Chromium (mg/L)	GS-AP-MW-21	0.01	0.000303	0.1	No	8	0.004392	25	None	No	0.004	NP (normality)
Chromium (mg/L)	GS-AP-MW-21V	0.01	0.000218	0.1	No	8	0.004429	25	None	No	0.004	NP (normality)
Chromium (mg/L)	GS-AP-MW-3	0.0003262	0.0002318	0.1	No	6	0.00003433	0	None	No	0.01	Param.
Chromium (mg/L)	GS-AP-MW-45V	0.000882	0.0002	0.1	No	4	0.0002896	0	None	No	0.0625	NP (selected)
Chromium (mg/L)	GS-AP-MW-46	0.0003861	0.0001704	0.1	No	4	0.0004322	50	Kaplan-Meier	sqrt(x)	0.01	Param.
Chromium (mg/L)	GS-AP-MW-47	0.001015	0.00033	0.1	No	4	0.0003287	25	None	No	0.0625	NP (normality)
Chromium (mg/L)	GS-AP-MW-5R	0.0004687	0.0001018	0.1	No	4	0.00008082	0	None	No	0.01	Param.
Chromium (mg/L)	GS-AP-MW-6D	0.001015	0.00024	0.1	No	8	0.0004033	50	None	No	0.004	NP (normality)
Chromium (mg/L)	GS-AP-MW-6S	0.001015	0.000206	0.1	No	8	0.0003897	37.5	None	No	0.004	NP (normality)
Chromium (mg/L)	GS-AP-MW-7	0.005506	0.00001178	0.1	No	8	0.002592	0	None	No	0.01	Param.
Chromium (mg/L)	GS-AP-MW-9R	0.0004628	0.0001514	0.1	No	4	0.0003692	25	Kaplan-Meier	sqrt(x)	0.01	Param.
Chromium (mg/L)	GS-AP-MW-9V	0.001015	0.000228	0.1	No	8	0.0003997	50	None	No	0.004	NP (normality)
Cobalt (mg/L)	GS-AP-MW-10R	0.000682	0.000089	0.006	No	4	0.0002879	0	None	No	0.0625	NP (normality)
Cobalt (mg/L)	GS-AP-MW-11R	0.000203	0.00011	0.006	No	4	0.0000465	75	None	No	0.0625	NP (NDs)
Cobalt (mg/L)	GS-AP-MW-12V	0.00277	0.00013	0.006	No	8	0.000927	50	None	No	0.004	NP (normality)
Cobalt (mg/L)	GS-AP-MW-14R	0.000203	0.00015	0.006	No	4	0.0000265	75	None	No	0.0625	NP (NDs)
Cobalt (mg/L)	GS-AP-MW-15	0.000203	0.00009	0.006	No	8	0.00003995	87.5	None	No	0.004	NP (NDs)
Cobalt (mg/L)	GS-AP-MW-16D	0.000252	0.00009	0.006	No	8	0.00004576	75	None	No	0.004	NP (NDs)
Cobalt (mg/L)	GS-AP-MW-17	0.000203	0.000102	0.006	No	8	0.00003571	87.5	None	No	0.004	NP (NDs)
Cobalt (mg/L)	GS-AP-MW-18VR	0.000256	0.00009	0.006	No	4	0.00006995	50	None	No	0.0625	NP (selected)
Cobalt (mg/L)	GS-AP-MW-1R	0.000203	0.00009	0.006	No	4	0.0000565	75	None	No	0.0625	NP (NDs)
Cobalt (mg/L)	GS-AP-MW-3V	0.00025	0.000088	0.006	No	4	0.00007622	25	None	No	0.0625	NP (selected)
Cobalt (mg/L)	GS-AP-MW-45V	0.000203	0.000125	0.006	No	4	0.000039	75	None	No	0.0625	NP (NDs)
Cobalt (mg/L)	GS-AP-MW-47	0.0001978	0.00007273	0.006	No	4	0.00002754	0	None	No	0.01	Param.
Cobalt (mg/L)	GS-AP-MW-6S	0.005	0.000639	0.006	No	8	0.001998	25	None	No	0.004	NP (normality)
Cobalt (mg/L)	GS-AP-MW-7	0.003233	0.000136	0.006	No	8	0.001681	0	None	sqrt(x)	0.01	Param.
Cobalt (mg/L)	GS-AP-MW-9R	0.000203	0.00009	0.006	No	4	0.0000565	75	None	No	0.0625	NP (NDs)
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-10R	1.05	0.275	5	No	4	0.3364	0	None	No	0.0625	NP (selected)
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-11R	1.315	0.2619	5	No	4	0.2319	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-12	1.054	0.5964	5	No	8	0.2161	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-12V	1.326	0.6202	5	No	8	0.3328	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-13R	0.9307	0.2018	5	No	4	0.1605	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-14R	0.801	0.145	5	No	4	0.281	0	None	No	0.0625	NP (selected)
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-15	0.9368	0.3402	5	No	8	0.2815	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-15V	1.13	0.437	5	No	8	0.2441	0	None	No	0.004	NP (normality)
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-16D	1.005	0.4359	5	No	8	0.2686	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-17	1.399	0.06575	5	No	8	0.7876	0	None	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-18VR	0.8	0.187	5	No	4	0.2738	0	None	No	0.0625	NP (selected)
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-19	1.562	0.3788	5	No	8	0.5584	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-1R	0.836	0.0804	5	No	4	0.3104	0	None	No	0.0625	NP (selected)
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-2	1.177	0.1423	5	No	9	1.225	0	None	ln(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-21	0.6498	0.2352	5	No	8	0.1956	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-21V	1.004	0.5082	5	No	8	0.2339	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-3	1.074	0.2125	5	No	6	0.3136	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-3V	0.762	0.189	5	No	4	0.24	0	None	No	0.0625	NP (selected)
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-45V	0.9002	0.2493	5	No	4	0.1434	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-46	0.314	0.0303	5	No	4	0.1239	0	None	No	0.0625	NP (selected)
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-47	0.767	0.174	5	No	4	0.277	0	None	No	0.0625	NP (selected)
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-5R	0.9582	0.2867	5	No	4	0.1464	0	None	x^2	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-6D	0.9828	0.3154	5	No	8	0.3148	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-6S	0.9066	0.1523	5	No	7	0.3175	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-7	1.342	0.331	5	No	8	0.5182	0	None	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-9R	1.1	0.06025	5	No	4	0.2289	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-9V	0.8227	0.09408	5	No	8	0.3437	0	None	No	0.01	Param.
Fluoride (mg/L)	GS-AP-MW-10R	0.2944	0.2501	4	No	4	0.009777	0	None	No	0.01	Param.
Fluoride (mg/L)	GS-AP-MW-11R	0.143	0.0949	4	No	4	0.02261	0	None	No	0.0625	NP (normality)
Fluoride (mg/L)	GS-AP-MW-12	0.1318	0.09662	4	No	8	0.01661	0	None	No	0.01	Param.
Fluoride (mg/L)	GS-AP-MW-12V	0.1827	0.139	4	No	8	0.02063	0	None	No	0.01	Param.
Fluoride (mg/L)	GS-AP-MW-13R	0.2253	0.04124	4	No	4	0.04052	0	None	No	0.01	Param.
Fluoride (mg/L)	GS-AP-MW-14R	0.2462	0.0683	4	No	4	0.03918	0	None	No	0.01	Param.

Confidence Intervals Summary Table - All Results

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond Printed 11/16/2023, 3:44 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Fluoride (mg/L)	GS-AP-MW-15	0.6072	0.339	4	No	8	0.1265	0	None	No	0.01	Param.
Fluoride (mg/L)	GS-AP-MW-15V	0.3248	0.1757	4	No	8	0.07034	0	None	No	0.01	Param.
Fluoride (mg/L)	GS-AP-MW-16D	0.1249	0.09578	4	No	8	0.01376	0	None	No	0.01	Param.
Fluoride (mg/L)	GS-AP-MW-17	0.3262	0.205	4	No	8	0.05716	0	None	No	0.01	Param.
Fluoride (mg/L)	GS-AP-MW-18VR	0.2347	0.09527	4	No	4	0.03071	0	None	No	0.01	Param.
Fluoride (mg/L)	GS-AP-MW-19	0.3273	0.225	4	No	8	0.04826	0	None	No	0.01	Param.
Fluoride (mg/L)	GS-AP-MW-1R	0.2925	0.1515	4	No	4	0.03106	0	None	No	0.01	Param.
Fluoride (mg/L)	GS-AP-MW-2	0.8989	0.7595	4	No	9	0.0722	0	None	No	0.01	Param.
Fluoride (mg/L)	GS-AP-MW-21	0.228	0.179	4	No	8	0.02309	0	None	No	0.01	Param.
Fluoride (mg/L)	GS-AP-MW-21V	0.641	0.381	4	No	8	0.09377	0	None	No	0.004	NP (normality)
Fluoride (mg/L)	GS-AP-MW-3	0.1068	0.06903	4	No	6	0.02276	33.33	Kaplan-Meier	No	0.01	Param.
Fluoride (mg/L)	GS-AP-MW-3V	0.2903	0.1197	4	No	4	0.03756	0	None	No	0.01	Param.
Fluoride (mg/L)	GS-AP-MW-45V	0.3706	0.08386	4	No	4	0.06316	0	None	No	0.01	Param.
Fluoride (mg/L)	GS-AP-MW-46	0.3755	0.1645	4	No	4	0.04645	0	None	No	0.01	Param.
Fluoride (mg/L)	GS-AP-MW-47	0.1574	0.03812	4	No	4	0.02628	0	None	No	0.01	Param.
Fluoride (mg/L)	GS-AP-MW-5R	0.1649	0.08831	4	No	4	0.01622	0	None	x^2	0.01	Param.
Fluoride (mg/L)	GS-AP-MW-6D	0.1352	0.1053	4	No	8	0.01412	0	None	No	0.01	Param.
Fluoride (mg/L)	GS-AP-MW-6S	0.2483	0.1453	4	No	8	0.05294	0	None	x^(1/3)	0.01	Param.
Fluoride (mg/L)	GS-AP-MW-7	0.1439	0.08495	4	No	8	0.02954	0	None	sqrt(x)	0.01	Param.
Fluoride (mg/L)	GS-AP-MW-9R	0.2895	0.1245	4	No	4	0.03636	0	None	No	0.01	Param.
Fluoride (mg/L)	GS-AP-MW-9V	0.1839	0.1548	4	No	8	0.01372	0	None	No	0.01	Param.
Lead (mg/L)	GS-AP-MW-10R	0.000203	0.00013	0.015	No	4	0.0000365	75	None	No	0.0625	NP (NDs)
Lead (mg/L)	GS-AP-MW-11R	0.000203	0.000187	0.015	No	4	0.000008	75	None	No	0.0625	NP (NDs)
Lead (mg/L)	GS-AP-MW-12V	0.001616	0.00007196	0.015	No	8	0.0009452	25	Kaplan-Meier	sqrt(x)	0.01	Param.
Lead (mg/L)	GS-AP-MW-13R	0.000203	0.00013	0.015	No	4	0.0000365	75	None	No	0.0625	NP (NDs)
Lead (mg/L)	GS-AP-MW-14R	0.00045	0.000084	0.015	No	4	0.0001539	50	None	No	0.0625	NP (selected)
Lead (mg/L)	GS-AP-MW-15	0.000203	0.00008	0.015	No	8	0.00005526	75	Kaplan-Meier	No	0.004	NP (NDs)
Lead (mg/L)	GS-AP-MW-16D	0.000873	0.00009	0.015	No	8	0.000248	62.5	Kaplan-Meier	No	0.004	NP (NDs)
Lead (mg/L)	GS-AP-MW-17	0.000203	0.000175	0.015	No	8	0.000009899	87.5	Kaplan-Meier	No	0.004	NP (NDs)
Lead (mg/L)	GS-AP-MW-18VR	0.000634	0.000069	0.015	No	4	0.0002633	25	None	No	0.0625	NP (selected)
Lead (mg/L)	GS-AP-MW-1R	0.0002399	0.00007181	0.015	No	4	0.000045	25	Kaplan-Meier	No	0.01	Param.
Lead (mg/L)	GS-AP-MW-3	0.000203	0.000073	0.015	No	6	0.00005307	83.33	Kaplan-Meier	No	0.0155	NP (NDs)
Lead (mg/L)	GS-AP-MW-3V	0.0001832	0.00002881	0.015	No	4	0.00006251	50	Kaplan-Meier	No	0.01	Param.
Lead (mg/L)	GS-AP-MW-45V	0.000203	0.00007	0.015	No	4	0.0000665	75	Kaplan-Meier	No	0.0625	NP (NDs)
Lead (mg/L)	GS-AP-MW-6D	0.000203	0.000171	0.015	No	8	0.00001131	87.5	Kaplan-Meier	No	0.004	NP (NDs)
Lead (mg/L)	GS-AP-MW-6S	0.000203	0.00008	0.015	No	8	0.00005299	75	Kaplan-Meier	No	0.004	NP (NDs)
Lead (mg/L)	GS-AP-MW-7	0.002986	0.00005721	0.015	No	8	0.001382	0	None	No	0.01	Param.
Lithium (mg/L)	GS-AP-MW-10R	0.04231	0.03244	0.0809	No	4	0.002175	0	None	No	0.01	Param.
Lithium (mg/L)	GS-AP-MW-11R	0.03503	0.02552	0.0809	No	4	0.002095	0	None	No	0.01	Param.
Lithium (mg/L)	GS-AP-MW-12	0.05541	0.02664	0.0809	No	8	0.01358	0	None	No	0.01	Param.
Lithium (mg/L)	GS-AP-MW-12V	0.04257	0.02871	0.0809	No	8	0.006539	0	None	No	0.01	Param.
Lithium (mg/L)	GS-AP-MW-13R	0.02873	0.02537	0.0809	No	4	0.0007416	0	None	No	0.01	Param.
Lithium (mg/L)	GS-AP-MW-14R	0.02906	0.02119	0.0809	No	4	0.001735	0	None	No	0.01	Param.
Lithium (mg/L)	**GS-AP-MW-15**	**0.517**	**0.2892**	**0.0809**	**Yes**	**8**	**0.1075**	**0**	**None**	**No**	**0.01**	**Param.**
Lithium (mg/L)	GS-AP-MW-15V	0.208	0.0787	0.0809	No	8	0.04258	0	None	No	0.004	NP (normality)
Lithium (mg/L)	GS-AP-MW-16D	0.03606	0.03284	0.0809	No	8	0.001518	0	None	No	0.01	Param.
Lithium (mg/L)	GS-AP-MW-17	0.06514	0.05656	0.0809	No	8	0.00405	0	None	No	0.01	Param.
Lithium (mg/L)	GS-AP-MW-18VR	0.06637	0.03918	0.0809	No	4	0.005987	0	None	No	0.01	Param.
Lithium (mg/L)	GS-AP-MW-19	0.04324	0.03038	0.0809	No	8	0.006065	0	None	No	0.01	Param.
Lithium (mg/L)	GS-AP-MW-1R	0.04128	0.02587	0.0809	No	4	0.003393	0	None	No	0.01	Param.
Lithium (mg/L)	GS-AP-MW-2	0.04462	0.03585	0.0809	No	9	0.00454	0	None	No	0.01	Param.
Lithium (mg/L)	GS-AP-MW-21	0.2754	0.07796	0.0809	No	8	0.1024	0	None	sqrt(x)	0.01	Param.
Lithium (mg/L)	GS-AP-MW-21V	0.1374	0.06764	0.0809	No	8	0.03291	0	None	No	0.01	Param.
Lithium (mg/L)	GS-AP-MW-3	0.09576	0.06234	0.0809	No	6	0.01217	0	None	No	0.01	Param.
Lithium (mg/L)	GS-AP-MW-3V	0.1276	0.02508	0.0809	No	4	0.02258	0	None	No	0.01	Param.
Lithium (mg/L)	GS-AP-MW-45V	0.1132	0.002923	0.0809	No	4	0.02428	0	None	No	0.01	Param.
Lithium (mg/L)	GS-AP-MW-46	0.08324	0.04526	0.0809	No	4	0.008365	0	None	No	0.01	Param.
Lithium (mg/L)	GS-AP-MW-47	0.04536	0.03714	0.0809	No	4	0.001808	0	None	No	0.01	Param.
Lithium (mg/L)	GS-AP-MW-5R	0.08968	0.05527	0.0809	No	4	0.007577	0	None	No	0.01	Param.
Lithium (mg/L)	**GS-AP-MW-6D**	**0.3307**	**0.2933**	**0.0809**	**Yes**	**8**	**0.01767**	**0**	**None**	**No**	**0.01**	**Param.**
Lithium (mg/L)	GS-AP-MW-6S	0.0743	0.04945	0.0809	No	8	0.01172	0	None	No	0.01	Param.
Lithium (mg/L)	**GS-AP-MW-7**	**0.2208**	**0.169**	**0.0809**	**Yes**	**8**	**0.02444**	**0**	**None**	**No**	**0.01**	**Param.**
Lithium (mg/L)	GS-AP-MW-9R	0.03653	0.03447	0.0809	No	4	0.0004546	0	None	No	0.01	Param.
Lithium (mg/L)	GS-AP-MW-9V	0.0315	0.02895	0.0809	No	8	0.001207	0	None	No	0.01	Param.
Molybdenum (mg/L)	GS-AP-MW-10R	0.003674	0.000836	0.1	No	4	0.004587	50	Kaplan-Meier	No	0.01	Param.
Molybdenum (mg/L)	GS-AP-MW-11R	0.01015	0.00014	0.1	No	4	0.005005	75	Kaplan-Meier	No	0.0625	NP (NDs)
Molybdenum (mg/L)	GS-AP-MW-12	0.009281	0.004106	0.1	No	8	0.002441	0	None	No	0.01	Param.
Molybdenum (mg/L)	GS-AP-MW-12V	0.004245	0.001561	0.1	No	8	0.003572	25	Kaplan-Meier	sqrt(x)	0.01	Param.

Confidence Intervals Summary Table - All Results

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond Printed 11/16/2023, 3:44 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Molybdenum (mg/L)	GS-AP-MW-13R	0.001143	0.00003919	0.1	No	4	0.005642	50	Kaplan-Meier	x^(1/3)	0.01	Param.
Molybdenum (mg/L)	GS-AP-MW-14R	0.001411	0.0002755	0.1	No	4	0.005446	50	Kaplan-Meier	x^(1/3)	0.01	Param.
Molybdenum (mg/L)	GS-AP-MW-15	0.07131	0.03728	0.1	No	8	0.01789	0	None	x^3	0.01	Param.
Molybdenum (mg/L)	GS-AP-MW-15V	0.04712	0.0195	0.1	No	8	0.01303	0	None	No	0.01	Param.
Molybdenum (mg/L)	GS-AP-MW-16D	0.01015	0.00014	0.1	No	8	0.005146	50	None	No	0.004	NP (normality)
Molybdenum (mg/L)	GS-AP-MW-17	0.006233	0.001477	0.1	No	8	0.003578	25	Kaplan-Meier	No	0.01	Param.
Molybdenum (mg/L)	GS-AP-MW-18VR	0.06334	0.02681	0.1	No	4	0.008044	0	None	No	0.01	Param.
Molybdenum (mg/L)	GS-AP-MW-19	0.005679	0.002659	0.1	No	8	0.003096	25	Kaplan-Meier	sqrt(x)	0.01	Param.
Molybdenum (mg/L)	GS-AP-MW-1R	0.001772	0.000823	0.1	No	4	0.005156	50	Kaplan-Meier	ln(x)	0.01	Param.
Molybdenum (mg/L)	GS-AP-MW-2	0.004618	0.001983	0.1	No	9	0.001365	11.11	None	No	0.01	Param.
Molybdenum (mg/L)	GS-AP-MW-21	0.06182	0.007613	0.1	No	8	0.03091	0	None	sqrt(x)	0.01	Param.
Molybdenum (mg/L)	GS-AP-MW-21V	0.1111	0.03249	0.1	No	8	0.03707	0	None	No	0.01	Param.
Molybdenum (mg/L)	GS-AP-MW-3	0.01083	0.006292	0.1	No	6	0.00181	16.67	Kaplan-Meier	No	0.01	Param.
Molybdenum (mg/L)	GS-AP-MW-3V	0.0489	0.0191	0.1	No	4	0.01588	0	None	No	0.0625	NP (selected)
Molybdenum (mg/L)	GS-AP-MW-45V	0.0326	0.00454	0.1	No	4	0.01322	0	None	No	0.0625	NP (selected)
Molybdenum (mg/L)	GS-AP-MW-46	0.02073	0.001532	0.1	No	4	0.004229	0	None	No	0.01	Param.
Molybdenum (mg/L)	GS-AP-MW-47	0.0112	0.00165	0.1	No	4	0.005094	25	None	No	0.0625	NP (selected)
Molybdenum (mg/L)	GS-AP-MW-5R	0.01015	0.00212	0.1	No	4	0.004565	50	None	No	0.0625	NP (normality)
Molybdenum (mg/L)	GS-AP-MW-6D	0.01116	0.009419	0.1	No	8	0.0008226	0	None	No	0.01	Param.
Molybdenum (mg/L)	GS-AP-MW-6S	0.04473	0.02684	0.1	No	8	0.00844	0	None	No	0.01	Param.
Molybdenum (mg/L)	**GS-AP-MW-7**	**0.2235**	**0.2002**	**0.1**	**Yes**	**8**	**0.01099**	**0**	**None**	**No**	**0.01**	**Param.**
Molybdenum (mg/L)	GS-AP-MW-9R	0.01015	0.00308	0.1	No	4	0.004067	50	None	No	0.0625	NP (normality)
Molybdenum (mg/L)	GS-AP-MW-9V	0.01015	0.000538	0.1	No	8	0.004547	50	None	No	0.004	NP (normality)
Selenium (mg/L)	GS-AP-MW-6S	0.001071	0.0007545	0.05	No	8	0.0001427	37.5	Kaplan-Meier	No	0.01	Param.
Thallium (mg/L)	GS-AP-MW-18VR	0.000203	0.000077	0.002	No	4	0.000063	75	None	No	0.0625	NP (NDs)

Appendix IV Trend Tests - Significant Results

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond   Printed 11/16/2023, 3:49 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Arsenic (mg/L)	**GS-AP-MW-6D**	**0.008335**	**156**	**66**	**Yes**	**21**	**0**	**n/a**	**n/a**	**0.05**	**NP**
Arsenic (mg/L)	**GS-AP-MW-7**	**0.01618**	**129**	**66**	**Yes**	**21**	**0**	**n/a**	**n/a**	**0.05**	**NP**
Lithium (mg/L)	**GS-AP-MW-15**	**0.02896**	**99**	**66**	**Yes**	**21**	**0**	**n/a**	**n/a**	**0.05**	**NP**
Lithium (mg/L)	**GS-AP-MW-17V (bg)**	**-0.004015**	**-33**	**-23**	**Yes**	**10**	**0**	**n/a**	**n/a**	**0.05**	**NP**
Lithium (mg/L)	**GS-AP-MW-6D**	**0.0159**	**146**	**66**	**Yes**	**21**	**0**	**n/a**	**n/a**	**0.05**	**NP**
Lithium (mg/L)	**GS-AP-MW-7**	**0.009718**	**136**	**66**	**Yes**	**21**	**0**	**n/a**	**n/a**	**0.05**	**NP**
Lithium (mg/L)	**GS-AP-MW-8 (bg)**	**0**	**-83**	**-66**	**Yes**	**21**	**71.43**	**n/a**	**n/a**	**0.05**	**NP**
Molybdenum (mg/L)	**GS-AP-MW-7**	**0.01246**	**179**	**66**	**Yes**	**21**	**0**	**n/a**	**n/a**	**0.05**	**NP**

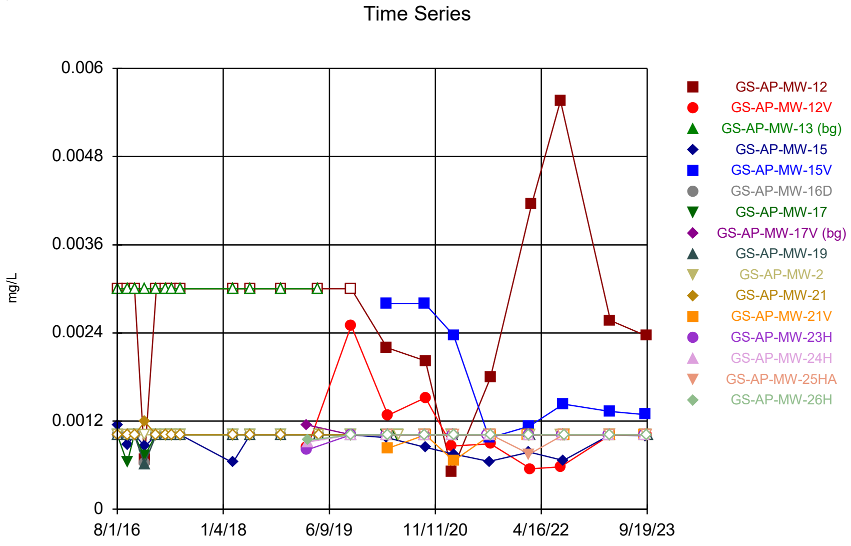
Appendix IV Trend Tests - All Results

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond Printed 11/16/2023, 3:49 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Arsenic (mg/L)	GS-AP-MW-13 (bg)	0	0	30	No	12	100	n/a	n/a	0.05	NP
Arsenic (mg/L)	GS-AP-MW-17V (bg)	-0.0002279	-12	-23	No	10	20	n/a	n/a	0.05	NP
Arsenic (mg/L)	**GS-AP-MW-6D**	**0.008335**	**156**	**66**	**Yes**	**21**	**0**	**n/a**	**n/a**	**0.05**	**NP**
Arsenic (mg/L)	**GS-AP-MW-7**	**0.01618**	**129**	**66**	**Yes**	**21**	**0**	**n/a**	**n/a**	**0.05**	**NP**
Arsenic (mg/L)	GS-AP-MW-8 (bg)	-0.00005185	-63	-66	No	21	52.38	n/a	n/a	0.05	NP
Arsenic (mg/L)	GS-AP-MW-13R	0.009787	4	8	No	4	0	n/a	n/a	0.05	NP
Arsenic (mg/L)	GS-AP-MW-46	0.03958	2	8	No	4	0	n/a	n/a	0.05	NP
Lithium (mg/L)	GS-AP-MW-13 (bg)	0	7	30	No	12	33.33	n/a	n/a	0.05	NP
Lithium (mg/L)	**GS-AP-MW-15**	**0.02896**	**99**	**66**	**Yes**	**21**	**0**	**n/a**	**n/a**	**0.05**	**NP**
Lithium (mg/L)	**GS-AP-MW-17V (bg)**	**-0.004015**	**-33**	**-23**	**Yes**	**10**	**0**	**n/a**	**n/a**	**0.05**	**NP**
Lithium (mg/L)	**GS-AP-MW-6D**	**0.0159**	**146**	**66**	**Yes**	**21**	**0**	**n/a**	**n/a**	**0.05**	**NP**
Lithium (mg/L)	**GS-AP-MW-7**	**0.009718**	**136**	**66**	**Yes**	**21**	**0**	**n/a**	**n/a**	**0.05**	**NP**
Lithium (mg/L)	**GS-AP-MW-8 (bg)**	**0**	**-83**	**-66**	**Yes**	**21**	**71.43**	**n/a**	**n/a**	**0.05**	**NP**
Molybdenum (mg/L)	GS-AP-MW-13 (bg)	0	0	30	No	12	100	n/a	n/a	0.05	NP
Molybdenum (mg/L)	GS-AP-MW-17V (bg)	0.0002748	4	23	No	10	20	n/a	n/a	0.05	NP
Molybdenum (mg/L)	**GS-AP-MW-7**	**0.01246**	**179**	**66**	**Yes**	**21**	**0**	**n/a**	**n/a**	**0.05**	**NP**
Molybdenum (mg/L)	GS-AP-MW-8 (bg)	0	-14	-66	No	21	95.24	n/a	n/a	0.05	NP

FIGURE A.

Sanitas™ v.10.0.13 . UG
Hollow symbols indicate censored values.



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Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

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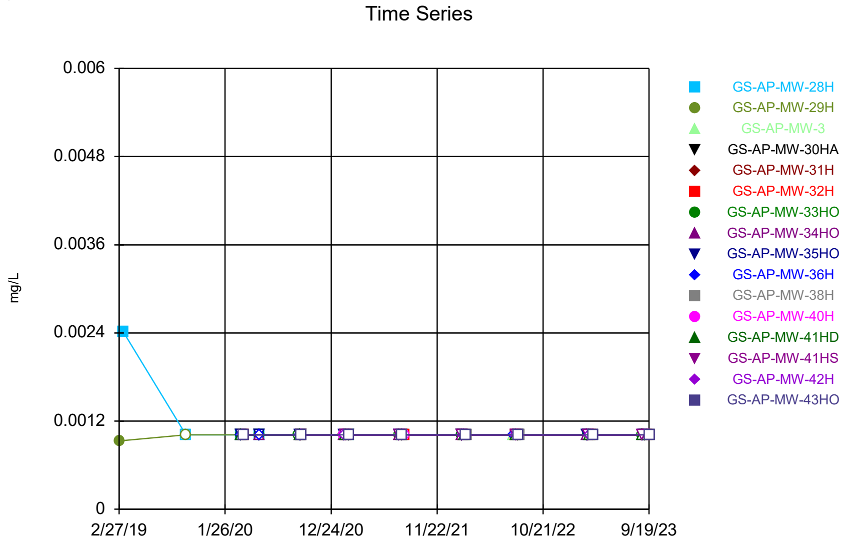

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Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

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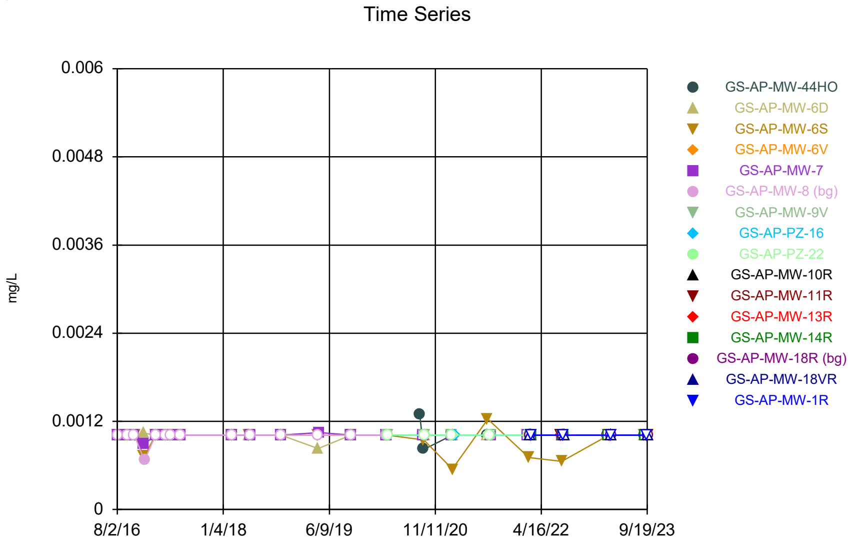

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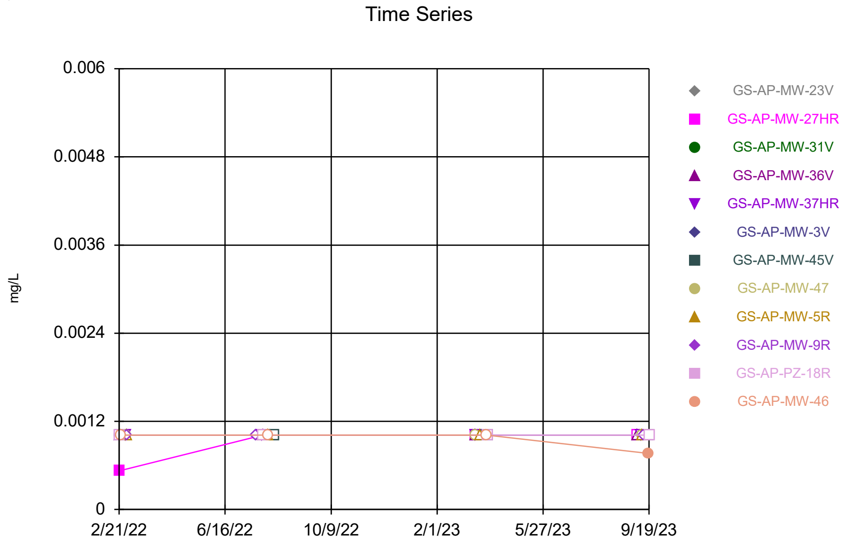

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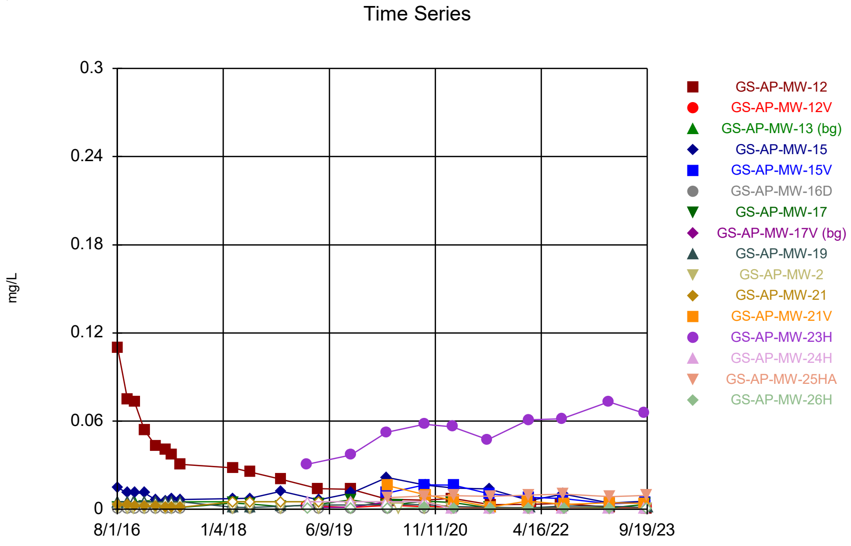

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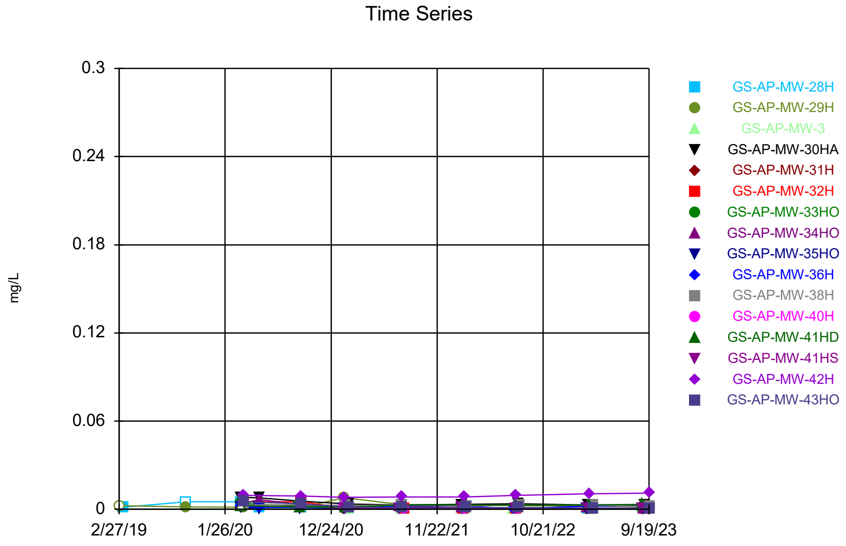

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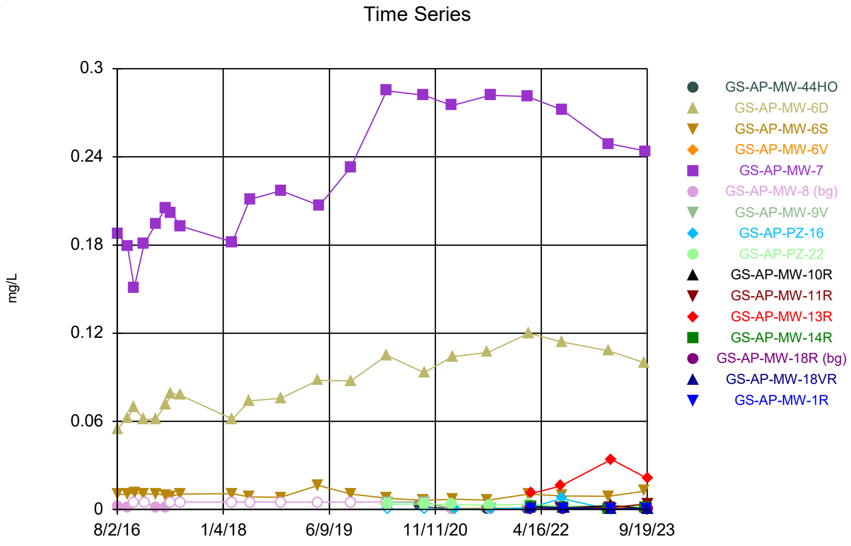

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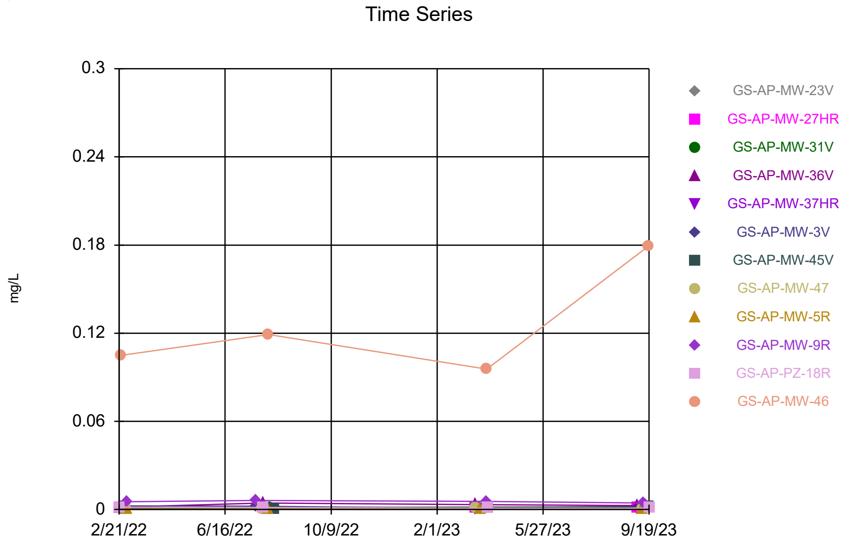
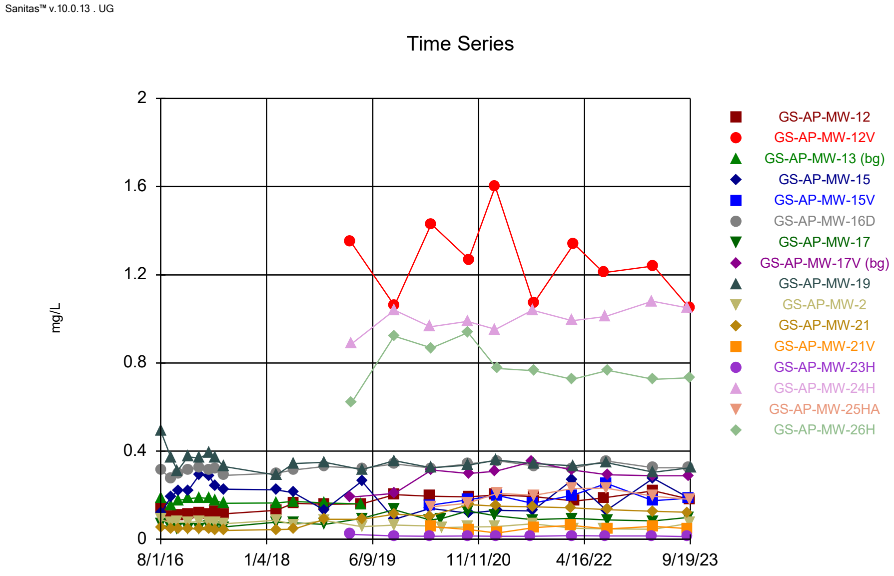


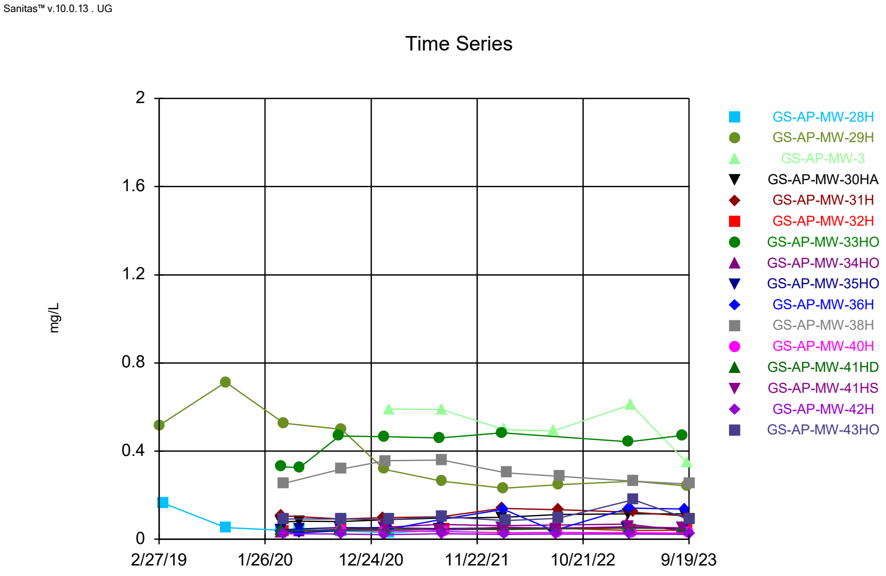
Constituent: Arsenic Analysis Run 11/15/2023 3:02 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond



Constituent: Barium Analysis Run 11/15/2023 3:02 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond



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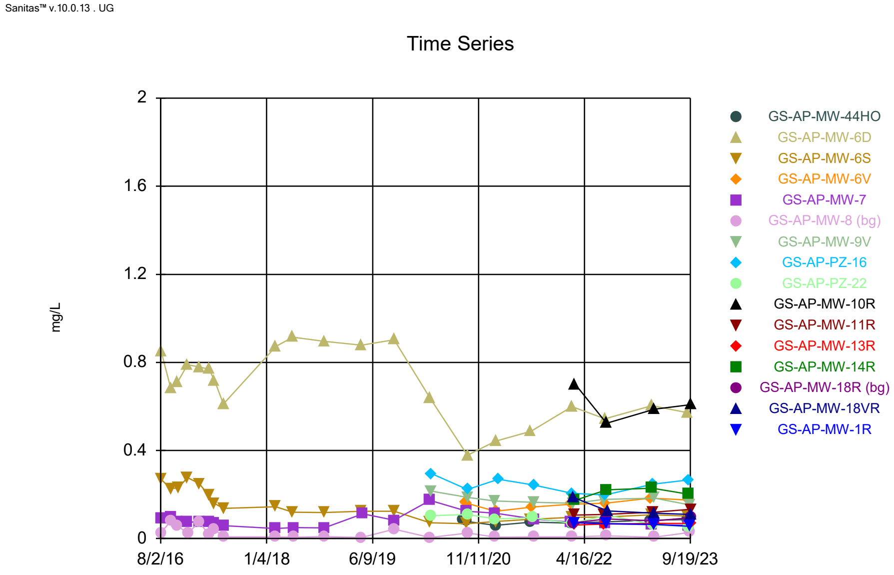
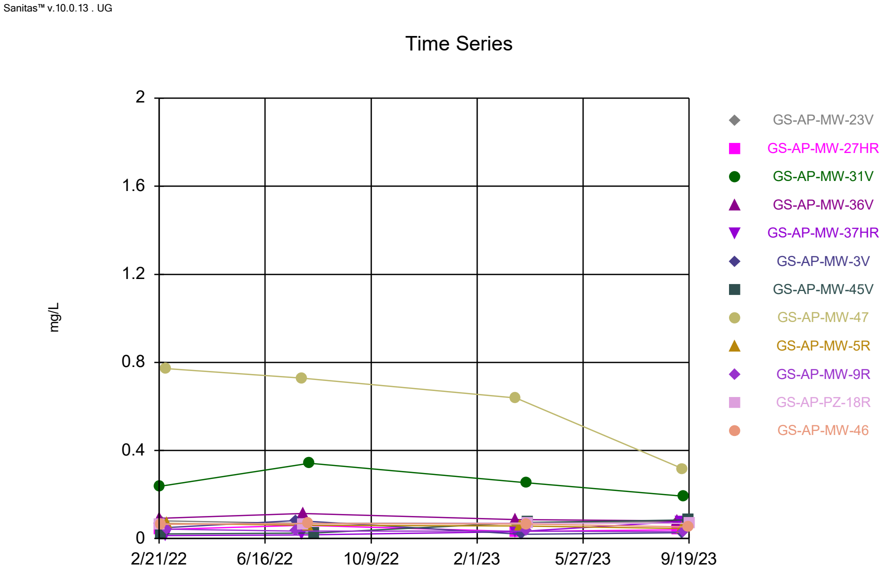
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond



Constituent: Barium Analysis Run 11/15/2023 3:02 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

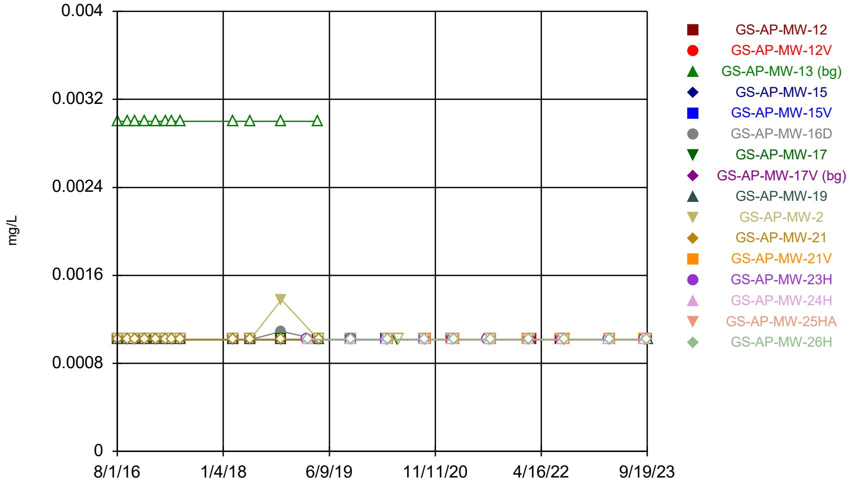


Constituent: Barium Analysis Run 11/15/2023 3:02 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG
Hollow symbols indicate censored values.

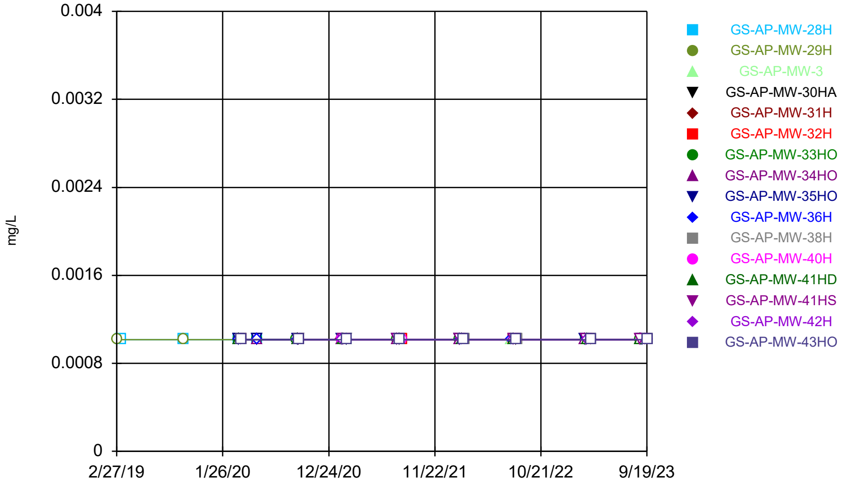
Time Series



Constituent: Beryllium Analysis Run 11/15/2023 3:02 PM
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG
Hollow symbols indicate censored values.

Time Series



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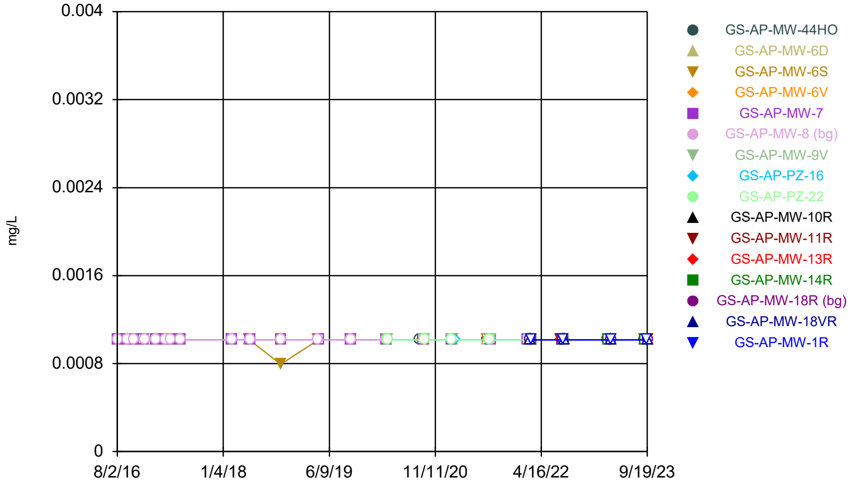
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG
Hollow symbols indicate censored values.

Time Series



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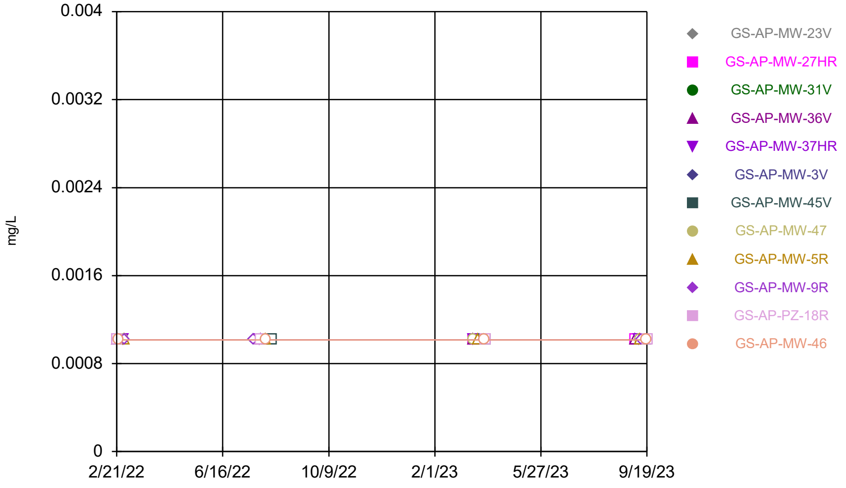
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG
Hollow symbols indicate censored values.

Time Series



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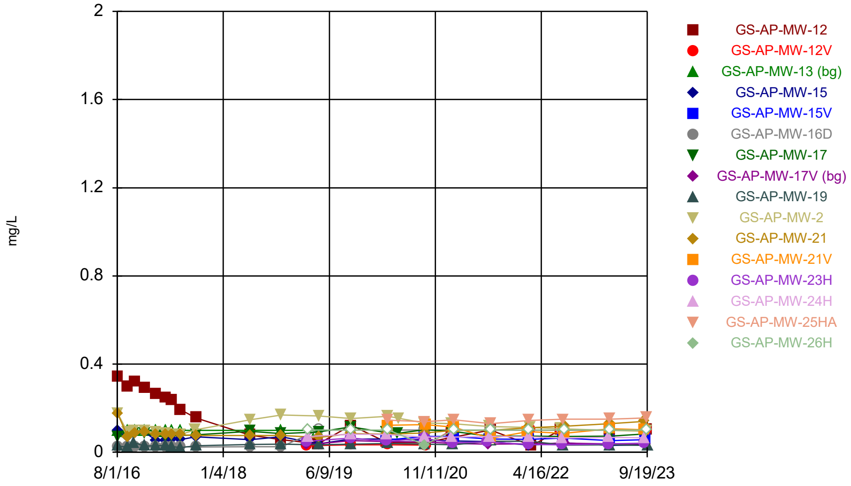
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG
Hollow symbols indicate censored values.

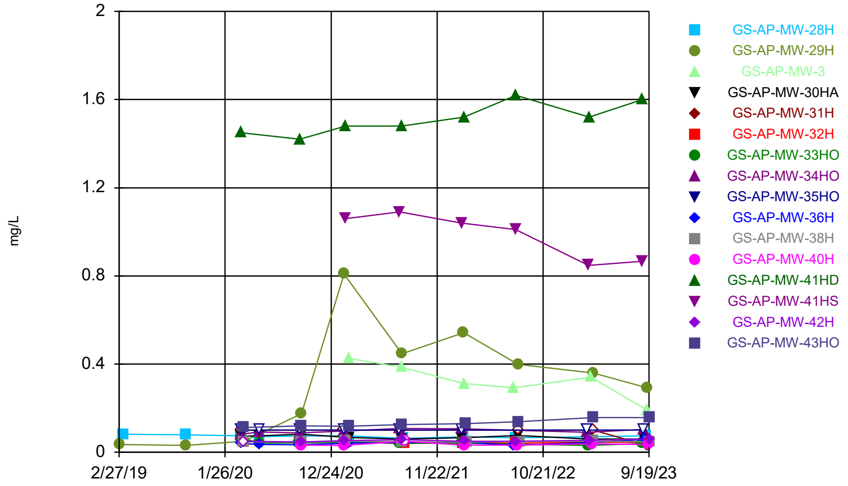
Time Series



Constituent: Boron Analysis Run 11/15/2023 3:02 PM
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG
Hollow symbols indicate censored values.

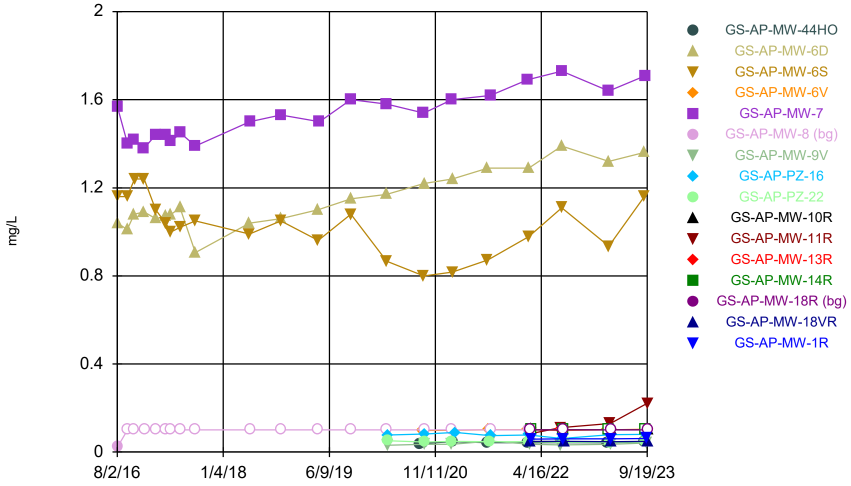
Time Series



Constituent: Boron Analysis Run 11/15/2023 3:02 PM
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG
Hollow symbols indicate censored values.

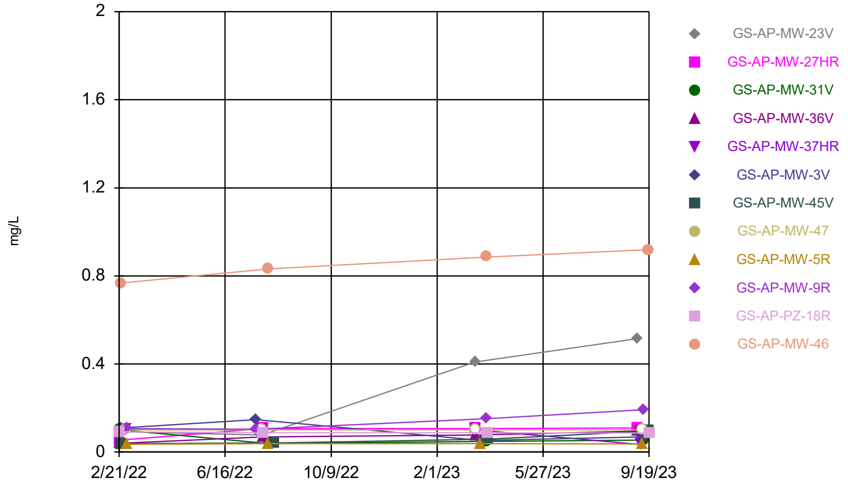
Time Series



Constituent: Boron Analysis Run 11/15/2023 3:02 PM
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG
Hollow symbols indicate censored values.

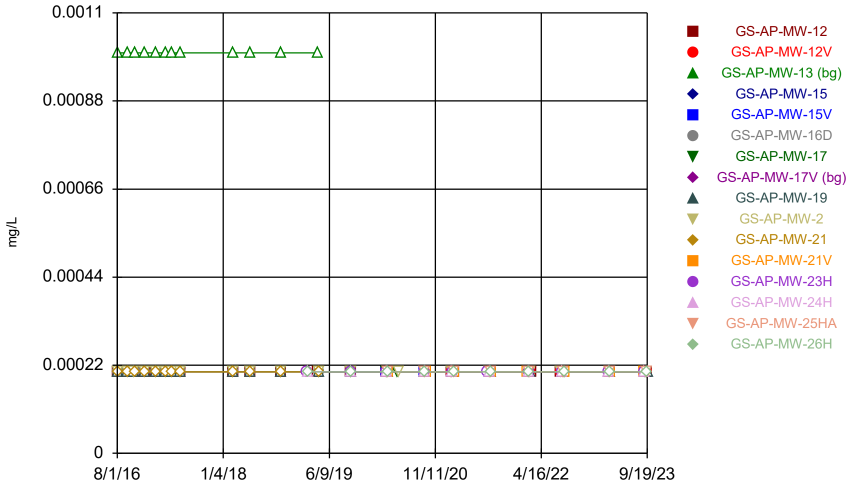
Time Series



Constituent: Boron Analysis Run 11/15/2023 3:02 PM
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG
Hollow symbols indicate censored values.

Time Series

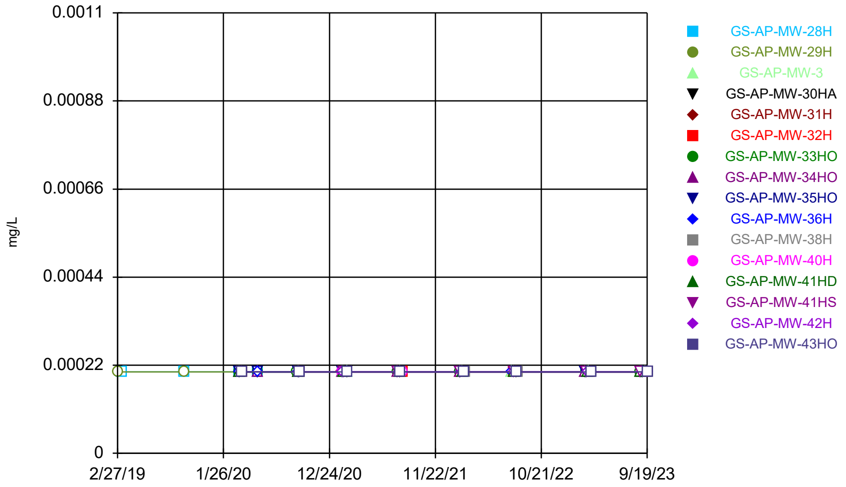


Constituent: Cadmium Analysis Run 11/15/2023 3:02 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG
Hollow symbols indicate censored values.

Time Series

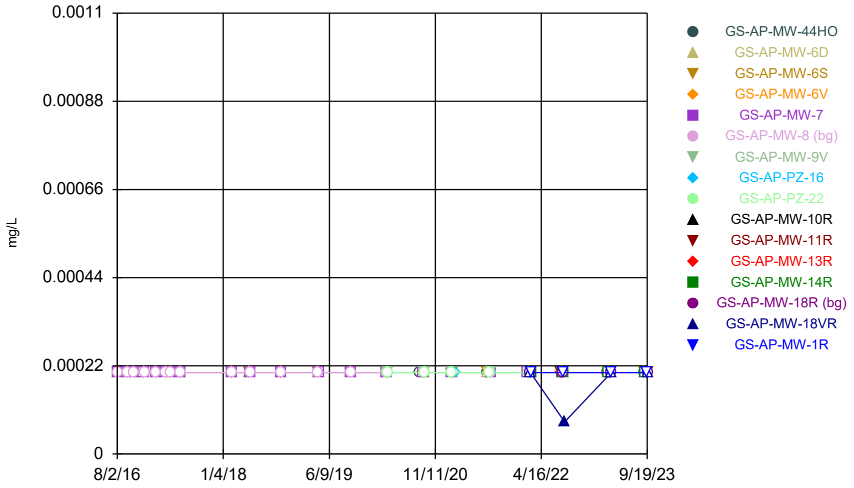


Constituent: Cadmium Analysis Run 11/15/2023 3:02 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG
Hollow symbols indicate censored values.

Time Series



Constituent: Cadmium Analysis Run 11/15/2023 3:02 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

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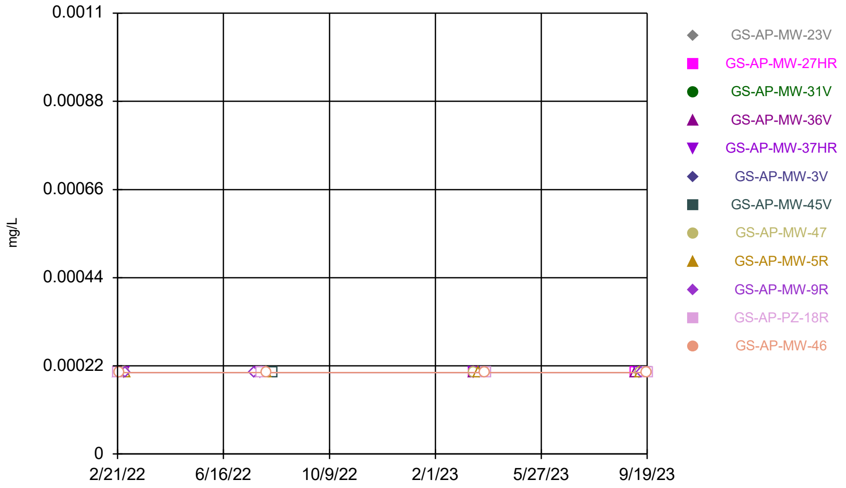
Hollow symbols indicate censored values.

Time Series



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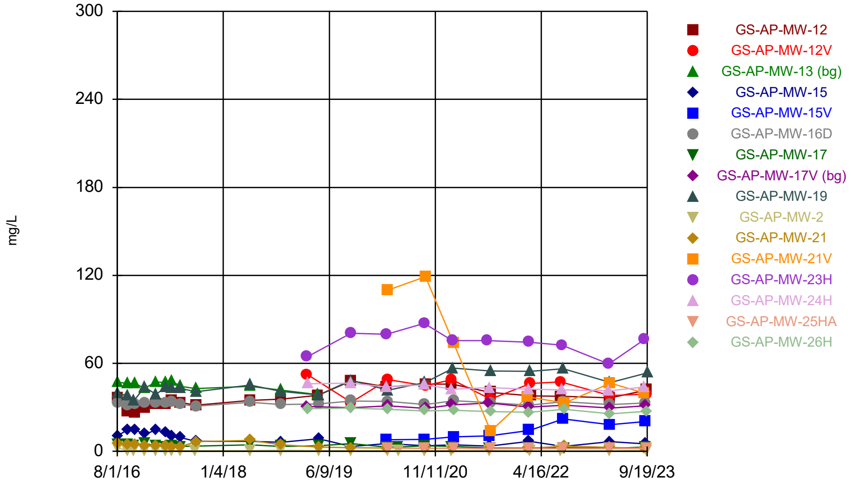
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG

Time Series

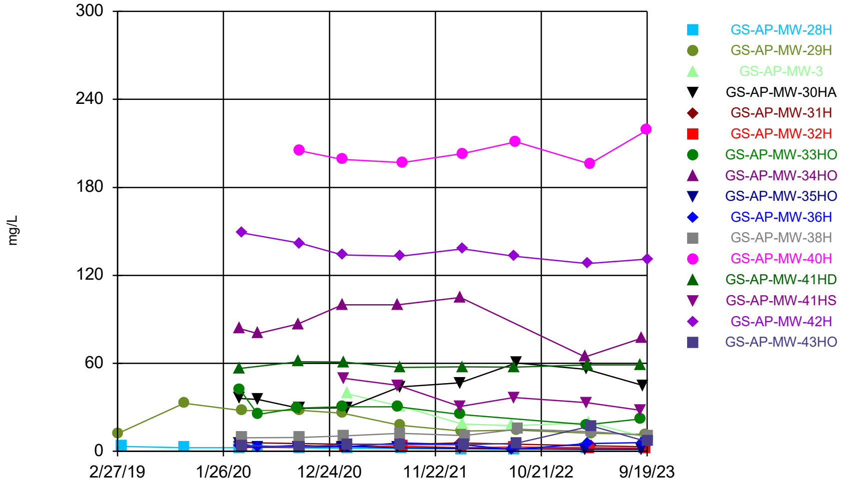


Constituent: Calcium Analysis Run 11/15/2023 3:03 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG

Time Series



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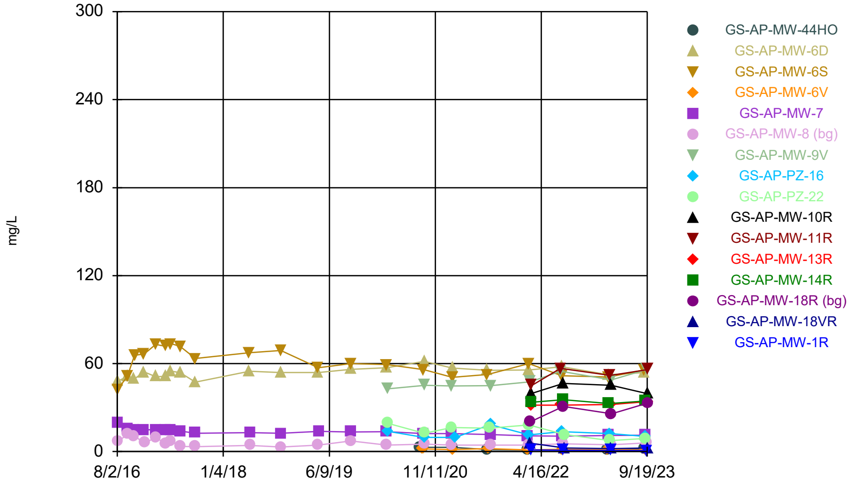
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG

Time Series



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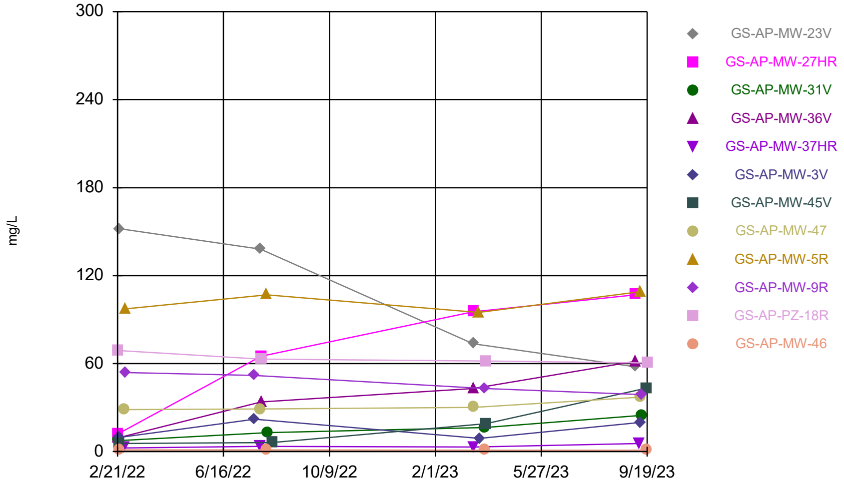
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG

Time Series



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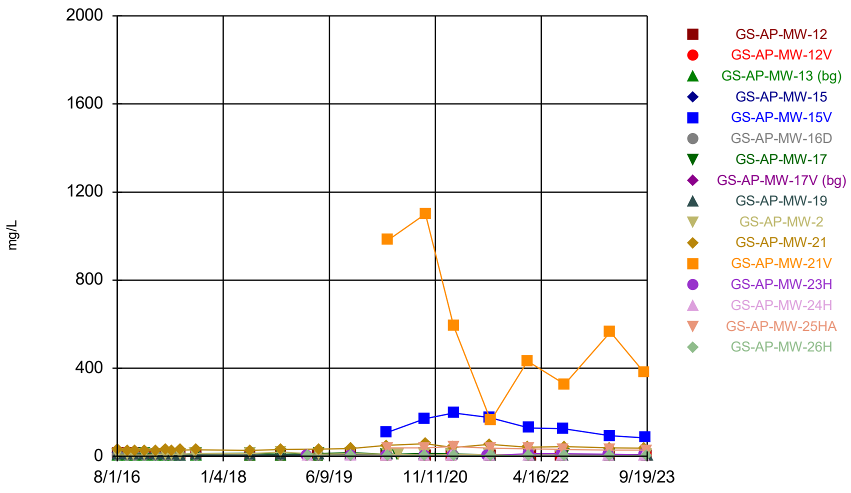
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG

Time Series

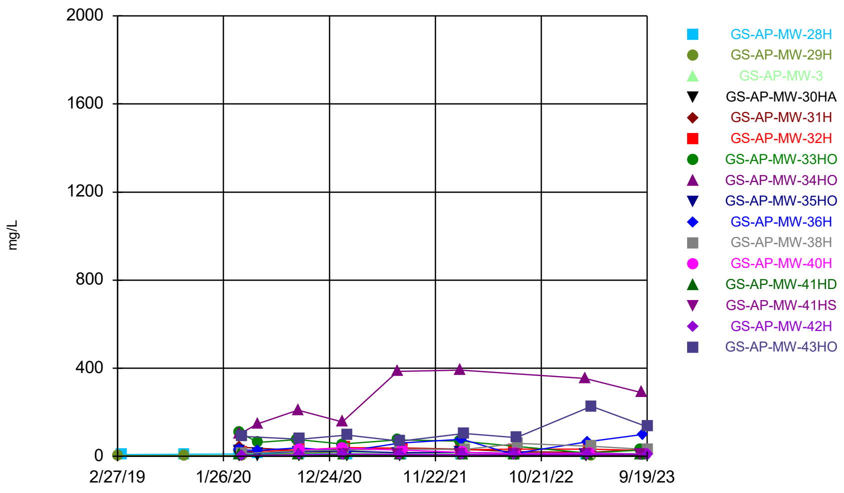


Constituent: Chloride   Analysis Run 11/15/2023 3:03 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG

Time Series



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Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG

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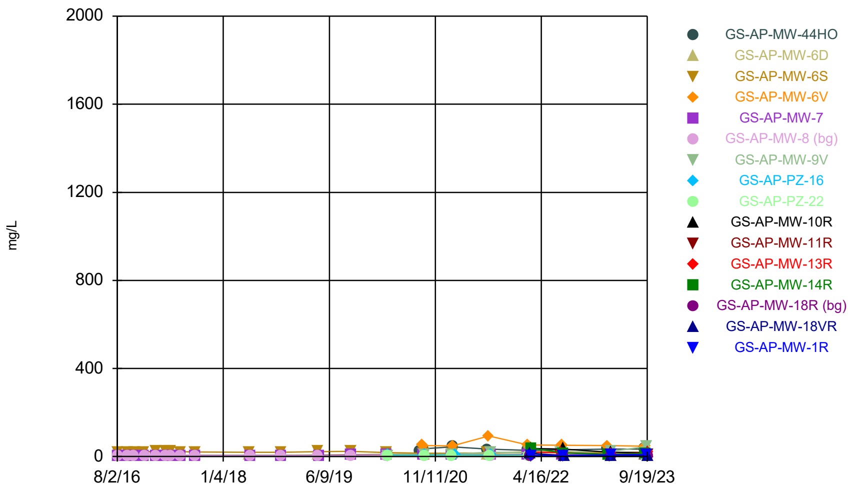

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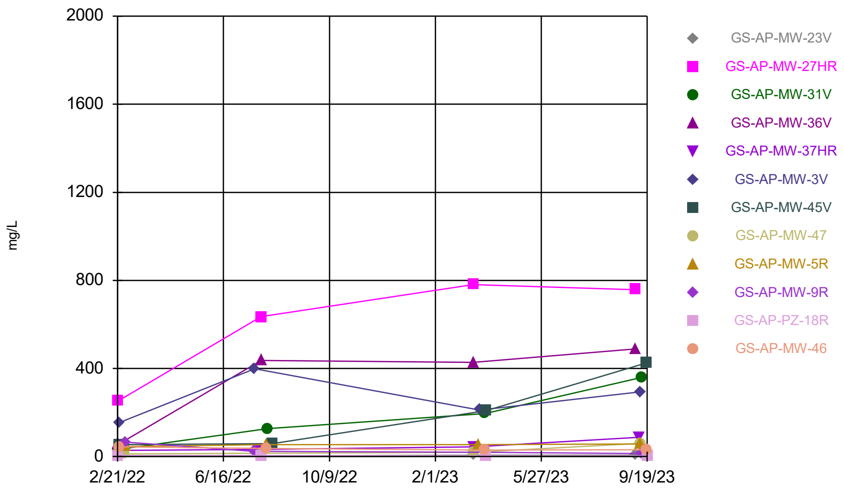
Sanitas™ v.10.0.13 . UG

Time Series



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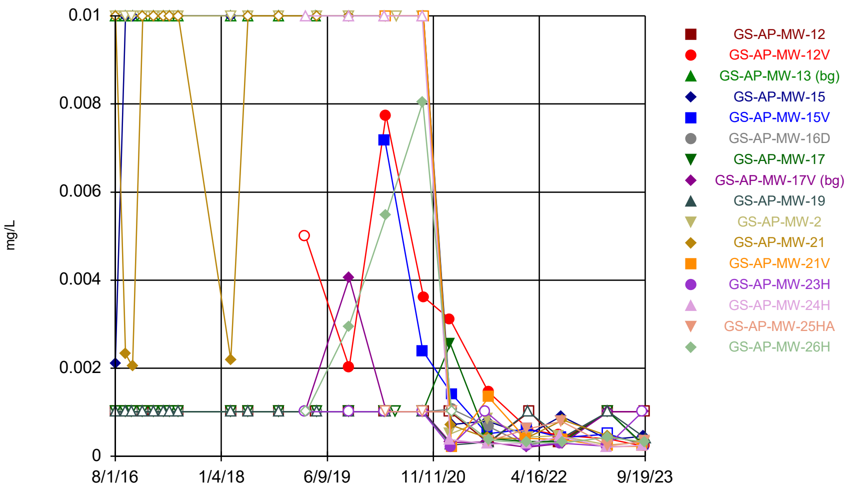
Sanitas™ v.10.0.13 . UG
Hollow symbols indicate censored values.

Time Series

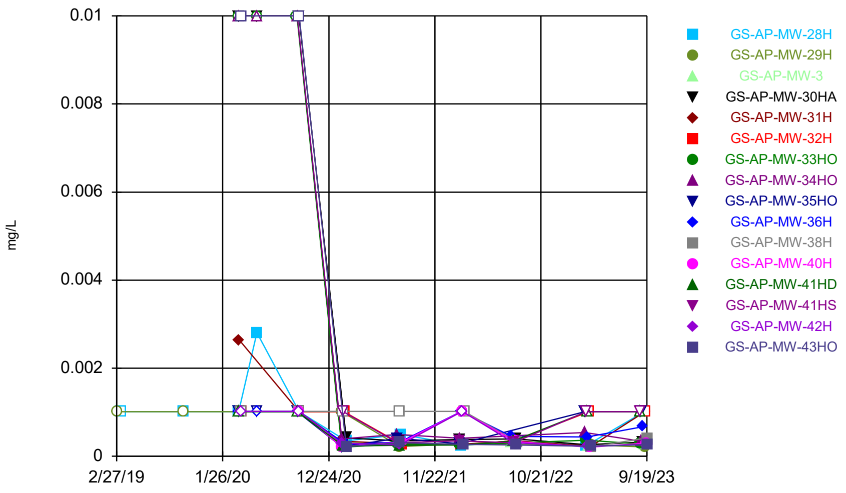


Constituent: Chromium Analysis Run 11/15/2023 3:03 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG
Hollow symbols indicate censored values.

Time Series



Constituent: Chromium Analysis Run 11/15/2023 3:03 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

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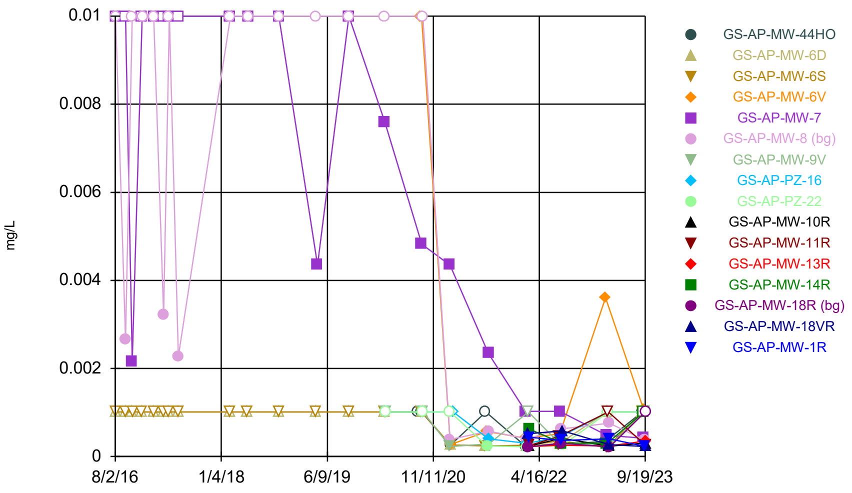
Hollow symbols indicate censored values.

Time Series



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Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

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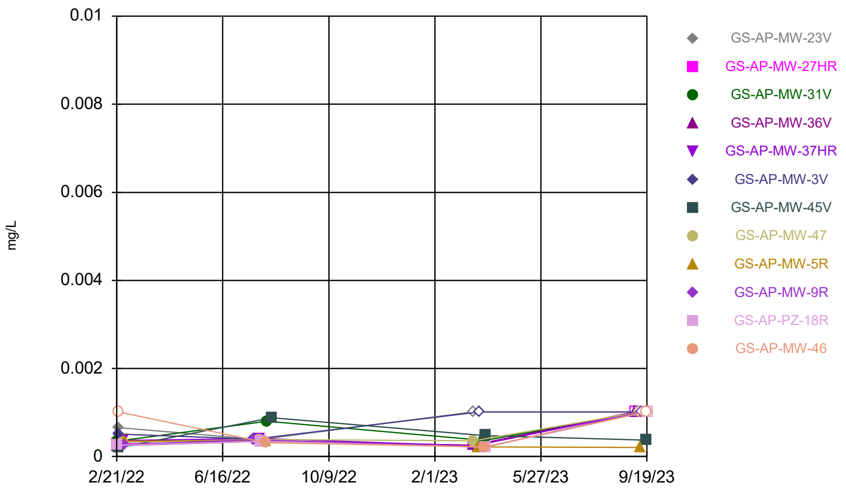
Time Series



Constituent: Chromium Analysis Run 11/15/2023 3:03 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG
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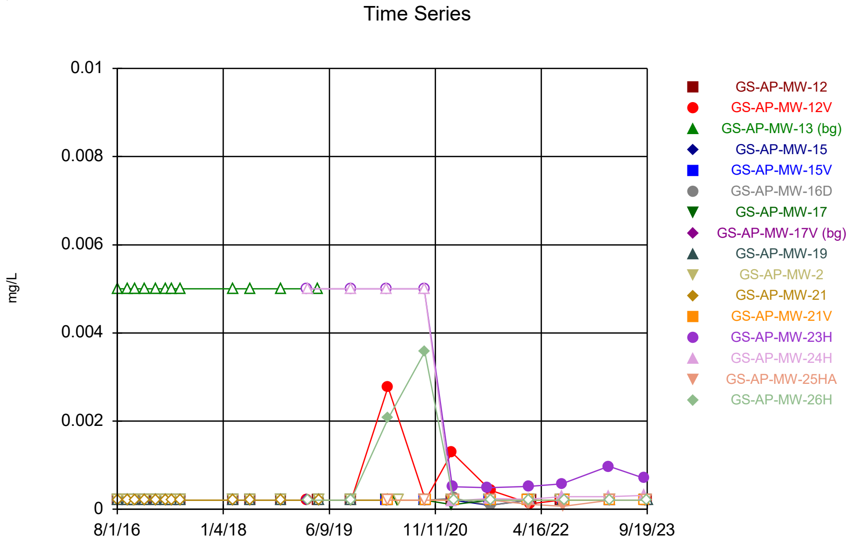
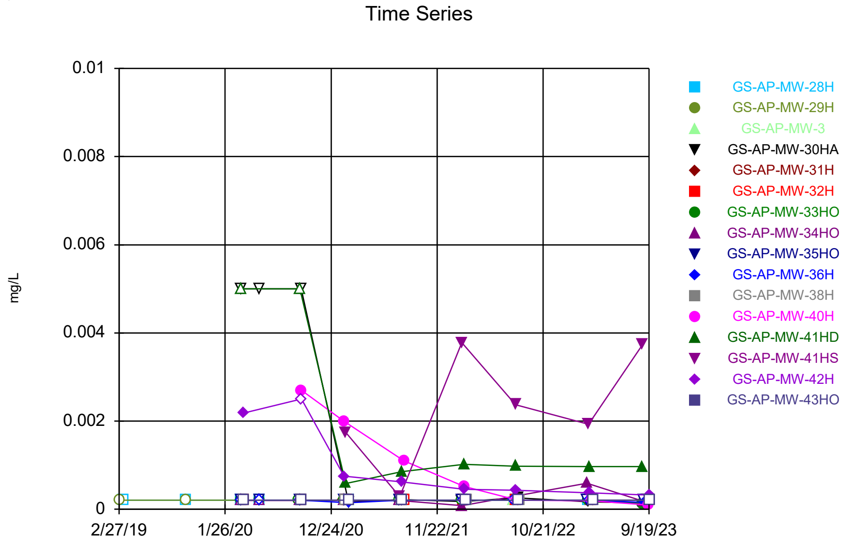


Constituent: Cobalt Analysis Run 11/15/2023 3:03 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

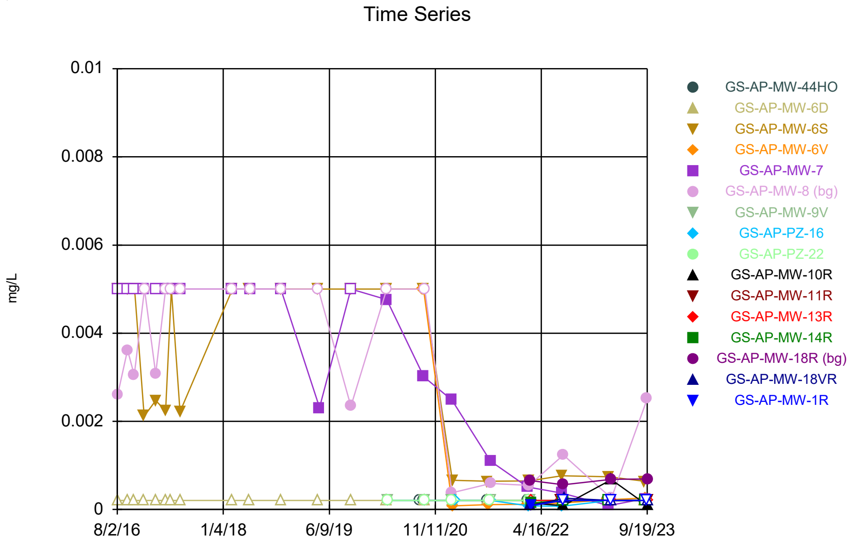
Sanitas™ v.10.0.13 . UG
Hollow symbols indicate censored values.



Constituent: Cobalt Analysis Run 11/15/2023 3:03 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

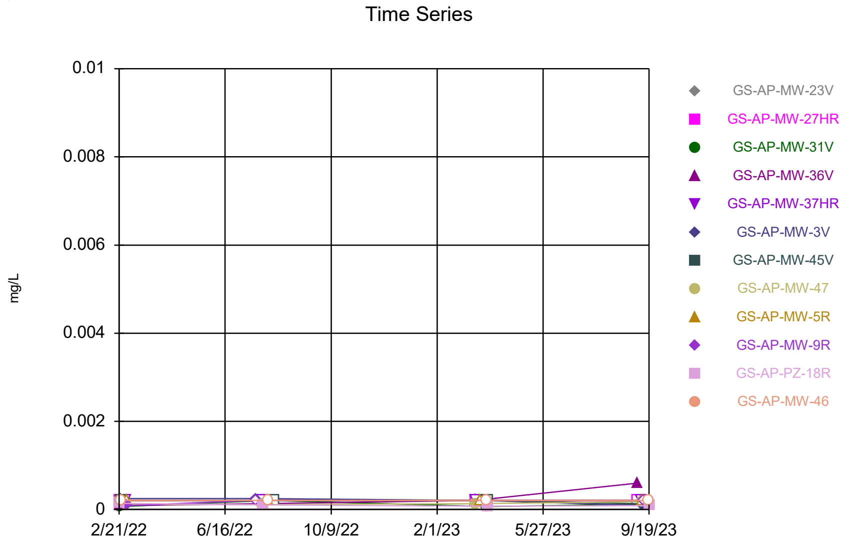
Sanitas™ v.10.0.13 . UG
Hollow symbols indicate censored values.



Constituent: Cobalt Analysis Run 11/15/2023 3:03 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

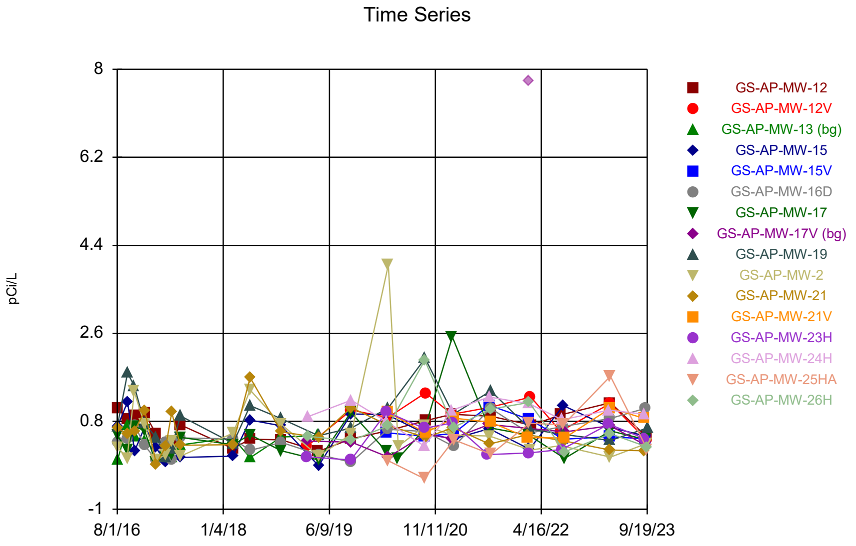
Sanitas™ v.10.0.13 . UG
Hollow symbols indicate censored values.



Constituent: Cobalt Analysis Run 11/15/2023 3:03 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

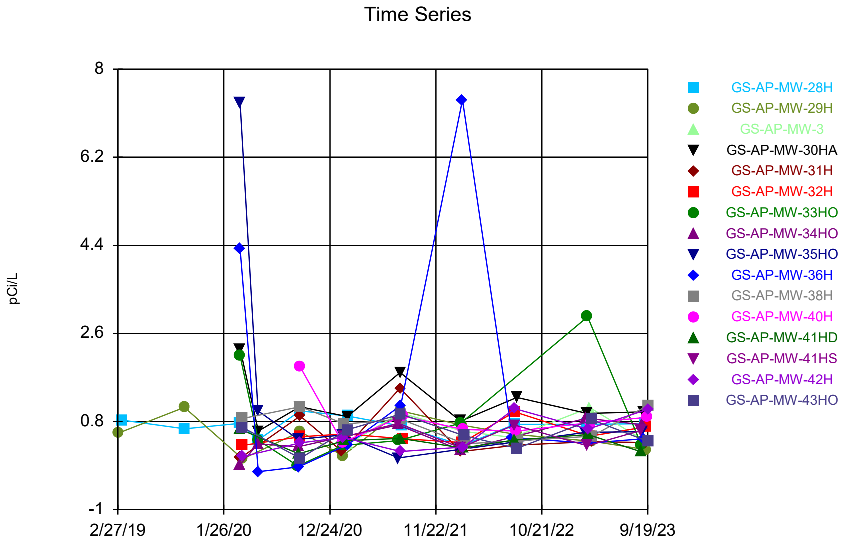
Sanitas™ v.10.0.13 . UG


Time Series

Constituent: Combined Radium 226 + 228 Analysis Run 11/15/2023 3:03 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

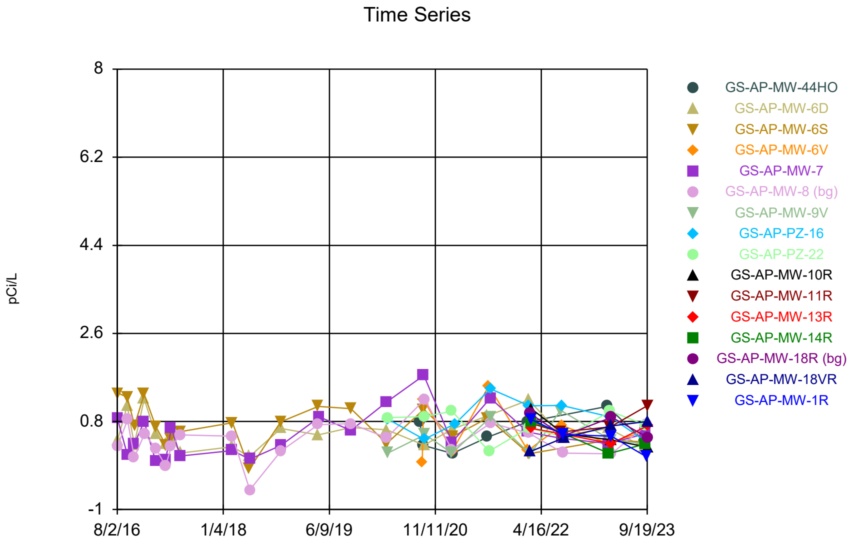
Sanitas™ v.10.0.13 . UG


Time Series

Constituent: Combined Radium 226 + 228 Analysis Run 11/15/2023 3:03 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

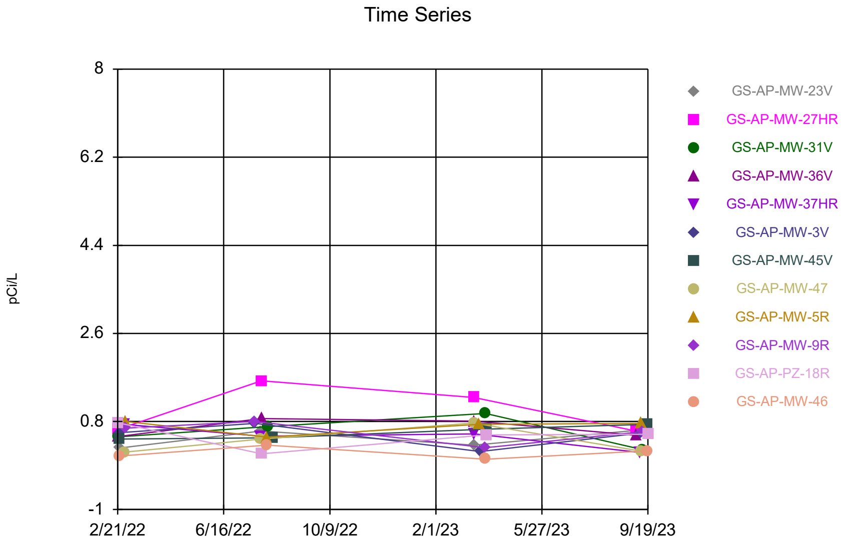
Sanitas™ v.10.0.13 . UG


Time Series

Constituent: Combined Radium 226 + 228 Analysis Run 11/15/2023 3:03 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG

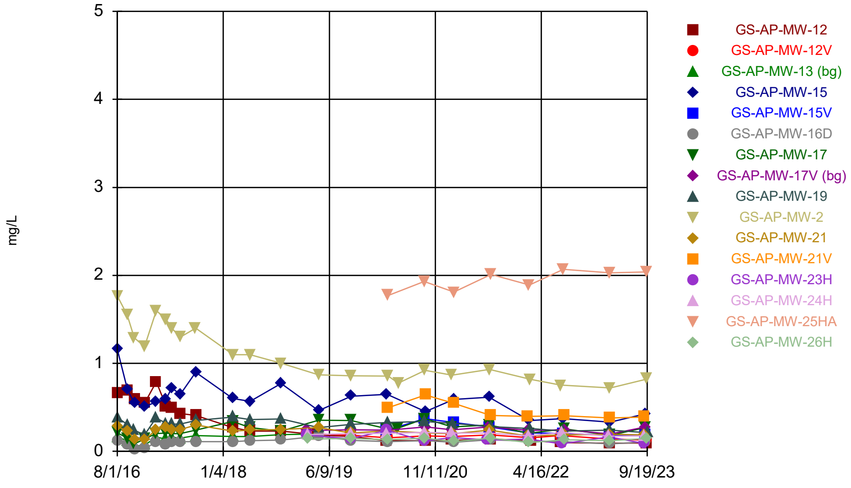

Time Series

Constituent: Combined Radium 226 + 228 Analysis Run 11/15/2023 3:03 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG

Time Series

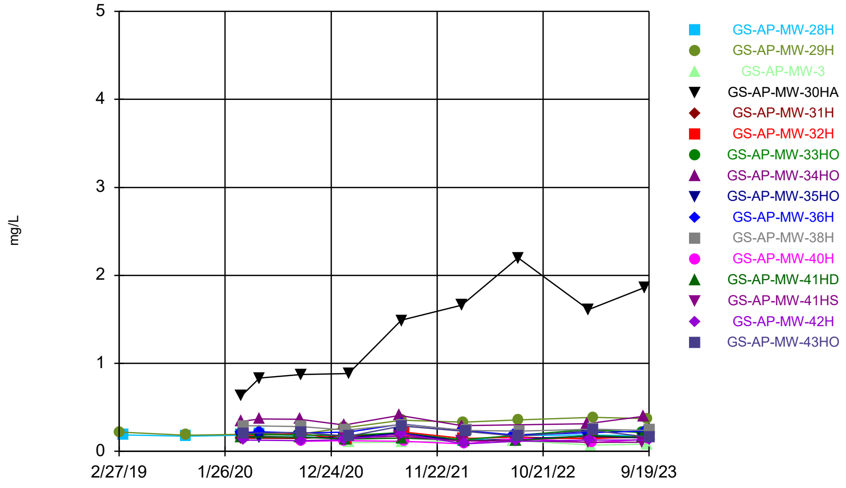


Constituent: Fluoride Analysis Run 11/15/2023 3:03 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG
Hollow symbols indicate censored values.

Time Series

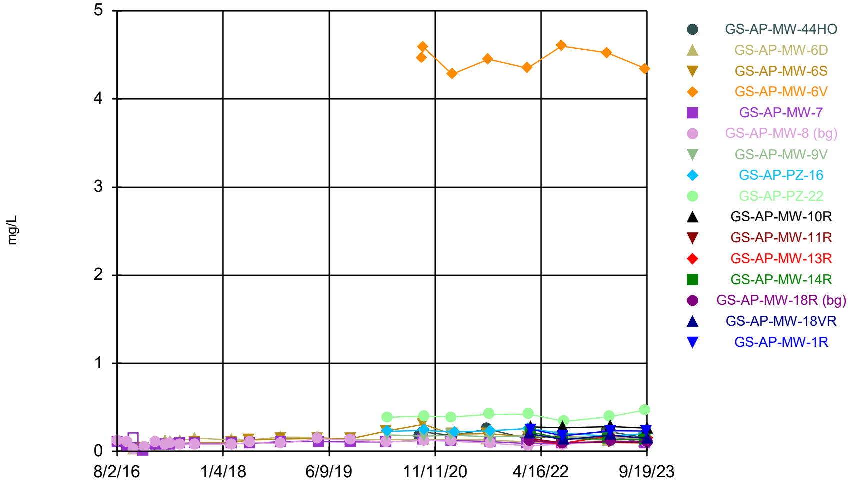


Constituent: Fluoride Analysis Run 11/15/2023 3:03 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG
Hollow symbols indicate censored values.

Time Series

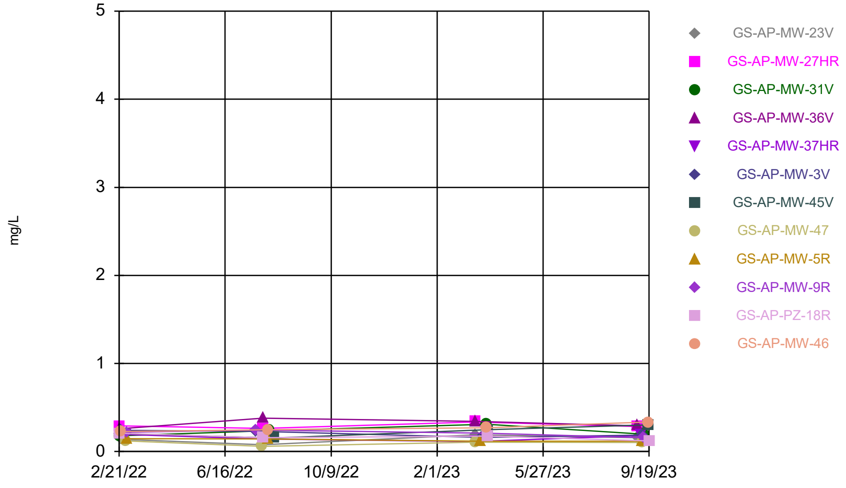


Constituent: Fluoride Analysis Run 11/15/2023 3:03 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG

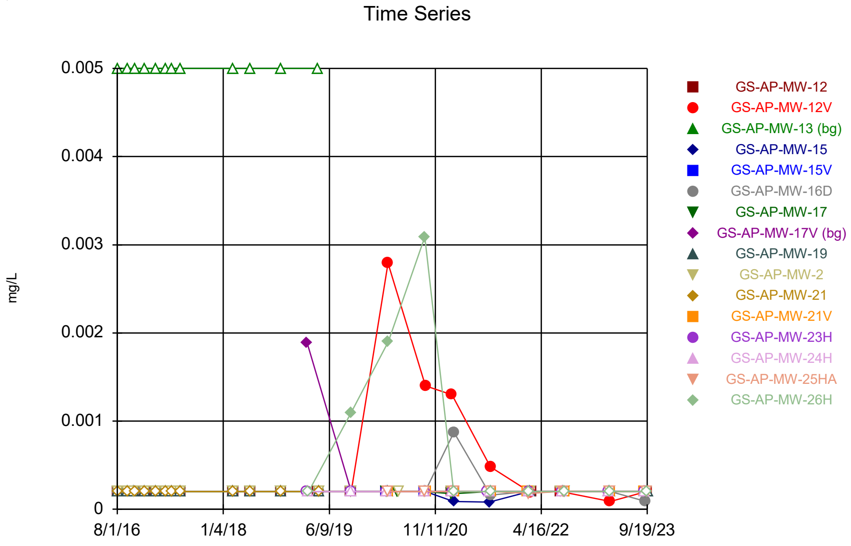
Time Series



Constituent: Fluoride Analysis Run 11/15/2023 3:03 PM

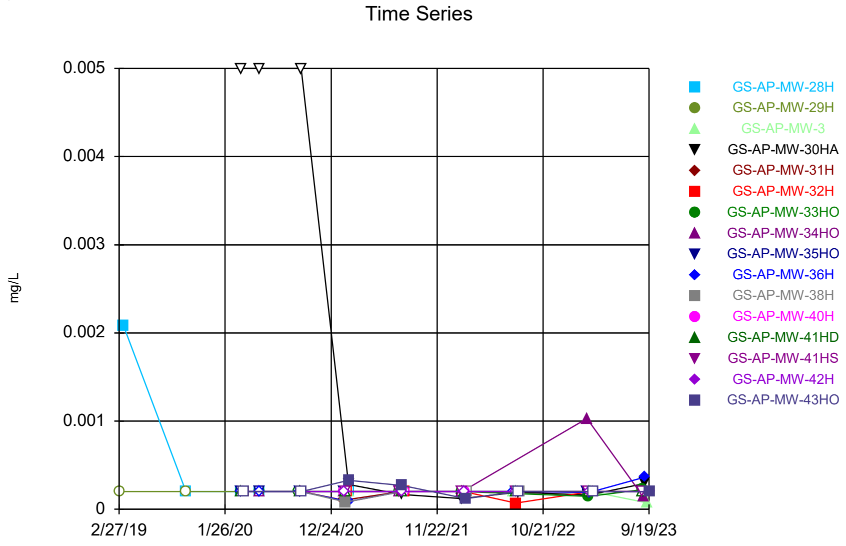
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG
Hollow symbols indicate censored values.



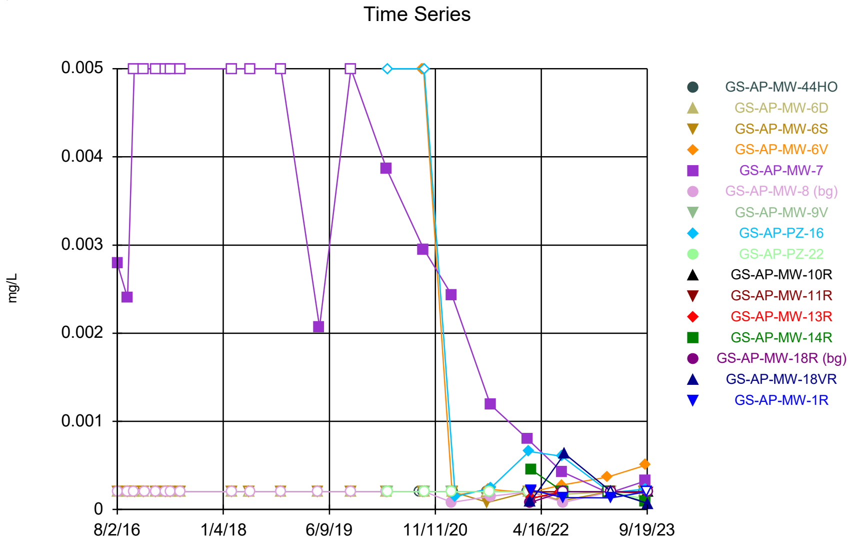
Constituent: Lead Analysis Run 11/15/2023 3:03 PM
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG
Hollow symbols indicate censored values.



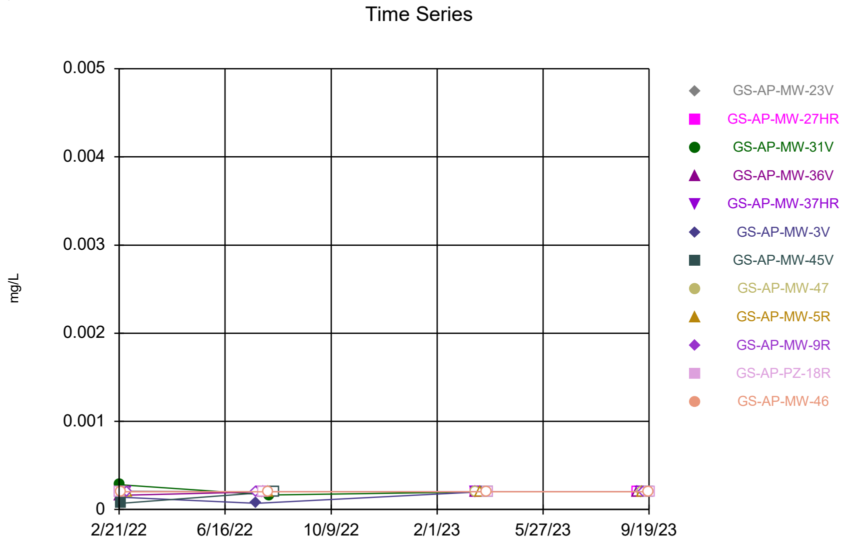
Constituent: Lead Analysis Run 11/15/2023 3:03 PM
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG
Hollow symbols indicate censored values.



Constituent: Lead Analysis Run 11/15/2023 3:03 PM
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

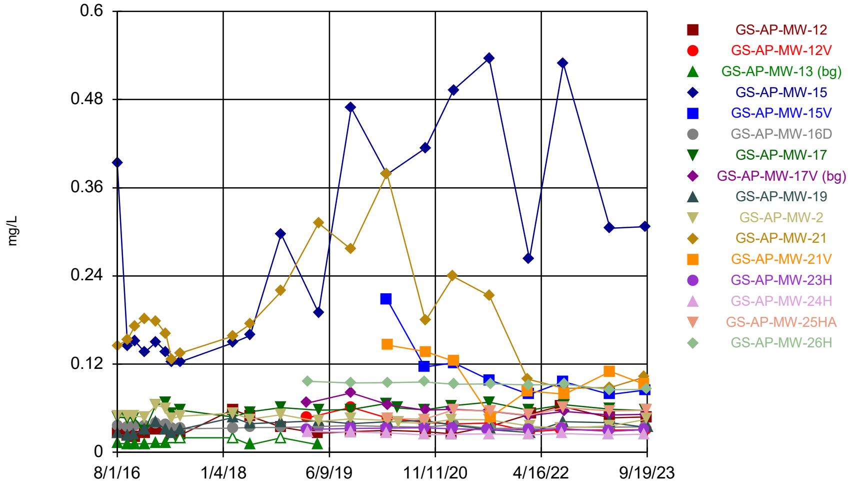
Sanitas™ v.10.0.13 . UG
Hollow symbols indicate censored values.



Constituent: Lead Analysis Run 11/15/2023 3:03 PM
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG
Hollow symbols indicate censored values.

Time Series

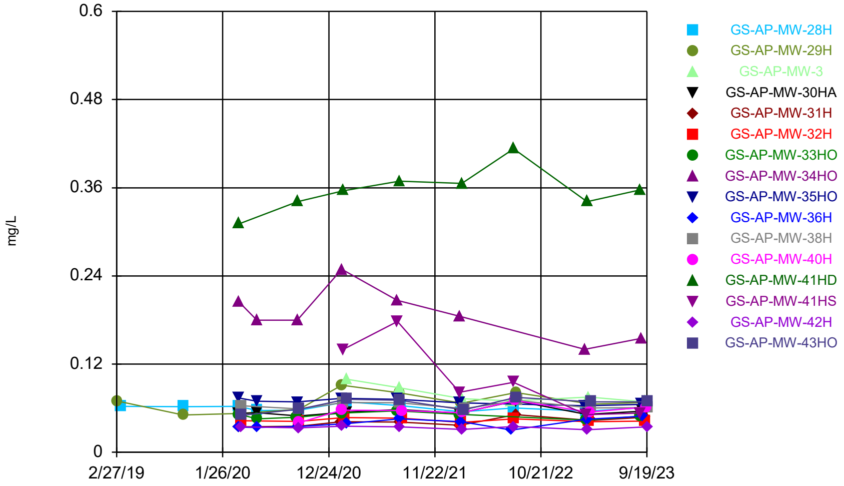


Constituent: Lithium Analysis Run 11/15/2023 3:03 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG

Time Series

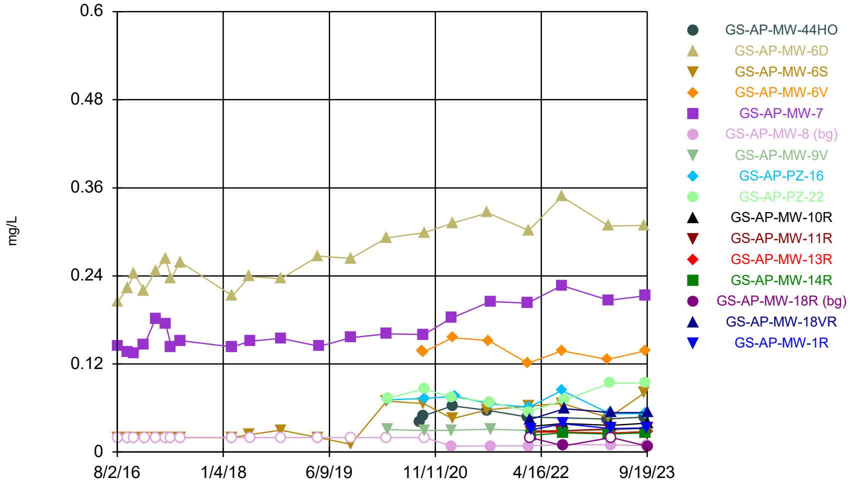


Constituent: Lithium Analysis Run 11/15/2023 3:03 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG
Hollow symbols indicate censored values.

Time Series

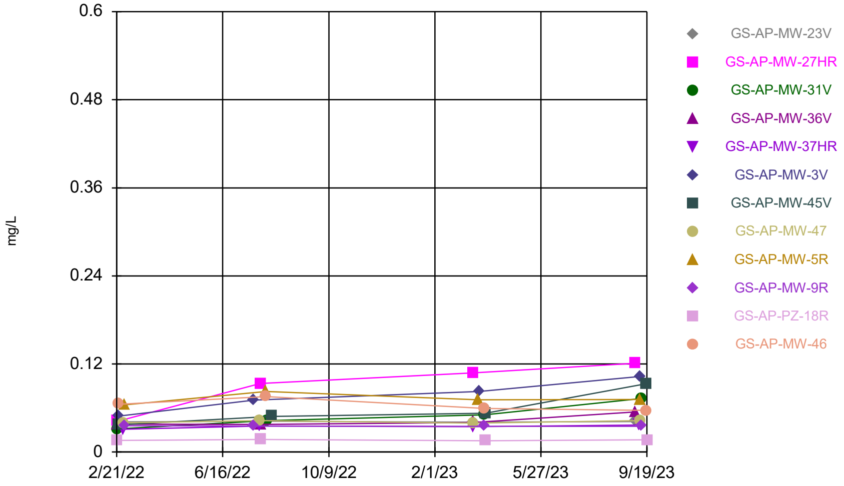


Constituent: Lithium Analysis Run 11/15/2023 3:03 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG

Time Series

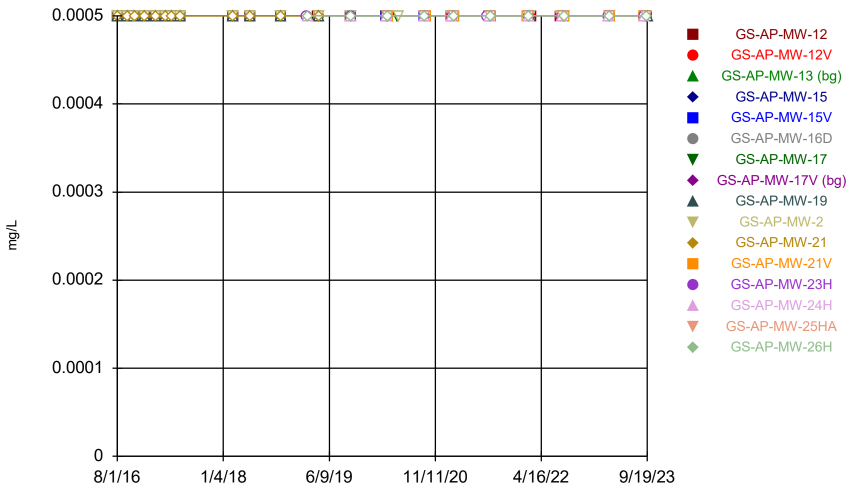


Constituent: Lithium Analysis Run 11/15/2023 3:03 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG
Hollow symbols indicate censored values.

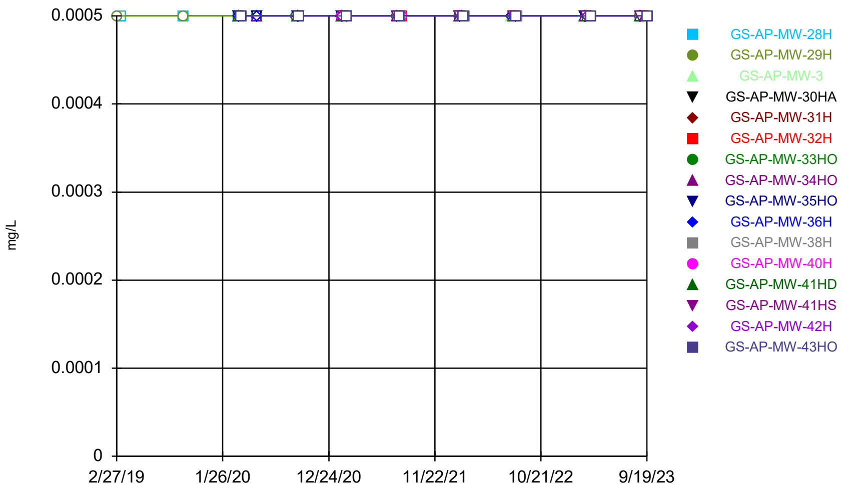
Time Series



Constituent: Mercury Analysis Run 11/15/2023 3:03 PM
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG
Hollow symbols indicate censored values.

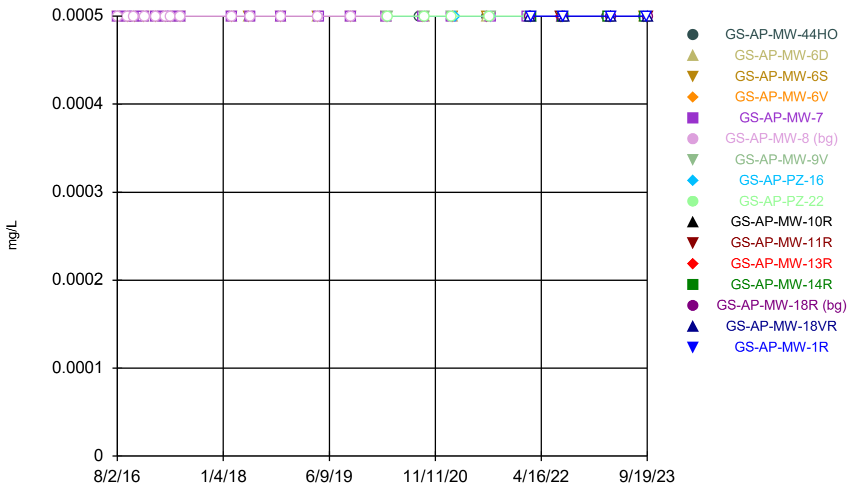
Time Series



Constituent: Mercury Analysis Run 11/15/2023 3:03 PM
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG
Hollow symbols indicate censored values.

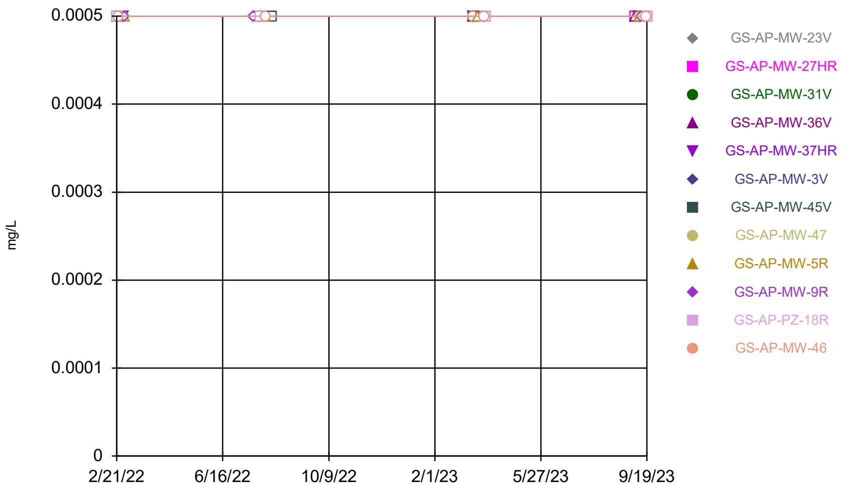
Time Series



Constituent: Mercury Analysis Run 11/15/2023 3:03 PM
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG
Hollow symbols indicate censored values.

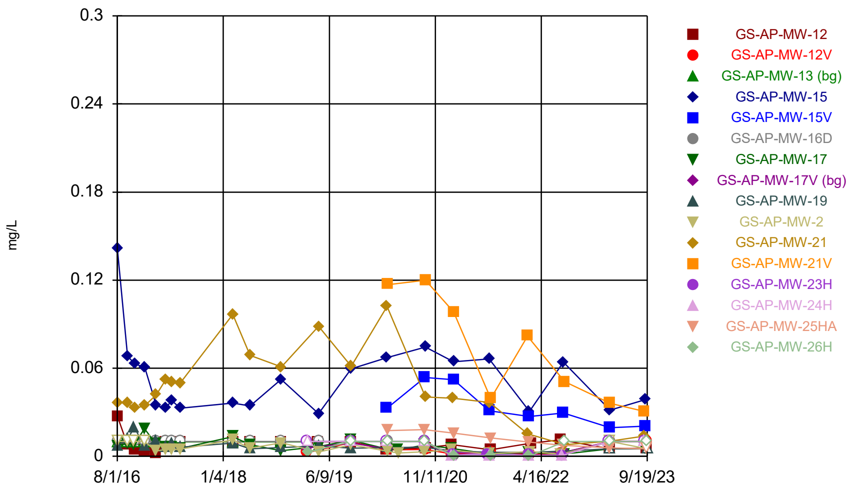
Time Series



Constituent: Mercury Analysis Run 11/15/2023 3:03 PM
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG
Hollow symbols indicate censored values.

Time Series

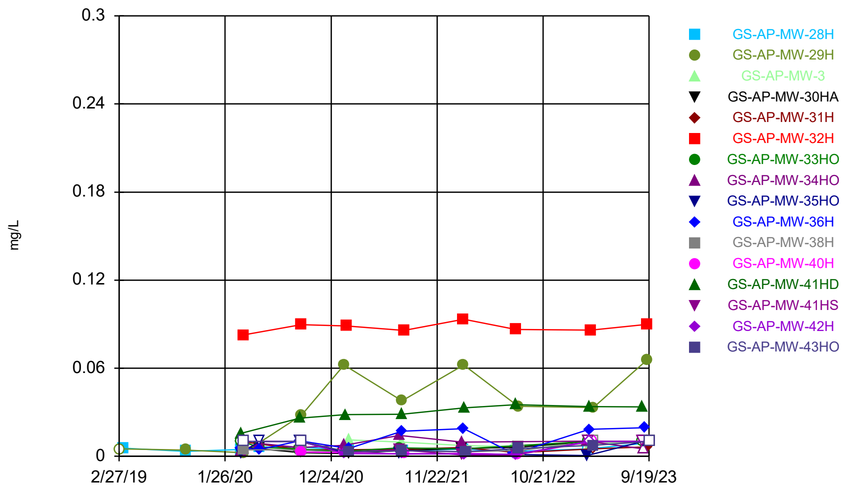


Constituent: Molybdenum Analysis Run 11/15/2023 3:04 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG
Hollow symbols indicate censored values.

Time Series

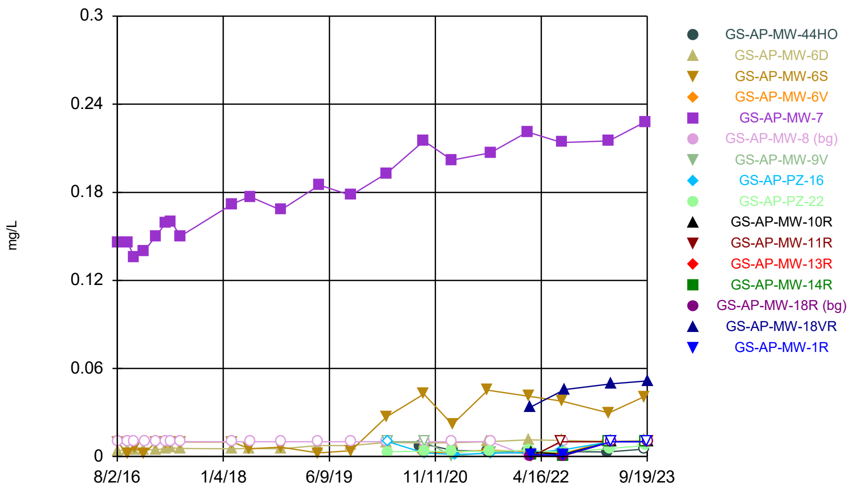


Constituent: Molybdenum Analysis Run 11/15/2023 3:04 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG
Hollow symbols indicate censored values.

Time Series

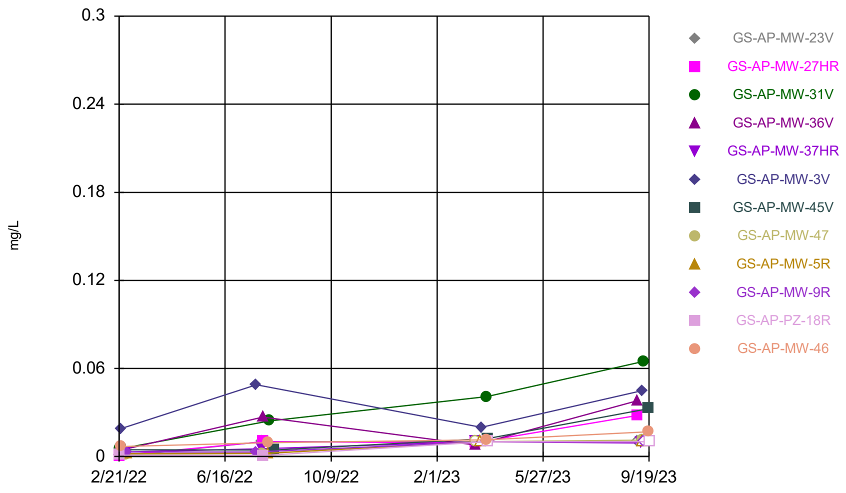


Constituent: Molybdenum Analysis Run 11/15/2023 3:04 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

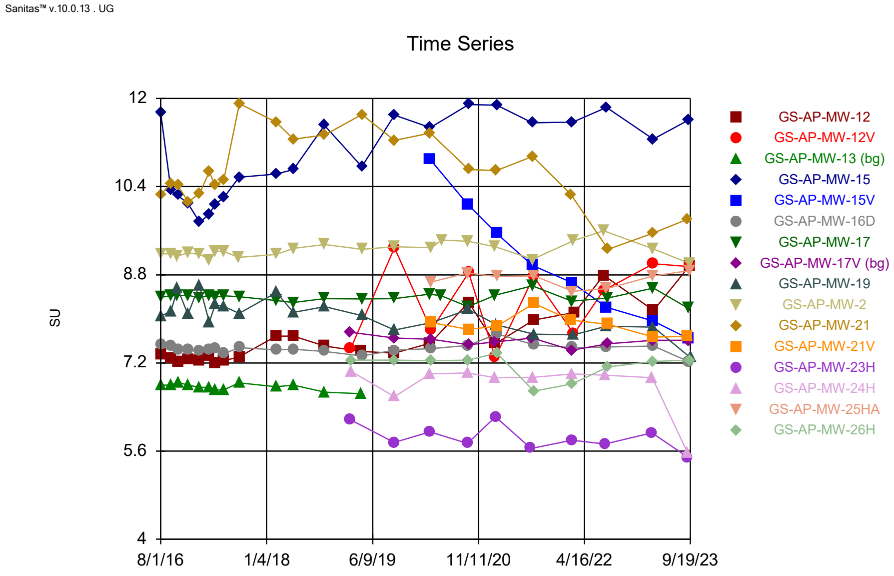
Sanitas™ v.10.0.13 . UG
Hollow symbols indicate censored values.

Time Series



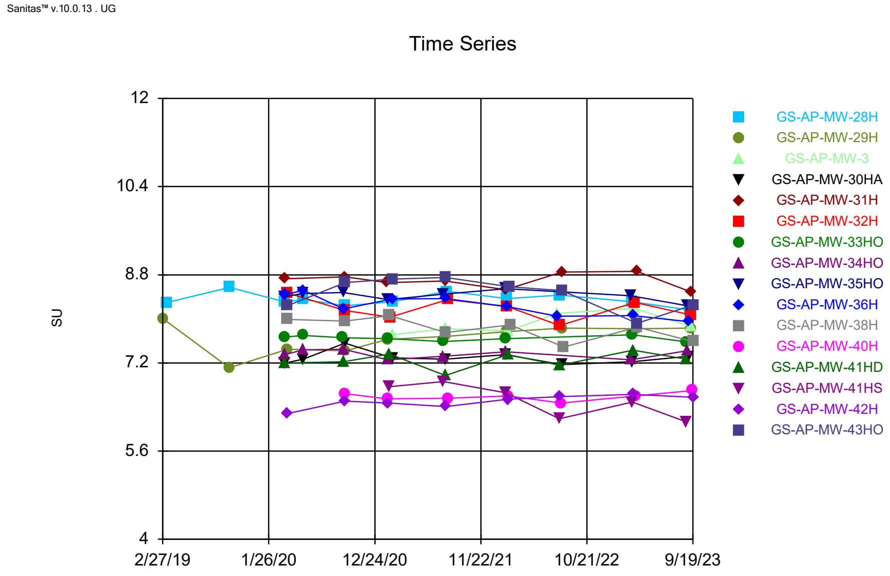
Constituent: Molybdenum Analysis Run 11/15/2023 3:04 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond



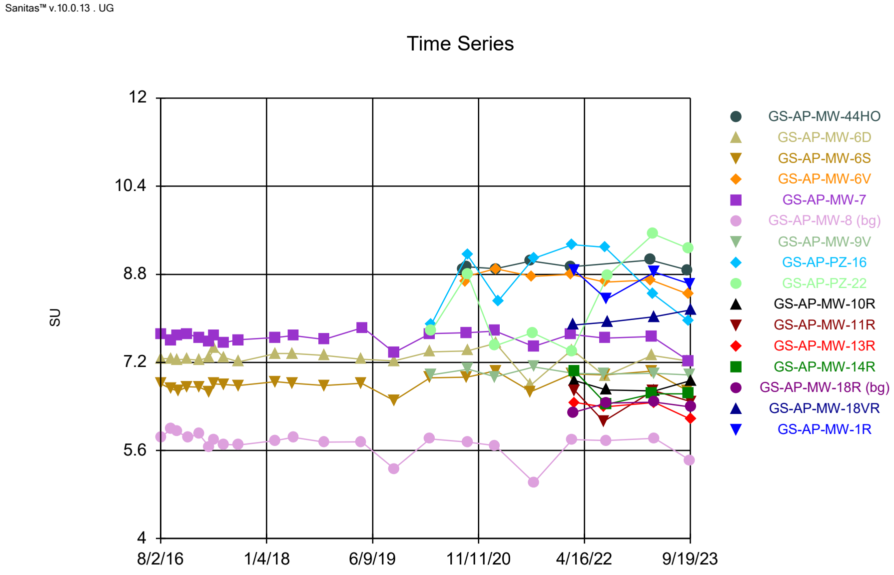
Constituent: pH   Analysis Run 11/15/2023 3:04 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond



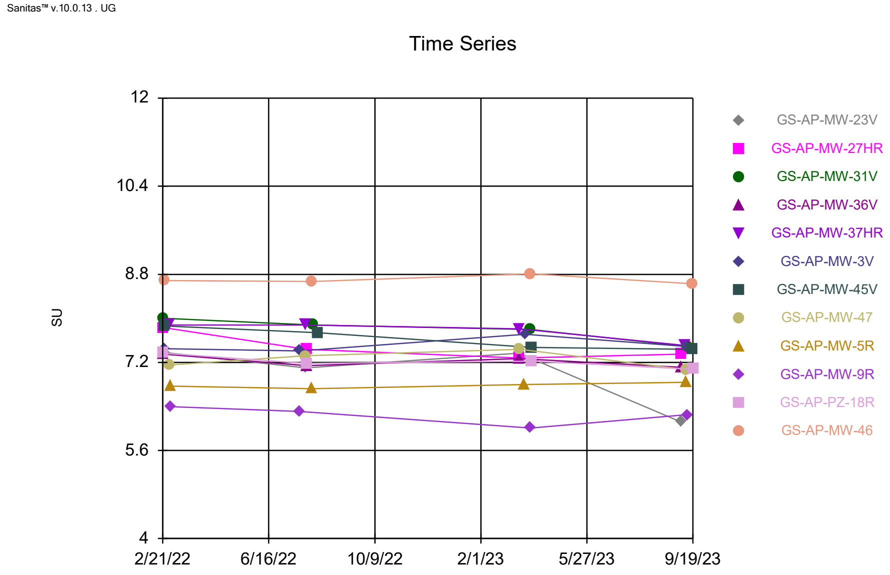
Constituent: pH   Analysis Run 11/15/2023 3:04 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond



Constituent: pH   Analysis Run 11/15/2023 3:04 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

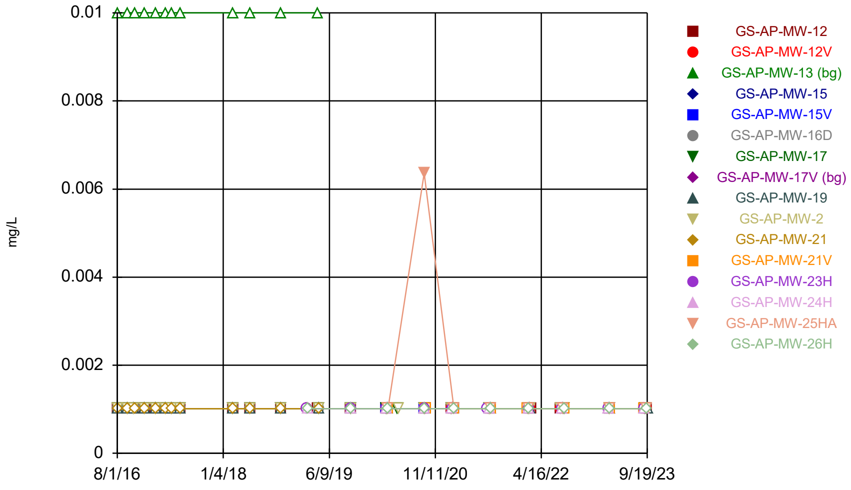


Constituent: pH   Analysis Run 11/15/2023 3:04 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG
Hollow symbols indicate censored values.

Time Series

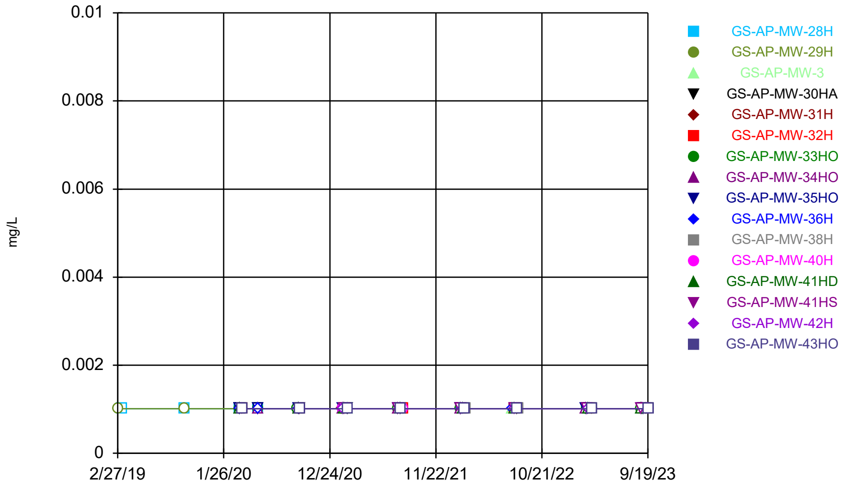


Constituent: Selenium Analysis Run 11/15/2023 3:04 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG
Hollow symbols indicate censored values.

Time Series

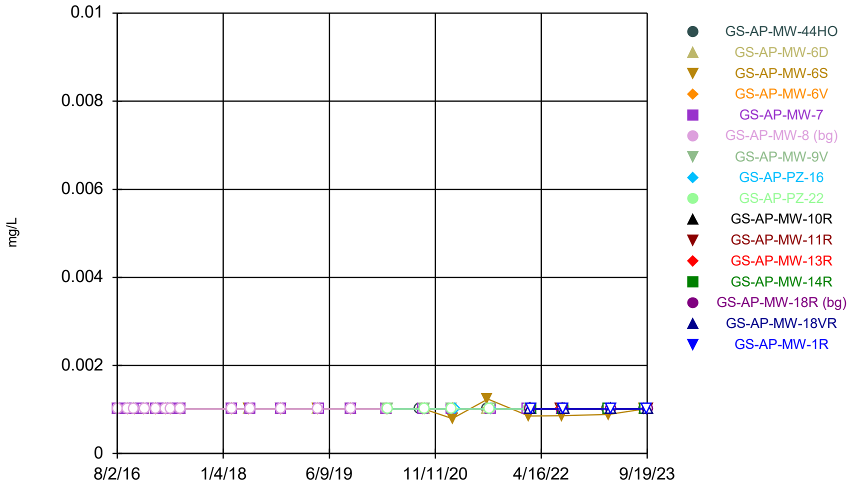


Constituent: Selenium Analysis Run 11/15/2023 3:04 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG
Hollow symbols indicate censored values.

Time Series

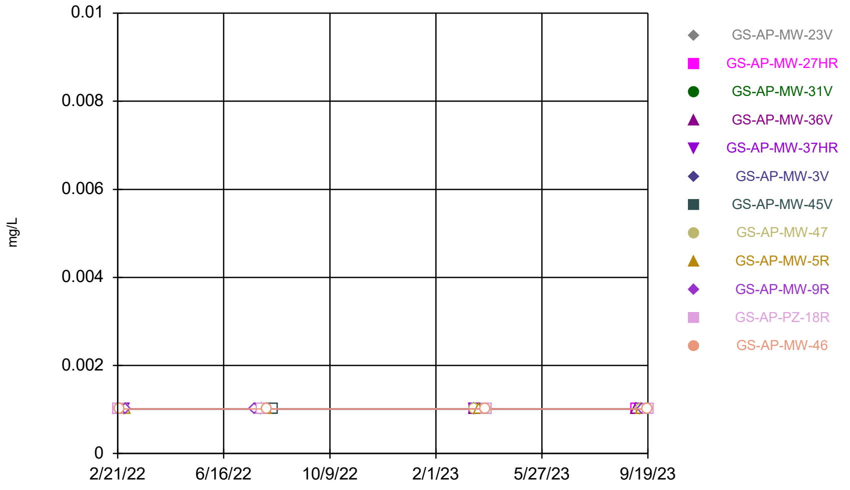


Constituent: Selenium Analysis Run 11/15/2023 3:04 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG
Hollow symbols indicate censored values.

Time Series

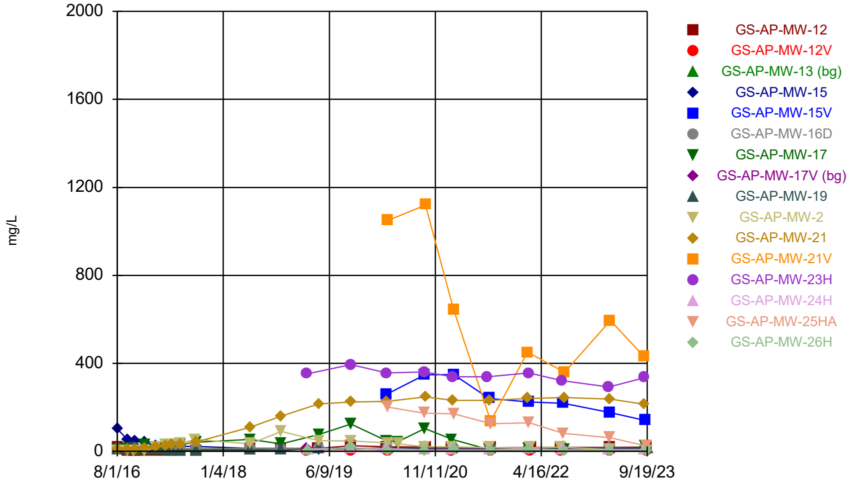


Constituent: Selenium Analysis Run 11/15/2023 3:04 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG
Hollow symbols indicate censored values.

Time Series

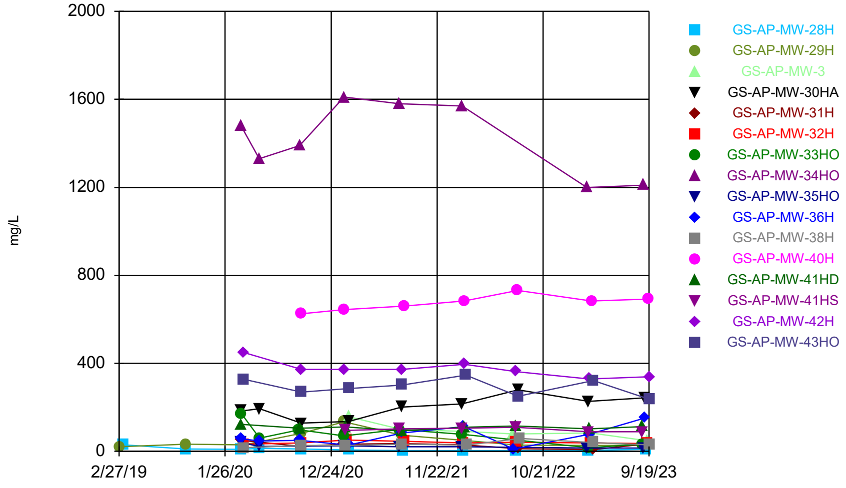


Constituent: Sulfate Analysis Run 11/15/2023 3:04 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG

Time Series

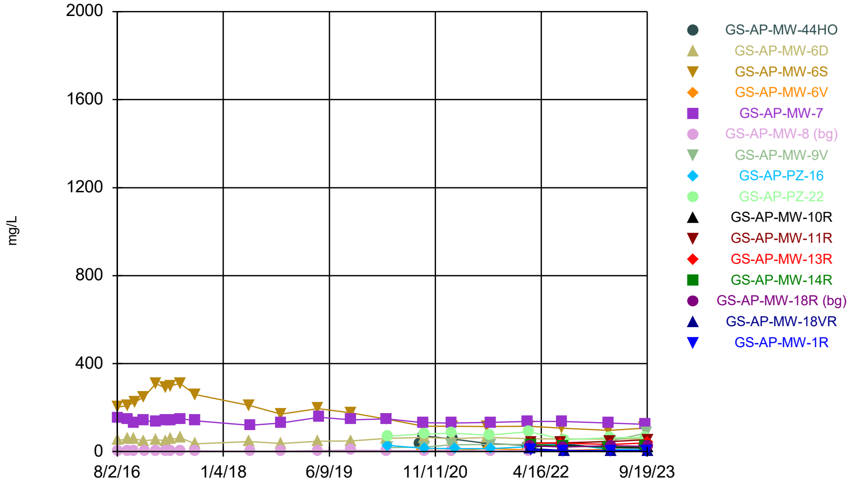


Constituent: Sulfate Analysis Run 11/15/2023 3:04 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG

Time Series

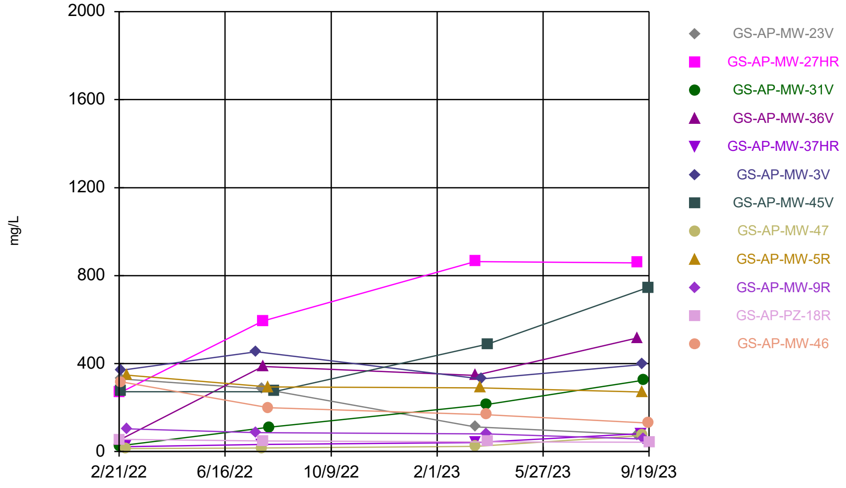


Constituent: Sulfate Analysis Run 11/15/2023 3:04 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG

Time Series

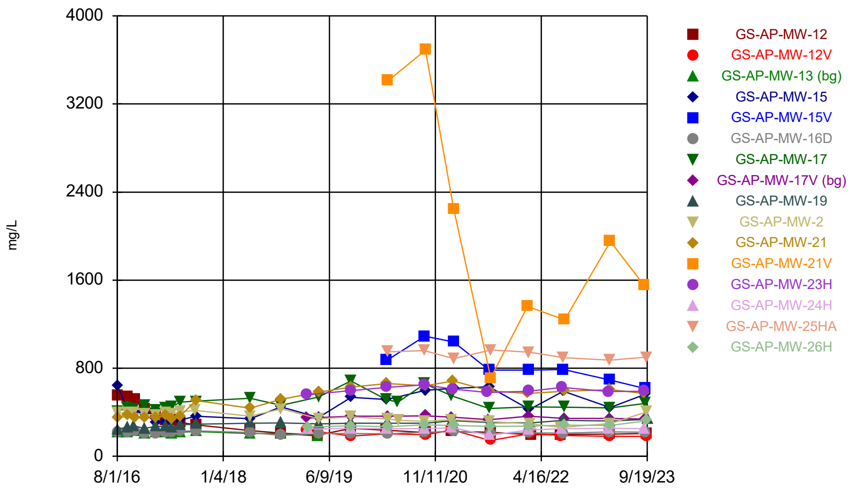


Constituent: Sulfate Analysis Run 11/15/2023 3:04 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG

Time Series

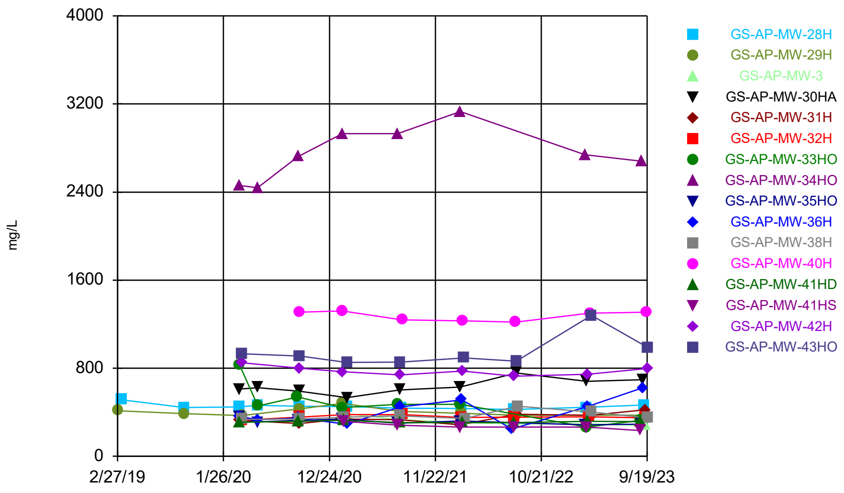


Constituent: TDS Analysis Run 11/15/2023 3:04 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG

Time Series

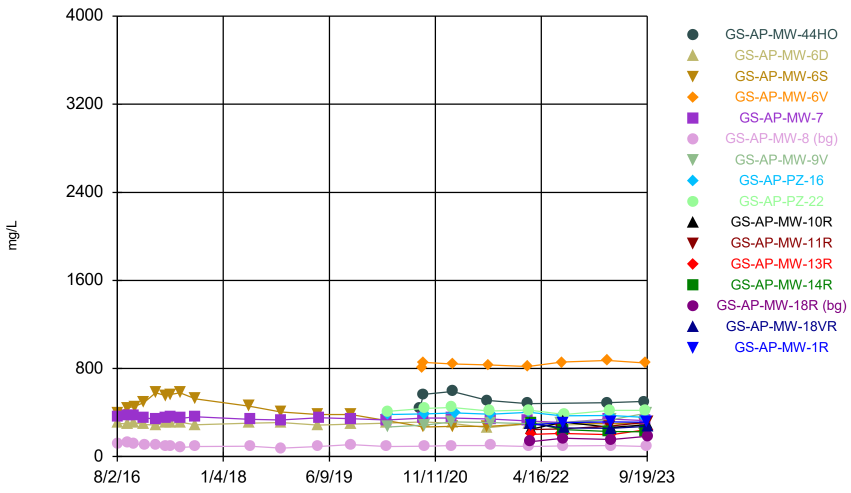


Constituent: TDS Analysis Run 11/15/2023 3:04 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG

Time Series

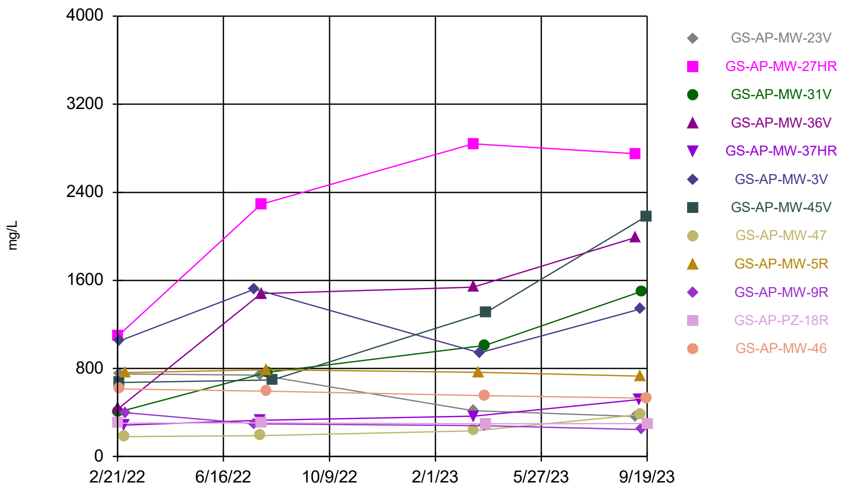


Constituent: TDS Analysis Run 11/15/2023 3:04 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG

Time Series

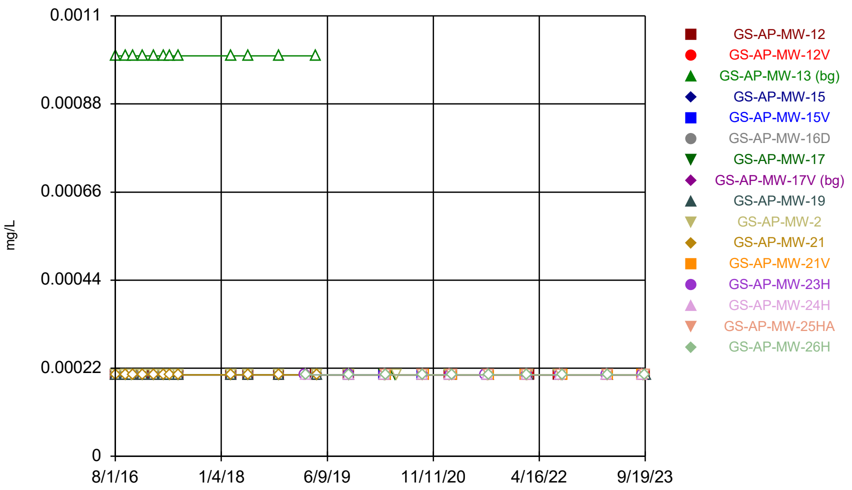


Constituent: TDS Analysis Run 11/15/2023 3:04 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG
Hollow symbols indicate censored values.

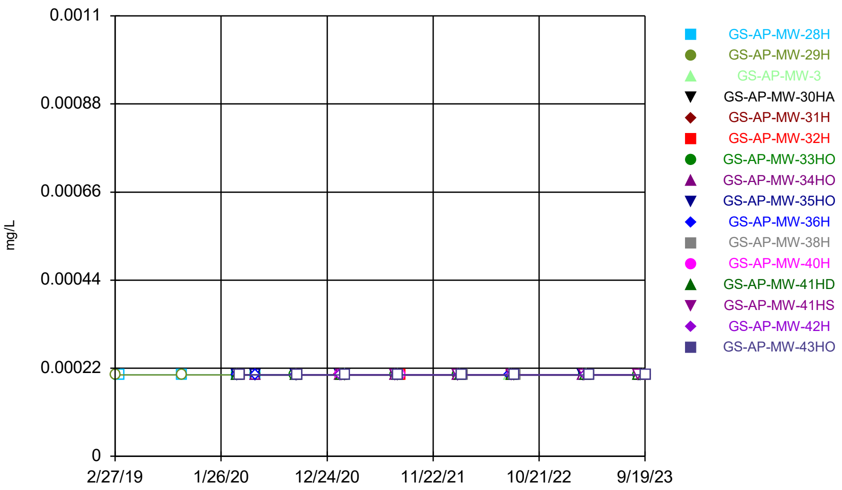
Time Series



Constituent: Thallium Analysis Run 11/15/2023 3:04 PM
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG
Hollow symbols indicate censored values.

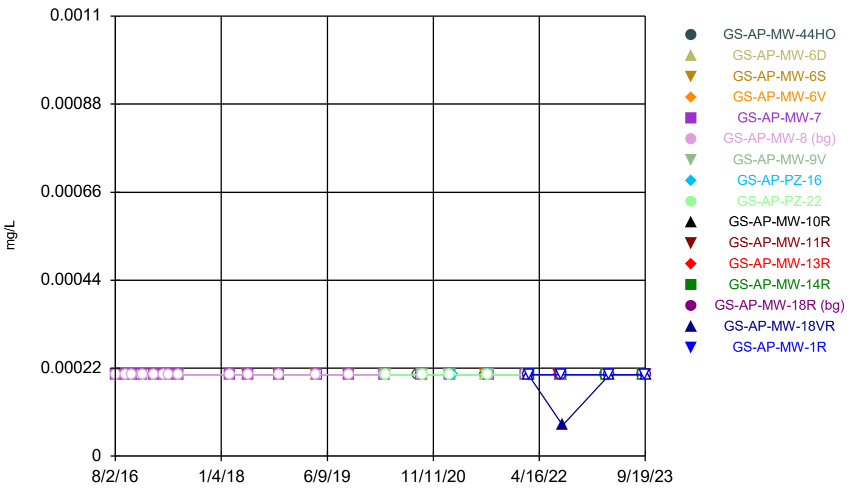
Time Series



Constituent: Thallium Analysis Run 11/15/2023 3:04 PM
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG
Hollow symbols indicate censored values.

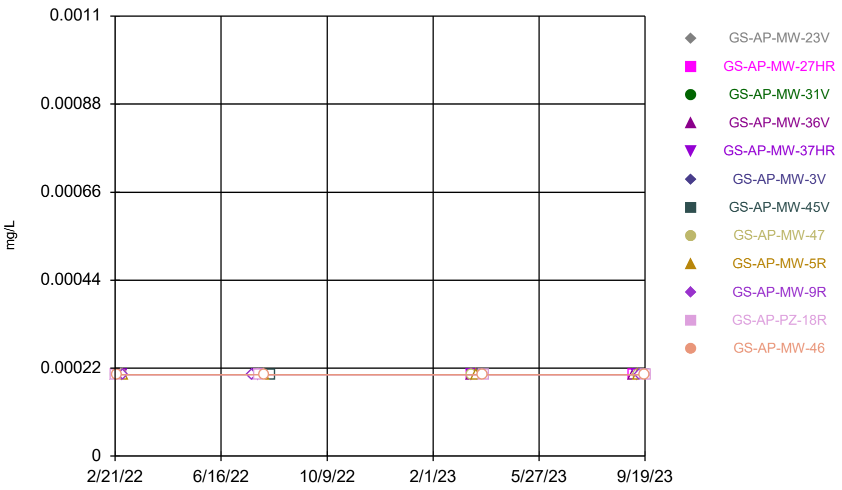
Time Series



Constituent: Thallium Analysis Run 11/15/2023 3:04 PM
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG
Hollow symbols indicate censored values.

Time Series



Constituent: Thallium Analysis Run 11/15/2023 3:04 PM
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Time Series

Constituent: Antimony (mg/L)   Analysis Run 11/15/2023 3:05 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

	GS-AP-MW-12	GS-AP-MW-12V	GS-AP-MW-13 (bg)	GS-AP-MW-15	GS-AP-MW-15V	GS-AP-MW-16D	GS-AP-MW-17	GS-AP-MW-17V ...	GS-AP-MW-19
8/1/2016				0.00115 (J)		<0.001015	<0.001015		<0.001015
8/2/2016			<0.003						
8/3/2016	<0.003								
9/19/2016						<0.001015	0.000636 (J)		
9/20/2016	<0.003		<0.003	0.000876 (J)					
9/21/2016									<0.001015
10/24/2016							<0.001015		<0.001015
10/25/2016	<0.003		<0.003	<0.001015		<0.001015			
12/13/2016	0.000681 (J)		<0.003			0.000633 (J)	0.00072 (J)		0.000613 (J)
12/14/2016				0.000858 (J)					
2/6/2017							<0.001015		
2/7/2017									<0.001015
2/8/2017	<0.003		<0.003	<0.001015		<0.001015			
3/27/2017							<0.001015		
3/28/2017				<0.001015					<0.001015
3/29/2017	<0.003		<0.003			<0.001015			
3/30/2017									
4/24/2017							<0.001015		
4/26/2017	<0.003		<0.003	<0.001015		<0.001015			<0.001015
6/5/2017							<0.001015		
6/6/2017				<0.001015		<0.001015			<0.001015
6/7/2017	<0.003		<0.003						
2/19/2018							<0.001015		
2/20/2018	<0.003		<0.003	0.000636 (J)					
2/21/2018						<0.001015			<0.001015
5/15/2018	<0.003		<0.003	<0.001015			<0.001015		
5/16/2018						<0.001015			<0.001015
10/15/2018				<0.001015			<0.001015		
10/16/2018	<0.003								<0.001015
10/17/2018			<0.003			<0.001015			
2/20/2019								0.00115 (J)	
2/21/2019		0.000841 (J)							
2/26/2019									
2/27/2019									
4/16/2019	<0.003		<0.003						
4/17/2019				<0.001015		<0.001015	<0.001015		<0.001015
9/23/2019							<0.001015		
9/24/2019				<0.001015		<0.001015		<0.001015	<0.001015
9/25/2019	<0.003	0.0025 (J)							
3/16/2020							<0.001015		
3/17/2020									
3/18/2020	0.0022 (J)			0.000976 (J)	0.0028 (J)				
3/23/2020									
3/24/2020		0.00128 (J)				<0.001015			<0.001015
3/25/2020								<0.001015	
5/12/2020							<0.001015		
5/13/2020									
9/17/2020									
9/21/2020					0.0028 (J)		<0.001015		
9/22/2020						<0.001015			<0.001015
9/23/2020	0.00202 (J)	0.00152 (J)		0.000844 (J)				<0.001015	
2/1/2021	0.000518 (J)	0.000861 (J)							

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Antimony (mg/L)   Analysis Run 11/15/2023 3:05 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

	GS-AP-MW-12	GS-AP-MW-12V	GS-AP-MW-13 (bg)	GS-AP-MW-15	GS-AP-MW-15V	GS-AP-MW-16D	GS-AP-MW-17	GS-AP-MW-17V ...	GS-AP-MW-19
2/2/2021							<0.001015	<0.001015	
2/3/2021									
2/8/2021									<0.001015
2/9/2021				0.00075 (J)	0.00237				
2/10/2021						<0.001015			
7/27/2021									
8/2/2021								<0.001015	
8/3/2021				0.00065 (J)	0.00097 (J)		<0.001015		
8/4/2021									
8/9/2021	0.00179	0.00089 (J)				<0.001015			
8/10/2021									<0.001015
8/11/2021									
8/12/2021									
2/8/2022									
2/14/2022							<0.001015	<0.001015	
2/15/2022						<0.001015			
2/16/2022				0.00078 (J)	0.00113				
2/22/2022									<0.001015
2/23/2022		0.00055 (J)							
2/28/2022	0.00415								
7/19/2022	0.00556								
7/20/2022		0.000577 (J)							
7/26/2022									
7/27/2022									
8/2/2022				0.000663 (J)	0.00143	<0.001015			
8/3/2022									<0.001015
8/8/2022							<0.001015		
8/9/2022								<0.001015	
8/10/2022									
3/14/2023									
3/15/2023									
3/20/2023				<0.001015	0.00133				
3/21/2023						<0.001015			<0.001015
3/22/2023	0.00257	<0.001015					<0.001015	<0.001015	
9/5/2023									
9/6/2023									
9/11/2023				0.001 (J)	0.00129		<0.001015	<0.001015	
9/12/2023						<0.001015			
9/13/2023	0.00236	<0.001015							
9/18/2023									
9/19/2023									<0.001015

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Antimony (mg/L) Analysis Run 11/15/2023 3:05 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-2	GS-AP-MW-21	GS-AP-MW-21V	GS-AP-MW-23H	GS-AP-MW-24H	GS-AP-MW-25HA	GS-AP-MW-26H
8/1/2016							
8/2/2016	<0.001015	<0.001015					
8/3/2016							
9/19/2016	<0.001015						
9/20/2016							
9/21/2016		<0.001015					
10/24/2016	<0.001015						
10/25/2016		<0.001015					
12/13/2016	<0.001015						
12/14/2016		0.00119 (J)					
2/6/2017							
2/7/2017							
2/8/2017	<0.001015	<0.001015					
3/27/2017							
3/28/2017		<0.001015					
3/29/2017							
3/30/2017	<0.001015						
4/24/2017							
4/26/2017	<0.001015	<0.001015					
6/5/2017							
6/6/2017	<0.001015	<0.001015					
6/7/2017							
2/19/2018							
2/20/2018		<0.001015					
2/21/2018	<0.001015						
5/15/2018		<0.001015					
5/16/2018	<0.001015						
10/15/2018							
10/16/2018	<0.001015	<0.001015					
10/17/2018							
2/20/2019				0.000809 (J)			
2/21/2019							
2/26/2019					0.000918 (J)		
2/27/2019							0.00094 (J)
4/16/2019							
4/17/2019	<0.001015	<0.001015					
9/23/2019				<0.001015			<0.001015
9/24/2019		<0.001015			<0.001015		
9/25/2019	<0.001015						
3/16/2020							
3/17/2020				<0.001015			
3/18/2020		<0.001015			<0.001015		
3/23/2020			0.000831 (J)				
3/24/2020						<0.001015	
3/25/2020	<0.001015						<0.001015
5/12/2020							
5/13/2020	<0.001015						
9/17/2020				<0.001015	<0.001015	<0.001015	
9/21/2020							<0.001015
9/22/2020	<0.001015						
9/23/2020		<0.001015	<0.001015				
2/1/2021	<0.001015						

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Antimony (mg/L) Analysis Run 11/15/2023 3:05 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-2	GS-AP-MW-21	GS-AP-MW-21V	GS-AP-MW-23H	GS-AP-MW-24H	GS-AP-MW-25HA	GS-AP-MW-26H
2/2/2021					<0.001015		
2/3/2021				<0.001015			
2/8/2021		<0.001015					
2/9/2021			0.000661 (J)				<0.001015
2/10/2021						<0.001015	
7/27/2021				<0.001015			
8/2/2021							
8/3/2021					<0.001015		
8/4/2021	<0.001015	<0.001015					
8/9/2021							
8/10/2021							<0.001015
8/11/2021			<0.001015				
8/12/2021						<0.001015	
2/8/2022		<0.001015	<0.001015				
2/14/2022				<0.001015			
2/15/2022					<0.001015		<0.001015
2/16/2022						0.00075 (J)	
2/22/2022	<0.001015						
2/23/2022							
2/28/2022							
7/19/2022	<0.001015						
7/20/2022							
7/26/2022				<0.001015			
7/27/2022					<0.001015		
8/2/2022							
8/3/2022						<0.001015	
8/8/2022							
8/9/2022			<0.001015				
8/10/2022		<0.001015					<0.001015
3/14/2023				<0.001015			
3/15/2023					<0.001015		
3/20/2023							
3/21/2023		<0.001015	<0.001015				
3/22/2023	<0.001015					<0.001015	<0.001015
9/5/2023		<0.001015	<0.001015				
9/6/2023				<0.001015	<0.001015		
9/11/2023							
9/12/2023							
9/13/2023							
9/18/2023	<0.001015					<0.001015	<0.001015
9/19/2023							

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Antimony (mg/L) Analysis Run 11/15/2023 3:05 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-28H	GS-AP-MW-29H	GS-AP-MW-3	GS-AP-MW-30HA	GS-AP-MW-31H	GS-AP-MW-32H	GS-AP-MW-33HO	GS-AP-MW-34HO	GS-AP-MW-35HO
2/27/2019		0.000932 (J)							
3/13/2019	0.00241 (J)								
9/24/2019		<0.001015							
9/25/2019	<0.001015								
3/16/2020	<0.001015							<0.001015	
3/17/2020							<0.001015		<0.001015
3/18/2020				<0.001015	<0.001015				
3/24/2020						<0.001015			
3/25/2020		<0.001015							
5/12/2020	<0.001015							<0.001015	<0.001015
5/13/2020				<0.001015			<0.001015		
9/15/2020							<0.001015		
9/16/2020								<0.001015	<0.001015
9/17/2020									
9/21/2020				<0.001015		<0.001015			
9/22/2020	<0.001015	<0.001015			<0.001015				
2/1/2021					<0.001015				
2/2/2021									
2/3/2021		<0.001015					<0.001015	<0.001015	
2/4/2021									<0.001015
2/8/2021									
2/9/2021									
2/10/2021						<0.001015			
2/17/2021	<0.001015		<0.001015	<0.001015					
7/27/2021							<0.001015	<0.001015	
7/28/2021									<0.001015
8/2/2021				<0.001015	<0.001015				
8/3/2021			<0.001015						
8/4/2021		<0.001015							
8/9/2021	<0.001015								
8/10/2021						<0.001015			
2/8/2022				<0.001015	<0.001015				
2/9/2022							<0.001015	<0.001015	<0.001015
2/14/2022	<0.001015	<0.001015				<0.001015			
2/15/2022									
2/16/2022			<0.001015						
2/21/2022									
2/22/2022									
7/20/2022			<0.001015						
7/26/2022									
7/27/2022	<0.001015					<0.001015			
8/2/2022									
8/3/2022		<0.001015		<0.001015	<0.001015				
8/10/2022									
3/8/2023								<0.001015	<0.001015
3/13/2023				<0.001015					
3/14/2023	<0.001015						<0.001015		
3/15/2023									
3/21/2023			<0.001015			<0.001015			
3/22/2023									
3/27/2023					<0.001015				
3/28/2023		<0.001015							

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Antimony (mg/L) Analysis Run 11/15/2023 3:05 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-28H	GS-AP-MW-29H	GS-AP-MW-3	GS-AP-MW-30HA	GS-AP-MW-31H	GS-AP-MW-32H	GS-AP-MW-33HO	GS-AP-MW-34HO	GS-AP-MW-35HO
8/30/2023							<0.001015		
8/31/2023								<0.001015	<0.001015
9/5/2023				<0.001015					
9/6/2023									
9/11/2023	<0.001015								
9/12/2023			<0.001015						
9/13/2023		<0.001015			<0.001015	<0.001015			
9/18/2023									
9/19/2023									

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Antimony (mg/L)   Analysis Run 11/15/2023 3:05 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

	GS-AP-MW-36H	GS-AP-MW-38H	GS-AP-MW-40H	GS-AP-MW-41HD	GS-AP-MW-41HS	GS-AP-MW-42H	GS-AP-MW-43HO
2/27/2019							
3/13/2019							
9/24/2019							
9/25/2019							
3/16/2020							
3/17/2020	<0.001015						
3/18/2020				<0.001015			
3/24/2020		<0.001015				<0.001015	
3/25/2020							<0.001015
5/12/2020							
5/13/2020	<0.001015						
9/15/2020							
9/16/2020							
9/17/2020	<0.001015			<0.001015			
9/21/2020							
9/22/2020		<0.001015	<0.001015			<0.001015	<0.001015
2/1/2021							
2/2/2021			<0.001015				
2/3/2021						<0.001015	
2/4/2021							
2/8/2021				<0.001015	<0.001015		
2/9/2021		<0.001015					
2/10/2021							
2/17/2021	<0.001015						<0.001015
7/27/2021							
7/28/2021					<0.001015		
8/2/2021							
8/3/2021				<0.001015			
8/4/2021	<0.001015	<0.001015				<0.001015	<0.001015
8/9/2021							
8/10/2021			<0.001015				
2/8/2022					<0.001015		
2/9/2022							
2/14/2022	<0.001015						
2/15/2022			<0.001015	<0.001015			
2/16/2022						<0.001015	
2/21/2022							<0.001015
2/22/2022		<0.001015					
7/20/2022	<0.001015						
7/26/2022					<0.001015		
7/27/2022				<0.001015		<0.001015	
8/2/2022			<0.001015				
8/3/2022							<0.001015
8/10/2022		<0.001015					
3/8/2023							
3/13/2023					<0.001015		
3/14/2023							
3/15/2023	<0.001015			<0.001015		<0.001015	
3/21/2023							
3/22/2023			<0.001015				
3/27/2023							
3/28/2023		<0.001015					<0.001015

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Antimony (mg/L) Analysis Run 11/15/2023 3:05 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-36H	GS-AP-MW-38H	GS-AP-MW-40H	GS-AP-MW-41HD	GS-AP-MW-41HS	GS-AP-MW-42H	GS-AP-MW-43HO
8/30/2023				<0.001015	<0.001015		
8/31/2023							
9/5/2023							
9/6/2023	<0.001015						
9/11/2023							
9/12/2023							
9/13/2023							
9/18/2023			<0.001015				
9/19/2023		<0.001015				<0.001015	<0.001015

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Antimony (mg/L) Analysis Run 11/15/2023 3:05 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-44HO	GS-AP-MW-6D	GS-AP-MW-6S	GS-AP-MW-6V	GS-AP-MW-7	GS-AP-MW-8 (bg)	GS-AP-MW-9V	GS-AP-PZ-16	GS-AP-PZ-22
8/2/2016					<0.001015				
8/3/2016		<0.001015	<0.001015			<0.001015			
9/20/2016		<0.001015	<0.001015						
9/21/2016					<0.001015	<0.001015			
10/24/2016		<0.001015			<0.001015				
10/25/2016						<0.001015			
10/26/2016			<0.001015						
12/12/2016		0.00104 (J)	0.000727 (J)		0.000891 (J)				
12/13/2016						0.00067 (J)			
2/6/2017		<0.001015	<0.001015		<0.001015	<0.001015			
3/27/2017		<0.001015	<0.001015						
3/28/2017					<0.001015	<0.001015			
4/24/2017		<0.001015	<0.001015		<0.001015	<0.001015			
6/6/2017		<0.001015	<0.001015						
6/7/2017					<0.001015	<0.001015			
2/19/2018		<0.001015	<0.001015		<0.001015	<0.001015			
5/14/2018		<0.001015	<0.001015						
5/15/2018					<0.001015	<0.001015			
10/15/2018		<0.001015	<0.001015		<0.001015				
10/16/2018						<0.001015			
4/16/2019		0.000828 (J)	<0.001015			<0.001015			
4/23/2019					0.00105 (J)				
9/23/2019		<0.001015	<0.001015						
9/24/2019					<0.001015	<0.001015			
3/17/2020		<0.001015	<0.001015		<0.001015				
3/18/2020						<0.001015			
3/23/2020							<0.001015		
3/24/2020								<0.001015	<0.001015
8/27/2020	0.0013 (J)								
9/8/2020				<0.001015					
9/15/2020	0.000819 (J)			<0.001015					
9/16/2020			0.000948 (J)		<0.001015				
9/17/2020		<0.001015						<0.001015	<0.001015
9/21/2020						<0.001015			
9/22/2020							<0.001015		
2/2/2021					<0.001015	<0.001015	<0.001015		<0.001015
2/3/2021	<0.001015	<0.001015	0.00055 (J)	<0.001015					
2/17/2021								<0.001015	
7/27/2021	<0.001015	<0.001015	0.00123						
8/2/2021				<0.001015					
8/3/2021									<0.001015
8/9/2021					<0.001015			<0.001015	
8/10/2021						<0.001015	<0.001015		
2/8/2022					<0.001015				
2/9/2022	<0.001015			<0.001015					
2/14/2022		<0.001015	0.00071 (J)						<0.001015
2/15/2022								<0.001015	
2/16/2022						<0.001015			
2/21/2022							<0.001015		
2/22/2022									
2/28/2022									
3/1/2022									

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Antimony (mg/L) Analysis Run 11/15/2023 3:05 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-44HO	GS-AP-MW-6D	GS-AP-MW-6S	GS-AP-MW-6V	GS-AP-MW-7	GS-AP-MW-8 (bg)	GS-AP-MW-9V	GS-AP-PZ-16	GS-AP-PZ-22
7/19/2022							<0.001015		
7/20/2022									
7/25/2022		<0.001015		<0.001015	<0.001015				
7/26/2022			0.000656 (J)					<0.001015	
8/2/2022						<0.001015			
8/3/2022									
8/9/2022									<0.001015
3/6/2023	<0.001015								
3/8/2023				<0.001015					
3/14/2023		<0.001015	<0.001015		<0.001015				
3/15/2023									
3/21/2023								<0.001015	<0.001015
3/22/2023									
3/27/2023						<0.001015	<0.001015		
3/28/2023									
9/5/2023	<0.001015	<0.001015	<0.001015						
9/11/2023				<0.001015	<0.001015				<0.001015
9/12/2023								<0.001015	
9/13/2023							<0.001015		
9/18/2023						<0.001015			
9/19/2023									

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Antimony (mg/L) Analysis Run 11/15/2023 3:05 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-10R	GS-AP-MW-11R	GS-AP-MW-13R	GS-AP-MW-14R	GS-AP-MW-18R ...	GS-AP-MW-18VR	GS-AP-MW-1R
8/2/2016							
8/3/2016							
9/20/2016							
9/21/2016							
10/24/2016							
10/25/2016							
10/26/2016							
12/12/2016							
12/13/2016							
2/6/2017							
3/27/2017							
3/28/2017							
4/24/2017							
6/6/2017							
6/7/2017							
2/19/2018							
5/14/2018							
5/15/2018							
10/15/2018							
10/16/2018							
4/16/2019							
4/23/2019							
9/23/2019							
9/24/2019							
3/17/2020							
3/18/2020							
3/23/2020							
3/24/2020							
8/27/2020							
9/8/2020							
9/15/2020							
9/16/2020							
9/17/2020							
9/21/2020							
9/22/2020							
2/2/2021							
2/3/2021							
2/17/2021							
7/27/2021							
8/2/2021							
8/3/2021							
8/9/2021							
8/10/2021							
2/8/2022							
2/9/2022							
2/14/2022							
2/15/2022							
2/16/2022							
2/21/2022							
2/22/2022					<0.001015	<0.001015	
2/28/2022				<0.001015			
3/1/2022	<0.001015	<0.001015	<0.001015				<0.001015

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Antimony (mg/L) Analysis Run 11/15/2023 3:05 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-10R	GS-AP-MW-11R	GS-AP-MW-13R	GS-AP-MW-14R	GS-AP-MW-18R ...	GS-AP-MW-18VR	GS-AP-MW-1R
7/19/2022		<0.001015					
7/20/2022			<0.001015				
7/25/2022							
7/26/2022							
8/2/2022							<0.001015
8/3/2022	<0.001015			<0.001015	<0.001015		
8/9/2022						<0.001015	
3/6/2023							
3/8/2023							
3/14/2023							
3/15/2023				<0.001015			
3/21/2023							
3/22/2023		<0.001015					
3/27/2023	<0.001015		<0.001015			<0.001015	<0.001015
3/28/2023					<0.001015		
9/5/2023							
9/11/2023							
9/12/2023				<0.001015			
9/13/2023							<0.001015
9/18/2023							
9/19/2023	<0.001015	<0.001015	<0.001015		<0.001015	<0.001015	

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Antimony (mg/L) Analysis Run 11/15/2023 3:05 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-23V	GS-AP-MW-27HR	GS-AP-MW-31V	GS-AP-MW-36V	GS-AP-MW-37HR	GS-AP-MW-3V	GS-AP-MW-45V	GS-AP-MW-47	GS-AP-MW-5R
2/21/2022									
2/22/2022		0.00053 (J)	<0.001015	<0.001015					
2/23/2022	<0.001015					<0.001015	<0.001015		
2/28/2022					<0.001015			<0.001015	
3/1/2022									<0.001015
7/19/2022									
7/20/2022						<0.001015			
7/26/2022	<0.001015				<0.001015			<0.001015	
7/27/2022		<0.001015		<0.001015					
8/2/2022									<0.001015
8/3/2022			<0.001015						
8/8/2022							<0.001015		
3/14/2023	<0.001015	<0.001015		<0.001015					
3/15/2023					<0.001015			<0.001015	
3/20/2023									<0.001015
3/21/2023						<0.001015			
3/27/2023			<0.001015						
3/28/2023							<0.001015		
9/6/2023	<0.001015	<0.001015		<0.001015					
9/11/2023					<0.001015				
9/12/2023						<0.001015		<0.001015	<0.001015
9/13/2023			<0.001015						
9/18/2023							<0.001015		
9/19/2023									

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Antimony (mg/L) Analysis Run 11/15/2023 3:05 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-9R	GS-AP-PZ-18R	GS-AP-MW-46
2/21/2022		<0.001015	
2/22/2022			
2/23/2022			<0.001015
2/28/2022			
3/1/2022	<0.001015		
7/19/2022	<0.001015		
7/20/2022			
7/26/2022			
7/27/2022		<0.001015	
8/2/2022			<0.001015
8/3/2022			
8/8/2022			
3/14/2023			
3/15/2023			
3/20/2023			
3/21/2023			
3/27/2023	<0.001015		<0.001015
3/28/2023		<0.001015	
9/6/2023			
9/11/2023			
9/12/2023			
9/13/2023	<0.001015		
9/18/2023			0.000764 (J)
9/19/2023		<0.001015	

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Arsenic (mg/L)   Analysis Run 11/15/2023 3:05 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

	GS-AP-MW-12	GS-AP-MW-12V	GS-AP-MW-13 (bg)	GS-AP-MW-15	GS-AP-MW-15V	GS-AP-MW-16D	GS-AP-MW-17	GS-AP-MW-17V ...	GS-AP-MW-19
8/1/2016				0.015		<0.000203	0.00138 (J)		<0.005
8/2/2016			<0.005						
8/3/2016	0.11								
9/19/2016						<0.000203	0.00137 (J)		
9/20/2016	0.0746		<0.005	0.0111					
9/21/2016									<0.005
10/24/2016							0.00122 (J)		<0.005
10/25/2016	0.0728		<0.005	0.0109		<0.000203			
12/13/2016	0.0538		<0.005			<0.000203	0.00243 (J)		<0.005
12/14/2016				0.011					
2/6/2017							0.00158 (J)		
2/7/2017									<0.005
2/8/2017	0.0427		<0.005	0.00625		<0.000203			
3/27/2017							0.0011 (J)		
3/28/2017				0.00558					<0.005
3/29/2017	0.0404		<0.005			<0.000203			
3/30/2017									
4/24/2017							0.00133 (J)		
4/26/2017	0.0372		<0.005	0.007		<0.000203			<0.005
6/5/2017							0.00115 (J)		
6/6/2017				0.00663		<0.000203			<0.005
6/7/2017	0.0307		<0.005						
2/19/2018							0.00424 (J)		
2/20/2018	0.0282		<0.005	0.00724					
2/21/2018						<0.000203			0.00138 (J)
5/15/2018	0.0253		<0.005	0.00749			0.00352 (J)		
5/16/2018						<0.000203			0.00114 (J)
10/15/2018				0.0123			0.0018 (J)		
10/16/2018	0.0203								0.00216 (J)
10/17/2018			<0.005			<0.000203			
2/20/2019								0.0011 (J)	
2/21/2019		<0.005							
2/26/2019									
2/27/2019									
4/16/2019	0.014		<0.005						
4/17/2019				0.00633		<0.000203	0.00343 (J)		0.00302 (J)
9/23/2019							0.00631		
9/24/2019				0.011		<0.000203		0.00149 (J)	0.00289 (J)
9/25/2019	0.0135	0.00129 (J)							
3/16/2020							0.00268 (J)		
3/17/2020									
3/18/2020	0.00693			0.0217	0.011				
3/23/2020									
3/24/2020		0.00266 (J)				<0.000203			0.00313 (J)
3/25/2020								<0.005	
5/12/2020							0.00326 (J)		
5/13/2020									
9/17/2020									
9/21/2020					0.0167		0.0055		
9/22/2020						<0.000203			0.00313 (J)
9/23/2020	0.00616	0.00176 (J)		0.0165				<0.005	
2/1/2021	0.00747	0.00154							

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Arsenic (mg/L)   Analysis Run 11/15/2023 3:05 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

	GS-AP-MW-12	GS-AP-MW-12V	GS-AP-MW-13 (bg)	GS-AP-MW-15	GS-AP-MW-15V	GS-AP-MW-16D	GS-AP-MW-17	GS-AP-MW-17V ...	GS-AP-MW-19
2/2/2021							0.00478	0.000243	
2/3/2021									
2/8/2021									0.00178
2/9/2021				0.0145	0.0165				
2/10/2021						0.000491			
7/27/2021									
8/2/2021								0.00013 (J)	
8/3/2021				0.0139	0.0105		0.00086		
8/4/2021									
8/9/2021	0.00308	0.00112				0.0001 (J)			
8/10/2021									0.00133
8/11/2021									
8/12/2021									
2/8/2022									
2/14/2022							0.00112	0.00047	
2/15/2022						0.00012 (J)			
2/16/2022				0.00592	0.0081				
2/22/2022									0.00098
2/23/2022		0.00102							
2/28/2022	0.00343								
7/19/2022	0.00407								
7/20/2022		0.00102							
7/26/2022									
7/27/2022									
8/2/2022				0.0104	0.00733	<0.000203			
8/3/2022									0.00223
8/8/2022							0.000878		
8/9/2022								0.000807	
8/10/2022									
3/14/2023									
3/15/2023									
3/20/2023				0.00427	0.00375				
3/21/2023						<0.000203			0.00197
3/22/2023	0.00135	0.000929					0.000896	0.000293	
9/5/2023									
9/6/2023									
9/11/2023				0.00545	0.00436		0.00337	0.000554	
9/12/2023						0.000205			
9/13/2023	0.00071	0.000958							
9/18/2023									
9/19/2023									0.0012

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Arsenic (mg/L) Analysis Run 11/15/2023 3:05 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-2	GS-AP-MW-21	GS-AP-MW-21V	GS-AP-MW-23H	GS-AP-MW-24H	GS-AP-MW-25HA	GS-AP-MW-26H
8/1/2016							
8/2/2016	<0.000203	0.0027 (J)					
8/3/2016							
9/19/2016	<0.000203						
9/20/2016							
9/21/2016		0.00258 (J)					
10/24/2016	<0.000203						
10/25/2016		0.00214 (J)					
12/13/2016	<0.000203						
12/14/2016		0.00193 (J)					
2/6/2017							
2/7/2017							
2/8/2017	<0.000203	0.00188 (J)					
3/27/2017							
3/28/2017		0.00153 (J)					
3/29/2017							
3/30/2017	<0.000203						
4/24/2017							
4/26/2017	<0.000203	0.00135 (J)					
6/5/2017							
6/6/2017	<0.000203	0.00131 (J)					
6/7/2017							
2/19/2018							
2/20/2018		<0.005					
2/21/2018	<0.000203						
5/15/2018		<0.005					
5/16/2018	<0.000203						
10/15/2018							
10/16/2018	<0.000203	<0.005					
10/17/2018							
2/20/2019				0.0306			
2/21/2019							
2/26/2019					<0.005		
2/27/2019							<0.000203
4/16/2019							
4/17/2019	<0.000203	<0.005					
9/23/2019				0.0369			<0.000203
9/24/2019		<0.005			<0.005		
9/25/2019	<0.000203						
3/16/2020							
3/17/2020				0.0524			
3/18/2020		<0.005			<0.005		
3/23/2020			0.0159				
3/24/2020						0.00798	
3/25/2020	<0.000203						<0.000203
5/12/2020							
5/13/2020	<0.000203						
9/17/2020				0.0579	<0.005	0.00904	
9/21/2020							0.00143 (J)
9/22/2020	<0.000203						
9/23/2020		<0.005	0.01				
2/1/2021	<0.000203						

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Arsenic (mg/L) Analysis Run 11/15/2023 3:05 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-2	GS-AP-MW-21	GS-AP-MW-21V	GS-AP-MW-23H	GS-AP-MW-24H	GS-AP-MW-25HA	GS-AP-MW-26H
2/2/2021					0.000341		
2/3/2021				0.0562			
2/8/2021		0.000624					
2/9/2021			0.0063				0.000192 (J)
2/10/2021						0.00923	
7/27/2021				0.0474			
8/2/2021							
8/3/2021					0.00033		
8/4/2021	<0.000203	0.00054					
8/9/2021							
8/10/2021							0.00019 (J)
8/11/2021			0.00161				
8/12/2021						0.00888	
2/8/2022		0.00046	0.00551				
2/14/2022				0.061			
2/15/2022					0.00029		0.00025
2/16/2022						0.00968	
2/22/2022	<0.000203						
2/23/2022							
2/28/2022							
7/19/2022	8.3E-05 (J)						
7/20/2022							
7/26/2022				0.0616			
7/27/2022					0.00022		
8/2/2022							
8/3/2022						0.0103	
8/8/2022							
8/9/2022			0.00345				
8/10/2022		0.000495					0.000161 (J)
3/14/2023				0.0731			
3/15/2023					0.000211		
3/20/2023							
3/21/2023		0.000472	0.00444				
3/22/2023	<0.000203					0.00851	0.000149 (J)
9/5/2023		0.000578	0.00411				
9/6/2023				0.0652	0.000239		
9/11/2023							
9/12/2023							
9/13/2023							
9/18/2023	0.000122 (J)					0.00944	<0.000203
9/19/2023							

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Arsenic (mg/L) Analysis Run 11/15/2023 3:05 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-28H	GS-AP-MW-29H	GS-AP-MW-3	GS-AP-MW-30HA	GS-AP-MW-31H	GS-AP-MW-32H	GS-AP-MW-33HO	GS-AP-MW-34HO	GS-AP-MW-35HO
2/27/2019		<0.005							
3/13/2019	0.00142 (J)								
9/24/2019		0.00155 (J)							
9/25/2019	<0.005								
3/16/2020	<0.005							0.00351 (J)	
3/17/2020							0.0044 (J)		0.00105 (J)
3/18/2020				0.00813	0.0012 (J)				
3/24/2020						<0.005			
3/25/2020		0.00141 (J)							
5/12/2020	0.00135 (J)							0.00668	<0.000203
5/13/2020				0.00779			0.00308 (J)		
9/15/2020							0.00275 (J)		
9/16/2020								0.00308 (J)	<0.000203
9/17/2020									
9/21/2020				0.00551		<0.005			
9/22/2020	0.00112 (J)	0.00109 (J)			<0.005				
2/1/2021					0.000325				
2/2/2021									
2/3/2021		0.00794					0.00177	0.00257	
2/4/2021									0.000442
2/8/2021									
2/9/2021									
2/10/2021						0.000838			
2/17/2021	0.000796		0.000168 (J)	0.00354					
7/27/2021							0.00143	0.00179	
7/28/2021									0.00024
8/2/2021				0.003	0.00029				
8/3/2021			0.00014 (J)						
8/4/2021		0.00317							
8/9/2021	0.00063								
8/10/2021						0.00058			
2/8/2022				0.00331	0.00034				
2/9/2022							0.00087	0.00112	0.00019 (J)
2/14/2022	0.00058	0.00313				0.00062			
2/15/2022									
2/16/2022			0.0002 (J)						
2/21/2022									
2/22/2022									
7/20/2022			0.000137 (J)						
7/26/2022									
7/27/2022	0.000436					0.000353			
8/2/2022									
8/3/2022		0.00248		0.00387	0.000201 (J)				
8/10/2022									
3/8/2023								0.00105	<0.000203
3/13/2023				0.00298					
3/14/2023	0.000553						0.000523		
3/15/2023									
3/21/2023			0.000162 (J)			0.000407			
3/22/2023									
3/27/2023					0.00016 (J)				
3/28/2023		0.00221							

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Arsenic (mg/L) Analysis Run 11/15/2023 3:05 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-28H	GS-AP-MW-29H	GS-AP-MW-3	GS-AP-MW-30HA	GS-AP-MW-31H	GS-AP-MW-32H	GS-AP-MW-33HO	GS-AP-MW-34HO	GS-AP-MW-35HO
8/30/2023							0.000822		
8/31/2023								0.00065	<0.000203
9/5/2023				0.00325					
9/6/2023									
9/11/2023	0.000957								
9/12/2023			0.000177 (J)						
9/13/2023		0.00158			0.00041	0.000575			
9/18/2023									
9/19/2023									

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Arsenic (mg/L)   Analysis Run 11/15/2023 3:05 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

	GS-AP-MW-36H	GS-AP-MW-38H	GS-AP-MW-40H	GS-AP-MW-41HD	GS-AP-MW-41HS	GS-AP-MW-42H	GS-AP-MW-43HO
2/27/2019							
3/13/2019							
9/24/2019							
9/25/2019							
3/16/2020							
3/17/2020	0.00171 (J)						
3/18/2020				<0.005			
3/24/2020		0.00302 (J)				0.00944	
3/25/2020							0.00509
5/12/2020							
5/13/2020	0.00122 (J)						
9/15/2020							
9/16/2020							
9/17/2020	0.0013 (J)			0.0016 (J)			
9/21/2020							
9/22/2020		0.00304 (J)	0.00193 (J)			0.00912	0.0039 (J)
2/1/2021							
2/2/2021			0.000958				
2/3/2021						0.00806	
2/4/2021							
2/8/2021				0.00148	0.000551		
2/9/2021		0.0026					
2/10/2021							
2/17/2021	0.00102						0.00132
7/27/2021							
7/28/2021					0.00038		
8/2/2021							
8/3/2021				0.00289			
8/4/2021	0.00246	0.00287				0.00846	0.00125
8/9/2021							
8/10/2021			0.00046				
2/8/2022					0.00144		
2/9/2022							
2/14/2022	0.00235						
2/15/2022			0.0004	0.00284			
2/16/2022						0.00846	
2/21/2022							0.00089
2/22/2022		0.00221					
7/20/2022	0.0004						
7/26/2022					0.000471		
7/27/2022				0.00271		0.00938	
8/2/2022			0.000294				
8/3/2022							0.00109
8/10/2022		0.00294					
3/8/2023							
3/13/2023					0.000483		
3/14/2023							
3/15/2023	0.00235			0.00301		0.0105	
3/21/2023							
3/22/2023			0.00081				
3/27/2023							
3/28/2023		0.00303					0.000779

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Arsenic (mg/L) Analysis Run 11/15/2023 3:05 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-36H	GS-AP-MW-38H	GS-AP-MW-40H	GS-AP-MW-41HD	GS-AP-MW-41HS	GS-AP-MW-42H	GS-AP-MW-43HO
8/30/2023				0.00342	0.000556		
8/31/2023							
9/5/2023							
9/6/2023	0.00225						
9/11/2023							
9/12/2023							
9/13/2023							
9/18/2023			0.000331				
9/19/2023		0.00194				0.0111	0.000738

Time Series

Constituent: Arsenic (mg/L) Analysis Run 11/15/2023 3:05 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-44HO	GS-AP-MW-6D	GS-AP-MW-6S	GS-AP-MW-6V	GS-AP-MW-7	GS-AP-MW-8 (bg)	GS-AP-MW-9V	GS-AP-PZ-16	GS-AP-PZ-22
8/2/2016					0.188				
8/3/2016		0.0547	0.0103			0.00214 (J)			
9/20/2016		0.0625	0.0103						
9/21/2016					0.179	0.00112 (J)			
10/24/2016		0.0695			0.151				
10/25/2016						<0.005			
10/26/2016			0.0115						
12/12/2016		0.0611	0.0106		0.181				
12/13/2016						<0.005			
2/6/2017		0.0618	0.0106		0.194	0.00111 (J)			
3/27/2017		0.0711	0.00989						
3/28/2017					0.205	0.00109 (J)			
4/24/2017		0.0787	0.00907		0.202	<0.005			
6/6/2017		0.0778	0.0105						
6/7/2017					0.193	<0.005			
2/19/2018		0.0616	0.0108		0.182	<0.005			
5/14/2018		0.074	0.00864						
5/15/2018					0.211	<0.005			
10/15/2018		0.0758	0.00832		0.217				
10/16/2018						<0.005			
4/16/2019		0.088	0.0164			<0.005			
4/23/2019					0.207				
9/23/2019		0.0876	0.0105						
9/24/2019					0.233	<0.005			
3/17/2020		0.105	0.00778		0.285				
3/18/2020						<0.005			
3/23/2020							<0.005		
3/24/2020								<0.000203	0.00367 (J)
8/27/2020	0.00321 (J)								
9/8/2020				<0.005					
9/15/2020	0.00184 (J)			<0.005					
9/16/2020			0.00611		0.282				
9/17/2020		0.0931						<0.000203	0.00387 (J)
9/21/2020						<0.005			
9/22/2020							<0.005		
2/2/2021					0.275	0.000228	0.000101 (J)		0.00338
2/3/2021	0.000795	0.104	0.0071	0.000767					
2/17/2021								0.000258	
7/27/2021	0.00034	0.107	0.00634						
8/2/2021				0.00094					
8/3/2021									0.00296
8/9/2021					0.282			0.00059	
8/10/2021						0.00039	0.00032		
2/8/2022					0.281				
2/9/2022	0.00035			0.0009					
2/14/2022		0.12	0.0106						0.00358
2/15/2022								0.00112	
2/16/2022						0.00028			
2/21/2022							0.00021		
2/22/2022									
2/28/2022									
3/1/2022									

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Arsenic (mg/L) Analysis Run 11/15/2023 3:05 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-44HO	GS-AP-MW-6D	GS-AP-MW-6S	GS-AP-MW-6V	GS-AP-MW-7	GS-AP-MW-8 (bg)	GS-AP-MW-9V	GS-AP-PZ-16	GS-AP-PZ-22
7/19/2022							0.000252		
7/20/2022									
7/25/2022		0.114		0.000844	0.272				
7/26/2022			0.00935					0.00761	
8/2/2022						0.00016 (J)			
8/3/2022									
8/9/2022									0.00231
3/6/2023	0.000275								
3/8/2023				0.00113					
3/14/2023		0.108	0.00908		0.249				
3/15/2023									
3/21/2023								<0.000203	0.00226
3/22/2023									
3/27/2023						0.000162 (J)	0.000153 (J)		
3/28/2023									
9/5/2023	0.000527	0.1	0.0126						
9/11/2023				0.000641	0.244				0.00229
9/12/2023								0.000121 (J)	
9/13/2023							0.000133 (J)		
9/18/2023						0.000244			
9/19/2023									

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Arsenic (mg/L)   Analysis Run 11/15/2023 3:05 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

	GS-AP-MW-10R	GS-AP-MW-11R	GS-AP-MW-13R	GS-AP-MW-14R	GS-AP-MW-18R ...	GS-AP-MW-18VR	GS-AP-MW-1R
8/2/2016							
8/3/2016							
9/20/2016							
9/21/2016							
10/24/2016							
10/25/2016							
10/26/2016							
12/12/2016							
12/13/2016							
2/6/2017							
3/27/2017							
3/28/2017							
4/24/2017							
6/6/2017							
6/7/2017							
2/19/2018							
5/14/2018							
5/15/2018							
10/15/2018							
10/16/2018							
4/16/2019							
4/23/2019							
9/23/2019							
9/24/2019							
3/17/2020							
3/18/2020							
3/23/2020							
3/24/2020							
8/27/2020							
9/8/2020							
9/15/2020							
9/16/2020							
9/17/2020							
9/21/2020							
9/22/2020							
2/2/2021							
2/3/2021							
2/17/2021							
7/27/2021							
8/2/2021							
8/3/2021							
8/9/2021							
8/10/2021							
2/8/2022							
2/9/2022							
2/14/2022							
2/15/2022							
2/16/2022							
2/21/2022							
2/22/2022					0.00037	0.00164	
2/28/2022				0.00231			
3/1/2022	0.00209	0.00235	0.011				0.00038

Time Series

Constituent: Arsenic (mg/L) Analysis Run 11/15/2023 3:05 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-10R	GS-AP-MW-11R	GS-AP-MW-13R	GS-AP-MW-14R	GS-AP-MW-18R ...	GS-AP-MW-18VR	GS-AP-MW-1R
7/19/2022		0.00137					
7/20/2022			0.016				
7/25/2022							
7/26/2022							
8/2/2022							0.000259
8/3/2022	0.00109			0.00142	0.000429		
8/9/2022						0.00121	
3/6/2023							
3/8/2023							
3/14/2023							
3/15/2023				0.000553			
3/21/2023							
3/22/2023		0.00148					
3/27/2023	0.00277		0.034			0.000422	0.000248
3/28/2023					0.000433		
9/5/2023							
9/11/2023							
9/12/2023				0.000932			
9/13/2023							0.000313
9/18/2023							
9/19/2023	0.00047	0.00378	0.0213		0.000488	0.000661	

Time Series

Constituent: Arsenic (mg/L) Analysis Run 11/15/2023 3:05 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-23V	GS-AP-MW-27HR	GS-AP-MW-31V	GS-AP-MW-36V	GS-AP-MW-37HR	GS-AP-MW-3V	GS-AP-MW-45V	GS-AP-MW-47	GS-AP-MW-5R
2/21/2022									
2/22/2022		0.00102	0.0011	0.00167					
2/23/2022	0.00016 (J)					0.00249	0.00106		
2/28/2022					0.00094			0.00038	
3/1/2022									0.00048
7/19/2022									
7/20/2022						0.00228			
7/26/2022	<0.000203				0.00101			0.000423	
7/27/2022		0.00148		0.00447					
8/2/2022									0.000325
8/3/2022			0.0015						
8/8/2022							0.000618		
3/14/2023	<0.000203	0.00105		0.00337					
3/15/2023					0.000822			0.00102	
3/20/2023									0.000194 (J)
3/21/2023						0.000654			
3/27/2023			0.00166						
3/28/2023							0.0013		
9/6/2023	<0.000203	0.00122		0.00268					
9/11/2023					0.00137				
9/12/2023						0.00104		0.000627	0.000161 (J)
9/13/2023			0.00182						
9/18/2023							0.002		
9/19/2023									

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Arsenic (mg/L) Analysis Run 11/15/2023 3:05 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-9R	GS-AP-PZ-18R	GS-AP-MW-46
2/21/2022		0.00167	
2/22/2022			
2/23/2022			0.105
2/28/2022			
3/1/2022	0.00529		
7/19/2022	0.00629		
7/20/2022			
7/26/2022			
7/27/2022		0.00143	
8/2/2022			0.119
8/3/2022			
8/8/2022			
3/14/2023			
3/15/2023			
3/20/2023			
3/21/2023			
3/27/2023	0.00564		0.0955
3/28/2023		0.00106	
9/6/2023			
9/11/2023			
9/12/2023			
9/13/2023	0.00449		
9/18/2023			0.179
9/19/2023		0.00104	

Time Series

Constituent: Barium (mg/L) Analysis Run 11/15/2023 3:05 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-12	GS-AP-MW-12V	GS-AP-MW-13 (bg)	GS-AP-MW-15	GS-AP-MW-15V	GS-AP-MW-16D	GS-AP-MW-17	GS-AP-MW-17V ...	GS-AP-MW-19
8/1/2016				0.117		0.316	0.0696		0.492
8/2/2016			0.184						
8/3/2016	0.144								
9/19/2016						0.276	0.0503		
9/20/2016	0.102		0.153	0.193					
9/21/2016									0.371
10/24/2016							0.0468		0.311
10/25/2016	0.109		0.176	0.222		0.3			
12/13/2016	0.115		0.184			0.314	0.0472		0.374
12/14/2016				0.222					
2/6/2017							0.0498		
2/7/2017									0.368
2/8/2017	0.122		0.189	0.294		0.324			
3/27/2017							0.0559		
3/28/2017				0.288					0.391
3/29/2017	0.116		0.184			0.316			
3/30/2017									
4/24/2017							0.055		
4/26/2017	0.127		0.177	0.24		0.323			0.371
6/5/2017							0.0552		
6/6/2017				0.228		0.29			0.33
6/7/2017	0.115		0.164						
2/19/2018							0.077		
2/20/2018	0.132		0.165	0.224					
2/21/2018						0.3			0.291
5/15/2018	0.163		0.172	0.212			0.0751		
5/16/2018						0.315			0.343
10/15/2018				0.133			0.0682		
10/16/2018	0.159								0.35
10/17/2018			0.165			0.331			
2/20/2019								0.191	
2/21/2019		1.35							
2/26/2019									
2/27/2019									
4/16/2019	0.161		0.16						
4/17/2019				0.264		0.322	0.0946		0.316
9/23/2019							0.135		
9/24/2019				0.0913		0.342		0.208	0.356
9/25/2019	0.202	1.06							
3/16/2020							0.0883		
3/17/2020									
3/18/2020	0.195			0.14	0.155				
3/23/2020									
3/24/2020		1.43				0.323			0.324
3/25/2020								0.314	
5/12/2020							0.0941		
5/13/2020									
9/17/2020									
9/21/2020					0.18		0.128		
9/22/2020						0.342			0.337
9/23/2020	0.193	1.27		0.119				0.299	
2/1/2021	0.201	1.6							

Time Series

Constituent: Barium (mg/L) Analysis Run 11/15/2023 3:05 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-12	GS-AP-MW-12V	GS-AP-MW-13 (bg)	GS-AP-MW-15	GS-AP-MW-15V	GS-AP-MW-16D	GS-AP-MW-17	GS-AP-MW-17V ...	GS-AP-MW-19
2/2/2021							0.107	0.308	
2/3/2021									
2/8/2021									0.36
2/9/2021				0.132	0.2				
2/10/2021						0.356			
7/27/2021									
8/2/2021								0.353	
8/3/2021				0.129	0.164		0.0889		
8/4/2021									
8/9/2021	0.194	1.07				0.334			
8/10/2021									0.343
8/11/2021									
8/12/2021									
2/8/2022									
2/14/2022							0.0945	0.315	
2/15/2022						0.322			
2/16/2022				0.271	0.2				
2/22/2022									0.334
2/23/2022		1.34							
2/28/2022	0.173								
7/19/2022	0.188								
7/20/2022		1.21							
7/26/2022									
7/27/2022									
8/2/2022				0.131	0.253	0.355			
8/3/2022									0.348
8/8/2022							0.0875		
8/9/2022								0.292	
8/10/2022									
3/14/2023									
3/15/2023									
3/20/2023				0.276	0.175				
3/21/2023						0.324			0.304
3/22/2023	0.22	1.24					0.0835	0.289	
9/5/2023									
9/6/2023									
9/11/2023				0.188	0.186		0.1	0.288	
9/12/2023						0.324			
9/13/2023	0.182	1.05							
9/18/2023									
9/19/2023									0.325

Time Series

Constituent: Barium (mg/L) Analysis Run 11/15/2023 3:05 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-2	GS-AP-MW-21	GS-AP-MW-21V	GS-AP-MW-23H	GS-AP-MW-24H	GS-AP-MW-25HA	GS-AP-MW-26H
8/1/2016							
8/2/2016	0.0895	0.0535					
8/3/2016							
9/19/2016	0.0744						
9/20/2016							
9/21/2016		0.0458					
10/24/2016	0.0787						
10/25/2016		0.0489					
12/13/2016	0.0758						
12/14/2016		0.0494					
2/6/2017							
2/7/2017							
2/8/2017	0.0823	0.0449					
3/27/2017							
3/28/2017		0.0446					
3/29/2017							
3/30/2017	0.0768						
4/24/2017							
4/26/2017	0.077	0.0424					
6/5/2017							
6/6/2017	0.0711	0.0402					
6/7/2017							
2/19/2018							
2/20/2018		0.0441					
2/21/2018	0.0864						
5/15/2018		0.0456					
5/16/2018	0.0658						
10/15/2018							
10/16/2018	0.0846	0.0909					
10/17/2018							
2/20/2019				0.0227			
2/21/2019							
2/26/2019					0.887		
2/27/2019							0.622
4/16/2019							
4/17/2019	0.0576	0.0914					
9/23/2019				0.0148			0.922
9/24/2019		0.114			1.04		
9/25/2019	0.065						
3/16/2020							
3/17/2020				0.0143			
3/18/2020		0.105			0.964		
3/23/2020			0.0574				
3/24/2020						0.147	
3/25/2020	0.0602						0.868
5/12/2020							
5/13/2020	0.0528						
9/17/2020				0.0146	0.988	0.164	
9/21/2020							0.938
9/22/2020	0.0563						
9/23/2020		0.157	0.0438				
2/1/2021	0.0578						

Time Series

Constituent: Barium (mg/L) Analysis Run 11/15/2023 3:05 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-2	GS-AP-MW-21	GS-AP-MW-21V	GS-AP-MW-23H	GS-AP-MW-24H	GS-AP-MW-25HA	GS-AP-MW-26H
2/2/2021					0.952		
2/3/2021				0.0138			
2/8/2021		0.151					
2/9/2021			0.028				0.775
2/10/2021						0.208	
7/27/2021				0.0133			
8/2/2021							
8/3/2021					1.04		
8/4/2021	0.0702	0.148					
8/9/2021							
8/10/2021							0.765
8/11/2021			0.0535				
8/12/2021						0.2	
2/8/2022		0.143	0.0631				
2/14/2022				0.0166			
2/15/2022					0.992		0.726
2/16/2022						0.23	
2/22/2022	0.0501						
2/23/2022							
2/28/2022							
7/19/2022	0.0474						
7/20/2022							
7/26/2022				0.0154			
7/27/2022					1.01		
8/2/2022							
8/3/2022						0.232	
8/8/2022							
8/9/2022			0.0477				
8/10/2022		0.135					0.766
3/14/2023				0.0155			
3/15/2023					1.08		
3/20/2023							
3/21/2023		0.127	0.059				
3/22/2023	0.0456					0.196	0.725
9/5/2023		0.122	0.0484				
9/6/2023				0.0127	1.05		
9/11/2023							
9/12/2023							
9/13/2023							
9/18/2023	0.0732					0.181	0.733
9/19/2023							

Time Series

Constituent: Barium (mg/L) Analysis Run 11/15/2023 3:05 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-28H	GS-AP-MW-29H	GS-AP-MW-3	GS-AP-MW-30HA	GS-AP-MW-31H	GS-AP-MW-32H	GS-AP-MW-33HO	GS-AP-MW-34HO	GS-AP-MW-35HO
2/27/2019		0.517							
3/13/2019	0.164								
9/24/2019		0.712							
9/25/2019	0.0528								
3/16/2020	0.0411							0.0309	
3/17/2020							0.329		0.0426
3/18/2020				0.0791	0.106				
3/24/2020						0.0362			
3/25/2020		0.527							
5/12/2020	0.0436							0.0379	0.0472
5/13/2020				0.0819			0.324		
9/15/2020							0.469		
9/16/2020								0.0451	0.0532
9/17/2020									
9/21/2020				0.0811		0.0396			
9/22/2020	0.0385	0.499			0.0916				
2/1/2021					0.0974				
2/2/2021									
2/3/2021		0.318					0.465	0.0543	
2/4/2021									0.052
2/8/2021									
2/9/2021									
2/10/2021						0.0511			
2/17/2021	0.0297		0.59	0.089					
7/27/2021							0.46	0.0668	
7/28/2021									0.0492
8/2/2021				0.0965	0.102				
8/3/2021			0.589						
8/4/2021		0.264							
8/9/2021	0.0407								
8/10/2021						0.0475			
2/8/2022				0.1	0.14				
2/9/2022							0.483	0.0615	0.0516
2/14/2022	0.0483	0.231				0.047			
2/15/2022									
2/16/2022			0.498						
2/21/2022									
2/22/2022									
7/20/2022			0.492						
7/26/2022									
7/27/2022	0.0482					0.0499			
8/2/2022									
8/3/2022		0.248		0.113	0.134				
8/10/2022									
3/8/2023								0.0695	0.0521
3/13/2023				0.115					
3/14/2023	0.052						0.443		
3/15/2023									
3/21/2023			0.611			0.0393			
3/22/2023									
3/27/2023					0.123				
3/28/2023		0.263							

Time Series

Constituent: Barium (mg/L) Analysis Run 11/15/2023 3:05 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-28H	GS-AP-MW-29H	GS-AP-MW-3	GS-AP-MW-30HA	GS-AP-MW-31H	GS-AP-MW-32H	GS-AP-MW-33HO	GS-AP-MW-34HO	GS-AP-MW-35HO
8/30/2023							0.472		
8/31/2023								0.04	0.0494
9/5/2023				0.116					
9/6/2023									
9/11/2023	0.0484								
9/12/2023			0.348						
9/13/2023		0.242			0.105	0.0408			
9/18/2023									
9/19/2023									

Time Series

Constituent: Barium (mg/L)   Analysis Run 11/15/2023 3:05 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

	GS-AP-MW-36H	GS-AP-MW-38H	GS-AP-MW-40H	GS-AP-MW-41HD	GS-AP-MW-41HS	GS-AP-MW-42H	GS-AP-MW-43HO
2/27/2019							
3/13/2019							
9/24/2019							
9/25/2019							
3/16/2020							
3/17/2020	0.0353						
3/18/2020				0.0393			
3/24/2020		0.253				0.0253	
3/25/2020							0.0927
5/12/2020							
5/13/2020	0.03						
9/15/2020							
9/16/2020							
9/17/2020	0.0378			0.0414			
9/21/2020							
9/22/2020		0.319	0.0417			0.0237	0.0921
2/1/2021							
2/2/2021			0.0384				
2/3/2021						0.0216	
2/4/2021							
2/8/2021				0.0434	0.0544		
2/9/2021		0.356					
2/10/2021							
2/17/2021	0.0463						0.0894
7/27/2021							
7/28/2021					0.0445		
8/2/2021							
8/3/2021				0.045			
8/4/2021	0.0905	0.359				0.0256	0.102
8/9/2021							
8/10/2021			0.0358				
2/8/2022					0.0542		
2/9/2022							
2/14/2022	0.136						
2/15/2022			0.0298	0.0441			
2/16/2022						0.0226	
2/21/2022							0.0849
2/22/2022		0.301					
7/20/2022	0.0393						
7/26/2022					0.0497		
7/27/2022				0.0475		0.0238	
8/2/2022			0.0306				
8/3/2022							0.0956
8/10/2022		0.286					
3/8/2023							
3/13/2023					0.0572		
3/14/2023							
3/15/2023	0.142			0.0511		0.0241	
3/21/2023							
3/22/2023			0.0302				
3/27/2023							
3/28/2023		0.264					0.18

Time Series

Constituent: Barium (mg/L) Analysis Run 11/15/2023 3:05 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-36H	GS-AP-MW-38H	GS-AP-MW-40H	GS-AP-MW-41HD	GS-AP-MW-41HS	GS-AP-MW-42H	GS-AP-MW-43HO
8/30/2023				0.0519	0.0518		
8/31/2023							
9/5/2023							
9/6/2023	0.137						
9/11/2023							
9/12/2023							
9/13/2023							
9/18/2023			0.028				
9/19/2023		0.251				0.0223	0.0906

Time Series

Constituent: Barium (mg/L) Analysis Run 11/15/2023 3:05 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-44HO	GS-AP-MW-6D	GS-AP-MW-6S	GS-AP-MW-6V	GS-AP-MW-7	GS-AP-MW-8 (bg)	GS-AP-MW-9V	GS-AP-PZ-16	GS-AP-PZ-22
8/2/2016					0.0927				
8/3/2016		0.852	0.27			0.0274			
9/20/2016		0.685	0.228						
9/21/2016					0.0979	0.0811			
10/24/2016		0.711			0.0751				
10/25/2016						0.0576			
10/26/2016			0.23						
12/12/2016		0.789	0.276		0.0737				
12/13/2016						0.0241			
2/6/2017		0.779	0.25		0.0773	0.0747			
3/27/2017		0.77	0.196						
3/28/2017					0.0728	0.0183			
4/24/2017		0.716	0.159		0.0724	0.04			
6/6/2017		0.611	0.137						
6/7/2017					0.0581	0.00769 (J)			
2/19/2018		0.872	0.145		0.0464	0.00762 (J)			
5/14/2018		0.914	0.12						
5/15/2018					0.0501	0.00701 (J)			
10/15/2018		0.896	0.118		0.049				
10/16/2018						0.0094 (J)			
4/16/2019		0.879	0.124			0.00459 (J)			
4/23/2019					0.113				
9/23/2019		0.903	0.124						
9/24/2019					0.0834	0.0434			
3/17/2020		0.638	0.0725		0.174				
3/18/2020						0.00507 (J)			
3/23/2020							0.215		
3/24/2020								0.295	0.104
8/27/2020	0.0867								
9/8/2020				0.164					
9/15/2020	0.0783			0.16					
9/16/2020			0.0682		0.124				
9/17/2020		0.378						0.223	0.109
9/21/2020						0.026			
9/22/2020							0.187		
2/2/2021					0.115	0.0068	0.17		0.0891
2/3/2021	0.0602	0.443	0.0779	0.124					
2/17/2021								0.27	
7/27/2021	0.0749	0.488	0.0876						
8/2/2021				0.143					
8/3/2021									0.0953
8/9/2021					0.0891			0.244	
8/10/2021						0.00805	0.165		
2/8/2022					0.0747				
2/9/2022	0.0711			0.156					
2/14/2022		0.599	0.097						0.0695
2/15/2022								0.205	
2/16/2022						0.00763			
2/21/2022							0.161		
2/22/2022									
2/28/2022									
3/1/2022									

Time Series

Constituent: Barium (mg/L) Analysis Run 11/15/2023 3:05 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-44HO	GS-AP-MW-6D	GS-AP-MW-6S	GS-AP-MW-6V	GS-AP-MW-7	GS-AP-MW-8 (bg)	GS-AP-MW-9V	GS-AP-PZ-16	GS-AP-PZ-22
7/19/2022							0.178		
7/20/2022									
7/25/2022		0.544		0.161	0.0677				
7/26/2022			0.0978					0.198	
8/2/2022						0.0116			
8/3/2022									
8/9/2022									0.106
3/6/2023	0.0835								
3/8/2023				0.183					
3/14/2023		0.604	0.108		0.0631				
3/15/2023									
3/21/2023								0.248	0.0615
3/22/2023									
3/27/2023						0.00644	0.184		
3/28/2023									
9/5/2023	0.0867	0.571	0.102						
9/11/2023				0.175	0.0607				0.0543
9/12/2023								0.266	
9/13/2023							0.153		
9/18/2023						0.0289			
9/19/2023									

Time Series

Constituent: Barium (mg/L) Analysis Run 11/15/2023 3:05 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-10R	GS-AP-MW-11R	GS-AP-MW-13R	GS-AP-MW-14R	GS-AP-MW-18R ...	GS-AP-MW-18VR	GS-AP-MW-1R
8/2/2016							
8/3/2016							
9/20/2016							
9/21/2016							
10/24/2016							
10/25/2016							
10/26/2016							
12/12/2016							
12/13/2016							
2/6/2017							
3/27/2017							
3/28/2017							
4/24/2017							
6/6/2017							
6/7/2017							
2/19/2018							
5/14/2018							
5/15/2018							
10/15/2018							
10/16/2018							
4/16/2019							
4/23/2019							
9/23/2019							
9/24/2019							
3/17/2020							
3/18/2020							
3/23/2020							
3/24/2020							
8/27/2020							
9/8/2020							
9/15/2020							
9/16/2020							
9/17/2020							
9/21/2020							
9/22/2020							
2/2/2021							
2/3/2021							
2/17/2021							
7/27/2021							
8/2/2021							
8/3/2021							
8/9/2021							
8/10/2021							
2/8/2022							
2/9/2022							
2/14/2022							
2/15/2022							
2/16/2022							
2/21/2022							
2/22/2022					0.0716	0.187	
2/28/2022				0.174			
3/1/2022	0.701	0.107	0.0617				0.072

Time Series

Constituent: Barium (mg/L) Analysis Run 11/15/2023 3:05 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-10R	GS-AP-MW-11R	GS-AP-MW-13R	GS-AP-MW-14R	GS-AP-MW-18R ...	GS-AP-MW-18VR	GS-AP-MW-1R
7/19/2022		0.11					
7/20/2022			0.0667				
7/25/2022							
7/26/2022							
8/2/2022							0.0679
8/3/2022	0.524			0.221	0.0895		
8/9/2022						0.126	
3/6/2023							
3/8/2023							
3/14/2023							
3/15/2023				0.229			
3/21/2023							
3/22/2023		0.12					
3/27/2023	0.587		0.0685			0.115	0.0647
3/28/2023					0.0803		
9/5/2023							
9/11/2023							
9/12/2023				0.201			
9/13/2023							0.0559
9/18/2023							
9/19/2023	0.608	0.133	0.0696		0.0955	0.11	

Time Series

Constituent: Barium (mg/L) Analysis Run 11/15/2023 3:05 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-23V	GS-AP-MW-27HR	GS-AP-MW-31V	GS-AP-MW-36V	GS-AP-MW-37HR	GS-AP-MW-3V	GS-AP-MW-45V	GS-AP-MW-47	GS-AP-MW-5R
2/21/2022									
2/22/2022		0.0414	0.238	0.092					
2/23/2022	0.0812					0.0486	0.0207		
2/28/2022					0.0131			0.772	
3/1/2022									0.0695
7/19/2022									
7/20/2022						0.0815			
7/26/2022	0.0695				0.0171			0.728	
7/27/2022		0.0599		0.114					
8/2/2022									0.0605
8/3/2022			0.342						
8/8/2022							0.0257		
3/14/2023	0.0698	0.0327		0.0858					
3/15/2023					0.0314			0.638	
3/20/2023									0.0567
3/21/2023						0.0197			
3/27/2023			0.253						
3/28/2023							0.073		
9/6/2023	0.0771	0.0401		0.0803					
9/11/2023					0.0771				
9/12/2023						0.0269		0.317	0.0454
9/13/2023			0.192						
9/18/2023							0.0851		
9/19/2023									

Time Series

Constituent: Barium (mg/L) Analysis Run 11/15/2023 3:05 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-9R	GS-AP-PZ-18R	GS-AP-MW-46
2/21/2022		0.0662	
2/22/2022			
2/23/2022			0.0652
2/28/2022			
3/1/2022	0.0425		
7/19/2022	0.0339		
7/20/2022			
7/26/2022			
7/27/2022		0.0668	
8/2/2022			0.0696
8/3/2022			
8/8/2022			
3/14/2023			
3/15/2023			
3/20/2023			
3/21/2023			
3/27/2023	0.0344		0.0655
3/28/2023		0.0701	
9/6/2023			
9/11/2023			
9/12/2023			
9/13/2023	0.0315		
9/18/2023			0.0535
9/19/2023		0.0688	

Time Series

Constituent: Beryllium (mg/L) Analysis Run 11/15/2023 3:05 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-12	GS-AP-MW-12V	GS-AP-MW-13 (bg)	GS-AP-MW-15	GS-AP-MW-15V	GS-AP-MW-16D	GS-AP-MW-17	GS-AP-MW-17V ...	GS-AP-MW-19
8/1/2016				<0.001015		<0.001015	<0.001015		<0.001015
8/2/2016			<0.003						
8/3/2016	<0.001015								
9/19/2016						<0.001015	<0.001015		
9/20/2016	<0.001015		<0.003	<0.001015					
9/21/2016									<0.001015
10/24/2016							<0.001015		<0.001015
10/25/2016	<0.001015		<0.003	<0.001015		<0.001015			
12/13/2016	<0.001015		<0.003			<0.001015	<0.001015		<0.001015
12/14/2016				<0.001015					
2/6/2017							<0.001015		
2/7/2017									<0.001015
2/8/2017	<0.001015		<0.003	<0.001015		<0.001015			
3/27/2017							<0.001015		
3/28/2017				<0.001015					<0.001015
3/29/2017	<0.001015		<0.003			<0.001015			
3/30/2017									
4/24/2017							<0.001015		
4/26/2017	<0.001015		<0.003	<0.001015		<0.001015			<0.001015
6/5/2017							<0.001015		
6/6/2017				<0.001015		<0.001015			<0.001015
6/7/2017	<0.001015		<0.003						
2/19/2018							<0.001015		
2/20/2018	<0.001015		<0.003	<0.001015					
2/21/2018						<0.001015			<0.001015
5/15/2018	<0.001015		<0.003	<0.001015			<0.001015		
5/16/2018						<0.001015			<0.001015
10/15/2018				<0.001015			<0.001015		
10/16/2018	<0.001015								<0.001015
10/17/2018			<0.003			0.00109 (J)			
2/20/2019								<0.001015	
2/21/2019		<0.001015							
2/26/2019									
2/27/2019									
4/16/2019	<0.001015		<0.003						
4/17/2019				<0.001015		<0.001015	<0.001015		<0.001015
9/23/2019							<0.001015		
9/24/2019				<0.001015		<0.001015		<0.001015	<0.001015
9/25/2019	<0.001015	<0.001015							
3/16/2020							<0.001015		
3/17/2020									
3/18/2020	<0.001015			<0.001015	<0.001015				
3/23/2020									
3/24/2020		<0.001015				<0.001015			<0.001015
3/25/2020								<0.001015	
5/12/2020							<0.001015		
5/13/2020									
9/17/2020									
9/21/2020					<0.001015		<0.001015		
9/22/2020						<0.001015			<0.001015
9/23/2020	<0.001015	<0.001015		<0.001015				<0.001015	
2/1/2021	<0.001015	<0.001015							

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Beryllium (mg/L) Analysis Run 11/15/2023 3:05 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-12	GS-AP-MW-12V	GS-AP-MW-13 (bg)	GS-AP-MW-15	GS-AP-MW-15V	GS-AP-MW-16D	GS-AP-MW-17	GS-AP-MW-17V ...	GS-AP-MW-19
2/2/2021							<0.001015	<0.001015	
2/3/2021									
2/8/2021									<0.001015
2/9/2021				<0.001015	<0.001015				
2/10/2021						<0.001015			
7/27/2021									
8/2/2021								<0.001015	
8/3/2021				<0.001015	<0.001015		<0.001015		
8/4/2021									
8/9/2021	<0.001015	<0.001015				<0.001015			
8/10/2021									<0.001015
8/11/2021									
8/12/2021									
2/8/2022									
2/14/2022							<0.001015	<0.001015	
2/15/2022						<0.001015			
2/16/2022				<0.001015	<0.001015				
2/22/2022									<0.001015
2/23/2022		<0.001015							
2/28/2022	<0.001015								
7/19/2022	<0.001015								
7/20/2022		<0.001015							
7/26/2022									
7/27/2022									
8/2/2022				<0.001015	<0.001015	<0.001015			
8/3/2022									<0.001015
8/8/2022							<0.001015		
8/9/2022								<0.001015	
8/10/2022									
3/14/2023									
3/15/2023									
3/20/2023				<0.001015	<0.001015				
3/21/2023						<0.001015			<0.001015
3/22/2023	<0.001015	<0.001015					<0.001015	<0.001015	
9/5/2023									
9/6/2023									
9/11/2023				<0.001015	<0.001015		<0.001015	<0.001015	
9/12/2023						<0.001015			
9/13/2023	<0.001015	<0.001015							
9/18/2023									
9/19/2023									<0.001015

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Beryllium (mg/L) Analysis Run 11/15/2023 3:05 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-2	GS-AP-MW-21	GS-AP-MW-21V	GS-AP-MW-23H	GS-AP-MW-24H	GS-AP-MW-25HA	GS-AP-MW-26H
8/1/2016							
8/2/2016	<0.001015	<0.001015					
8/3/2016							
9/19/2016	<0.001015						
9/20/2016							
9/21/2016		<0.001015					
10/24/2016	<0.001015						
10/25/2016		<0.001015					
12/13/2016	<0.001015						
12/14/2016		<0.001015					
2/6/2017							
2/7/2017							
2/8/2017	<0.001015	<0.001015					
3/27/2017							
3/28/2017		<0.001015					
3/29/2017							
3/30/2017	<0.001015						
4/24/2017							
4/26/2017	<0.001015	<0.001015					
6/5/2017							
6/6/2017	<0.001015	<0.001015					
6/7/2017							
2/19/2018							
2/20/2018		<0.001015					
2/21/2018	<0.001015						
5/15/2018		<0.001015					
5/16/2018	<0.001015						
10/15/2018							
10/16/2018	0.00138 (J)	<0.001015					
10/17/2018							
2/20/2019				<0.001015			
2/21/2019							
2/26/2019					<0.001015		
2/27/2019							<0.001015
4/16/2019							
4/17/2019	<0.001015	<0.001015					
9/23/2019				<0.001015			<0.001015
9/24/2019		<0.001015			<0.001015		
9/25/2019	<0.001015						
3/16/2020							
3/17/2020				<0.001015			
3/18/2020		<0.001015			<0.001015		
3/23/2020			<0.001015				
3/24/2020						<0.001015	
3/25/2020	<0.001015						<0.001015
5/12/2020							
5/13/2020	<0.001015						
9/17/2020				<0.001015	<0.001015	<0.001015	
9/21/2020							<0.001015
9/22/2020	<0.001015						
9/23/2020		<0.001015	<0.001015				
2/1/2021	<0.001015						

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Beryllium (mg/L) Analysis Run 11/15/2023 3:05 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-2	GS-AP-MW-21	GS-AP-MW-21V	GS-AP-MW-23H	GS-AP-MW-24H	GS-AP-MW-25HA	GS-AP-MW-26H
2/2/2021					<0.001015		
2/3/2021				<0.001015			
2/8/2021		<0.001015					
2/9/2021			<0.001015				<0.001015
2/10/2021						<0.001015	
7/27/2021				<0.001015			
8/2/2021							
8/3/2021					<0.001015		
8/4/2021	<0.001015	<0.001015					
8/9/2021							
8/10/2021							<0.001015
8/11/2021			<0.001015				
8/12/2021						<0.001015	
2/8/2022		<0.001015	<0.001015				
2/14/2022				<0.001015			
2/15/2022					<0.001015		<0.001015
2/16/2022						<0.001015	
2/22/2022	<0.001015						
2/23/2022							
2/28/2022							
7/19/2022	<0.001015						
7/20/2022							
7/26/2022				<0.001015			
7/27/2022					<0.001015		
8/2/2022							
8/3/2022						<0.001015	
8/8/2022							
8/9/2022			<0.001015				
8/10/2022		<0.001015					<0.001015
3/14/2023				<0.001015			
3/15/2023					<0.001015		
3/20/2023							
3/21/2023		<0.001015	<0.001015				
3/22/2023	<0.001015					<0.001015	<0.001015
9/5/2023		<0.001015	<0.001015				
9/6/2023				<0.001015	<0.001015		
9/11/2023							
9/12/2023							
9/13/2023							
9/18/2023	<0.001015					<0.001015	<0.001015
9/19/2023							

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Beryllium (mg/L) Analysis Run 11/15/2023 3:05 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-28H	GS-AP-MW-29H	GS-AP-MW-3	GS-AP-MW-30HA	GS-AP-MW-31H	GS-AP-MW-32H	GS-AP-MW-33HO	GS-AP-MW-34HO	GS-AP-MW-35HO
2/27/2019		<0.001015							
3/13/2019	<0.001015								
9/24/2019		<0.001015							
9/25/2019	<0.001015								
3/16/2020	<0.001015							<0.001015	
3/17/2020							<0.001015		<0.001015
3/18/2020				<0.001015	<0.001015				
3/24/2020						<0.001015			
3/25/2020		<0.001015							
5/12/2020	<0.001015							<0.001015	<0.001015
5/13/2020				<0.001015			<0.001015		
9/15/2020							<0.001015		
9/16/2020								<0.001015	<0.001015
9/17/2020									
9/21/2020				<0.001015		<0.001015			
9/22/2020	<0.001015	<0.001015			<0.001015				
2/1/2021					<0.001015				
2/2/2021									
2/3/2021		<0.001015					<0.001015	<0.001015	
2/4/2021									<0.001015
2/8/2021									
2/9/2021									
2/10/2021						<0.001015			
2/17/2021	<0.001015		<0.001015	<0.001015					
7/27/2021							<0.001015	<0.001015	
7/28/2021									<0.001015
8/2/2021				<0.001015	<0.001015				
8/3/2021			<0.001015						
8/4/2021		<0.001015							
8/9/2021	<0.001015								
8/10/2021						<0.001015			
2/8/2022				<0.001015	<0.001015				
2/9/2022							<0.001015	<0.001015	<0.001015
2/14/2022	<0.001015	<0.001015				<0.001015			
2/15/2022									
2/16/2022			<0.001015						
2/21/2022									
2/22/2022									
7/20/2022			<0.001015						
7/26/2022									
7/27/2022	<0.001015					<0.001015			
8/2/2022									
8/3/2022		<0.001015		<0.001015	<0.001015				
8/10/2022									
3/8/2023								<0.001015	<0.001015
3/13/2023				<0.001015					
3/14/2023	<0.001015						<0.001015		
3/15/2023									
3/21/2023			<0.001015			<0.001015			
3/22/2023									
3/27/2023					<0.001015				
3/28/2023		<0.001015							

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Beryllium (mg/L) Analysis Run 11/15/2023 3:05 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-28H	GS-AP-MW-29H	GS-AP-MW-3	GS-AP-MW-30HA	GS-AP-MW-31H	GS-AP-MW-32H	GS-AP-MW-33HO	GS-AP-MW-34HO	GS-AP-MW-35HO
8/30/2023							<0.001015		
8/31/2023								<0.001015	<0.001015
9/5/2023				<0.001015					
9/6/2023									
9/11/2023	<0.001015								
9/12/2023			<0.001015						
9/13/2023		<0.001015			<0.001015	<0.001015			
9/18/2023									
9/19/2023									

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Beryllium (mg/L) Analysis Run 11/15/2023 3:05 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-36H	GS-AP-MW-38H	GS-AP-MW-40H	GS-AP-MW-41HD	GS-AP-MW-41HS	GS-AP-MW-42H	GS-AP-MW-43HO
2/27/2019							
3/13/2019							
9/24/2019							
9/25/2019							
3/16/2020							
3/17/2020	<0.001015						
3/18/2020				<0.001015			
3/24/2020		<0.001015				<0.001015	
3/25/2020							<0.001015
5/12/2020							
5/13/2020	<0.001015						
9/15/2020							
9/16/2020							
9/17/2020	<0.001015			<0.001015			
9/21/2020							
9/22/2020		<0.001015	<0.001015			<0.001015	<0.001015
2/1/2021							
2/2/2021			<0.001015				
2/3/2021						<0.001015	
2/4/2021							
2/8/2021				<0.001015	<0.001015		
2/9/2021		<0.001015					
2/10/2021							
2/17/2021	<0.001015						<0.001015
7/27/2021							
7/28/2021					<0.001015		
8/2/2021							
8/3/2021				<0.001015			
8/4/2021	<0.001015	<0.001015				<0.001015	<0.001015
8/9/2021							
8/10/2021			<0.001015				
2/8/2022					<0.001015		
2/9/2022							
2/14/2022	<0.001015						
2/15/2022			<0.001015	<0.001015			
2/16/2022						<0.001015	
2/21/2022							<0.001015
2/22/2022		<0.001015					
7/20/2022	<0.001015						
7/26/2022					<0.001015		
7/27/2022				<0.001015		<0.001015	
8/2/2022			<0.001015				
8/3/2022							<0.001015
8/10/2022		<0.001015					
3/8/2023							
3/13/2023					<0.001015		
3/14/2023							
3/15/2023	<0.001015			<0.001015		<0.001015	
3/21/2023							
3/22/2023			<0.001015				
3/27/2023							
3/28/2023		<0.001015					<0.001015

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Beryllium (mg/L) Analysis Run 11/15/2023 3:05 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-36H	GS-AP-MW-38H	GS-AP-MW-40H	GS-AP-MW-41HD	GS-AP-MW-41HS	GS-AP-MW-42H	GS-AP-MW-43HO
8/30/2023				<0.001015	<0.001015		
8/31/2023							
9/5/2023							
9/6/2023	<0.001015						
9/11/2023							
9/12/2023							
9/13/2023							
9/18/2023			<0.001015				
9/19/2023		<0.001015				<0.001015	<0.001015

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Beryllium (mg/L) Analysis Run 11/15/2023 3:05 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-44HO	GS-AP-MW-6D	GS-AP-MW-6S	GS-AP-MW-6V	GS-AP-MW-7	GS-AP-MW-8 (bg)	GS-AP-MW-9V	GS-AP-PZ-16	GS-AP-PZ-22
8/2/2016					<0.001015				
8/3/2016		<0.001015	<0.001015			<0.001015			
9/20/2016		<0.001015	<0.001015						
9/21/2016					<0.001015	<0.001015			
10/24/2016		<0.001015			<0.001015				
10/25/2016						<0.001015			
10/26/2016			<0.001015						
12/12/2016		<0.001015	<0.001015		<0.001015				
12/13/2016						<0.001015			
2/6/2017		<0.001015	<0.001015		<0.001015	<0.001015			
3/27/2017		<0.001015	<0.001015						
3/28/2017					<0.001015	<0.001015			
4/24/2017		<0.001015	<0.001015		<0.001015	<0.001015			
6/6/2017		<0.001015	<0.001015						
6/7/2017					<0.001015	<0.001015			
2/19/2018		<0.001015	<0.001015		<0.001015	<0.001015			
5/14/2018		<0.001015	<0.001015						
5/15/2018					<0.001015	<0.001015			
10/15/2018		<0.001015	0.000794 (J)		<0.001015				
10/16/2018						<0.001015			
4/16/2019		<0.001015	<0.001015			<0.001015			
4/23/2019					<0.001015				
9/23/2019		<0.001015	<0.001015						
9/24/2019					<0.001015	<0.001015			
3/17/2020		<0.001015	<0.001015		<0.001015				
3/18/2020						<0.001015			
3/23/2020							<0.001015		
3/24/2020								<0.001015	<0.001015
8/27/2020	<0.001015								
9/8/2020				<0.001015					
9/15/2020	<0.001015			<0.001015					
9/16/2020			<0.001015		<0.001015				
9/17/2020		<0.001015						<0.001015	<0.001015
9/21/2020						<0.001015			
9/22/2020							<0.001015		
2/2/2021					<0.001015	<0.001015	<0.001015		<0.001015
2/3/2021	<0.001015	<0.001015	<0.001015	<0.001015					
2/17/2021								<0.001015	
7/27/2021	<0.001015	<0.001015	<0.001015						
8/2/2021				<0.001015					
8/3/2021									<0.001015
8/9/2021					<0.001015			<0.001015	
8/10/2021						<0.001015	<0.001015		
2/8/2022					<0.001015				
2/9/2022	<0.001015			<0.001015					
2/14/2022		<0.001015	<0.001015						<0.001015
2/15/2022								<0.001015	
2/16/2022						<0.001015			
2/21/2022							<0.001015		
2/22/2022									
2/28/2022									
3/1/2022									

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Beryllium (mg/L)   Analysis Run 11/15/2023 3:05 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

	GS-AP-MW-44HO	GS-AP-MW-6D	GS-AP-MW-6S	GS-AP-MW-6V	GS-AP-MW-7	GS-AP-MW-8 (bg)	GS-AP-MW-9V	GS-AP-PZ-16	GS-AP-PZ-22
7/19/2022							<0.001015		
7/20/2022									
7/25/2022		<0.001015		<0.001015	<0.001015				
7/26/2022			<0.001015					<0.001015	
8/2/2022						<0.001015			
8/3/2022									
8/9/2022									<0.001015
3/6/2023	<0.001015								
3/8/2023				<0.001015					
3/14/2023		<0.001015	<0.001015		<0.001015				
3/15/2023									
3/21/2023								<0.001015	<0.001015
3/22/2023									
3/27/2023						<0.001015	<0.001015		
3/28/2023									
9/5/2023	<0.001015	<0.001015	<0.001015						
9/11/2023				<0.001015	<0.001015				<0.001015
9/12/2023								<0.001015	
9/13/2023							<0.001015		
9/18/2023						<0.001015			
9/19/2023									

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Beryllium (mg/L) Analysis Run 11/15/2023 3:05 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-10R	GS-AP-MW-11R	GS-AP-MW-13R	GS-AP-MW-14R	GS-AP-MW-18R ...	GS-AP-MW-18VR	GS-AP-MW-1R
8/2/2016							
8/3/2016							
9/20/2016							
9/21/2016							
10/24/2016							
10/25/2016							
10/26/2016							
12/12/2016							
12/13/2016							
2/6/2017							
3/27/2017							
3/28/2017							
4/24/2017							
6/6/2017							
6/7/2017							
2/19/2018							
5/14/2018							
5/15/2018							
10/15/2018							
10/16/2018							
4/16/2019							
4/23/2019							
9/23/2019							
9/24/2019							
3/17/2020							
3/18/2020							
3/23/2020							
3/24/2020							
8/27/2020							
9/8/2020							
9/15/2020							
9/16/2020							
9/17/2020							
9/21/2020							
9/22/2020							
2/2/2021							
2/3/2021							
2/17/2021							
7/27/2021							
8/2/2021							
8/3/2021							
8/9/2021							
8/10/2021							
2/8/2022							
2/9/2022							
2/14/2022							
2/15/2022							
2/16/2022							
2/21/2022							
2/22/2022					<0.001015	<0.001015	
2/28/2022				<0.001015			
3/1/2022	<0.001015	<0.001015	<0.001015				<0.001015

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Beryllium (mg/L) Analysis Run 11/15/2023 3:05 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-10R	GS-AP-MW-11R	GS-AP-MW-13R	GS-AP-MW-14R	GS-AP-MW-18R ...	GS-AP-MW-18VR	GS-AP-MW-1R
7/19/2022		<0.001015					
7/20/2022			<0.001015				
7/25/2022							
7/26/2022							
8/2/2022							<0.001015
8/3/2022	<0.001015			<0.001015	<0.001015		
8/9/2022						<0.001015	
3/6/2023							
3/8/2023							
3/14/2023							
3/15/2023				<0.001015			
3/21/2023							
3/22/2023		<0.001015					
3/27/2023	<0.001015		<0.001015			<0.001015	<0.001015
3/28/2023					<0.001015		
9/5/2023							
9/11/2023							
9/12/2023				<0.001015			
9/13/2023							<0.001015
9/18/2023							
9/19/2023	<0.001015	<0.001015	<0.001015		<0.001015	<0.001015	

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Beryllium (mg/L)   Analysis Run 11/15/2023 3:05 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

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	GS-AP-MW-23V	GS-AP-MW-27HR	GS-AP-MW-31V	GS-AP-MW-36V	GS-AP-MW-37HR	GS-AP-MW-3V	GS-AP-MW-45V	GS-AP-MW-47	GS-AP-MW-5R
2/21/2022									
2/22/2022		<0.001015	<0.001015	<0.001015					
2/23/2022	<0.001015					<0.001015	<0.001015		
2/28/2022					<0.001015			<0.001015	
3/1/2022									<0.001015
7/19/2022									
7/20/2022						<0.001015			
7/26/2022	<0.001015				<0.001015			<0.001015	
7/27/2022		<0.001015		<0.001015					
8/2/2022									<0.001015
8/3/2022			<0.001015						
8/8/2022							<0.001015		
3/14/2023	<0.001015	<0.001015		<0.001015					
3/15/2023					<0.001015			<0.001015	
3/20/2023									<0.001015
3/21/2023						<0.001015			
3/27/2023			<0.001015						
3/28/2023							<0.001015		
9/6/2023	<0.001015	<0.001015		<0.001015					
9/11/2023					<0.001015				
9/12/2023						<0.001015		<0.001015	<0.001015
9/13/2023			<0.001015						
9/18/2023							<0.001015		
9/19/2023									

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Beryllium (mg/L) Analysis Run 11/15/2023 3:05 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-9R	GS-AP-PZ-18R	GS-AP-MW-46
2/21/2022		<0.001015	
2/22/2022			
2/23/2022			<0.001015
2/28/2022			
3/1/2022	<0.001015		
7/19/2022	<0.001015		
7/20/2022			
7/26/2022			
7/27/2022		<0.001015	
8/2/2022			<0.001015
8/3/2022			
8/8/2022			
3/14/2023			
3/15/2023			
3/20/2023			
3/21/2023			
3/27/2023	<0.001015		<0.001015
3/28/2023		<0.001015	
9/6/2023			
9/11/2023			
9/12/2023			
9/13/2023	<0.001015		
9/18/2023			<0.001015
9/19/2023		<0.001015	

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Boron (mg/L) Analysis Run 11/15/2023 3:05 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-12	GS-AP-MW-12V	GS-AP-MW-13 (bg)	GS-AP-MW-15	GS-AP-MW-15V	GS-AP-MW-16D	GS-AP-MW-17	GS-AP-MW-17V ...	GS-AP-MW-19
8/1/2016				0.0955 (J)		0.0266 (J)	0.0712 (J)		0.0279 (J)
8/2/2016			<0.1						
8/3/2016	0.34								
9/19/2016						0.0262 (J)	0.0716 (J)		
9/20/2016	0.299		<0.1	0.0706 (J)					
9/21/2016									0.0235 (J)
10/24/2016							0.0858 (J)		0.0444 (J)
10/25/2016	0.323		<0.1	0.0849 (J)		0.0273 (J)			
12/13/2016	0.294		<0.1			0.0258 (J)	0.0875 (J)		0.0285 (J)
12/14/2016				0.0914 (J)					
2/6/2017							0.0729 (J)		
2/7/2017									0.03 (J)
2/8/2017	0.264		<0.1	0.0524 (J)		0.0249 (J)			
3/27/2017							0.0706 (J)		
3/28/2017				0.0532 (J)					0.0309 (J)
3/29/2017	0.246		<0.1			0.0247 (J)			
3/30/2017									
4/24/2017							0.0737 (J)		
4/26/2017	0.234		<0.1	0.0598 (J)		0.0264 (J)			0.0273 (J)
6/5/2017							0.0767 (J)		
6/6/2017				0.0576 (J)		0.0247 (J)			0.0212 (J)
6/7/2017	0.194		<0.1						
8/21/2017									
8/22/2017	0.156		<0.1	0.0702 (J)		0.0246 (J)	0.0786 (J)		0.0294 (J)
8/23/2017									
5/15/2018	0.0781 (J)		<0.1	0.0567 (J)			0.0953 (J)		
5/16/2018						0.0247 (J)			0.0356 (J)
10/15/2018				0.07 (J)			0.0842 (J)		
10/16/2018	0.057 (J)								0.0363 (J)
10/17/2018			<0.1			0.0251 (J)			
2/20/2019								0.0337 (J)	
2/21/2019		0.0303 (J)							
2/26/2019									
2/27/2019									
4/16/2019	0.0385 (J)		<0.1						
4/17/2019				0.0388 (J)		<0.1015	0.0916 (J)		0.0336 (J)
9/23/2019							0.116		
9/24/2019				0.0607 (J)		<0.1015		0.0532 (J)	0.0375 (J)
9/25/2019	0.122	0.0347 (J)							
3/16/2020							0.0894 (J)		
3/17/2020									
3/18/2020	0.0449 (J)			0.0596 (J)	0.0565 (J)				
3/23/2020									
3/24/2020		0.0343 (J)				<0.1015			0.0398 (J)
3/25/2020								0.0482 (J)	
5/12/2020							0.0862 (J)		
5/13/2020									
9/17/2020									
9/21/2020					0.0712 (J)		0.102		
9/22/2020						<0.1015			0.037 (J)
9/23/2020	0.0446 (J)	0.0322 (J)		0.0537 (J)				0.0478 (J)	
2/1/2021	0.0672 (J)	<0.1015							

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Boron (mg/L) Analysis Run 11/15/2023 3:05 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-12	GS-AP-MW-12V	GS-AP-MW-13 (bg)	GS-AP-MW-15	GS-AP-MW-15V	GS-AP-MW-16D	GS-AP-MW-17	GS-AP-MW-17V ...	GS-AP-MW-19
2/2/2021							0.0946 (J)	0.0396 (J)	
2/3/2021									
2/8/2021									0.0336 (J)
2/9/2021				0.0521 (J)	0.0722 (J)				
2/10/2021						<0.1015			
7/27/2021									
8/2/2021								0.0368 (J)	
8/3/2021				0.0491 (J)	0.0601 (J)		0.0729 (J)		
8/4/2021									
8/9/2021	<0.1015	<0.1015				<0.1015			
8/10/2021									<0.1015
8/11/2021									
8/12/2021									
2/8/2022									
2/14/2022							0.073 (J)	0.0386 (J)	
2/15/2022						<0.1015			
2/16/2022				0.0323 (J)	0.0594 (J)				
2/22/2022									<0.1015
2/23/2022		<0.1015							
2/28/2022	0.0305 (J)								
7/19/2022	<0.1015								
7/20/2022		<0.1015							
7/26/2022									
7/27/2022									
8/2/2022				0.0426 (J)	0.0649 (J)	<0.1015			
8/3/2022									0.0329 (J)
8/8/2022							0.0717 (J)		
8/9/2022								0.0418 (J)	
8/10/2022									
3/14/2023									
3/15/2023									
3/20/2023				0.0308 (J)	0.0536 (J)				
3/21/2023						<0.1015			0.0334 (J)
3/22/2023	<0.1015	<0.1015					0.0727 (J)	0.0379 (J)	
9/5/2023									
9/6/2023									
9/11/2023				0.0337 (J)	0.0573 (J)		0.0835 (J)	0.0388 (J)	
9/12/2023						<0.1015			
9/13/2023	<0.1015	<0.1015							
9/18/2023									
9/19/2023									0.0314 (J)

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Boron (mg/L) Analysis Run 11/15/2023 3:05 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-2	GS-AP-MW-21	GS-AP-MW-21V	GS-AP-MW-23H	GS-AP-MW-24H	GS-AP-MW-25HA	GS-AP-MW-26H
8/1/2016							
8/2/2016	0.178	0.176					
8/3/2016							
9/19/2016	0.0937 (J)						
9/20/2016							
9/21/2016		0.0723 (J)					
10/24/2016	0.0986 (J)						
10/25/2016		0.0867 (J)					
12/13/2016	0.0965 (J)						
12/14/2016		0.092 (J)					
2/6/2017							
2/7/2017							
2/8/2017	0.0896 (J)	0.0803 (J)					
3/27/2017							
3/28/2017		0.0804 (J)					
3/29/2017							
3/30/2017	0.0871 (J)						
4/24/2017							
4/26/2017	0.0818 (J)	0.0801 (J)					
6/5/2017							
6/6/2017	0.0805 (J)	0.0795 (J)					
6/7/2017							
8/21/2017	0.102						
8/22/2017							
8/23/2017		0.0764 (J)					
5/15/2018		0.0769 (J)					
5/16/2018	0.147						
10/15/2018							
10/16/2018	0.169	0.0764 (J)					
10/17/2018							
2/20/2019				0.0498 (J)			
2/21/2019							
2/26/2019					0.0719 (J)		
2/27/2019							<0.1015
4/16/2019							
4/17/2019	0.165	0.0675 (J)					
9/23/2019				0.0641 (J)			<0.1015
9/24/2019		0.0843 (J)			0.0821 (J)		
9/25/2019	0.153						
3/16/2020							
3/17/2020				0.0504 (J)			
3/18/2020		0.0824 (J)			0.0811 (J)		
3/23/2020			0.122				
3/24/2020						0.146	
3/25/2020	0.163						<0.1015
5/12/2020							
5/13/2020	0.154						
9/17/2020				0.0637 (J)	0.069 (J)	0.138	
9/21/2020							0.0334 (J)
9/22/2020	0.133						
9/23/2020		0.0871 (J)	0.126				
2/1/2021	0.13						

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Boron (mg/L)   Analysis Run 11/15/2023 3:05 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

	GS-AP-MW-2	GS-AP-MW-21	GS-AP-MW-21V	GS-AP-MW-23H	GS-AP-MW-24H	GS-AP-MW-25HA	GS-AP-MW-26H
2/2/2021					0.0685 (J)		
2/3/2021				0.0425 (J)			
2/8/2021		0.0991 (J)					
2/9/2021			0.114				<0.1015
2/10/2021						0.147	
7/27/2021				0.0474 (J)			
8/2/2021							
8/3/2021					0.0721 (J)		
8/4/2021	0.117	0.0993 (J)					
8/9/2021							
8/10/2021							<0.1015
8/11/2021			0.0631 (J)				
8/12/2021						0.13	
2/8/2022		0.111	0.0938 (J)				
2/14/2022				0.035 (J)			
2/15/2022					0.0708 (J)		<0.1015
2/16/2022						0.145	
2/22/2022	0.112						
2/23/2022							
2/28/2022							
7/19/2022	0.106						
7/20/2022							
7/26/2022				0.0338 (J)			
7/27/2022					0.0641 (J)		
8/2/2022							
8/3/2022						0.15	
8/8/2022							
8/9/2022			0.0869 (J)				
8/10/2022		0.119					<0.1015
3/14/2023				0.0377 (J)			
3/15/2023					0.0674 (J)		
3/20/2023							
3/21/2023		0.13	0.106				
3/22/2023	0.0989 (J)					0.151	<0.1015
9/5/2023		0.14	0.103				
9/6/2023				0.0411 (J)	0.0665 (J)		
9/11/2023							
9/12/2023							
9/13/2023							
9/18/2023	0.0952 (J)					0.156	<0.1015
9/19/2023							

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Boron (mg/L)   Analysis Run 11/15/2023 3:05 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

	GS-AP-MW-28H	GS-AP-MW-29H	GS-AP-MW-3	GS-AP-MW-30HA	GS-AP-MW-31H	GS-AP-MW-32H	GS-AP-MW-33HO	GS-AP-MW-34HO	GS-AP-MW-35HO
2/27/2019		0.0359 (J)							
3/13/2019	0.0819 (J)								
9/24/2019		0.0305 (J)							
9/25/2019	0.0784 (J)								
3/16/2020	0.0751 (J)							0.0827 (J)	
3/17/2020							0.066 (J)		<0.1015
3/18/2020				0.0734 (J)	<0.1015				
3/24/2020						0.0492 (J)			
3/25/2020		<0.1							
5/12/2020	0.0719 (J)							0.0929 (J)	<0.1015
5/13/2020				0.0747 (J)			0.0409 (J)		
9/15/2020							0.0425 (J)		
9/16/2020								0.0874 (J)	<0.1015
9/17/2020									
9/21/2020				0.0814 (J)		0.0455 (J)			
9/22/2020	0.0728 (J)	0.175			<0.1015				
2/1/2021					<0.1015				
2/2/2021									
2/3/2021		0.809					0.0453 (J)	0.0964 (J)	
2/4/2021									<0.1015
2/8/2021									
2/9/2021									
2/10/2021						0.0477 (J)			
2/17/2021	0.0748 (J)		0.426	0.0668 (J)					
7/27/2021							0.0417 (J)	0.108	
7/28/2021									<0.1015
8/2/2021				0.06 (J)	<0.1015				
8/3/2021			0.386						
8/4/2021		0.447							
8/9/2021	0.063 (J)								
8/10/2021						0.0393 (J)			
2/8/2022				0.0654 (J)	<0.1015				
2/9/2022							0.0416 (J)	0.106	<0.1015
2/14/2022	0.0706 (J)	0.542				0.0443 (J)			
2/15/2022									
2/16/2022			0.311						
2/21/2022									
2/22/2022									
7/20/2022			0.292						
7/26/2022									
7/27/2022	0.0663 (J)					0.0414 (J)			
8/2/2022									
8/3/2022		0.399		0.0761 (J)	<0.1015				
8/10/2022									
3/8/2023								0.0911 (J)	<0.1015
3/13/2023				0.0605 (J)					
3/14/2023	0.0699 (J)						0.0312 (J)		
3/15/2023									
3/21/2023			0.341			0.0455 (J)			
3/22/2023									
3/27/2023					<0.1015				
3/28/2023		0.36							

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Boron (mg/L)   Analysis Run 11/15/2023 3:05 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

	GS-AP-MW-28H	GS-AP-MW-29H	GS-AP-MW-3	GS-AP-MW-30HA	GS-AP-MW-31H	GS-AP-MW-32H	GS-AP-MW-33HO	GS-AP-MW-34HO	GS-AP-MW-35HO
8/30/2023							0.04 (J)		
8/31/2023								0.104	<0.1015
9/5/2023				0.0607 (J)					
9/6/2023									
9/11/2023	0.0745 (J)								
9/12/2023			0.192						
9/13/2023		0.292			0.0318 (J)	0.0464 (J)			
9/18/2023									
9/19/2023									

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Boron (mg/L)   Analysis Run 11/15/2023 3:05 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

	GS-AP-MW-36H	GS-AP-MW-38H	GS-AP-MW-40H	GS-AP-MW-41HD	GS-AP-MW-41HS	GS-AP-MW-42H	GS-AP-MW-43HO
2/27/2019							
3/13/2019							
9/24/2019							
9/25/2019							
3/16/2020							
3/17/2020	0.0394 (J)						
3/18/2020				1.45			
3/24/2020		0.0468 (J)				<0.1	
3/25/2020							0.112
5/12/2020							
5/13/2020	0.0359 (J)						
9/15/2020							
9/16/2020							
9/17/2020	0.0345 (J)			1.42			
9/21/2020							
9/22/2020		0.0461 (J)	0.0326 (J)			0.0469 (J)	0.12
2/1/2021							
2/2/2021			0.0305 (J)				
2/3/2021						0.053 (J)	
2/4/2021							
2/8/2021				1.48	1.06		
2/9/2021		0.0504 (J)					
2/10/2021							
2/17/2021	0.0413 (J)						0.119
7/27/2021							
7/28/2021					1.09		
8/2/2021							
8/3/2021				1.48			
8/4/2021	0.0449 (J)	0.0479 (J)				0.0578 (J)	0.126
8/9/2021							
8/10/2021			<0.1015				
2/8/2022					1.04		
2/9/2022							
2/14/2022	0.0467 (J)						
2/15/2022			0.0321 (J)	1.52			
2/16/2022						0.0502 (J)	
2/21/2022							0.13
2/22/2022		0.0452 (J)					
7/20/2022	0.0316 (J)						
7/26/2022					1.01		
7/27/2022				1.62		0.05 (J)	
8/2/2022			0.0327 (J)				
8/3/2022							0.139
8/10/2022		0.0498 (J)					
3/8/2023							
3/13/2023					0.848		
3/14/2023							
3/15/2023	0.0446 (J)			1.52		0.055 (J)	
3/21/2023							
3/22/2023			0.0379 (J)				
3/27/2023							
3/28/2023		0.0503 (J)					0.157

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Boron (mg/L) Analysis Run 11/15/2023 3:05 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-36H	GS-AP-MW-38H	GS-AP-MW-40H	GS-AP-MW-41HD	GS-AP-MW-41HS	GS-AP-MW-42H	GS-AP-MW-43HO
8/30/2023				1.6	0.867		
8/31/2023							
9/5/2023							
9/6/2023	0.0588 (J)						
9/11/2023							
9/12/2023							
9/13/2023							
9/18/2023			0.035 (J)				
9/19/2023		0.0486 (J)				0.0599 (J)	0.158

Time Series

Constituent: Boron (mg/L) Analysis Run 11/15/2023 3:05 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-44HO	GS-AP-MW-6D	GS-AP-MW-6S	GS-AP-MW-6V	GS-AP-MW-7	GS-AP-MW-8 (bg)	GS-AP-MW-9V	GS-AP-PZ-16	GS-AP-PZ-22
8/2/2016					1.57				
8/3/2016		1.04	1.16			0.0239 (J)			
9/20/2016		1.01	1.16						
9/21/2016					1.4	<0.1015			
10/24/2016		1.08			1.42				
10/25/2016						<0.1015			
10/26/2016			1.24						
12/12/2016		1.09	1.24		1.38				
12/13/2016						<0.1015			
2/6/2017		1.06	1.1		1.44	<0.1015			
3/27/2017		1.07	1.04						
3/28/2017					1.44	<0.1015			
4/24/2017		1.08	1		1.41	<0.1015			
6/6/2017		1.11	1.02						
6/7/2017					1.45	<0.1015			
8/21/2017		0.906	1.05		1.39	<0.1015			
5/14/2018		1.04	0.99						
5/15/2018					1.5	<0.1015			
10/15/2018		1.06	1.05		1.53				
10/16/2018						<0.1015			
4/16/2019		1.1	0.961			<0.1015			
4/23/2019					1.5				
9/23/2019		1.15	1.08						
9/24/2019					1.6	<0.1015			
3/17/2020		1.17	0.867		1.58				
3/18/2020						<0.1015			
3/23/2020							0.0316 (J)		
3/24/2020								0.0772 (J)	0.0521 (J)
8/27/2020	0.0366 (J)								
9/8/2020				0.0974 (J)					
9/15/2020	0.0404 (J)			0.0974 (J)					
9/16/2020			0.8		1.54				
9/17/2020		1.22						0.0824 (J)	0.0454 (J)
9/21/2020						<0.1015			
9/22/2020							0.0348 (J)		
2/2/2021					1.6	<0.1015	0.0358 (J)		0.0486 (J)
2/3/2021	0.0472 (J)	1.24	0.817	0.1 (J)					
2/17/2021								0.089 (J)	
7/27/2021	0.0429 (J)	1.29	0.873						
8/2/2021				0.101 (J)					
8/3/2021									0.0478 (J)
8/9/2021					1.62			0.0747 (J)	
8/10/2021						<0.1015	<0.1015		
2/8/2022					1.69				
2/9/2022	0.0429 (J)			0.101 (J)					
2/14/2022		1.29	0.978						0.047 (J)
2/15/2022								0.0781 (J)	
2/16/2022						<0.1015			
2/21/2022							0.0349 (J)		
2/22/2022									
2/28/2022									
3/1/2022									

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Boron (mg/L)   Analysis Run 11/15/2023 3:05 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

	GS-AP-MW-44HO	GS-AP-MW-6D	GS-AP-MW-6S	GS-AP-MW-6V	GS-AP-MW-7	GS-AP-MW-8 (bg)	GS-AP-MW-9V	GS-AP-PZ-16	GS-AP-PZ-22
7/19/2022							0.0327 (J)		
7/20/2022									
7/25/2022		1.39		0.0978 (J)	1.73				
7/26/2022			1.11					0.0612 (J)	
8/2/2022						<0.1015			
8/3/2022									
8/9/2022									0.0448 (J)
3/6/2023	0.0433 (J)								
3/8/2023				0.101 (J)					
3/14/2023		1.32	0.935		1.64				
3/15/2023									
3/21/2023								0.0798 (J)	0.0442 (J)
3/22/2023									
3/27/2023						<0.1015	0.0359 (J)		
3/28/2023									
9/5/2023	0.0455 (J)	1.36	1.16						
9/11/2023				0.104	1.71				0.046 (J)
9/12/2023								0.0808 (J)	
9/13/2023							0.0414 (J)		
9/18/2023						<0.1015			
9/19/2023									

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Boron (mg/L)   Analysis Run 11/15/2023 3:05 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

	GS-AP-MW-10R	GS-AP-MW-11R	GS-AP-MW-13R	GS-AP-MW-14R	GS-AP-MW-18R ...	GS-AP-MW-18VR	GS-AP-MW-1R
8/2/2016							
8/3/2016							
9/20/2016							
9/21/2016							
10/24/2016							
10/25/2016							
10/26/2016							
12/12/2016							
12/13/2016							
2/6/2017							
3/27/2017							
3/28/2017							
4/24/2017							
6/6/2017							
6/7/2017							
8/21/2017							
5/14/2018							
5/15/2018							
10/15/2018							
10/16/2018							
4/16/2019							
4/23/2019							
9/23/2019							
9/24/2019							
3/17/2020							
3/18/2020							
3/23/2020							
3/24/2020							
8/27/2020							
9/8/2020							
9/15/2020							
9/16/2020							
9/17/2020							
9/21/2020							
9/22/2020							
2/2/2021							
2/3/2021							
2/17/2021							
7/27/2021							
8/2/2021							
8/3/2021							
8/9/2021							
8/10/2021							
2/8/2022							
2/9/2022							
2/14/2022							
2/15/2022							
2/16/2022							
2/21/2022							
2/22/2022					<0.1015	0.0488 (J)	
2/28/2022				<0.1015			
3/1/2022	<0.1015	0.0844 (J)	<0.1015				0.0582 (J)

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Boron (mg/L)   Analysis Run 11/15/2023 3:05 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

	GS-AP-MW-10R	GS-AP-MW-11R	GS-AP-MW-13R	GS-AP-MW-14R	GS-AP-MW-18R ...	GS-AP-MW-18VR	GS-AP-MW-1R
7/19/2022		0.111					
7/20/2022			<0.1015				
7/25/2022							
7/26/2022							
8/2/2022							0.0596 (J)
8/3/2022	<0.1015			<0.1015	<0.1015		
8/9/2022						0.0488 (J)	
3/6/2023							
3/8/2023							
3/14/2023							
3/15/2023				<0.1015			
3/21/2023							
3/22/2023		0.13					
3/27/2023	<0.1015		<0.1015			0.0477 (J)	0.0603 (J)
3/28/2023					<0.1015		
9/5/2023							
9/11/2023							
9/12/2023				<0.1015			
9/13/2023							0.0619 (J)
9/18/2023							
9/19/2023	<0.1015	0.222	<0.1015		<0.1015	0.0488 (J)	

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Boron (mg/L) Analysis Run 11/15/2023 3:05 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-23V	GS-AP-MW-27HR	GS-AP-MW-31V	GS-AP-MW-36V	GS-AP-MW-37HR	GS-AP-MW-3V	GS-AP-MW-45V	GS-AP-MW-47	GS-AP-MW-5R
2/21/2022									
2/22/2022		0.0541 (J)	<0.1015	0.0402 (J)					
2/23/2022	0.0919 (J)					0.109	0.038 (J)		
2/28/2022					<0.1015			<0.1015	
3/1/2022									0.036 (J)
7/19/2022									
7/20/2022						0.148			
7/26/2022	0.0772 (J)				<0.1015			<0.1015	
7/27/2022		0.107		0.0689 (J)					
8/2/2022									0.0384 (J)
8/3/2022			0.0391 (J)						
8/8/2022							0.0415 (J)		
3/14/2023	0.409	0.107		0.0771 (J)					
3/15/2023					<0.1015			<0.1015	
3/20/2023									0.038 (J)
3/21/2023						0.0528 (J)			
3/27/2023			0.048 (J)						
3/28/2023							0.0582 (J)		
9/6/2023	0.515	0.109		0.095 (J)					
9/11/2023					0.0347 (J)				
9/12/2023						0.0692 (J)		<0.1015	0.0374 (J)
9/13/2023			0.0544 (J)						
9/18/2023							0.0954 (J)		
9/19/2023									

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Boron (mg/L)   Analysis Run 11/15/2023 3:05 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

	GS-AP-MW-9R	GS-AP-PZ-18R	GS-AP-MW-46
2/21/2022		0.0925 (J)	
2/22/2022			
2/23/2022			0.768
2/28/2022			
3/1/2022	0.106		
7/19/2022	0.104		
7/20/2022			
7/26/2022			
7/27/2022		0.0879 (J)	
8/2/2022			0.832
8/3/2022			
8/8/2022			
3/14/2023			
3/15/2023			
3/20/2023			
3/21/2023			
3/27/2023	0.152		0.886
3/28/2023		0.0871 (J)	
9/6/2023			
9/11/2023			
9/12/2023			
9/13/2023	0.193		
9/18/2023			0.919
9/19/2023		0.0868 (J)	

Time Series

Constituent: Cadmium (mg/L) Analysis Run 11/15/2023 3:05 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-12	GS-AP-MW-12V	GS-AP-MW-13 (bg)	GS-AP-MW-15	GS-AP-MW-15V	GS-AP-MW-16D	GS-AP-MW-17	GS-AP-MW-17V ...	GS-AP-MW-19
8/1/2016				<0.000203		<0.000203	<0.000203		<0.000203
8/2/2016			<0.001						
8/3/2016	<0.000203								
9/19/2016						<0.000203	<0.000203		
9/20/2016	<0.000203		<0.001	<0.000203					
9/21/2016									<0.000203
10/24/2016							<0.000203		<0.000203
10/25/2016	<0.000203		<0.001	<0.000203		<0.000203			
12/13/2016	<0.000203		<0.001			<0.000203	<0.000203		<0.000203
12/14/2016				<0.000203					
2/6/2017							<0.000203		
2/7/2017									<0.000203
2/8/2017	<0.000203		<0.001	<0.000203		<0.000203			
3/27/2017							<0.000203		
3/28/2017				<0.000203					<0.000203
3/29/2017	<0.000203		<0.001			<0.000203			
3/30/2017									
4/24/2017							<0.000203		
4/26/2017	<0.000203		<0.001	<0.000203		<0.000203			<0.000203
6/5/2017							<0.000203		
6/6/2017				<0.000203		<0.000203			<0.000203
6/7/2017	<0.000203		<0.001						
2/19/2018							<0.000203		
2/20/2018	<0.000203		<0.001	<0.000203					
2/21/2018						<0.000203			<0.000203
5/15/2018	<0.000203		<0.001	<0.000203			<0.000203		
5/16/2018						<0.000203			<0.000203
10/15/2018				<0.000203			<0.000203		
10/16/2018	<0.000203								<0.000203
10/17/2018			<0.001			<0.000203			
2/20/2019								<0.000203	
2/21/2019		<0.000203							
2/26/2019									
2/27/2019									
4/16/2019	<0.000203		<0.001						
4/17/2019				<0.000203		<0.000203	<0.000203		<0.000203
9/23/2019							<0.000203		
9/24/2019				<0.000203		<0.000203		<0.000203	<0.000203
9/25/2019	<0.000203	<0.000203							
3/16/2020							<0.000203		
3/17/2020									
3/18/2020	<0.000203			<0.000203	<0.000203				
3/23/2020									
3/24/2020		<0.000203				<0.000203			<0.000203
3/25/2020								<0.000203	
5/12/2020							<0.000203		
5/13/2020									
9/17/2020									
9/21/2020					<0.000203		<0.000203		
9/22/2020						<0.000203			<0.000203
9/23/2020	<0.000203	<0.000203		<0.000203				<0.000203	
2/1/2021	<0.000203	<0.000203							

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cadmium (mg/L) Analysis Run 11/15/2023 3:05 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-12	GS-AP-MW-12V	GS-AP-MW-13 (bg)	GS-AP-MW-15	GS-AP-MW-15V	GS-AP-MW-16D	GS-AP-MW-17	GS-AP-MW-17V ...	GS-AP-MW-19
2/2/2021							<0.000203	<0.000203	
2/3/2021									
2/8/2021									<0.000203
2/9/2021				<0.000203	<0.000203				
2/10/2021						<0.000203			
7/27/2021									
8/2/2021								<0.000203	
8/3/2021				<0.000203	<0.000203		<0.000203		
8/4/2021									
8/9/2021	<0.000203	<0.000203				<0.000203			
8/10/2021									<0.000203
8/11/2021									
8/12/2021									
2/8/2022									
2/14/2022							<0.000203	<0.000203	
2/15/2022						<0.000203			
2/16/2022				<0.000203	<0.000203				
2/22/2022									<0.000203
2/23/2022		<0.000203							
2/28/2022	<0.000203								
7/19/2022	<0.000203								
7/20/2022		<0.000203							
7/26/2022									
7/27/2022									
8/2/2022				<0.000203	<0.000203	<0.000203			
8/3/2022									<0.000203
8/8/2022							<0.000203		
8/9/2022								<0.000203	
8/10/2022									
3/14/2023									
3/15/2023									
3/20/2023				<0.000203	<0.000203				
3/21/2023						<0.000203			<0.000203
3/22/2023	<0.000203	<0.000203					<0.000203	<0.000203	
9/5/2023									
9/6/2023									
9/11/2023				<0.000203	<0.000203		<0.000203	<0.000203	
9/12/2023						<0.000203			
9/13/2023	<0.000203	<0.000203							
9/18/2023									
9/19/2023									<0.000203

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cadmium (mg/L) Analysis Run 11/15/2023 3:05 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-2	GS-AP-MW-21	GS-AP-MW-21V	GS-AP-MW-23H	GS-AP-MW-24H	GS-AP-MW-25HA	GS-AP-MW-26H
8/1/2016							
8/2/2016	<0.000203	<0.000203					
8/3/2016							
9/19/2016	<0.000203						
9/20/2016							
9/21/2016		<0.000203					
10/24/2016	<0.000203						
10/25/2016		<0.000203					
12/13/2016	<0.000203						
12/14/2016		<0.000203					
2/6/2017							
2/7/2017							
2/8/2017	<0.000203	<0.000203					
3/27/2017							
3/28/2017		<0.000203					
3/29/2017							
3/30/2017	<0.000203						
4/24/2017							
4/26/2017	<0.000203	<0.000203					
6/5/2017							
6/6/2017	<0.000203	<0.000203					
6/7/2017							
2/19/2018							
2/20/2018		<0.000203					
2/21/2018	<0.000203						
5/15/2018		<0.000203					
5/16/2018	<0.000203						
10/15/2018							
10/16/2018	<0.000203	<0.000203					
10/17/2018							
2/20/2019				<0.000203			
2/21/2019							
2/26/2019					<0.000203		
2/27/2019							<0.000203
4/16/2019							
4/17/2019	<0.000203	<0.000203					
9/23/2019				<0.000203			<0.000203
9/24/2019		<0.000203			<0.000203		
9/25/2019	<0.000203						
3/16/2020							
3/17/2020				<0.000203			
3/18/2020		<0.000203			<0.000203		
3/23/2020			<0.000203				
3/24/2020						<0.000203	
3/25/2020	<0.000203						<0.000203
5/12/2020							
5/13/2020	<0.000203						
9/17/2020				<0.000203	<0.000203	<0.000203	
9/21/2020							<0.000203
9/22/2020	<0.000203						
9/23/2020		<0.000203	<0.000203				
2/1/2021	<0.000203						

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cadmium (mg/L)   Analysis Run 11/15/2023 3:05 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

	GS-AP-MW-2	GS-AP-MW-21	GS-AP-MW-21V	GS-AP-MW-23H	GS-AP-MW-24H	GS-AP-MW-25HA	GS-AP-MW-26H
2/2/2021					<0.000203		
2/3/2021				<0.000203			
2/8/2021		<0.000203					
2/9/2021			<0.000203				<0.000203
2/10/2021						<0.000203	
7/27/2021				<0.000203			
8/2/2021							
8/3/2021					<0.000203		
8/4/2021	<0.000203	<0.000203					
8/9/2021							
8/10/2021							<0.000203
8/11/2021			<0.000203				
8/12/2021						<0.000203	
2/8/2022		<0.000203	<0.000203				
2/14/2022				<0.000203			
2/15/2022					<0.000203		<0.000203
2/16/2022						<0.000203	
2/22/2022	<0.000203						
2/23/2022							
2/28/2022							
7/19/2022	<0.000203						
7/20/2022							
7/26/2022				<0.000203			
7/27/2022					<0.000203		
8/2/2022							
8/3/2022						<0.000203	
8/8/2022							
8/9/2022			<0.000203				
8/10/2022		<0.000203					<0.000203
3/14/2023				<0.000203			
3/15/2023					<0.000203		
3/20/2023							
3/21/2023		<0.000203	<0.000203				
3/22/2023	<0.000203					<0.000203	<0.000203
9/5/2023		<0.000203	<0.000203				
9/6/2023				<0.000203	<0.000203		
9/11/2023							
9/12/2023							
9/13/2023							
9/18/2023	<0.000203					<0.000203	<0.000203
9/19/2023							

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cadmium (mg/L) Analysis Run 11/15/2023 3:05 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-28H	GS-AP-MW-29H	GS-AP-MW-3	GS-AP-MW-30HA	GS-AP-MW-31H	GS-AP-MW-32H	GS-AP-MW-33HO	GS-AP-MW-34HO	GS-AP-MW-35HO
2/27/2019		<0.000203							
3/13/2019	<0.000203								
9/24/2019		<0.000203							
9/25/2019	<0.000203								
3/16/2020	<0.000203							<0.000203	
3/17/2020							<0.000203		<0.000203
3/18/2020				<0.000203	<0.000203				
3/24/2020						<0.000203			
3/25/2020		<0.000203							
5/12/2020	<0.000203							<0.000203	<0.000203
5/13/2020				<0.000203			<0.000203		
9/15/2020							<0.000203		
9/16/2020								<0.000203	<0.000203
9/17/2020									
9/21/2020				<0.000203		<0.000203			
9/22/2020	<0.000203	<0.000203			<0.000203				
2/1/2021					<0.000203				
2/2/2021									
2/3/2021		<0.000203					<0.000203	<0.000203	
2/4/2021									<0.000203
2/8/2021									
2/9/2021									
2/10/2021						<0.000203			
2/17/2021	<0.000203		<0.000203	<0.000203					
7/27/2021							<0.000203	<0.000203	
7/28/2021									<0.000203
8/2/2021				<0.000203	<0.000203				
8/3/2021			<0.000203						
8/4/2021		<0.000203							
8/9/2021	<0.000203								
8/10/2021						<0.000203			
2/8/2022				<0.000203	<0.000203				
2/9/2022							<0.000203	<0.000203	<0.000203
2/14/2022	<0.000203	<0.000203				<0.000203			
2/15/2022									
2/16/2022			<0.000203						
2/21/2022									
2/22/2022									
7/20/2022			<0.000203						
7/26/2022									
7/27/2022	<0.000203					<0.000203			
8/2/2022									
8/3/2022		<0.000203		<0.000203	<0.000203				
8/10/2022									
3/8/2023								<0.000203	<0.000203
3/13/2023				<0.000203					
3/14/2023	<0.000203						<0.000203		
3/15/2023									
3/21/2023			<0.000203			<0.000203			
3/22/2023									
3/27/2023					<0.000203				
3/28/2023		<0.000203							

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cadmium (mg/L) Analysis Run 11/15/2023 3:05 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-28H	GS-AP-MW-29H	GS-AP-MW-3	GS-AP-MW-30HA	GS-AP-MW-31H	GS-AP-MW-32H	GS-AP-MW-33HO	GS-AP-MW-34HO	GS-AP-MW-35HO
8/30/2023							<0.000203		
8/31/2023								<0.000203	<0.000203
9/5/2023				<0.000203					
9/6/2023									
9/11/2023	<0.000203								
9/12/2023			<0.000203						
9/13/2023		<0.000203			<0.000203	<0.000203			
9/18/2023									
9/19/2023									

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cadmium (mg/L) Analysis Run 11/15/2023 3:05 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-36H	GS-AP-MW-38H	GS-AP-MW-40H	GS-AP-MW-41HD	GS-AP-MW-41HS	GS-AP-MW-42H	GS-AP-MW-43HO
2/27/2019							
3/13/2019							
9/24/2019							
9/25/2019							
3/16/2020							
3/17/2020	<0.000203						
3/18/2020				<0.000203			
3/24/2020		<0.000203				<0.000203	
3/25/2020							<0.000203
5/12/2020							
5/13/2020	<0.000203						
9/15/2020							
9/16/2020							
9/17/2020	<0.000203			<0.000203			
9/21/2020							
9/22/2020		<0.000203	<0.000203			<0.000203	<0.000203
2/1/2021							
2/2/2021			<0.000203				
2/3/2021						<0.000203	
2/4/2021							
2/8/2021				<0.000203	<0.000203		
2/9/2021		<0.000203					
2/10/2021							
2/17/2021	<0.000203						<0.000203
7/27/2021							
7/28/2021					<0.000203		
8/2/2021							
8/3/2021				<0.000203			
8/4/2021	<0.000203	<0.000203				<0.000203	<0.000203
8/9/2021							
8/10/2021			<0.000203				
2/8/2022					<0.000203		
2/9/2022							
2/14/2022	<0.000203						
2/15/2022			<0.000203	<0.000203			
2/16/2022						<0.000203	
2/21/2022							<0.000203
2/22/2022		<0.000203					
7/20/2022	<0.000203						
7/26/2022					<0.000203		
7/27/2022				<0.000203		<0.000203	
8/2/2022			<0.000203				
8/3/2022							<0.000203
8/10/2022		<0.000203					
3/8/2023							
3/13/2023					<0.000203		
3/14/2023							
3/15/2023	<0.000203			<0.000203		<0.000203	
3/21/2023							
3/22/2023			<0.000203				
3/27/2023							
3/28/2023		<0.000203					<0.000203

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cadmium (mg/L)   Analysis Run 11/15/2023 3:05 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

	GS-AP-MW-36H	GS-AP-MW-38H	GS-AP-MW-40H	GS-AP-MW-41HD	GS-AP-MW-41HS	GS-AP-MW-42H	GS-AP-MW-43HO
8/30/2023				<0.000203	<0.000203		
8/31/2023							
9/5/2023							
9/6/2023	<0.000203						
9/11/2023							
9/12/2023							
9/13/2023							
9/18/2023			<0.000203				
9/19/2023		<0.000203				<0.000203	<0.000203

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cadmium (mg/L) Analysis Run 11/15/2023 3:05 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-44HO	GS-AP-MW-6D	GS-AP-MW-6S	GS-AP-MW-6V	GS-AP-MW-7	GS-AP-MW-8 (bg)	GS-AP-MW-9V	GS-AP-PZ-16	GS-AP-PZ-22
8/2/2016					<0.000203				
8/3/2016		<0.000203	<0.000203			<0.000203			
9/20/2016		<0.000203	<0.000203						
9/21/2016					<0.000203	<0.000203			
10/24/2016		<0.000203			<0.000203				
10/25/2016						<0.000203			
10/26/2016			<0.000203						
12/12/2016		<0.000203	<0.000203		<0.000203				
12/13/2016						<0.000203			
2/6/2017		<0.000203	<0.000203		<0.000203	<0.000203			
3/27/2017		<0.000203	<0.000203						
3/28/2017					<0.000203	<0.000203			
4/24/2017		<0.000203	<0.000203		<0.000203	<0.000203			
6/6/2017		<0.000203	<0.000203						
6/7/2017					<0.000203	<0.000203			
2/19/2018		<0.000203	<0.000203		<0.000203	<0.000203			
5/14/2018		<0.000203	<0.000203						
5/15/2018					<0.000203	<0.000203			
10/15/2018		<0.000203	<0.000203		<0.000203				
10/16/2018						<0.000203			
4/16/2019		<0.000203	<0.000203			<0.000203			
4/23/2019					<0.000203				
9/23/2019		<0.000203	<0.000203						
9/24/2019					<0.000203	<0.000203			
3/17/2020		<0.000203	<0.000203		<0.000203				
3/18/2020						<0.000203			
3/23/2020							<0.000203		
3/24/2020								<0.000203	<0.000203
8/27/2020	<0.000203								
9/8/2020				<0.000203					
9/15/2020	<0.000203			<0.000203					
9/16/2020			<0.000203		<0.000203				
9/17/2020		<0.000203						<0.000203	<0.000203
9/21/2020						<0.000203			
9/22/2020							<0.000203		
2/2/2021					<0.000203	<0.000203	<0.000203		<0.000203
2/3/2021	<0.000203	<0.000203	<0.000203	<0.000203					
2/17/2021								<0.000203	
7/27/2021	<0.000203	<0.000203	<0.000203						
8/2/2021				<0.000203					
8/3/2021									<0.000203
8/9/2021					<0.000203			<0.000203	
8/10/2021						<0.000203	<0.000203		
2/8/2022					<0.000203				
2/9/2022	<0.000203			<0.000203					
2/14/2022		<0.000203	<0.000203						<0.000203
2/15/2022								<0.000203	
2/16/2022						<0.000203			
2/21/2022							<0.000203		
2/22/2022									
2/28/2022									
3/1/2022									

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cadmium (mg/L) Analysis Run 11/15/2023 3:05 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-44HO	GS-AP-MW-6D	GS-AP-MW-6S	GS-AP-MW-6V	GS-AP-MW-7	GS-AP-MW-8 (bg)	GS-AP-MW-9V	GS-AP-PZ-16	GS-AP-PZ-22
7/19/2022							<0.000203		
7/20/2022									
7/25/2022		<0.000203		<0.000203	<0.000203				
7/26/2022			<0.000203					<0.000203	
8/2/2022						<0.000203			
8/3/2022									
8/9/2022									<0.000203
3/6/2023	<0.000203								
3/8/2023				<0.000203					
3/14/2023		<0.000203	<0.000203		<0.000203				
3/15/2023									
3/21/2023								<0.000203	<0.000203
3/22/2023									
3/27/2023						<0.000203	<0.000203		
3/28/2023									
9/5/2023	<0.000203	<0.000203	<0.000203						
9/11/2023				<0.000203	<0.000203				<0.000203
9/12/2023								<0.000203	
9/13/2023							<0.000203		
9/18/2023						<0.000203			
9/19/2023									

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cadmium (mg/L) Analysis Run 11/15/2023 3:05 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-10R	GS-AP-MW-11R	GS-AP-MW-13R	GS-AP-MW-14R	GS-AP-MW-18R ...	GS-AP-MW-18VR	GS-AP-MW-1R
8/2/2016							
8/3/2016							
9/20/2016							
9/21/2016							
10/24/2016							
10/25/2016							
10/26/2016							
12/12/2016							
12/13/2016							
2/6/2017							
3/27/2017							
3/28/2017							
4/24/2017							
6/6/2017							
6/7/2017							
2/19/2018							
5/14/2018							
5/15/2018							
10/15/2018							
10/16/2018							
4/16/2019							
4/23/2019							
9/23/2019							
9/24/2019							
3/17/2020							
3/18/2020							
3/23/2020							
3/24/2020							
8/27/2020							
9/8/2020							
9/15/2020							
9/16/2020							
9/17/2020							
9/21/2020							
9/22/2020							
2/2/2021							
2/3/2021							
2/17/2021							
7/27/2021							
8/2/2021							
8/3/2021							
8/9/2021							
8/10/2021							
2/8/2022							
2/9/2022							
2/14/2022							
2/15/2022							
2/16/2022							
2/21/2022							
2/22/2022					<0.000203	<0.000203	
2/28/2022				<0.000203			
3/1/2022	<0.000203	<0.000203	<0.000203				<0.000203

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cadmium (mg/L) Analysis Run 11/15/2023 3:05 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-10R	GS-AP-MW-11R	GS-AP-MW-13R	GS-AP-MW-14R	GS-AP-MW-18R ...	GS-AP-MW-18VR	GS-AP-MW-1R
7/19/2022		<0.000203					
7/20/2022			<0.000203				
7/25/2022							
7/26/2022							
8/2/2022							<0.000203
8/3/2022	<0.000203			<0.000203	<0.000203		
8/9/2022						8E-05 (J)	
3/6/2023							
3/8/2023							
3/14/2023							
3/15/2023				<0.000203			
3/21/2023							
3/22/2023		<0.000203					
3/27/2023	<0.000203		<0.000203			<0.000203	<0.000203
3/28/2023					<0.000203		
9/5/2023							
9/11/2023							
9/12/2023				<0.000203			
9/13/2023							<0.000203
9/18/2023							
9/19/2023	<0.000203	<0.000203	<0.000203		<0.000203	<0.000203	

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cadmium (mg/L) Analysis Run 11/15/2023 3:05 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-23V	GS-AP-MW-27HR	GS-AP-MW-31V	GS-AP-MW-36V	GS-AP-MW-37HR	GS-AP-MW-3V	GS-AP-MW-45V	GS-AP-MW-47	GS-AP-MW-5R
2/21/2022									
2/22/2022		<0.000203	<0.000203	<0.000203					
2/23/2022	<0.000203					<0.000203	<0.000203		
2/28/2022					<0.000203			<0.000203	
3/1/2022									<0.000203
7/19/2022									
7/20/2022						<0.000203			
7/26/2022	<0.000203				<0.000203			<0.000203	
7/27/2022		<0.000203		<0.000203					
8/2/2022									<0.000203
8/3/2022			<0.000203						
8/8/2022							<0.000203		
3/14/2023	<0.000203	<0.000203		<0.000203					
3/15/2023					<0.000203			<0.000203	
3/20/2023									<0.000203
3/21/2023						<0.000203			
3/27/2023			<0.000203						
3/28/2023							<0.000203		
9/6/2023	<0.000203	<0.000203		<0.000203					
9/11/2023					<0.000203				
9/12/2023						<0.000203		<0.000203	<0.000203
9/13/2023			<0.000203						
9/18/2023							<0.000203		
9/19/2023									

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cadmium (mg/L)   Analysis Run 11/15/2023 3:05 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

	GS-AP-MW-9R	GS-AP-PZ-18R	GS-AP-MW-46
2/21/2022		<0.000203	
2/22/2022			
2/23/2022			<0.000203
2/28/2022			
3/1/2022	<0.000203		
7/19/2022	<0.000203		
7/20/2022			
7/26/2022			
7/27/2022		<0.000203	
8/2/2022			<0.000203
8/3/2022			
8/8/2022			
3/14/2023			
3/15/2023			
3/20/2023			
3/21/2023			
3/27/2023	<0.000203		<0.000203
3/28/2023		<0.000203	
9/6/2023			
9/11/2023			
9/12/2023			
9/13/2023	<0.000203		
9/18/2023			<0.000203
9/19/2023		<0.000203	

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Calcium (mg/L) Analysis Run 11/15/2023 3:05 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-12	GS-AP-MW-12V	GS-AP-MW-13 (bg)	GS-AP-MW-15	GS-AP-MW-15V	GS-AP-MW-16D	GS-AP-MW-17	GS-AP-MW-17V ...	GS-AP-MW-19
8/1/2016				10.5		33	4.52		39.6
8/2/2016			47.2						
8/3/2016	36.1								
9/19/2016						31.7	4.3		
9/20/2016	27		46.3	14.7					
9/21/2016									38.1
10/24/2016							4.02		34.7
10/25/2016	26.1		46.6	14.7		32.2			
12/13/2016	29.4		43.1			33.1	5.5		44
12/14/2016				11.9					
2/6/2017							3.79		
2/7/2017									39
2/8/2017	31.9		47.5	14.4		32.7			
3/27/2017							3.13		
3/28/2017				12.9					43.9
3/29/2017	31.8		46.8			32.7			
3/30/2017									
4/24/2017							3.41		
4/26/2017	34.6		48.1	10.4		33.8			42.8
6/5/2017							3.32		
6/6/2017				9.41		32.2			43.1
6/7/2017	33.4		44.4						
8/21/2017									
8/22/2017	31.5		42.9	6.89		30.9	3.52		40.7
8/23/2017									
5/15/2018	34.8		44.3	6.86			4.53		
5/16/2018						33.5			45.3
10/15/2018				6.28			3.38		
10/16/2018	35.6								40.9
10/17/2018			41.8			32			
2/20/2019								30.6	
2/21/2019		52.3							
2/26/2019									
2/27/2019									
4/16/2019	38.3		38.6						
4/17/2019				8.53		32.3	3.86		38.4
9/23/2019							5.43		
9/24/2019				3.26		34.3		29.7	48.4
9/25/2019	48.1	33.4							
3/16/2020							3		
3/17/2020									
3/18/2020	44			5.25	8.01				
3/23/2020									
3/24/2020		48.9				34.1			41.7
3/25/2020								31.1	
5/12/2020							2.95		
5/13/2020									
9/17/2020									
9/21/2020					8.2		3.73		
9/22/2020						32			46.9
9/23/2020	45.9	44.8		3.83				29.3	
2/1/2021	45.8	48.9							

Time Series

Constituent: Calcium (mg/L) Analysis Run 11/15/2023 3:05 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-12	GS-AP-MW-12V	GS-AP-MW-13 (bg)	GS-AP-MW-15	GS-AP-MW-15V	GS-AP-MW-16D	GS-AP-MW-17	GS-AP-MW-17V ...	GS-AP-MW-19
2/2/2021							3.3	31.8	
2/3/2021									
2/8/2021									56.8
2/9/2021				4.38	10				
2/10/2021						34.6			
7/27/2021									
8/2/2021								33	
8/3/2021				3.55	10.6		2.17		
8/4/2021									
8/9/2021	40.2	35.7				33.2			
8/10/2021									54.8
8/11/2021									
8/12/2021									
2/8/2022									
2/14/2022							2.17	30.1	
2/15/2022						31.5			
2/16/2022				6.76	14.3				
2/22/2022									54.6
2/23/2022		46.3							
2/28/2022	37.9								
7/19/2022	37.599998								
7/20/2022		47.5							
7/26/2022									
7/27/2022									
8/2/2022				3.31	22.200001	33.799999			
8/3/2022									56.400002
8/8/2022							2.44		
8/9/2022								31.4	
8/10/2022									
3/14/2023									
3/15/2023									
3/20/2023				6.6	18.2				
3/21/2023						32			46.9
3/22/2023	36.4	38					2.07	29.6	
9/5/2023									
9/6/2023									
9/11/2023				5.21	20.299999		2.93	31.1	
9/12/2023						33.099998			
9/13/2023	41.799999	39.200001							
9/18/2023									
9/19/2023									53.5

Time Series

Constituent: Calcium (mg/L) Analysis Run 11/15/2023 3:05 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-2	GS-AP-MW-21	GS-AP-MW-21V	GS-AP-MW-23H	GS-AP-MW-24H	GS-AP-MW-25HA	GS-AP-MW-26H
8/1/2016							
8/2/2016	2.25	5.29					
8/3/2016							
9/19/2016	0.724						
9/20/2016							
9/21/2016		4.51					
10/24/2016	0.635						
10/25/2016		4.92					
12/13/2016	0.714						
12/14/2016		3.5					
2/6/2017							
2/7/2017							
2/8/2017	0.722	3.75					
3/27/2017							
3/28/2017		3.63					
3/29/2017							
3/30/2017	0.686						
4/24/2017							
4/26/2017	0.646	3.3					
6/5/2017							
6/6/2017	0.569	3.24					
6/7/2017							
8/21/2017	0.634						
8/22/2017							
8/23/2017		6.6					
5/15/2018		7.57					
5/16/2018	0.588						
10/15/2018							
10/16/2018	0.714	4.4					
10/17/2018							
2/20/2019				64.5			
2/21/2019							
2/26/2019					46		
2/27/2019							29.1
4/16/2019							
4/17/2019	0.511	2.88					
9/23/2019				80.6			29.6
9/24/2019		2.47			46.5		
9/25/2019	0.581						
3/16/2020							
3/17/2020				79.8			
3/18/2020		2.35			44		
3/23/2020			110				
3/24/2020						2.42	
3/25/2020	0.518						28.6
5/12/2020							
5/13/2020	0.493 (J)						
9/17/2020				87.2	45.5	1.99	
9/21/2020							27.6
9/22/2020	0.503						
9/23/2020		1.96	119				
2/1/2021	0.517						

Time Series

Constituent: Calcium (mg/L) Analysis Run 11/15/2023 3:05 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-2	GS-AP-MW-21	GS-AP-MW-21V	GS-AP-MW-23H	GS-AP-MW-24H	GS-AP-MW-25HA	GS-AP-MW-26H
2/2/2021					42.4		
2/3/2021				75.6			
2/8/2021		1.95					
2/9/2021			73.8				28.1
2/10/2021						2.11	
7/27/2021				75.5			
8/2/2021							
8/3/2021					43.4		
8/4/2021	0.564	1.76					
8/9/2021							
8/10/2021							27.2
8/11/2021			13.8				
8/12/2021						1.79	
2/8/2022		1.98	37.2				
2/14/2022				74.4			
2/15/2022					42.4		26.6
2/16/2022						1.82	
2/22/2022	0.413						
2/23/2022							
2/28/2022							
7/19/2022	0.359 (J)						
7/20/2022							
7/26/2022				72.400002			
7/27/2022					41.900002		
8/2/2022							
8/3/2022						1.86	
8/8/2022							
8/9/2022			33				
8/10/2022		3.49					28.700001
3/14/2023				59.5			
3/15/2023					41.200001		
3/20/2023							
3/21/2023		2.74	46.6				
3/22/2023	0.4 (J)					1.84	25.7
9/5/2023		2	39.799999				
9/6/2023				76.300003	43.799999		
9/11/2023							
9/12/2023							
9/13/2023							
9/18/2023	0.668					2.05	27.299999
9/19/2023							

Time Series

Constituent: Calcium (mg/L) Analysis Run 11/15/2023 3:05 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-28H	GS-AP-MW-29H	GS-AP-MW-3	GS-AP-MW-30HA	GS-AP-MW-31H	GS-AP-MW-32H	GS-AP-MW-33HO	GS-AP-MW-34HO	GS-AP-MW-35HO
2/27/2019		12.1							
3/13/2019	3.42								
9/24/2019		32.8							
9/25/2019	2.52								
3/16/2020	2.4							83.8	
3/17/2020							42.3		5.27
3/18/2020				36	6.06				
3/24/2020						2.62			
3/25/2020		27.8							
5/12/2020	2.83							80.4	3.04
5/13/2020				35.3			25.2		
9/15/2020							29.5		
9/16/2020								86.9	3.04
9/17/2020									
9/21/2020				29.4		3			
9/22/2020	2.37	28.1			5.31				
2/1/2021					4.92				
2/2/2021									
2/3/2021		26.1					30.3	100	
2/4/2021									3.3
2/8/2021									
2/9/2021									
2/10/2021						3.24			
2/17/2021	2.02		39.3	29.7					
7/27/2021							30.5	100	
7/28/2021									2.51
8/2/2021				43.8	4.6				
8/3/2021			30.8						
8/4/2021		17.7							
8/9/2021	1.75								
8/10/2021						3.59			
2/8/2022				46.7	5.73				
2/9/2022							25.2	105	2.11
2/14/2022	1.66	13.9				2.53			
2/15/2022									
2/16/2022			18.6						
2/21/2022									
2/22/2022									
7/20/2022			17.6						
7/26/2022									
7/27/2022	1.45					2.86			
8/2/2022									
8/3/2022		14.5		60.299999	4.85				
8/10/2022									
3/8/2023								64.5	1.49
3/13/2023				56					
3/14/2023	1.99						18.200001		
3/15/2023									
3/21/2023			19.4			2.42			
3/22/2023									
3/27/2023					3.9				
3/28/2023		12.2							

Time Series

Constituent: Calcium (mg/L)   Analysis Run 11/15/2023 3:05 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

	GS-AP-MW-28H	GS-AP-MW-29H	GS-AP-MW-3	GS-AP-MW-30HA	GS-AP-MW-31H	GS-AP-MW-32H	GS-AP-MW-33HO	GS-AP-MW-34HO	GS-AP-MW-35HO
8/30/2023							22.1		
8/31/2023								77	1.38
9/5/2023				45.099998					
9/6/2023									
9/11/2023	1.84								
9/12/2023			9.92						
9/13/2023		11.6			3.21	2.08			
9/18/2023									
9/19/2023									

Time Series

Constituent: Calcium (mg/L) Analysis Run 11/15/2023 3:05 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-36H	GS-AP-MW-38H	GS-AP-MW-40H	GS-AP-MW-41HD	GS-AP-MW-41HS	GS-AP-MW-42H	GS-AP-MW-43HO
2/27/2019							
3/13/2019							
9/24/2019							
9/25/2019							
3/16/2020							
3/17/2020	3.45						
3/18/2020				56.6			
3/24/2020		9.33				149	
3/25/2020							4.11
5/12/2020							
5/13/2020	2.93						
9/15/2020							
9/16/2020							
9/17/2020	4.12			61.1			
9/21/2020							
9/22/2020		9.56	205			142	2.82
2/1/2021							
2/2/2021			199				
2/3/2021						134	
2/4/2021							
2/8/2021				60.8	49.8		
2/9/2021		10.6					
2/10/2021							
2/17/2021	3.16						4.82
7/27/2021							
7/28/2021					45.1		
8/2/2021							
8/3/2021				57.1			
8/4/2021	5.78	12.2				133	4.58
8/9/2021							
8/10/2021			197				
2/8/2022					30.6		
2/9/2022							
2/14/2022	4.69						
2/15/2022			203	57.6			
2/16/2022						138	
2/21/2022							4.56
2/22/2022		10.8					
7/20/2022	1.16						
7/26/2022					36.700001		
7/27/2022				57.5		133	
8/2/2022			211				
8/3/2022							5.62
8/10/2022		15.1					
3/8/2023							
3/13/2023					33.3		
3/14/2023							
3/15/2023	5.26			58.9		128	
3/21/2023							
3/22/2023			196				
3/27/2023							
3/28/2023		13.4					17.4

Time Series

Constituent: Calcium (mg/L) Analysis Run 11/15/2023 3:05 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-36H	GS-AP-MW-38H	GS-AP-MW-40H	GS-AP-MW-41HD	GS-AP-MW-41HS	GS-AP-MW-42H	GS-AP-MW-43HO
8/30/2023				58.900002	28		
8/31/2023							
9/5/2023							
9/6/2023	5.89						
9/11/2023							
9/12/2023							
9/13/2023							
9/18/2023			219				
9/19/2023		10.7				131	6.7

Time Series

Constituent: Calcium (mg/L)   Analysis Run 11/15/2023 3:05 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

	GS-AP-MW-44HO	GS-AP-MW-6D	GS-AP-MW-6S	GS-AP-MW-6V	GS-AP-MW-7	GS-AP-MW-8 (bg)	GS-AP-MW-9V	GS-AP-PZ-16	GS-AP-PZ-22
8/2/2016					19.4				
8/3/2016		48.1	42.5			6.85			
9/20/2016		51.2	51.1						
9/21/2016					15.4	11.7			
10/24/2016		49.5			14.8				
10/25/2016						10.8			
10/26/2016			65.6						
12/12/2016		54.3	66.5		15				
12/13/2016						5.86			
2/6/2017		51.2	73.1		14.9	9.76			
3/27/2017		51.4	71.9						
3/28/2017					14.3	5.28			
4/24/2017		54.7	73.5		14.5	6.89			
6/6/2017		53.9	71.8						
6/7/2017					14.1	3.58			
8/21/2017		47.3	63.5		12.6	3.38			
5/14/2018		54.8	67.5						
5/15/2018					12.9	4.25			
10/15/2018		53.9	68.9		12.5				
10/16/2018						3.21			
4/16/2019		54	57.1			4.43			
4/23/2019					13.8				
9/23/2019		56.1	60						
9/24/2019					13.4	7.24			
3/17/2020		57.2	59.3		13.5				
3/18/2020						4.51			
3/23/2020							42.9		
3/24/2020								13.9	19.3
8/27/2020	2.89								
9/8/2020				1.8					
9/15/2020	2.94			1.74					
9/16/2020			55.9		12.2				
9/17/2020		61.5						9.69	12.6
9/21/2020						5.19			
9/22/2020							45.3		
2/2/2021					12.2	4.35	44.8		16.5
2/3/2021	2.87	56.9	50.7	1.5					
2/17/2021								9.59	
7/27/2021	1.46	55.5	52.6						
8/2/2021				2.1					
8/3/2021									16
8/9/2021					11.6			18.5	
8/10/2021						4.47	45.1		
2/8/2022					10.7				
2/9/2022	1.16			1.29					
2/14/2022		55.7	60.1						18.1
2/15/2022								11.5	
2/16/2022						4.42			
2/21/2022							47.7		
2/22/2022									
2/28/2022									
3/1/2022									

Time Series

Constituent: Calcium (mg/L) Analysis Run 11/15/2023 3:05 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-44HO	GS-AP-MW-6D	GS-AP-MW-6S	GS-AP-MW-6V	GS-AP-MW-7	GS-AP-MW-8 (bg)	GS-AP-MW-9V	GS-AP-PZ-16	GS-AP-PZ-22
7/19/2022							54.700001		
7/20/2022									
7/25/2022		57.900002		1.52	10.6				
7/26/2022			51.799999					13.7	
8/2/2022						5.28			
8/3/2022									
8/9/2022									11.6
3/6/2023	1.09								
3/8/2023				1.46					
3/14/2023		52.4	50.900002		11				
3/15/2023									
3/21/2023								12.4	7.61
3/22/2023									
3/27/2023						4.77	49		
3/28/2023									
9/5/2023	2	53.900002	55.700001						
9/11/2023				1.22	11.2				9.05
9/12/2023								10.4	
9/13/2023							56		
9/18/2023						6.08			
9/19/2023									

Time Series

Constituent: Calcium (mg/L) Analysis Run 11/15/2023 3:05 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-10R	GS-AP-MW-11R	GS-AP-MW-13R	GS-AP-MW-14R	GS-AP-MW-18R ...	GS-AP-MW-18VR	GS-AP-MW-1R
8/2/2016							
8/3/2016							
9/20/2016							
9/21/2016							
10/24/2016							
10/25/2016							
10/26/2016							
12/12/2016							
12/13/2016							
2/6/2017							
3/27/2017							
3/28/2017							
4/24/2017							
6/6/2017							
6/7/2017							
8/21/2017							
5/14/2018							
5/15/2018							
10/15/2018							
10/16/2018							
4/16/2019							
4/23/2019							
9/23/2019							
9/24/2019							
3/17/2020							
3/18/2020							
3/23/2020							
3/24/2020							
8/27/2020							
9/8/2020							
9/15/2020							
9/16/2020							
9/17/2020							
9/21/2020							
9/22/2020							
2/2/2021							
2/3/2021							
2/17/2021							
7/27/2021							
8/2/2021							
8/3/2021							
8/9/2021							
8/10/2021							
2/8/2022							
2/9/2022							
2/14/2022							
2/15/2022							
2/16/2022							
2/21/2022							
2/22/2022					20.3	5.8	
2/28/2022				33.7			
3/1/2022	39.8	45.3	31.6				1.14

Time Series

Constituent: Calcium (mg/L) Analysis Run 11/15/2023 3:05 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-10R	GS-AP-MW-11R	GS-AP-MW-13R	GS-AP-MW-14R	GS-AP-MW-18R ...	GS-AP-MW-18VR	GS-AP-MW-1R
7/19/2022		56.799999					
7/20/2022			31.799999				
7/25/2022							
7/26/2022							
8/2/2022							0.888
8/3/2022	46.599998			35.299999	30.799999		
8/9/2022						2.49	
3/6/2023							
3/8/2023							
3/14/2023							
3/15/2023				32.8			
3/21/2023							
3/22/2023		52					
3/27/2023	45.3		32.1			2.12	0.838
3/28/2023					25.799999		
9/5/2023							
9/11/2023							
9/12/2023				34.5			
9/13/2023							0.823
9/18/2023							
9/19/2023	39.599998	56	34		33.099998	2.49	

Time Series

Constituent: Calcium (mg/L) Analysis Run 11/15/2023 3:05 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-23V	GS-AP-MW-27HR	GS-AP-MW-31V	GS-AP-MW-36V	GS-AP-MW-37HR	GS-AP-MW-3V	GS-AP-MW-45V	GS-AP-MW-47	GS-AP-MW-5R
2/21/2022									
2/22/2022		12.3	7.58	9.42					
2/23/2022	152					9.73	5.61		
2/28/2022					2.59			28.7	
3/1/2022									97.3
7/19/2022									
7/20/2022						22.1			
7/26/2022	138				3.48			29	
7/27/2022		65.099998		33.900002					
8/2/2022									107
8/3/2022			13						
8/8/2022							6.3		
3/14/2023	73.6	95.3		43					
3/15/2023					3.16			30.2	
3/20/2023									94.8
3/21/2023						9.04			
3/27/2023			16.4						
3/28/2023							19		
9/6/2023	57.900002	107		61.5					
9/11/2023					5.59				
9/12/2023						20		37.200001	109
9/13/2023			24.700001						
9/18/2023							43.299999		
9/19/2023									

Time Series

Constituent: Calcium (mg/L) Analysis Run 11/15/2023 3:05 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-9R	GS-AP-PZ-18R	GS-AP-MW-46
2/21/2022		69	
2/22/2022			
2/23/2022			1.2
2/28/2022			
3/1/2022	54		
7/19/2022	52		
7/20/2022			
7/26/2022			
7/27/2022		63.099998	
8/2/2022			1.21
8/3/2022			
8/8/2022			
3/14/2023			
3/15/2023			
3/20/2023			
3/21/2023			
3/27/2023	43		0.975
3/28/2023		61.799999	
9/6/2023			
9/11/2023			
9/12/2023			
9/13/2023	38.900002		
9/18/2023			0.866
9/19/2023		60.5	

Time Series

Constituent: Chloride (mg/L) Analysis Run 11/15/2023 3:05 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-12	GS-AP-MW-12V	GS-AP-MW-13 (bg)	GS-AP-MW-15	GS-AP-MW-15V	GS-AP-MW-16D	GS-AP-MW-17	GS-AP-MW-17V ...	GS-AP-MW-19
8/1/2016				15.6		2.6	6.47		6.67
8/2/2016			2.91						
8/3/2016	14.5								
9/19/2016						2.51	7.78		
9/20/2016	12.9		2.94	8.6					
9/21/2016									6.54
10/24/2016							7.29		8.77
10/25/2016	12.2		2.94	7.96		2.53			
12/13/2016	10.4		2.93			2.53	12.2		6.16
12/14/2016				6.94					
2/6/2017							7.68		
2/7/2017									7.57
2/8/2017	8.77		2.85	4.96		2.5			
3/27/2017							9		
3/28/2017				5.2					5.9
3/29/2017	10		3.4			2.9			
3/30/2017									
4/24/2017							10		
4/26/2017	9.8		3.7	6		3.2			6.5
6/5/2017							10		
6/6/2017				4.9		2.6			5.5
6/7/2017	8		3.3						
8/21/2017									
8/22/2017	6.5		3.4	5.3		2.9	12		6.5
8/23/2017									
5/15/2018	4.4		3.2	3.8			13		
5/16/2018						3			6.6
10/15/2018				6.6			10		
10/16/2018	3.1								6.2
10/17/2018			2.3			2.2			
2/20/2019								3.56	
2/21/2019		3.77							
2/26/2019									
2/27/2019									
4/16/2019	3.22		3.23						
4/17/2019				5.2		2.82	12.7		7.27
9/23/2019							16.2		
9/24/2019				5.96		2.9		3.69	5.83
9/25/2019	6.68	3.84							
3/16/2020							9.95		
3/17/2020									
3/18/2020	4.22			8	108				
3/23/2020									
3/24/2020		4.46				2.88			6.29
3/25/2020								3.72	
5/12/2020							9.16		
5/13/2020									
9/17/2020									
9/21/2020					171		13.8		
9/22/2020						2.94			6.6
9/23/2020	3.15	4.63		6				3.74	
2/1/2021	3.32	3.86							

Time Series

Constituent: Chloride (mg/L) Analysis Run 11/15/2023 3:05 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-12	GS-AP-MW-12V	GS-AP-MW-13 (bg)	GS-AP-MW-15	GS-AP-MW-15V	GS-AP-MW-16D	GS-AP-MW-17	GS-AP-MW-17V ...	GS-AP-MW-19
2/2/2021							10.2	3.49	
2/3/2021									
2/8/2021									6
2/9/2021				6.12	197				
2/10/2021						3.19			
7/27/2021									
8/2/2021								3.12	
8/3/2021				6.22	176		5.88		
8/4/2021									
8/9/2021	2.75	4.44				3.08			
8/10/2021									4.83
8/11/2021									
8/12/2021									
2/8/2022									
2/14/2022							7.15	3.26	
2/15/2022						3.58			
2/16/2022				5.86	129				
2/22/2022									4.59
2/23/2022		3.83							
2/28/2022	3.34								
7/19/2022	2.99								
7/20/2022		3.85							
7/26/2022									
7/27/2022									
8/2/2022				4.36	126	3.65			
8/3/2022									5.35
8/8/2022							6.21		
8/9/2022								3.09	
8/10/2022									
3/14/2023									
3/15/2023									
3/20/2023				5.41	93.5				
3/21/2023						3.72			5.22
3/22/2023	2.73	3.77					5.96	2.8	
9/5/2023									
9/6/2023									
9/11/2023				5.04	83.900002		7.59	2.83	
9/12/2023						4.14			
9/13/2023	3.19	4.38							
9/18/2023									
9/19/2023									4.82

Time Series

Constituent: Chloride (mg/L) Analysis Run 11/15/2023 3:05 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-2	GS-AP-MW-21	GS-AP-MW-21V	GS-AP-MW-23H	GS-AP-MW-24H	GS-AP-MW-25HA	GS-AP-MW-26H
8/1/2016							
8/2/2016	6.15	28.1					
8/3/2016							
9/19/2016	5.98						
9/20/2016							
9/21/2016		26.8					
10/24/2016	5.93						
10/25/2016		26					
12/13/2016	5.7						
12/14/2016		25.3					
2/6/2017							
2/7/2017							
2/8/2017	8.44	23.8					
3/27/2017							
3/28/2017		28					
3/29/2017							
3/30/2017	11						
4/24/2017							
4/26/2017	10	27					
6/5/2017							
6/6/2017	9.6	28					
6/7/2017							
8/21/2017	12						
8/22/2017							
8/23/2017		29					
5/15/2018		27					
5/16/2018	12						
10/15/2018							
10/16/2018	20	31					
10/17/2018							
2/20/2019				2.58			
2/21/2019							
2/26/2019					3.28		
2/27/2019							2.87
4/16/2019							
4/17/2019	9.5	32.3					
9/23/2019				2.26			2.35
9/24/2019		36			2.89		
9/25/2019	12						
3/16/2020							
3/17/2020				2.62			
3/18/2020		49.5			3.5		
3/23/2020			981				
3/24/2020						38	
3/25/2020	9.7						2.73
5/12/2020							
5/13/2020	8.25						
9/17/2020				1.92	3.19	38.3	
9/21/2020							3.25
9/22/2020	6.33						
9/23/2020		56.9	1100				
2/1/2021	8.42						

Time Series

Constituent: Chloride (mg/L) Analysis Run 11/15/2023 3:05 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-2	GS-AP-MW-21	GS-AP-MW-21V	GS-AP-MW-23H	GS-AP-MW-24H	GS-AP-MW-25HA	GS-AP-MW-26H
2/2/2021					3.06		
2/3/2021				2.07			
2/8/2021		39.8					
2/9/2021			592				2.55
2/10/2021						43.7	
7/27/2021				2.48			
8/2/2021							
8/3/2021					2.94		
8/4/2021	7.25	54.8					
8/9/2021							
8/10/2021							2.87
8/11/2021			162				
8/12/2021						36.3	
2/8/2022		41.4	432				
2/14/2022				12.8			
2/15/2022					3.18		2.59
2/16/2022						34.3	
2/22/2022	6.05						
2/23/2022							
2/28/2022							
7/19/2022	4.42						
7/20/2022							
7/26/2022				12.9			
7/27/2022					3.3		
8/2/2022							
8/3/2022						30.5	
8/8/2022							
8/9/2022			327				
8/10/2022		44					2.33
3/14/2023				9.24			
3/15/2023					2.88		
3/20/2023							
3/21/2023		38.5	564				
3/22/2023	4.23					28.5	2.33
9/5/2023		36.599998	380				
9/6/2023				5.93	3.11		
9/11/2023							
9/12/2023							
9/13/2023							
9/18/2023	6.28					27.799999	2.22
9/19/2023							

Time Series

Constituent: Chloride (mg/L) Analysis Run 11/15/2023 3:05 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-28H	GS-AP-MW-29H	GS-AP-MW-3	GS-AP-MW-30HA	GS-AP-MW-31H	GS-AP-MW-32H	GS-AP-MW-33HO	GS-AP-MW-34HO	GS-AP-MW-35HO
2/27/2019		3.09							
3/13/2019	8								
9/24/2019		3.11							
9/25/2019	8.93								
3/16/2020	10.6							101	
3/17/2020							108		23.9
3/18/2020				5.14	41.3				
3/24/2020						20.5			
3/25/2020		3.1							
5/12/2020	12.7							148	14.5
5/13/2020				4.24			63.3		
9/15/2020							75.6		
9/16/2020								210	20.9
9/17/2020									
9/21/2020				3.45		28.2			
9/22/2020	12.2	13.2			27.3				
2/1/2021					31.2				
2/2/2021									
2/3/2021		18.9					55.2	156	
2/4/2021									23.9
2/8/2021									
2/9/2021									
2/10/2021						39.4			
2/17/2021	10.3		17.4	3.69					
7/27/2021							75.3	386	
7/28/2021									16.7
8/2/2021				4.28	38.5				
8/3/2021			13.6						
8/4/2021		13.8							
8/9/2021	7.85								
8/10/2021						36.6			
2/8/2022				5.81	32.5				
2/9/2022							68.9	392	17.5
2/14/2022	8.33	14.2				29.8			
2/15/2022									
2/16/2022			14						
2/21/2022									
2/22/2022									
7/20/2022			15.3						
7/26/2022									
7/27/2022	7.71					33.200001			
8/2/2022									
8/3/2022		7.1		5.91	21.6				
8/10/2022									
3/8/2023								354	8.75
3/13/2023				4.77					
3/14/2023	8.63						15.3		
3/15/2023									
3/21/2023			16			32.6			
3/22/2023									
3/27/2023					18.4				
3/28/2023		5.09							

Time Series

Constituent: Chloride (mg/L)   Analysis Run 11/15/2023 3:05 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

	GS-AP-MW-28H	GS-AP-MW-29H	GS-AP-MW-3	GS-AP-MW-30HA	GS-AP-MW-31H	GS-AP-MW-32H	GS-AP-MW-33HO	GS-AP-MW-34HO	GS-AP-MW-35HO
8/30/2023							28.5		
8/31/2023								290	8.21
9/5/2023				6.67					
9/6/2023									
9/11/2023	9.86								
9/12/2023			12.5						
9/13/2023		5.63			32.599998	26.5			
9/18/2023									
9/19/2023									

Time Series

Constituent: Chloride (mg/L)   Analysis Run 11/15/2023 3:05 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

	GS-AP-MW-36H	GS-AP-MW-38H	GS-AP-MW-40H	GS-AP-MW-41HD	GS-AP-MW-41HS	GS-AP-MW-42H	GS-AP-MW-43HO
2/27/2019							
3/13/2019							
9/24/2019							
9/25/2019							
3/16/2020							
3/17/2020	29.4						
3/18/2020				6.02			
3/24/2020		12.6				3.35	
3/25/2020							90.6
5/12/2020							
5/13/2020	27.2						
9/15/2020							
9/16/2020							
9/17/2020	38.5			6.63			
9/21/2020							
9/22/2020		24.8	30.4			7.07	78
2/1/2021							
2/2/2021			36.8				
2/3/2021						10.1	
2/4/2021							
2/8/2021				6.44	9.18		
2/9/2021		28.1					
2/10/2021							
2/17/2021	24.3						96.3
7/27/2021							
7/28/2021					8.34		
8/2/2021							
8/3/2021				6.07			
8/4/2021	59.8	33.1				9.75	69.4
8/9/2021							
8/10/2021			28				
2/8/2022					6.72		
2/9/2022							
2/14/2022	77.7						
2/15/2022			18	6.67			
2/16/2022						8.61	
2/21/2022							104
2/22/2022		31					
7/20/2022	10.6						
7/26/2022					7.24		
7/27/2022				7.18		9.12	
8/2/2022			12.7				
8/3/2022							84.5
8/10/2022		59.299999					
3/8/2023							
3/13/2023					6.83		
3/14/2023							
3/15/2023	66.6			7.05		9.31	
3/21/2023							
3/22/2023			15.5				
3/27/2023							
3/28/2023		45.8					228

Time Series

Constituent: Chloride (mg/L)   Analysis Run 11/15/2023 3:05 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

	GS-AP-MW-36H	GS-AP-MW-38H	GS-AP-MW-40H	GS-AP-MW-41HD	GS-AP-MW-41HS	GS-AP-MW-42H	GS-AP-MW-43HO
8/30/2023				7.91	7.77		
8/31/2023							
9/5/2023							
9/6/2023	99.300003						
9/11/2023							
9/12/2023							
9/13/2023							
9/18/2023			9.85				
9/19/2023		31.6				11	134

Time Series

Constituent: Chloride (mg/L) Analysis Run 11/15/2023 3:05 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-44HO	GS-AP-MW-6D	GS-AP-MW-6S	GS-AP-MW-6V	GS-AP-MW-7	GS-AP-MW-8 (bg)	GS-AP-MW-9V	GS-AP-PZ-16	GS-AP-PZ-22
8/2/2016					3.7				
8/3/2016		5.2	21.9			3.21			
9/20/2016		5.31	20.9						
9/21/2016					3.74	2.95			
10/24/2016		5.4			3.75				
10/25/2016						3.03			
10/26/2016			20.7						
12/12/2016		5.46	21.1		4.06				
12/13/2016						3.21			
2/6/2017		5.28	23.3		3.92	3			
3/27/2017		6.4	25						
3/28/2017					4.3	3.3			
4/24/2017		6.5	24		4.6	3.8			
6/6/2017		4.7	22						
6/7/2017					4.3	3.5			
8/21/2017		6.1	21		4.7	3.6			
5/14/2018		6	20						
5/15/2018					4.3	3.3			
10/15/2018		7	20		5.1				
10/16/2018						3.3			
4/16/2019		8.36	23.1			3.69			
4/23/2019					5.16				
9/23/2019		8.72	23.4						
9/24/2019					5.76	3.21			
3/17/2020		10.1	17.4		6.65				
3/18/2020						4.35			
3/23/2020							5.13		
3/24/2020								5.72	2.53
8/27/2020	27.1								
9/8/2020				50.4					
9/15/2020	36.2			49.8					
9/16/2020			14.6		6.17				
9/17/2020		10.5						6.57	2.46
9/21/2020						3.22			
9/22/2020							7.57		
2/2/2021					6.76	3.85	10.8		2.99
2/3/2021	44.8	12.2	14.9	48					
2/17/2021								6.69	
7/27/2021	33.4	11.1	17						
8/2/2021				94.1					
8/3/2021									2.67
8/9/2021					7.03			6.22	
8/10/2021						4.04	18.8		
2/8/2022					7.475 (D)				
2/9/2022	28.5			53.3					
2/14/2022		11.7	20.6						3.1
2/15/2022								5.84	
2/16/2022						4.42			
2/21/2022							18.4		
2/22/2022									
2/28/2022									
3/1/2022									

Time Series

Constituent: Chloride (mg/L) Analysis Run 11/15/2023 3:05 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-44HO	GS-AP-MW-6D	GS-AP-MW-6S	GS-AP-MW-6V	GS-AP-MW-7	GS-AP-MW-8 (bg)	GS-AP-MW-9V	GS-AP-PZ-16	GS-AP-PZ-22
7/19/2022							18.799999		
7/20/2022									
7/25/2022		9.533 (D)		51.25 (D)	7.9725 (D)				
7/26/2022			22.9					4.94	
8/2/2022						4.35			
8/3/2022									
8/9/2022									2.32
3/6/2023	33.799999								
3/8/2023				49.8500005 (D)					
3/14/2023		9.66	18.5		7.98				
3/15/2023									
3/21/2023								5.96	2.8
3/22/2023									
3/27/2023						4.17	23.2		
3/28/2023									
9/5/2023	33.799999	9.14	19.200001						
9/11/2023				46.549999 (D)	8.17				2.96
9/12/2023								6.03	
9/13/2023							45.799999		
9/18/2023						3.07			
9/19/2023									

Time Series

Constituent: Chloride (mg/L)   Analysis Run 11/15/2023 3:05 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

	GS-AP-MW-10R	GS-AP-MW-11R	GS-AP-MW-13R	GS-AP-MW-14R	GS-AP-MW-18R ...	GS-AP-MW-18VR	GS-AP-MW-1R
8/2/2016							
8/3/2016							
9/20/2016							
9/21/2016							
10/24/2016							
10/25/2016							
10/26/2016							
12/12/2016							
12/13/2016							
2/6/2017							
3/27/2017							
3/28/2017							
4/24/2017							
6/6/2017							
6/7/2017							
8/21/2017							
5/14/2018							
5/15/2018							
10/15/2018							
10/16/2018							
4/16/2019							
4/23/2019							
9/23/2019							
9/24/2019							
3/17/2020							
3/18/2020							
3/23/2020							
3/24/2020							
8/27/2020							
9/8/2020							
9/15/2020							
9/16/2020							
9/17/2020							
9/21/2020							
9/22/2020							
2/2/2021							
2/3/2021							
2/17/2021							
7/27/2021							
8/2/2021							
8/3/2021							
8/9/2021							
8/10/2021							
2/8/2022							
2/9/2022							
2/14/2022							
2/15/2022							
2/16/2022							
2/21/2022							
2/22/2022					3.52	15.3	
2/28/2022				38.1			
3/1/2022	37.5	5.08	19.2				5.25

Time Series

Constituent: Chloride (mg/L) Analysis Run 11/15/2023 3:05 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-10R	GS-AP-MW-11R	GS-AP-MW-13R	GS-AP-MW-14R	GS-AP-MW-18R ...	GS-AP-MW-18VR	GS-AP-MW-1R
7/19/2022		5.38					
7/20/2022			17.6				
7/25/2022							
7/26/2022							
8/2/2022							5.38
8/3/2022	33.5			16.1	4.34		
8/9/2022						3.31	
3/6/2023							
3/8/2023							
3/14/2023							
3/15/2023				11			
3/21/2023							
3/22/2023		4.39					
3/27/2023	19.3		11.4			3.45	7.49
3/28/2023					3		
9/5/2023							
9/11/2023							
9/12/2023				13.8			
9/13/2023							9.36
9/18/2023							
9/19/2023	18.6	7.64	16.799999		3.44	5.31	

Time Series

Constituent: Chloride (mg/L) Analysis Run 11/15/2023 3:05 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-23V	GS-AP-MW-27HR	GS-AP-MW-31V	GS-AP-MW-36V	GS-AP-MW-37HR	GS-AP-MW-3V	GS-AP-MW-45V	GS-AP-MW-47	GS-AP-MW-5R
2/21/2022									
2/22/2022		253	32.1	55.9					
2/23/2022	3.21					155	54.2		
2/28/2022					28.1			11.7	
3/1/2022									46.4
7/19/2022									
7/20/2022						399			
7/26/2022	3.49				32.099998			15.4	
7/27/2022		635		436					
8/2/2022									54.5
8/3/2022			127						
8/8/2022							58.799999		
3/14/2023	5.79	781		428					
3/15/2023					44.4			19.8	
3/20/2023									54.6
3/21/2023						212			
3/27/2023			196						
3/28/2023							209		
9/6/2023	7.04	758		489					
9/11/2023					87.400002				
9/12/2023						294		60	57.900002
9/13/2023			360						
9/18/2023							425		
9/19/2023									

Time Series

Constituent: Chloride (mg/L) Analysis Run 11/15/2023 3:05 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-9R	GS-AP-PZ-18R	GS-AP-MW-46
2/21/2022		5.32	
2/22/2022			
2/23/2022			43.9
2/28/2022			
3/1/2022	65.9		
7/19/2022	24.5		
7/20/2022			
7/26/2022			
7/27/2022		4.98	
8/2/2022			37
8/3/2022			
8/8/2022			
3/14/2023			
3/15/2023			
3/20/2023			
3/21/2023			
3/27/2023	19.1		30.200001
3/28/2023		4	
9/6/2023			
9/11/2023			
9/12/2023			
9/13/2023	13.7		
9/18/2023			31.1
9/19/2023		3.86	

Time Series

Constituent: Chromium (mg/L) Analysis Run 11/15/2023 3:05 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-12	GS-AP-MW-12V	GS-AP-MW-13 (bg)	GS-AP-MW-15	GS-AP-MW-15V	GS-AP-MW-16D	GS-AP-MW-17	GS-AP-MW-17V ...	GS-AP-MW-19
8/1/2016				0.00209 (J)		<0.001015	<0.001015		<0.001015
8/2/2016			<0.01						
8/3/2016	<0.001015								
9/19/2016						<0.001015	<0.001015		
9/20/2016	<0.001015		<0.01	<0.01					
9/21/2016									<0.001015
10/24/2016							<0.001015		<0.001015
10/25/2016	<0.001015		<0.01	<0.01		<0.001015			
12/13/2016	<0.001015		<0.01			<0.001015	<0.001015		<0.001015
12/14/2016				<0.01					
2/6/2017							<0.001015		
2/7/2017									<0.001015
2/8/2017	<0.001015		<0.01	<0.01		<0.001015			
3/27/2017							<0.001015		
3/28/2017				<0.01					<0.001015
3/29/2017	<0.001015		<0.01			<0.001015			
3/30/2017									
4/24/2017							<0.001015		
4/26/2017	<0.001015		<0.01	<0.01		<0.001015			<0.001015
6/5/2017							<0.001015		
6/6/2017				<0.01		<0.001015			<0.001015
6/7/2017	<0.001015		<0.01						
2/19/2018							<0.001015		
2/20/2018	<0.001015		<0.01	<0.01					
2/21/2018						<0.001015			<0.001015
5/15/2018	<0.001015		<0.01	<0.01			<0.001015		
5/16/2018						<0.001015			<0.001015
10/15/2018				<0.01			<0.001015		
10/16/2018	<0.001015								<0.001015
10/17/2018			<0.01			<0.001015			
2/20/2019								<0.001015	
2/21/2019		<0.01							
2/26/2019									
2/27/2019									
4/16/2019	<0.001015		<0.01						
4/17/2019				<0.01		<0.001015	<0.001015		<0.001015
9/23/2019							<0.001015		
9/24/2019				<0.01		<0.001015		0.00405 (J)	<0.001015
9/25/2019	<0.001015	0.00202 (J)							
3/16/2020							<0.001015		
3/17/2020									
3/18/2020	<0.001015			<0.01	0.00716 (J)				
3/23/2020									
3/24/2020		0.00774 (J)				<0.001015			<0.001015
3/25/2020								<0.001015	
5/12/2020							<0.001015		
5/13/2020									
9/17/2020									
9/21/2020					0.00239 (J)		<0.001015		
9/22/2020						<0.001015			<0.001015
9/23/2020	<0.001015	0.00362 (J)		<0.01				<0.001015	
2/1/2021	<0.001015	0.00311							

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Chromium (mg/L) Analysis Run 11/15/2023 3:05 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-12	GS-AP-MW-12V	GS-AP-MW-13 (bg)	GS-AP-MW-15	GS-AP-MW-15V	GS-AP-MW-16D	GS-AP-MW-17	GS-AP-MW-17V ...	GS-AP-MW-19
2/2/2021							0.00255	0.000313 (J)	
2/3/2021									
2/8/2021									0.000258 (J)
2/9/2021				0.00072 (J)	0.00142				
2/10/2021						0.00107			
7/27/2021									
8/2/2021								0.00032 (J)	
8/3/2021				0.0008 (J)	0.00051 (J)		0.00041 (J)		
8/4/2021									
8/9/2021	0.00031 (J)	0.00146				0.00068 (J)			
8/10/2021									0.00032 (J)
8/11/2021									
8/12/2021									
2/8/2022									
2/14/2022							0.00034 (J)	0.00021 (J)	
2/15/2022						0.00025 (J)			
2/16/2022				0.00048 (J)	0.00062 (J)				
2/22/2022									<0.001015
2/23/2022		0.00061 (J)							
2/28/2022	<0.001015								
7/19/2022	0.000322 (J)								
7/20/2022		0.000485 (J)							
7/26/2022									
7/27/2022									
8/2/2022				0.000913 (J)	0.000427 (J)	0.000402 (J)			
8/3/2022									0.000412 (J)
8/8/2022							0.000334 (J)		
8/9/2022								0.000291 (J)	
8/10/2022									
3/14/2023									
3/15/2023									
3/20/2023				0.000384 (J)	<0.001015				
3/21/2023						<0.001015			<0.001015
3/22/2023	<0.001015	0.000396 (J)					<0.001015	<0.001015	
9/5/2023									
9/6/2023									
9/11/2023				0.000451 (J)	0.000264 (J)		0.000262 (J)	<0.001015	
9/12/2023						0.000226 (J)			
9/13/2023	<0.001015	0.00023 (J)							
9/18/2023									
9/19/2023									0.000417 (J)

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Chromium (mg/L) Analysis Run 11/15/2023 3:05 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-2	GS-AP-MW-21	GS-AP-MW-21V	GS-AP-MW-23H	GS-AP-MW-24H	GS-AP-MW-25HA	GS-AP-MW-26H
8/1/2016							
8/2/2016	<0.01	<0.01					
8/3/2016							
9/19/2016	<0.01						
9/20/2016							
9/21/2016		0.00233 (J)					
10/24/2016	<0.01						
10/25/2016		0.00204 (J)					
12/13/2016	<0.01						
12/14/2016		<0.01					
2/6/2017							
2/7/2017							
2/8/2017	<0.01	<0.01					
3/27/2017							
3/28/2017		<0.01					
3/29/2017							
3/30/2017	<0.01						
4/24/2017							
4/26/2017	<0.01	<0.01					
6/5/2017							
6/6/2017	<0.01	<0.01					
6/7/2017							
2/19/2018							
2/20/2018		0.00219 (J)					
2/21/2018	<0.01						
5/15/2018		<0.01					
5/16/2018	<0.01						
10/15/2018							
10/16/2018	<0.01	<0.01					
10/17/2018							
2/20/2019				<0.001015			
2/21/2019							
2/26/2019					<0.01		
2/27/2019							<0.001015
4/16/2019							
4/17/2019	<0.01	<0.01					
9/23/2019				<0.001015			0.00295 (J)
9/24/2019		<0.01			<0.01		
9/25/2019	<0.01						
3/16/2020							
3/17/2020				<0.001015			
3/18/2020		<0.01			<0.01		
3/23/2020			<0.01				
3/24/2020						<0.001015	
3/25/2020	<0.01						0.00547 (J)
5/12/2020							
5/13/2020	<0.01						
9/17/2020				<0.001015	<0.01	<0.001015	
9/21/2020							0.00804 (J)
9/22/2020	<0.01						
9/23/2020		<0.01	<0.01				
2/1/2021	0.000505 (J)						

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Chromium (mg/L) Analysis Run 11/15/2023 3:05 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-2	GS-AP-MW-21	GS-AP-MW-21V	GS-AP-MW-23H	GS-AP-MW-24H	GS-AP-MW-25HA	GS-AP-MW-26H
2/2/2021					0.000382 (J)		
2/3/2021				0.000222 (J)			
2/8/2021		0.000705 (J)					
2/9/2021			0.000218 (J)				<0.001015
2/10/2021						<0.001015	
7/27/2021				<0.001015			
8/2/2021							
8/3/2021					0.00028 (J)		
8/4/2021	0.00085 (J)	0.00042 (J)					
8/9/2021							
8/10/2021							0.00037 (J)
8/11/2021			0.00134				
8/12/2021						0.00035 (J)	
2/8/2022		0.0004 (J)	0.00041 (J)				
2/14/2022				0.00023 (J)			
2/15/2022					0.00029 (J)		0.00031 (J)
2/16/2022						0.00062 (J)	
2/22/2022	0.00044 (J)						
2/23/2022							
2/28/2022							
7/19/2022	0.000469 (J)						
7/20/2022							
7/26/2022				0.000302 (J)			
7/27/2022					0.000446 (J)		
8/2/2022							
8/3/2022						0.000794 (J)	
8/8/2022							
8/9/2022			0.000378 (J)				
8/10/2022		0.000827 (J)					0.000311 (J)
3/14/2023				0.000226 (J)			
3/15/2023					0.000208 (J)		
3/20/2023							
3/21/2023		0.000459 (J)	0.000223 (J)				
3/22/2023	0.000254 (J)					0.00024 (J)	0.000429 (J)
9/5/2023		0.000303 (J)	0.000227 (J)				
9/6/2023				<0.001015	0.000248 (J)		
9/11/2023							
9/12/2023							
9/13/2023							
9/18/2023	0.000325 (J)					0.000337 (J)	0.000321 (J)
9/19/2023							

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Chromium (mg/L) Analysis Run 11/15/2023 3:05 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-28H	GS-AP-MW-29H	GS-AP-MW-3	GS-AP-MW-30HA	GS-AP-MW-31H	GS-AP-MW-32H	GS-AP-MW-33HO	GS-AP-MW-34HO	GS-AP-MW-35HO
2/27/2019		<0.001015							
3/13/2019	<0.001015								
9/24/2019		<0.001015							
9/25/2019	<0.001015								
3/16/2020	<0.001015							<0.01	
3/17/2020							<0.01		<0.001015
3/18/2020				<0.01	0.00264 (J)				
3/24/2020						<0.001015			
3/25/2020		<0.001015							
5/12/2020	0.00281 (J)							<0.01	<0.001015
5/13/2020				<0.01			<0.01		
9/15/2020							<0.01		
9/16/2020								<0.01	<0.001015
9/17/2020									
9/21/2020				<0.01		<0.001015			
9/22/2020	<0.001015	<0.001015			<0.001015				
2/1/2021					0.000345 (J)				
2/2/2021									
2/3/2021		<0.001015					0.000207 (J)	0.000397 (J)	
2/4/2021									0.000211 (J)
2/8/2021									
2/9/2021									
2/10/2021						<0.001015			
2/17/2021	0.000352 (J)		0.000326 (J)	0.000418 (J)					
7/27/2021							0.00028 (J)	0.0005 (J)	
7/28/2021									0.00041 (J)
8/2/2021				0.00035 (J)	0.00029 (J)				
8/3/2021			0.00027 (J)						
8/4/2021		0.00022 (J)							
8/9/2021	0.0005 (J)								
8/10/2021						0.00027 (J)			
2/8/2022				0.00038 (J)	0.00027 (J)				
2/9/2022							0.00026 (J)	0.00041 (J)	0.00029 (J)
2/14/2022	0.00025 (J)	0.00029 (J)				0.00026 (J)			
2/15/2022									
2/16/2022			0.00027 (J)						
2/21/2022									
2/22/2022									
7/20/2022			0.000315 (J)						
7/26/2022									
7/27/2022	0.000336 (J)					0.000353 (J)			
8/2/2022									
8/3/2022		0.000265 (J)		0.000398 (J)	0.00035 (J)				
8/10/2022									
3/8/2023								0.000538 (J)	<0.001015
3/13/2023				0.000264 (J)					
3/14/2023	0.000248 (J)						0.000368 (J)		
3/15/2023									
3/21/2023			0.000239 (J)			<0.001015			
3/22/2023									
3/27/2023					0.000232 (J)				
3/28/2023		0.000258 (J)							

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Chromium (mg/L) Analysis Run 11/15/2023 3:05 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-28H	GS-AP-MW-29H	GS-AP-MW-3	GS-AP-MW-30HA	GS-AP-MW-31H	GS-AP-MW-32H	GS-AP-MW-33HO	GS-AP-MW-34HO	GS-AP-MW-35HO
8/30/2023							0.000279 (J)		
8/31/2023								0.000348 (J)	<0.001015
9/5/2023				0.000322 (J)					
9/6/2023									
9/11/2023	<0.001015								
9/12/2023			0.000254 (J)						
9/13/2023		0.000216 (J)			<0.001015	<0.001015			
9/18/2023									
9/19/2023									

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Chromium (mg/L) Analysis Run 11/15/2023 3:05 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-36H	GS-AP-MW-38H	GS-AP-MW-40H	GS-AP-MW-41HD	GS-AP-MW-41HS	GS-AP-MW-42H	GS-AP-MW-43HO
2/27/2019							
3/13/2019							
9/24/2019							
9/25/2019							
3/16/2020							
3/17/2020	<0.00102						
3/18/2020				<0.001015			
3/24/2020		<0.00102				<0.00102	
3/25/2020							<0.01
5/12/2020							
5/13/2020	<0.00102						
9/15/2020							
9/16/2020							
9/17/2020	<0.00102			<0.001015			
9/21/2020							
9/22/2020		<0.00102	<0.00102			<0.00102	<0.01
2/1/2021							
2/2/2021			0.000222 (J)				
2/3/2021						0.000298 (J)	
2/4/2021							
2/8/2021				0.000235 (J)	<0.001015		
2/9/2021		<0.00102					
2/10/2021							
2/17/2021	0.000271 (J)						0.000219 (J)
7/27/2021							
7/28/2021					0.00031 (J)		
8/2/2021							
8/3/2021				0.00025 (J)			
8/4/2021	0.00032 (J)	<0.00102				0.00026 (J)	0.00031 (J)
8/9/2021							
8/10/2021			0.00032 (J)				
2/8/2022					0.00035 (J)		
2/9/2022							
2/14/2022	<0.00102						
2/15/2022			<0.00102	0.00026 (J)			
2/16/2022						<0.00102	
2/21/2022							0.00027 (J)
2/22/2022		<0.00102					
7/20/2022	0.000451 (J)						
7/26/2022					0.000309 (J)		
7/27/2022				0.000351 (J)		0.000306 (J)	
8/2/2022			0.000337 (J)				
8/3/2022							0.000257 (J)
8/10/2022		0.000322 (J)					
3/8/2023							
3/13/2023					<0.001015		
3/14/2023							
3/15/2023	0.00044 (J)			<0.001015		0.000226 (J)	
3/21/2023							
3/22/2023			0.000209 (J)				
3/27/2023							
3/28/2023		0.000213 (J)					0.000229 (J)

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Chromium (mg/L) Analysis Run 11/15/2023 3:05 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-36H	GS-AP-MW-38H	GS-AP-MW-40H	GS-AP-MW-41HD	GS-AP-MW-41HS	GS-AP-MW-42H	GS-AP-MW-43HO
8/30/2023				<0.001015	<0.001015		
8/31/2023							
9/5/2023							
9/6/2023	0.000674 (J)						
9/11/2023							
9/12/2023							
9/13/2023							
9/18/2023			0.0003 (J)				
9/19/2023		0.000417 (J)				0.000271 (J)	0.000266 (J)

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Chromium (mg/L) Analysis Run 11/15/2023 3:05 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-44HO	GS-AP-MW-6D	GS-AP-MW-6S	GS-AP-MW-6V	GS-AP-MW-7	GS-AP-MW-8 (bg)	GS-AP-MW-9V	GS-AP-PZ-16	GS-AP-PZ-22
8/2/2016					<0.01				
8/3/2016		<0.001015	<0.001015			<0.01			
9/20/2016		<0.001015	<0.001015						
9/21/2016					<0.01	0.00266 (J)			
10/24/2016		<0.001015			0.00216 (J)				
10/25/2016						<0.01			
10/26/2016			<0.001015						
12/12/2016		<0.001015	<0.001015		<0.01				
12/13/2016						<0.01			
2/6/2017		<0.001015	<0.001015		<0.01	<0.01			
3/27/2017		<0.001015	<0.001015						
3/28/2017					<0.01	0.00322 (J)			
4/24/2017		<0.001015	<0.001015		<0.01	<0.01			
6/6/2017		<0.001015	<0.001015						
6/7/2017					<0.01	0.00227 (J)			
2/19/2018		<0.001015	<0.001015		<0.01	<0.01			
5/14/2018		<0.001015	<0.001015						
5/15/2018					<0.01	<0.01			
10/15/2018		<0.001015	<0.001015		<0.01				
10/16/2018						<0.01			
4/16/2019		<0.001015	<0.001015			<0.01			
4/23/2019					0.00435 (J)				
9/23/2019		<0.001015	<0.001015						
9/24/2019					<0.01	<0.01			
3/17/2020		<0.001015	<0.001015		0.0076 (J)				
3/18/2020						<0.01			
3/23/2020							<0.001015		
3/24/2020								<0.001015	<0.001015
8/27/2020	<0.001015								
9/8/2020				<0.01					
9/15/2020	<0.001015			<0.01					
9/16/2020			<0.001015		0.00482 (J)				
9/17/2020		<0.001015						<0.001015	<0.001015
9/21/2020						<0.01			
9/22/2020							<0.001015		
2/2/2021					0.00435	0.000389 (J)	0.000228 (J)		<0.001015
2/3/2021	0.000255 (J)	0.000264 (J)	0.000268 (J)	0.000274 (J)					
2/17/2021								<0.001015	
7/27/2021	<0.001015	0.00024 (J)	0.00024 (J)						
8/2/2021				0.00057 (J)					
8/3/2021									0.00024 (J)
8/9/2021					0.00234			0.0004 (J)	
8/10/2021						0.00058 (J)	0.00029 (J)		
2/8/2022					0.00103				
2/9/2022	0.00023 (J)			0.00042 (J)					
2/14/2022		0.00024 (J)	0.00026 (J)						0.00022 (J)
2/15/2022								0.0003 (J)	
2/16/2022						0.0004 (J)			
2/21/2022							<0.001015		
2/22/2022									
2/28/2022									
3/1/2022									

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Chromium (mg/L) Analysis Run 11/15/2023 3:05 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-44HO	GS-AP-MW-6D	GS-AP-MW-6S	GS-AP-MW-6V	GS-AP-MW-7	GS-AP-MW-8 (bg)	GS-AP-MW-9V	GS-AP-PZ-16	GS-AP-PZ-22
7/19/2022							0.000323 (J)		
7/20/2022									
7/25/2022		0.000301 (J)		0.000519 (J)	0.00103				
7/26/2022			0.000359 (J)					0.000449 (J)	
8/2/2022						0.000629 (J)			
8/3/2022									
8/9/2022									0.000258 (J)
3/6/2023	0.000343 (J)								
3/8/2023				0.00361					
3/14/2023		<0.001015	0.000206 (J)		0.000482 (J)				
3/15/2023									
3/21/2023								<0.001015	<0.001015
3/22/2023									
3/27/2023						0.000761 (J)	0.000236 (J)		
3/28/2023									
9/5/2023	<0.001015	<0.001015	<0.001015						
9/11/2023				0.00107	0.00042 (J)				<0.001015
9/12/2023								<0.001015	
9/13/2023							<0.001015		
9/18/2023						0.000368 (J)			
9/19/2023									

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Chromium (mg/L) Analysis Run 11/15/2023 3:05 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-10R	GS-AP-MW-11R	GS-AP-MW-13R	GS-AP-MW-14R	GS-AP-MW-18R ...	GS-AP-MW-18VR	GS-AP-MW-1R
8/2/2016							
8/3/2016							
9/20/2016							
9/21/2016							
10/24/2016							
10/25/2016							
10/26/2016							
12/12/2016							
12/13/2016							
2/6/2017							
3/27/2017							
3/28/2017							
4/24/2017							
6/6/2017							
6/7/2017							
2/19/2018							
5/14/2018							
5/15/2018							
10/15/2018							
10/16/2018							
4/16/2019							
4/23/2019							
9/23/2019							
9/24/2019							
3/17/2020							
3/18/2020							
3/23/2020							
3/24/2020							
8/27/2020							
9/8/2020							
9/15/2020							
9/16/2020							
9/17/2020							
9/21/2020							
9/22/2020							
2/2/2021							
2/3/2021							
2/17/2021							
7/27/2021							
8/2/2021							
8/3/2021							
8/9/2021							
8/10/2021							
2/8/2022							
2/9/2022							
2/14/2022							
2/15/2022							
2/16/2022							
2/21/2022							
2/22/2022					0.00022 (J)	0.00052 (J)	
2/28/2022				0.00062 (J)			
3/1/2022	0.00024 (J)	0.00026 (J)	0.00023 (J)				0.00044 (J)

Time Series

Constituent: Chromium (mg/L) Analysis Run 11/15/2023 3:05 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-10R	GS-AP-MW-11R	GS-AP-MW-13R	GS-AP-MW-14R	GS-AP-MW-18R ...	GS-AP-MW-18VR	GS-AP-MW-1R
7/19/2022		0.000455 (J)					
7/20/2022			0.000261 (J)				
7/25/2022							
7/26/2022							
8/2/2022							0.00037 (J)
8/3/2022	0.000414 (J)			0.000306 (J)	0.000304 (J)		
8/9/2022						0.000584 (J)	
3/6/2023							
3/8/2023							
3/14/2023							
3/15/2023				0.000302 (J)			
3/21/2023							
3/22/2023		<0.001015					
3/27/2023	0.000235 (J)		0.000246 (J)			0.000272 (J)	0.000404 (J)
3/28/2023					0.000221 (J)		
9/5/2023							
9/11/2023							
9/12/2023				<0.001015			
9/13/2023							0.000236 (J)
9/18/2023							
9/19/2023	0.000306 (J)	0.000264 (J)	0.00035 (J)		<0.001015	0.000225 (J)	

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Chromium (mg/L) Analysis Run 11/15/2023 3:05 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-23V	GS-AP-MW-27HR	GS-AP-MW-31V	GS-AP-MW-36V	GS-AP-MW-37HR	GS-AP-MW-3V	GS-AP-MW-45V	GS-AP-MW-47	GS-AP-MW-5R
2/21/2022									
2/22/2022		0.00029 (J)	0.00035 (J)	0.00025 (J)					
2/23/2022	0.00066 (J)					0.00051 (J)	0.0002 (J)		
2/28/2022					0.00037 (J)			0.00033 (J)	
3/1/2022									0.00035 (J)
7/19/2022									
7/20/2022						0.000397 (J)			
7/26/2022	0.000389 (J)				0.000407 (J)			0.000389 (J)	
7/27/2022		0.000354 (J)		0.000348 (J)					
8/2/2022									0.00036 (J)
8/3/2022			0.000803 (J)						
8/8/2022							0.000882 (J)		
3/14/2023	<0.001015	0.000255 (J)		0.000257 (J)					
3/15/2023					0.00024 (J)			0.000359 (J)	
3/20/2023									0.000222 (J)
3/21/2023						<0.001015			
3/27/2023			0.000368 (J)						
3/28/2023							0.000479 (J)		
9/6/2023	<0.001015	<0.001015		<0.001015					
9/11/2023					<0.001015				
9/12/2023						<0.001015		<0.001015	0.000209 (J)
9/13/2023			<0.001015						
9/18/2023							0.000372 (J)		
9/19/2023									

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Chromium (mg/L) Analysis Run 11/15/2023 3:05 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-9R	GS-AP-PZ-18R	GS-AP-MW-46
2/21/2022		0.00026 (J)	
2/22/2022			
2/23/2022			<0.001015
2/28/2022			
3/1/2022	0.00027 (J)		
7/19/2022	0.000384 (J)		
7/20/2022			
7/26/2022			
7/27/2022		0.000346 (J)	
8/2/2022			0.000317 (J)
8/3/2022			
8/8/2022			
3/14/2023			
3/15/2023			
3/20/2023			
3/21/2023			
3/27/2023	0.000216 (J)		0.000222 (J)
3/28/2023		0.000212 (J)	
9/6/2023			
9/11/2023			
9/12/2023			
9/13/2023	<0.001015		
9/18/2023			<0.001015
9/19/2023		<0.001015	

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cobalt (mg/L) Analysis Run 11/15/2023 3:05 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-12	GS-AP-MW-12V	GS-AP-MW-13 (bg)	GS-AP-MW-15	GS-AP-MW-15V	GS-AP-MW-16D	GS-AP-MW-17	GS-AP-MW-17V ...	GS-AP-MW-19
8/1/2016				<0.000203		<0.000203	<0.000203		<0.000203
8/2/2016			<0.005						
8/3/2016	<0.000203								
9/19/2016						<0.000203	<0.000203		
9/20/2016	<0.000203		<0.005	<0.000203					
9/21/2016									<0.000203
10/24/2016							<0.000203		<0.000203
10/25/2016	<0.000203		<0.005	<0.000203		<0.000203			
12/13/2016	<0.000203		<0.005			<0.000203	<0.000203		<0.000203
12/14/2016				<0.000203					
2/6/2017							<0.000203		
2/7/2017									<0.000203
2/8/2017	<0.000203		<0.005	<0.000203		<0.000203			
3/27/2017							<0.000203		
3/28/2017				<0.000203					<0.000203
3/29/2017	<0.000203		<0.005			<0.000203			
3/30/2017									
4/24/2017							<0.000203		
4/26/2017	<0.000203		<0.005	<0.000203		<0.000203			<0.000203
6/5/2017							<0.000203		
6/6/2017				<0.000203		<0.000203			<0.000203
6/7/2017	<0.000203		<0.005						
2/19/2018							<0.000203		
2/20/2018	<0.000203		<0.005	<0.000203					
2/21/2018						<0.000203			<0.000203
5/15/2018	<0.000203		<0.005	<0.000203			<0.000203		
5/16/2018						<0.000203			<0.000203
10/15/2018				<0.000203			<0.000203		
10/16/2018	<0.000203								<0.000203
10/17/2018			<0.005			<0.000203			
2/20/2019								<0.000203	
2/21/2019		<0.000203							
2/26/2019									
2/27/2019									
4/16/2019	<0.000203		<0.005						
4/17/2019				<0.000203		<0.000203	<0.000203		<0.000203
9/23/2019							<0.000203		
9/24/2019				<0.000203		<0.000203		<0.000203	<0.000203
9/25/2019	<0.000203	<0.000203							
3/16/2020							<0.000203		
3/17/2020									
3/18/2020	<0.000203			<0.000203	<0.000203				
3/23/2020									
3/24/2020		0.00277 (J)				<0.000203			<0.000203
3/25/2020								<0.000203	
5/12/2020							<0.000203		
5/13/2020									
9/17/2020									
9/21/2020					<0.000203		<0.000203		
9/22/2020						<0.000203			<0.000203
9/23/2020	<0.000203	<0.000203		<0.000203				<0.000203	
2/1/2021	<0.000203	0.00129							

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cobalt (mg/L) Analysis Run 11/15/2023 3:05 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-12	GS-AP-MW-12V	GS-AP-MW-13 (bg)	GS-AP-MW-15	GS-AP-MW-15V	GS-AP-MW-16D	GS-AP-MW-17	GS-AP-MW-17V ...	GS-AP-MW-19
2/2/2021							0.000102 (J)	<0.000203	
2/3/2021									
2/8/2021									<0.000203
2/9/2021				<0.000203	<0.000203				
2/10/2021						0.000252			
7/27/2021									
8/2/2021								<0.000203	
8/3/2021				9E-05 (J)	<0.000203		<0.000203		
8/4/2021									
8/9/2021	<0.000203	0.00043				9E-05 (J)			
8/10/2021									<0.000203
8/11/2021									
8/12/2021									
2/8/2022									
2/14/2022							<0.000203	<0.000203	
2/15/2022						<0.000203			
2/16/2022				<0.000203	<0.000203				
2/22/2022									<0.000203
2/23/2022		0.00013 (J)							
2/28/2022	<0.000203								
7/19/2022	<0.000203								
7/20/2022		<0.000203							
7/26/2022									
7/27/2022									
8/2/2022				<0.000203	<0.000203	<0.000203			
8/3/2022									<0.000203
8/8/2022							<0.000203		
8/9/2022								<0.000203	
8/10/2022									
3/14/2023									
3/15/2023									
3/20/2023				<0.000203	<0.000203				
3/21/2023						<0.000203			<0.000203
3/22/2023	<0.000203	<0.000203					<0.000203	<0.000203	
9/5/2023									
9/6/2023									
9/11/2023				<0.000203	<0.000203		<0.000203	<0.000203	
9/12/2023						<0.000203			
9/13/2023	<0.000203	<0.000203							
9/18/2023									
9/19/2023									<0.000203

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cobalt (mg/L) Analysis Run 11/15/2023 3:05 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-2	GS-AP-MW-21	GS-AP-MW-21V	GS-AP-MW-23H	GS-AP-MW-24H	GS-AP-MW-25HA	GS-AP-MW-26H
8/1/2016							
8/2/2016	<0.000203	<0.000203					
8/3/2016							
9/19/2016	<0.000203						
9/20/2016							
9/21/2016		<0.000203					
10/24/2016	<0.000203						
10/25/2016		<0.000203					
12/13/2016	<0.000203						
12/14/2016		<0.000203					
2/6/2017							
2/7/2017							
2/8/2017	<0.000203	<0.000203					
3/27/2017							
3/28/2017		<0.000203					
3/29/2017							
3/30/2017	<0.000203						
4/24/2017							
4/26/2017	<0.000203	<0.000203					
6/5/2017							
6/6/2017	<0.000203	<0.000203					
6/7/2017							
2/19/2018							
2/20/2018		<0.000203					
2/21/2018	<0.000203						
5/15/2018		<0.000203					
5/16/2018	<0.000203						
10/15/2018							
10/16/2018	<0.000203	<0.000203					
10/17/2018							
2/20/2019				<0.005			
2/21/2019							
2/26/2019					<0.005		
2/27/2019							<0.000203
4/16/2019							
4/17/2019	<0.000203	<0.000203					
9/23/2019				<0.005			<0.000203
9/24/2019		<0.000203			<0.005		
9/25/2019	<0.000203						
3/16/2020							
3/17/2020				<0.005			
3/18/2020		<0.000203			<0.005		
3/23/2020			<0.000203				
3/24/2020						<0.000203	
3/25/2020	<0.000203						0.00207 (J)
5/12/2020							
5/13/2020	<0.000203						
9/17/2020				<0.005	<0.005	<0.000203	
9/21/2020							0.00357 (J)
9/22/2020	<0.000203						
9/23/2020		<0.000203	<0.000203				
2/1/2021	<0.000203						

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cobalt (mg/L) Analysis Run 11/15/2023 3:05 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-2	GS-AP-MW-21	GS-AP-MW-21V	GS-AP-MW-23H	GS-AP-MW-24H	GS-AP-MW-25HA	GS-AP-MW-26H
2/2/2021					0.000192 (J)		
2/3/2021				0.000512			
2/8/2021		<0.000203					
2/9/2021			<0.000203				<0.000203
2/10/2021						<0.000203	
7/27/2021				0.00049			
8/2/2021							
8/3/2021					0.00024		
8/4/2021	<0.000203	<0.000203					
8/9/2021							
8/10/2021							<0.000203
8/11/2021			<0.000203				
8/12/2021						<0.000203	
2/8/2022		<0.000203	<0.000203				
2/14/2022				0.00052			
2/15/2022					0.00023		<0.000203
2/16/2022						0.00011 (J)	
2/22/2022	<0.000203						
2/23/2022							
2/28/2022							
7/19/2022	<0.000203						
7/20/2022							
7/26/2022				0.000576			
7/27/2022					0.00029		
8/2/2022							
8/3/2022						6.8E-05 (J)	
8/8/2022							
8/9/2022			<0.000203				
8/10/2022		<0.000203					<0.000203
3/14/2023				0.000974			
3/15/2023					0.000286		
3/20/2023							
3/21/2023		<0.000203	<0.000203				
3/22/2023	<0.000203					<0.000203	<0.000203
9/5/2023		<0.000203	<0.000203				
9/6/2023				0.0007	0.000313		
9/11/2023							
9/12/2023							
9/13/2023							
9/18/2023	<0.000203					<0.000203	<0.000203
9/19/2023							

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cobalt (mg/L)   Analysis Run 11/15/2023 3:05 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

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	GS-AP-MW-28H	GS-AP-MW-29H	GS-AP-MW-3	GS-AP-MW-30HA	GS-AP-MW-31H	GS-AP-MW-32H	GS-AP-MW-33HO	GS-AP-MW-34HO	GS-AP-MW-35HO
2/27/2019		<0.000203							
3/13/2019	<0.000203								
9/24/2019		<0.000203							
9/25/2019	<0.000203								
3/16/2020	<0.000203							<0.0002	
3/17/2020							<0.000203		<0.000203
3/18/2020				<0.005	<0.000203				
3/24/2020						<0.000203			
3/25/2020		<0.000203							
5/12/2020	<0.000203							<0.0002	<0.000203
5/13/2020				<0.005			<0.000203		
9/15/2020							<0.000203		
9/16/2020								<0.0002	<0.000203
9/17/2020									
9/21/2020				<0.005		<0.000203			
9/22/2020	<0.000203	<0.000203			<0.000203				
2/1/2021					<0.000203				
2/2/2021									
2/3/2021		<0.000203					<0.000203	<0.0002	
2/4/2021									<0.000203
2/8/2021									
2/9/2021									
2/10/2021						<0.000203			
2/17/2021	<0.000203		<0.000203	0.00016 (J)					
7/27/2021							<0.000203	<0.0002	
7/28/2021									<0.000203
8/2/2021				0.00022	<0.000203				
8/3/2021			<0.000203						
8/4/2021		<0.000203							
8/9/2021	<0.000203								
8/10/2021						<0.000203			
2/8/2022				0.00018 (J)	<0.000203				
2/9/2022							<0.000203	8E-05 (J)	<0.000203
2/14/2022	<0.000203	<0.000203				<0.000203			
2/15/2022									
2/16/2022			<0.000203						
2/21/2022									
2/22/2022									
7/20/2022			<0.000203						
7/26/2022									
7/27/2022	<0.000203					<0.000203			
8/2/2022									
8/3/2022		<0.000203		0.000255	<0.000203				
8/10/2022									
3/8/2023								0.00059	<0.000203
3/13/2023				0.000168 (J)					
3/14/2023	<0.000203						<0.000203		
3/15/2023									
3/21/2023			<0.000203			<0.000203			
3/22/2023									
3/27/2023					<0.000203				
3/28/2023		<0.000203							

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cobalt (mg/L) Analysis Run 11/15/2023 3:05 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-28H	GS-AP-MW-29H	GS-AP-MW-3	GS-AP-MW-30HA	GS-AP-MW-31H	GS-AP-MW-32H	GS-AP-MW-33HO	GS-AP-MW-34HO	GS-AP-MW-35HO
8/30/2023							0.000136 (J)		
8/31/2023								0.000184 (J)	<0.000203
9/5/2023				0.000144 (J)					
9/6/2023									
9/11/2023	<0.000203								
9/12/2023			<0.000203						
9/13/2023		<0.000203			<0.000203	<0.000203			
9/18/2023									
9/19/2023									

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cobalt (mg/L) Analysis Run 11/15/2023 3:05 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-36H	GS-AP-MW-38H	GS-AP-MW-40H	GS-AP-MW-41HD	GS-AP-MW-41HS	GS-AP-MW-42H	GS-AP-MW-43HO
2/27/2019							
3/13/2019							
9/24/2019							
9/25/2019							
3/16/2020							
3/17/2020	<0.000203						
3/18/2020				<0.005			
3/24/2020		<0.000203				0.00218 (J)	
3/25/2020							<0.000203
5/12/2020							
5/13/2020	<0.000203						
9/15/2020							
9/16/2020							
9/17/2020	<0.000203			<0.005			
9/21/2020							
9/22/2020		<0.000203	0.0027 (J)			<0.005	<0.000203
2/1/2021							
2/2/2021			0.002				
2/3/2021						0.000752	
2/4/2021							
2/8/2021				0.000585	0.00175		
2/9/2021		<0.000203					
2/10/2021							
2/17/2021	0.000148 (J)						<0.000203
7/27/2021							
7/28/2021					0.00029		
8/2/2021							
8/3/2021				0.00085			
8/4/2021	<0.000203	<0.000203				0.00062	<0.000203
8/9/2021							
8/10/2021			0.0011				
2/8/2022					0.00378		
2/9/2022							
2/14/2022	<0.000203						
2/15/2022			0.00052	0.00102			
2/16/2022						0.00045	
2/21/2022							<0.000203
2/22/2022		<0.000203					
7/20/2022	<0.000203						
7/26/2022					0.00237		
7/27/2022				0.000979		0.000429	
8/2/2022			0.000206				
8/3/2022							<0.000203
8/10/2022		<0.000203					
3/8/2023							
3/13/2023					0.00193		
3/14/2023							
3/15/2023	<0.000203			0.00097		0.000371	
3/21/2023							
3/22/2023			0.000195 (J)				
3/27/2023							
3/28/2023		<0.000203					<0.000203

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cobalt (mg/L) Analysis Run 11/15/2023 3:05 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-36H	GS-AP-MW-38H	GS-AP-MW-40H	GS-AP-MW-41HD	GS-AP-MW-41HS	GS-AP-MW-42H	GS-AP-MW-43HO
8/30/2023				0.000967	0.00374		
8/31/2023							
9/5/2023							
9/6/2023	0.000155 (J)						
9/11/2023							
9/12/2023							
9/13/2023							
9/18/2023			9.9E-05 (J)				
9/19/2023		<0.000203				0.000321	<0.000203

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cobalt (mg/L) Analysis Run 11/15/2023 3:05 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-44HO	GS-AP-MW-6D	GS-AP-MW-6S	GS-AP-MW-6V	GS-AP-MW-7	GS-AP-MW-8 (bg)	GS-AP-MW-9V	GS-AP-PZ-16	GS-AP-PZ-22
8/2/2016					<0.005				
8/3/2016		<0.000203	<0.005			0.0026 (J)			
9/20/2016		<0.000203	<0.005						
9/21/2016					<0.005	0.00362 (J)			
10/24/2016		<0.000203			<0.005				
10/25/2016						0.00305 (J)			
10/26/2016			<0.005						
12/12/2016		<0.000203	0.00212 (J)		<0.005				
12/13/2016						<0.005			
2/6/2017		<0.000203	0.00247 (J)		<0.005	0.00308 (J)			
3/27/2017		<0.000203	0.00224 (J)						
3/28/2017					<0.005	<0.005			
4/24/2017		<0.000203	<0.005		<0.005	<0.005			
6/6/2017		<0.000203	0.00222 (J)						
6/7/2017					<0.005	<0.005			
2/19/2018		<0.000203	<0.005		<0.005	<0.005			
5/14/2018		<0.000203	<0.005						
5/15/2018					<0.005	<0.005			
10/15/2018		<0.000203	<0.005		<0.005				
10/16/2018						<0.005			
4/16/2019		<0.000203	<0.005			<0.005			
4/23/2019					0.00231 (J)				
9/23/2019		<0.000203	<0.005						
9/24/2019					<0.005	0.00234 (J)			
3/17/2020		<0.000203	<0.005		0.00476 (J)				
3/18/2020						<0.005			
3/23/2020							<0.000203		
3/24/2020								<0.000203	<0.000203
8/27/2020	<0.000203								
9/8/2020				<0.005					
9/15/2020	<0.000203			<0.005					
9/16/2020			<0.005		0.00301 (J)				
9/17/2020		<0.000203						<0.000203	<0.000203
9/21/2020						<0.005			
9/22/2020							<0.000203		
2/2/2021					0.00248	0.000384	<0.000203		<0.000203
2/3/2021	<0.000203	<0.000203	0.000663	8.19E-05 (J)					
2/17/2021								<0.000203	
7/27/2021	<0.000203	<0.000203	0.00064						
8/2/2021				0.00011 (J)					
8/3/2021									<0.000203
8/9/2021					0.0011			<0.000203	
8/10/2021						0.00059	<0.000203		
2/8/2022					0.00051				
2/9/2022	<0.000203			0.00012 (J)					
2/14/2022		<0.000203	0.00065						<0.000203
2/15/2022								8E-05 (J)	
2/16/2022						0.00055			
2/21/2022							<0.000203		
2/22/2022									
2/28/2022									
3/1/2022									

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cobalt (mg/L) Analysis Run 11/15/2023 3:05 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-44HO	GS-AP-MW-6D	GS-AP-MW-6S	GS-AP-MW-6V	GS-AP-MW-7	GS-AP-MW-8 (bg)	GS-AP-MW-9V	GS-AP-PZ-16	GS-AP-PZ-22
7/19/2022							<0.000203		
7/20/2022									
7/25/2022		<0.000203		0.000146 (J)	0.000372				
7/26/2022			0.000768					7.6E-05 (J)	
8/2/2022						0.00124			
8/3/2022									
8/9/2022									<0.000203
3/6/2023	<0.000203								
3/8/2023				0.000224					
3/14/2023		<0.000203	0.000746		9.22E-05 (J)				
3/15/2023									
3/21/2023								<0.000203	<0.000203
3/22/2023									
3/27/2023						0.000254	<0.000203		
3/28/2023									
9/5/2023	<0.000203	<0.000203	0.000639						
9/11/2023				0.000263	0.00025				<0.000203
9/12/2023								<0.000203	
9/13/2023							<0.000203		
9/18/2023						0.00251			
9/19/2023									

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cobalt (mg/L) Analysis Run 11/15/2023 3:05 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-10R	GS-AP-MW-11R	GS-AP-MW-13R	GS-AP-MW-14R	GS-AP-MW-18R ...	GS-AP-MW-18VR	GS-AP-MW-1R
8/2/2016							
8/3/2016							
9/20/2016							
9/21/2016							
10/24/2016							
10/25/2016							
10/26/2016							
12/12/2016							
12/13/2016							
2/6/2017							
3/27/2017							
3/28/2017							
4/24/2017							
6/6/2017							
6/7/2017							
2/19/2018							
5/14/2018							
5/15/2018							
10/15/2018							
10/16/2018							
4/16/2019							
4/23/2019							
9/23/2019							
9/24/2019							
3/17/2020							
3/18/2020							
3/23/2020							
3/24/2020							
8/27/2020							
9/8/2020							
9/15/2020							
9/16/2020							
9/17/2020							
9/21/2020							
9/22/2020							
2/2/2021							
2/3/2021							
2/17/2021							
7/27/2021							
8/2/2021							
8/3/2021							
8/9/2021							
8/10/2021							
2/8/2022							
2/9/2022							
2/14/2022							
2/15/2022							
2/16/2022							
2/21/2022							
2/22/2022					0.00066	9E-05 (J)	
2/28/2022				0.00015 (J)			
3/1/2022	0.00014 (J)	0.00011 (J)	<0.000203				9E-05 (J)

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cobalt (mg/L)   Analysis Run 11/15/2023 3:05 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

	GS-AP-MW-10R	GS-AP-MW-11R	GS-AP-MW-13R	GS-AP-MW-14R	GS-AP-MW-18R ...	GS-AP-MW-18VR	GS-AP-MW-1R
7/19/2022		<0.000203					
7/20/2022			<0.000203				
7/25/2022							
7/26/2022							
8/2/2022							<0.000203
8/3/2022	8.9E-05 (J)			<0.000203	0.000564		
8/9/2022						0.000256	
3/6/2023							
3/8/2023							
3/14/2023							
3/15/2023				<0.000203			
3/21/2023							
3/22/2023		<0.000203					
3/27/2023	0.000682		<0.000203			<0.000203	<0.000203
3/28/2023					0.000688		
9/5/2023							
9/11/2023							
9/12/2023				<0.000203			
9/13/2023							<0.000203
9/18/2023							
9/19/2023	9.5E-05 (J)	<0.000203	<0.000203		0.000694	<0.000203	

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cobalt (mg/L) Analysis Run 11/15/2023 3:05 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-23V	GS-AP-MW-27HR	GS-AP-MW-31V	GS-AP-MW-36V	GS-AP-MW-37HR	GS-AP-MW-3V	GS-AP-MW-45V	GS-AP-MW-47	GS-AP-MW-5R
2/21/2022									
2/22/2022		<0.000203	7E-05 (J)	9E-05 (J)					
2/23/2022	0.0002					0.00025	<0.000203		
2/28/2022					<0.000203			0.00012 (J)	
3/1/2022									<0.000203
7/19/2022									
7/20/2022						0.000249			
7/26/2022	<0.000203				<0.000203			0.000112 (J)	
7/27/2022		<0.000203		0.000136 (J)					
8/2/2022									<0.000203
8/3/2022			<0.000203						
8/8/2022							<0.000203		
3/14/2023	<0.000203	<0.000203		<0.000203					
3/15/2023					<0.000203			0.000135 (J)	
3/20/2023									<0.000203
3/21/2023						<0.000203			
3/27/2023			6.82E-05 (J)						
3/28/2023							<0.000203		
9/6/2023	<0.000203	<0.000203		0.000599					
9/11/2023					<0.000203				
9/12/2023						8.8E-05 (J)		0.000174 (J)	<0.000203
9/13/2023			0.000118 (J)						
9/18/2023							0.000125 (J)		
9/19/2023									

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cobalt (mg/L)   Analysis Run 11/15/2023 3:05 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

	GS-AP-MW-9R	GS-AP-PZ-18R	GS-AP-MW-46
2/21/2022		0.00014 (J)	
2/22/2022			
2/23/2022			<0.000203
2/28/2022			
3/1/2022	9E-05 (J)		
7/19/2022	<0.000203		
7/20/2022			
7/26/2022			
7/27/2022		0.000105 (J)	
8/2/2022			<0.000203
8/3/2022			
8/8/2022			
3/14/2023			
3/15/2023			
3/20/2023			
3/21/2023			
3/27/2023	<0.000203		<0.000203
3/28/2023		7.8E-05 (J)	
9/6/2023			
9/11/2023			
9/12/2023			
9/13/2023	<0.000203		
9/18/2023			<0.000203
9/19/2023		8.8E-05 (J)	

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 11/15/2023 3:05 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-12	GS-AP-MW-12V	GS-AP-MW-13 (bg)	GS-AP-MW-15	GS-AP-MW-15V	GS-AP-MW-16D	GS-AP-MW-17	GS-AP-MW-17V ...	GS-AP-MW-19
8/1/2016				0.682		0.363 (U)	0.508 (U)		0.697 (U)
8/2/2016			0.0177 (U)						
8/3/2016	1.08								
9/19/2016						0.435 (U)	0.216 (U)		
9/20/2016	0.848		0.725	1.2					
9/21/2016									1.79
10/24/2016							0.694		1.53
10/25/2016	0.92		0.494 (U)	0.194 (U)		0.725			
12/13/2016	0.974		0.39 (U)			0.309 (U)	0.614		0.758
12/14/2016				0.688					
2/6/2017							-0.0283 (U)		
2/7/2017									0.473
2/8/2017	0.535		0.455 (U)	0.254 (U)		0.00772 (U)			
3/27/2017							0.0736 (U)		
3/28/2017				-0.0411 (U)					0.0705 (U)
3/29/2017	0.194 (U)		0.251 (U)			0.36 (U)			
3/30/2017									
4/24/2017							0.114 (U)		
4/26/2017	0.384 (U)		0.0762 (U)	0.207 (U)		0.0175 (U)			0.238 (U)
6/5/2017							0.476		
6/6/2017				0.0618 (U)		0.464			0.909
6/7/2017	0.729		0.32 (U)						
2/19/2018							0.322 (U)		
2/20/2018	0.242 (U)		0.465	0.0898 (U)					
2/21/2018						0.44			0.349 (U)
5/15/2018	0.433 (U)		0.0571 (U)	0.829			0.526		
5/16/2018						0.209 (U)			1.12
10/15/2018				0.708			0.199 (U)		
10/16/2018	0.421 (U)								0.856
10/17/2018			0.482			0.368 (U)			
2/20/2019								0.398 (U)	
2/21/2019		0.296 (U)							
2/26/2019									
2/27/2019									
4/16/2019	0.184 (U)		0.506 (U)						
4/17/2019				-0.11 (U)		0.121 (U)	0.00935 (U)		0.507 (U)
9/23/2019							0.983		
9/24/2019				0.951		-0.033 (U)		0.373 (U)	0.664
9/25/2019	0.442 (U)	1.03							
3/16/2020							0.185 (U)		
3/17/2020									
3/18/2020	0.605			0.939	0.566 (U)				
3/23/2020									
3/24/2020		0.877 (U)				0.636			1.07
3/25/2020								0.0656 (U)	
5/12/2020							0.0339 (U)		
5/13/2020									
9/17/2020									
9/21/2020					0.494 (U)		0.651 (U)		
9/22/2020						0.59 (U)			2.09
9/23/2020	0.811 (U)	1.38		0.547 (U)				0.542 (U)	
2/1/2021	0.946 (U)	0.944 (U)							

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 11/15/2023 3:05 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-12	GS-AP-MW-12V	GS-AP-MW-13 (bg)	GS-AP-MW-15	GS-AP-MW-15V	GS-AP-MW-16D	GS-AP-MW-17	GS-AP-MW-17V ...	GS-AP-MW-19
2/2/2021							2.53	0.448 (U)	
2/3/2021									
2/8/2021									0.947 (U)
2/9/2021				0.442 (U)	0.55 (U)				
2/10/2021						0.285 (U)			
7/27/2021									
8/2/2021								0.738 (U)	
8/3/2021				0.65 (U)	1.13 (U)		0.667 (U)		
8/4/2021									
8/9/2021	0.907 (U)	1.0895 (UD)				1.07 (U)			
8/10/2021									1.42 (U)
8/11/2021									
8/12/2021									
2/8/2022									
2/14/2022							0.523 (U)	7.76 (o)	
2/15/2022						0.557 (U)			
2/16/2022				0.234 (U)	0.841 (U)				
2/22/2022									0.639 (U)
2/23/2022		1.3							
2/28/2022	0.725 (U)								
7/19/2022	0.934 (U)								
7/20/2022		0.596 (U)							
7/26/2022									
7/27/2022									
8/2/2022				1.12	0.437 (U)	0.696 (U)			
8/3/2022									0.53 (U)
8/8/2022							0.0413 (U)		
8/9/2022								0.584 (U)	
8/10/2022									
3/14/2023									
3/15/2023									
3/20/2023				0.679 (U)	0.484 (U)				
3/21/2023						0.861 (U)			0.407 (U)
3/22/2023	1.18	1.17					0.602 (U)	0.707 (U)	
9/5/2023									
9/6/2023									
9/11/2023				0.497 (U)	0.44 (U)		0.43 (U)	0.308 (U)	
9/12/2023						1.07 (U)			
9/13/2023	0.495 (U)	0.427 (U)							
9/18/2023									
9/19/2023									0.662 (U)

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 11/15/2023 3:05 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-2	GS-AP-MW-21	GS-AP-MW-21V	GS-AP-MW-23H	GS-AP-MW-24H	GS-AP-MW-25HA	GS-AP-MW-26H
8/1/2016							
8/2/2016	0.274 (U)	0.665					
8/3/2016							
9/19/2016	0.0478 (U)						
9/20/2016							
9/21/2016		0.532 (U)					
10/24/2016	1.41						
10/25/2016		0.601					
12/13/2016	0.733						
12/14/2016		1.02					
2/6/2017							
2/7/2017							
2/8/2017	0.0206 (U)	-0.074 (U)					
3/27/2017							
3/28/2017		0.3 (U)					
3/29/2017							
3/30/2017	0.122 (U)						
4/24/2017							
4/26/2017	0.397 (U)	0.982 (U)					
6/5/2017							
6/6/2017	0.0873 (U)	0.312 (U)					
6/7/2017							
2/19/2018							
2/20/2018		0.321 (U)					
2/21/2018	0.562						
5/15/2018		1.7					
5/16/2018	1.44						
10/15/2018							
10/16/2018	0.736	0.586					
10/17/2018							
2/20/2019				0.0759 (U)			
2/21/2019							
2/26/2019					0.9		
2/27/2019							0.492
4/16/2019							
4/17/2019	0.0905 (U)	0.47 (U)					
9/23/2019				0.00709 (U)			0.404 (U)
9/24/2019		1.08			1.23		
9/25/2019	0.537 (U)						
3/16/2020							
3/17/2020				0.989			
3/18/2020		0.732			0.788		
3/23/2020			0.982				
3/24/2020						-0.00194 (U)	
3/25/2020	4						0.707 (U)
5/12/2020							
5/13/2020	0.289 (U)						
9/17/2020				0.66 (U)	0.298 (U)	-0.369 (U)	
9/21/2020							2.05
9/22/2020	0.712						
9/23/2020		0.468 (U)	0.563 (U)				
2/1/2021	0.518 (U)						

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L)   Analysis Run 11/15/2023 3:05 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

	GS-AP-MW-2	GS-AP-MW-21	GS-AP-MW-21V	GS-AP-MW-23H	GS-AP-MW-24H	GS-AP-MW-25HA	GS-AP-MW-26H
2/2/2021					1.03 (U)		
2/3/2021				0.767 (U)			
2/8/2021		0.667 (U)					
2/9/2021			0.867 (U)				0.674 (U)
2/10/2021						0.422 (U)	
7/27/2021				0.124 (U)			
8/2/2021							
8/3/2021					1.3 (U)		
8/4/2021	0.502 (U)	0.337 (U)					
8/9/2021							
8/10/2021							1.05 (U)
8/11/2021			0.782 (U)				
8/12/2021						0.129 (U)	
2/8/2022		0.529 (U)	0.467 (U)				
2/14/2022				0.153 (U)			
2/15/2022					1.16		1.19
2/16/2022						0.763 (U)	
2/22/2022	0.21 (U)						
2/23/2022							
2/28/2022							
7/19/2022	0.306 (U)						
7/20/2022							
7/26/2022				0.223 (U)			
7/27/2022					0.833 (U)		
8/2/2022							
8/3/2022						0.73 (U)	
8/8/2022							
8/9/2022			0.458 (U)				
8/10/2022		0.395 (U)					0.178 (U)
3/14/2023				0.741 (U)			
3/15/2023					1.03 (U)		
3/20/2023							
3/21/2023		0.213 (U)	1.07 (U)				
3/22/2023	0.0664 (U)					1.72 (U)	0.546 (U)
9/5/2023		0.199 (U)	0.86 (U)				
9/6/2023				0.446 (U)	0.947 (U)		
9/11/2023							
9/12/2023							
9/13/2023							
9/18/2023	0.353 (U)					0.227 (U)	0.276 (U)
9/19/2023							

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 11/15/2023 3:05 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-28H	GS-AP-MW-29H	GS-AP-MW-3	GS-AP-MW-30HA	GS-AP-MW-31H	GS-AP-MW-32H	GS-AP-MW-33HO	GS-AP-MW-34HO	GS-AP-MW-35HO
2/27/2019		0.556							
3/13/2019	0.824								
9/24/2019		1.09							
9/25/2019	0.648 (U)								
3/16/2020	0.762 (U)							-0.085 (U)	
3/17/2020							2.14		7.32
3/18/2020				2.26	0.0549 (U)				
3/24/2020						0.313 (U)			
3/25/2020		0.036 (U)							
5/12/2020	0.425 (U)							0.345 (U)	1.02
5/13/2020				0.604			0.415 (U)		
9/15/2020							-0.106 (U)		
9/16/2020								0.286 (U)	0.435 (U)
9/17/2020									
9/21/2020				1.1		0.484 (U)			
9/22/2020	1.02	0.591 (U)			0.912				
2/1/2021					0.189 (U)				
2/2/2021									
2/3/2021		0.102 (U)					0.313 (U)	0.485 (U)	
2/4/2021									0.527 (U)
2/8/2021									
2/9/2021									
2/10/2021						0.546 (U)			
2/17/2021	0.911 (U)		0.331 (U)	0.902 (U)					
7/27/2021							0.408 (U)	0.732 (U)	
7/28/2021									0.0525 (U)
8/2/2021				1.8	1.48 (U)				
8/3/2021			0.978 (U)						
8/4/2021		1.02 (U)							
8/9/2021	0.706 (U)								
8/10/2021						0.445 (U)			
2/8/2022				0.806 (U)	0.189 (U)				
2/9/2022							0.767 (U)	0.213 (U)	0.23 (U)
2/14/2022	0.31 (U)	0.725 (U)				0.371 (U)			
2/15/2022									
2/16/2022			0.601 (U)						
2/21/2022									
2/22/2022									
7/20/2022			0.473 (U)						
7/26/2022									
7/27/2022	0.742 (U)					0.994 (U)			
8/2/2022									
8/3/2022		0.535 (U)		1.29 (U)	0.32 (U)				
8/10/2022									
3/9/2023									0.578 (U)
3/10/2023								0.868 (U)	
3/13/2023				0.963					
3/14/2023	0.739 (U)						2.94		
3/15/2023									
3/21/2023			1.08			0.503 (U)			
3/22/2023									
3/27/2023					0.39 (U)				

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 11/15/2023 3:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-28H	GS-AP-MW-29H	GS-AP-MW-3	GS-AP-MW-30HA	GS-AP-MW-31H	GS-AP-MW-32H	GS-AP-MW-33HO	GS-AP-MW-34HO	GS-AP-MW-35HO
3/28/2023		0.397 (U)							
8/30/2023							0.322 (U)		
8/31/2023								0.735 (U)	0.589 (U)
9/5/2023				0.998 (U)					
9/6/2023									
9/11/2023	0.755 (U)								
9/12/2023			0.397 (U)						
9/13/2023		0.223 (U)			0.367 (U)	0.691 (U)			
9/18/2023									
9/19/2023									

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L)   Analysis Run 11/15/2023 3:06 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

	GS-AP-MW-36H	GS-AP-MW-38H	GS-AP-MW-40H	GS-AP-MW-41HD	GS-AP-MW-41HS	GS-AP-MW-42H	GS-AP-MW-43HO
2/27/2019							
3/13/2019							
9/24/2019							
9/25/2019							
3/16/2020							
3/17/2020	4.33						
3/18/2020				0.64			
3/24/2020		0.862				0.0821 (U)	
3/25/2020							0.678 (U)
5/12/2020							
5/13/2020	-0.225 (U)						
9/15/2020							
9/16/2020							
9/17/2020	-0.125 (U)			0.14 (U)			
9/21/2020							
9/22/2020		1.1	1.91			0.36 (U)	0.0466 (U)
2/1/2021							
2/2/2021			0.369 (U)				
2/3/2021						0.475 (U)	
2/4/2021							
2/8/2021				0.409 (U)	0.49 (U)		
2/9/2021		0.746 (U)					
2/10/2021							
2/17/2021	0.322 (U)						0.629 (U)
7/27/2021							
7/28/2021					0.759 (U)		
8/2/2021							
8/3/2021				0.453 (U)			
8/4/2021	1.13	0.844 (U)				0.186 (U)	0.949 (U)
8/9/2021							
8/10/2021			0.91 (U)				
2/8/2022					0.267 (U)		
2/9/2022							
2/14/2022	7.37						
2/15/2022			0.64 (U)	0.256 (U)			
2/16/2022						0.275 (U)	
2/21/2022							0.509 (U)
2/22/2022		0.341 (U)					
7/20/2022	0.473 (U)						
7/26/2022					0.728 (U)		
7/27/2022				0.42 (U)		1.06 (U)	
8/2/2022			0.608 (U)				
8/3/2022							0.252 (U)
8/10/2022		0.411 (U)					
3/9/2023							
3/10/2023							
3/13/2023					0.305 (U)		
3/14/2023							
3/15/2023	0.356 (U)			0.534 (U)		0.641 (U)	
3/21/2023							
3/22/2023			0.772 (U)				
3/27/2023							

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L)   Analysis Run 11/15/2023 3:06 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

	GS-AP-MW-36H	GS-AP-MW-38H	GS-AP-MW-40H	GS-AP-MW-41HD	GS-AP-MW-41HS	GS-AP-MW-42H	GS-AP-MW-43HO
3/28/2023		0.502 (U)					0.833 (U)
8/30/2023				0.183 (U)	0.616 (U)		
8/31/2023							
9/5/2023							
9/6/2023	0.451 (U)						
9/11/2023							
9/12/2023							
9/13/2023							
9/18/2023			0.884 (U)				
9/19/2023		1.13				1.05 (U)	0.396 (U)

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 11/15/2023 3:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-44HO	GS-AP-MW-6D	GS-AP-MW-6S	GS-AP-MW-6V	GS-AP-MW-7	GS-AP-MW-8 (bg)	GS-AP-MW-9V	GS-AP-PZ-16	GS-AP-PZ-22
8/2/2016					0.87				
8/3/2016		0.42 (U)	1.38			0.299 (U)			
9/20/2016		1.13	1.3						
9/21/2016					0.107 (U)	0.835			
10/24/2016		0.327 (U)			0.337 (U)				
10/25/2016						0.0629 (U)			
10/26/2016			0.721 (U)						
12/12/2016		1.26	1.36		0.803				
12/13/2016						0.547			
2/6/2017		0.532	0.702		-0.0165 (U)	0.251 (U)			
3/27/2017		0.334 (U)	0.325 (U)						
3/28/2017					0.00697 (U)	-0.109 (U)			
4/24/2017		0.492	0.436 (U)		0.672	0.293 (U)			
6/6/2017		0.156 (U)	0.592						
6/7/2017					0.096 (U)	0.529			
2/19/2018		0.283 (U)	0.776		0.207 (U)	0.497			
5/14/2018		0.083 (U)	-0.169 (U)						
5/15/2018					0.0311 (U)	-0.601 (U)			
10/15/2018		0.656	0.792		0.309 (U)				
10/16/2018						0.2 (U)			
4/16/2019		0.528	1.11			0.733			
4/23/2019					0.894				
9/23/2019		0.677	1.06						
9/24/2019					0.618 (U)	0.753			
3/17/2020		0.629	0.351 (U)		1.2				
3/18/2020						0.465 (U)			
3/23/2020							0.156 (U)		
3/24/2020								0.847	0.878
8/27/2020	0.798								
9/8/2020				-0.0377 (U)					
9/15/2020	0.311 (U)			1.25					
9/16/2020			1.05		1.74				
9/17/2020		0.32 (U)						0.438 (U)	0.896
9/21/2020						1.25			
9/22/2020							0.536 (U)		
2/2/2021					0.373 (U)	0.223 (U)	0.154 (U)		1.01 (U)
2/3/2021	0.145 (U)	0.647 (U)	0.489 (U)	0.2 (U)					
2/17/2021								0.753 (U)	
7/27/2021	0.48 (U)	0.919 (U)	0.87 (U)						
8/2/2021				1.53					
8/3/2021									0.195 (U)
8/9/2021					1.28 (UD)			1.47	
8/10/2021						0.77 (U)	0.895 (U)		
2/8/2022					0.587 (UD)				
2/9/2022	0.793 (U)			0.209 (U)					
2/14/2022		1.24	0.14 (U)						0.67 (U)
2/15/2022								1.12 (U)	
2/16/2022						0.561 (U)			
2/21/2022							0.134 (U)		
2/22/2022									
2/28/2022									
3/1/2022									

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L)   Analysis Run 11/15/2023 3:06 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

	GS-AP-MW-44HO	GS-AP-MW-6D	GS-AP-MW-6S	GS-AP-MW-6V	GS-AP-MW-7	GS-AP-MW-8 (bg)	GS-AP-MW-9V	GS-AP-PZ-16	GS-AP-PZ-22
7/19/2022							1.03		
7/20/2022									
7/25/2022		0.513 (U)		0.722 (UD)	0.455 (U)				
7/26/2022								1.13	
8/2/2022						0.154 (U)			
8/3/2022									
8/9/2022									0.481 (U)
3/6/2023	1.11								
3/8/2023				0.3535 (UD)					
3/14/2023		0.656 (U)	0.424 (U)		0.351 (U)				
3/15/2023									
3/21/2023								0.891 (U)	1.01 (U)
3/22/2023									
3/27/2023						0.142 (U)	0.414 (U)		
3/28/2023									
9/5/2023	0.396 (U)	0.269 (U)	0.382 (U)						
9/11/2023				0.604 (UD)	0.555 (U)				0.727 (U)
9/12/2023								0.388 (U)	
9/13/2023							0.348 (U)		
9/18/2023						0.74 (U)			
9/19/2023									

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L)   Analysis Run 11/15/2023 3:06 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

	GS-AP-MW-10R	GS-AP-MW-11R	GS-AP-MW-13R	GS-AP-MW-14R	GS-AP-MW-18R ...	GS-AP-MW-18VR	GS-AP-MW-1R
8/2/2016							
8/3/2016							
9/20/2016							
9/21/2016							
10/24/2016							
10/25/2016							
10/26/2016							
12/12/2016							
12/13/2016							
2/6/2017							
3/27/2017							
3/28/2017							
4/24/2017							
6/6/2017							
6/7/2017							
2/19/2018							
5/14/2018							
5/15/2018							
10/15/2018							
10/16/2018							
4/16/2019							
4/23/2019							
9/23/2019							
9/24/2019							
3/17/2020							
3/18/2020							
3/23/2020							
3/24/2020							
8/27/2020							
9/8/2020							
9/15/2020							
9/16/2020							
9/17/2020							
9/21/2020							
9/22/2020							
2/2/2021							
2/3/2021							
2/17/2021							
7/27/2021							
8/2/2021							
8/3/2021							
8/9/2021							
8/10/2021							
2/8/2022							
2/9/2022							
2/14/2022							
2/15/2022							
2/16/2022							
2/21/2022							
2/22/2022					0.961 (U)	0.187 (U)	
2/28/2022				0.801 (U)			
3/1/2022	1.05 (U)	0.757 (U)	0.656 (U)				0.836 (U)

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 11/15/2023 3:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-10R	GS-AP-MW-11R	GS-AP-MW-13R	GS-AP-MW-14R	GS-AP-MW-18R ...	GS-AP-MW-18VR	GS-AP-MW-1R
7/19/2022		0.586 (U)					
7/20/2022			0.551 (U)				
7/25/2022							
7/26/2022							
8/2/2022							0.53 (U)
8/3/2022	0.552 (U)			0.55 (U)	0.507 (U)		
8/9/2022						0.473 (U)	
3/6/2023							
3/8/2023							
3/14/2023							
3/15/2023				0.145 (U)			
3/21/2023							
3/22/2023		0.691 (U)					
3/27/2023	0.422 (U)		0.347 (U)			0.708 (U)	0.498 (U)
3/28/2023					0.889 (U)		
9/5/2023							
9/11/2023							
9/12/2023				0.345 (U)			
9/13/2023							0.0804 (U)
9/18/2023							
9/19/2023	0.275 (U)	1.12 (U)	0.711 (U)		0.478 (U)	0.8 (U)	

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L)   Analysis Run 11/15/2023 3:06 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

	GS-AP-MW-23V	GS-AP-MW-27HR	GS-AP-MW-31V	GS-AP-MW-36V	GS-AP-MW-37HR	GS-AP-MW-3V	GS-AP-MW-45V	GS-AP-MW-47	GS-AP-MW-5R
2/21/2022									
2/22/2022		0.645 (U)	0.486 (U)	0.495 (U)					
2/23/2022	0.258 (U)					0.57 (U)	0.442 (U)		
2/28/2022					0.739 (U)			0.174 (U)	
3/1/2022									0.799 (U)
7/19/2022									
7/20/2022						0.762 (U)			
7/26/2022	0.603 (U)				0.5 (U)			0.441 (U)	
7/27/2022		1.63		0.857 (U)					
8/2/2022									0.479 (U)
8/3/2022			0.696 (U)						
8/8/2022							0.469 (U)		
3/14/2023	0.317 (U)	1.29		0.805 (U)				0.767 (U)	
3/15/2023					0.545 (U)				
3/20/2023									0.742 (U)
3/21/2023						0.189 (U)			
3/27/2023			0.965 (U)						
3/28/2023							0.647 (U)		
9/6/2023	0.618 (U)	0.605 (U)		0.517 (U)					
9/11/2023					0.17 (U)				
9/12/2023						0.567 (U)		0.193 (U)	0.763 (U)
9/13/2023			0.225 (U)						
9/18/2023							0.741 (U)		
9/19/2023									

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 11/15/2023 3:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-9R	GS-AP-PZ-18R	GS-AP-MW-46
2/21/2022		0.775 (U)	
2/22/2022			
2/23/2022			0.0974 (U)
2/28/2022			
3/1/2022	0.663 (U)		
7/19/2022	0.803 (U)		
7/20/2022			
7/26/2022			
7/27/2022		0.14 (U)	
8/2/2022			0.314 (U)
8/3/2022			
8/8/2022			
3/14/2023			
3/15/2023			
3/20/2023			
3/21/2023			
3/27/2023	0.263 (U)		0.0303 (U)
3/28/2023		0.526 (U)	
9/6/2023			
9/11/2023			
9/12/2023			
9/13/2023	0.591 (U)		
9/18/2023			0.2 (U)
9/19/2023		0.538 (U)	

Time Series

Constituent: Fluoride (mg/L)   Analysis Run 11/15/2023 3:06 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

	GS-AP-MW-12	GS-AP-MW-12V	GS-AP-MW-13 (bg)	GS-AP-MW-15	GS-AP-MW-15V	GS-AP-MW-16D	GS-AP-MW-17	GS-AP-MW-17V ...	GS-AP-MW-19
8/1/2016				1.16		0.117 (J)	0.214 (J)		0.385
8/2/2016			0.161 (J)						
8/3/2016	0.656								
9/19/2016						0.078 (J)	0.151 (J)		
9/20/2016	0.691		0.122 (J)	0.7					
9/21/2016									0.303
10/24/2016							0.086 (J)		0.24 (J)
10/25/2016	0.588		0.058 (J)	0.544		0.018 (J)			
12/13/2016	0.545		0.072 (J)			0.035 (J)	0.14 (J)		0.188 (J)
12/14/2016				0.51					
2/6/2017							0.2		
2/7/2017									0.38
2/8/2017	0.79		0.16	0.56		0.1			
3/27/2017							0.21		
3/28/2017				0.59					0.32
3/29/2017	0.51		0.14			0.08 (J)			
3/30/2017									
4/24/2017							0.2		
4/26/2017	0.49		0.16	0.72		0.11			0.31
6/5/2017							0.2		
6/6/2017				0.65		0.11			0.31
6/7/2017	0.43		0.15						
8/21/2017									
8/22/2017	0.41		0.18	0.9		0.11	0.24		0.35
8/23/2017									
2/19/2018							0.34		
2/20/2018	0.27		0.17	0.6					
2/21/2018						0.11			0.39
5/15/2018	0.23		0.17	0.57			0.27		
5/16/2018						0.12			0.36
10/15/2018				0.77			0.23		
10/16/2018	0.23								0.37
10/17/2018			0.19			0.13			
2/20/2019								0.239	
2/21/2019		0.205							
2/26/2019									
2/27/2019									
4/16/2019	0.188		0.197						
4/17/2019				0.463		0.171	0.354		0.27
9/23/2019							0.351		
9/24/2019				0.628		0.124		0.245	0.307
9/25/2019	0.168	0.185							
3/16/2020							0.261		
3/17/2020									
3/18/2020	0.122			0.647	0.243				
3/23/2020									
3/24/2020		0.155				0.109			0.327
3/25/2020								0.243	
5/12/2020							0.263		
5/13/2020									
9/17/2020									
9/21/2020					0.372		0.371		

Time Series

Constituent: Fluoride (mg/L) Analysis Run 11/15/2023 3:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-12	GS-AP-MW-12V	GS-AP-MW-13 (bg)	GS-AP-MW-15	GS-AP-MW-15V	GS-AP-MW-16D	GS-AP-MW-17	GS-AP-MW-17V ...	GS-AP-MW-19
9/22/2020						0.123			0.339
9/23/2020	0.12	0.176		0.452				0.278	
2/1/2021	0.126	0.169							
2/2/2021							0.276	0.244	
2/3/2021									
2/8/2021									0.319
2/9/2021				0.591	0.329				
2/10/2021						0.103			
7/27/2021									
8/2/2021								0.276	
8/3/2021				0.615	0.278		0.3		
8/4/2021									
8/9/2021	0.139	0.187				0.131			
8/10/2021									0.283
8/11/2021									
8/12/2021									
2/8/2022									
2/14/2022							0.206	0.237	
2/15/2022						0.114			
2/16/2022				0.349	0.208				
2/22/2022									0.259
2/23/2022		0.153							
2/28/2022	0.12								
7/19/2022	0.0983 (J)								
7/20/2022		0.18							
7/26/2022									
7/27/2022									
8/2/2022				0.373	0.206	0.112 (J)			
8/3/2022									0.231
8/8/2022							0.257		
8/9/2022								0.245	
8/10/2022									
3/14/2023									
3/15/2023									
3/20/2023				0.333	0.183				
3/21/2023						0.0849 (J)			0.24
3/22/2023	0.0941 (J)	0.138					0.183	0.198	
9/5/2023									
9/6/2023									
9/11/2023				0.425	0.183		0.269	0.278	
9/12/2023						0.106 (J)			
9/13/2023	0.0944 (J)	0.129							
9/18/2023									
9/19/2023									0.211

Time Series

Constituent: Fluoride (mg/L) Analysis Run 11/15/2023 3:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-2	GS-AP-MW-21	GS-AP-MW-21V	GS-AP-MW-23H	GS-AP-MW-24H	GS-AP-MW-25HA	GS-AP-MW-26H
8/1/2016							
8/2/2016	1.76	0.282 (J)					
8/3/2016							
9/19/2016	1.55						
9/20/2016							
9/21/2016		0.231 (J)					
10/24/2016	1.29						
10/25/2016		0.137 (J)					
12/13/2016	1.19						
12/14/2016		0.131 (J)					
2/6/2017							
2/7/2017							
2/8/2017	1.6	0.25					
3/27/2017							
3/28/2017		0.27					
3/29/2017							
3/30/2017	1.5						
4/24/2017							
4/26/2017	1.4	0.24					
6/5/2017							
6/6/2017	1.3	0.25					
6/7/2017							
8/21/2017	1.4						
8/22/2017							
8/23/2017		0.3					
2/19/2018							
2/20/2018		0.23					
2/21/2018	1.1						
5/15/2018		0.24					
5/16/2018	1.1						
10/15/2018							
10/16/2018	1	0.25					
10/17/2018							
2/20/2019				0.188			
2/21/2019							
2/26/2019					0.19		
2/27/2019							0.14
4/16/2019							
4/17/2019	0.868	0.272					
9/23/2019				0.144			0.146
9/24/2019		0.209			0.201		
9/25/2019	0.86						
3/16/2020							
3/17/2020				0.241			
3/18/2020		0.234			0.206		
3/23/2020			0.494				
3/24/2020						1.77	
3/25/2020	0.855						0.131
5/12/2020							
5/13/2020	0.777						
9/17/2020				0.117	0.217	1.93	
9/21/2020							0.151

Time Series

Constituent: Fluoride (mg/L)   Analysis Run 11/15/2023 3:06 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

	GS-AP-MW-2	GS-AP-MW-21	GS-AP-MW-21V	GS-AP-MW-23H	GS-AP-MW-24H	GS-AP-MW-25HA	GS-AP-MW-26H
9/22/2020	0.921						
9/23/2020		0.208	0.641				
2/1/2021	0.865						
2/2/2021					0.209		
2/3/2021				0.156			
2/8/2021		0.203					
2/9/2021			0.546				0.112
2/10/2021						1.81	
7/27/2021				0.13			
8/2/2021							
8/3/2021					0.208		
8/4/2021	0.932	0.24					
8/9/2021							
8/10/2021							0.152
8/11/2021			0.41				
8/12/2021						2.01	
2/8/2022		0.175	0.398				
2/14/2022				0.14			
2/15/2022					0.176		0.101
2/16/2022						1.89	
2/22/2022	0.819						
2/23/2022							
2/28/2022							
7/19/2022	0.752						
7/20/2022							
7/26/2022				0.0867 (J)			
7/27/2022					0.215		
8/2/2022							
8/3/2022						2.07	
8/8/2022							
8/9/2022			0.406				
8/10/2022		0.186					0.131
3/14/2023				0.165			
3/15/2023					0.172		
3/20/2023							
3/21/2023		0.194	0.381				
3/22/2023	0.72					2.03	0.123 (J)
9/5/2023		0.188	0.391				
9/6/2023				0.0905 (J)	0.175		
9/11/2023							
9/12/2023							
9/13/2023							
9/18/2023	0.822					2.04	0.147
9/19/2023							

Time Series

Constituent: Fluoride (mg/L) Analysis Run 11/15/2023 3:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-28H	GS-AP-MW-29H	GS-AP-MW-3	GS-AP-MW-30HA	GS-AP-MW-31H	GS-AP-MW-32H	GS-AP-MW-33HO	GS-AP-MW-34HO	GS-AP-MW-35HO
2/27/2019		0.218							
3/13/2019	0.187								
9/24/2019		0.183							
9/25/2019	0.172								
3/16/2020	0.183							0.338	
3/17/2020							0.202		0.166
3/18/2020				0.634	0.15				
3/24/2020						0.18			
3/25/2020		0.194							
5/12/2020	0.195							0.37	0.167
5/13/2020				0.833			0.191		
9/15/2020							0.188		
9/16/2020								0.364	0.162
9/17/2020									
9/21/2020				0.872		0.202			
9/22/2020	0.181	0.198			0.148				
2/1/2021					0.176				
2/2/2021									
2/3/2021		0.267					0.178	0.298	
2/4/2021									0.152
2/8/2021									
2/9/2021									
2/10/2021						0.134			
2/17/2021	0.18		0.1	0.884					
7/27/2021							0.214	0.408	
7/28/2021									0.207
8/2/2021				1.49	0.191				
8/3/2021			0.102						
8/4/2021		0.353							
8/9/2021	0.204								
8/10/2021						0.218			
2/8/2022				1.66	0.119				
2/9/2022							0.131	0.291	0.119
2/14/2022	0.121	0.332				0.148			
2/15/2022									
2/16/2022			<0.125						
2/21/2022									
2/22/2022									
7/20/2022			<0.125						
7/26/2022									
7/27/2022	0.179					0.161			
8/2/2022									
8/3/2022		0.359		2.2	0.141				
8/10/2022									
3/8/2023								0.315	0.171
3/13/2023				1.61					
3/14/2023	0.187						0.248		
3/15/2023									
3/21/2023			0.0689 (J)			0.144			
3/22/2023									
3/27/2023					0.155				
3/28/2023		0.388							

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Fluoride (mg/L) Analysis Run 11/15/2023 3:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-28H	GS-AP-MW-29H	GS-AP-MW-3	GS-AP-MW-30HA	GS-AP-MW-31H	GS-AP-MW-32H	GS-AP-MW-33HO	GS-AP-MW-34HO	GS-AP-MW-35HO
8/30/2023							0.213		
8/31/2023								0.399	0.153
9/5/2023				1.86					
9/6/2023									
9/11/2023	0.176								
9/12/2023			0.0808 (J)						
9/13/2023		0.371			0.159	0.172			
9/18/2023									
9/19/2023									

Time Series

Constituent: Fluoride (mg/L) Analysis Run 11/15/2023 3:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-36H	GS-AP-MW-38H	GS-AP-MW-40H	GS-AP-MW-41HD	GS-AP-MW-41HS	GS-AP-MW-42H	GS-AP-MW-43HO
2/27/2019							
3/13/2019							
9/24/2019							
9/25/2019							
3/16/2020							
3/17/2020	0.214						
3/18/2020				0.165			
3/24/2020		0.291				0.13	
3/25/2020							0.204
5/12/2020							
5/13/2020	0.224						
9/15/2020							
9/16/2020							
9/17/2020	0.209			0.16			
9/21/2020							
9/22/2020		0.28	0.114			0.121	0.216
2/1/2021							
2/2/2021			0.123				
2/3/2021						0.131	
2/4/2021							
2/8/2021				0.138	0.152		
2/9/2021		0.243					
2/10/2021							
2/17/2021	0.22						0.174
7/27/2021							
7/28/2021					0.172		
8/2/2021							
8/3/2021				0.15			
8/4/2021	0.31	0.305				0.203	0.289
8/9/2021							
8/10/2021			0.113				
2/8/2022					0.117		
2/9/2022							
2/14/2022	0.238						
2/15/2022			0.0854 (J)	0.125			
2/16/2022						0.0837 (J)	
2/21/2022							0.226
2/22/2022		0.239					
7/20/2022	0.186						
7/26/2022					0.121 (J)		
7/27/2022				0.122 (J)		0.116 (J)	
8/2/2022			0.151				
8/3/2022							0.173
8/10/2022		0.231					
3/8/2023							
3/13/2023					0.104 (J)		
3/14/2023							
3/15/2023	0.212			0.18		0.128	
3/21/2023							
3/22/2023			0.1 (J)				
3/27/2023							
3/28/2023		0.254					0.239

Time Series

Constituent: Fluoride (mg/L) Analysis Run 11/15/2023 3:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-36H	GS-AP-MW-38H	GS-AP-MW-40H	GS-AP-MW-41HD	GS-AP-MW-41HS	GS-AP-MW-42H	GS-AP-MW-43HO
8/30/2023				0.161	0.102 (J)		
8/31/2023							
9/5/2023							
9/6/2023	0.23						
9/11/2023							
9/12/2023							
9/13/2023							
9/18/2023			0.141				
9/19/2023		0.237				0.128	0.162

Time Series

Constituent: Fluoride (mg/L) Analysis Run 11/15/2023 3:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-44HO	GS-AP-MW-6D	GS-AP-MW-6S	GS-AP-MW-6V	GS-AP-MW-7	GS-AP-MW-8 (bg)	GS-AP-MW-9V	GS-AP-PZ-16	GS-AP-PZ-22
8/2/2016					0.098 (J)				
8/3/2016		0.127 (J)	0.099 (J)			0.125 (J)			
9/20/2016		0.087 (J)	0.074 (J)						
9/21/2016					0.061 (J)	0.098 (J)			
10/24/2016		0.019 (J)			<0.3				
10/25/2016						0.025 (J)			
10/26/2016			0.032 (J)						
12/12/2016		0.043 (J)	0.034 (J)		0.01 (J)				
12/13/2016						0.045 (J)			
2/6/2017		0.11	0.06 (J)		0.07 (J)	0.1			
3/27/2017		0.12	0.07 (J)						
3/28/2017					0.07 (J)	0.08 (J)			
4/24/2017		0.11	0.08 (J)		0.08 (J)	0.09 (J)			
6/6/2017		0.12	0.09 (J)						
6/7/2017					0.09 (J)	0.08 (J)			
8/21/2017		0.15	0.1		0.09 (J)	0.08 (J)			
2/19/2018		0.13	0.1		0.09 (J)	0.08 (J)			
5/14/2018		0.13	0.13						
5/15/2018					0.09 (J)	0.1			
10/15/2018		0.16	0.14		0.11				
10/16/2018						0.09 (J)			
4/16/2019		0.156	0.147			0.143			
4/23/2019					0.111				
9/23/2019		0.132	0.142						
9/24/2019					0.106	0.128			
3/17/2020		0.132	0.231		0.107				
3/18/2020						0.108			
3/23/2020							0.187		
3/24/2020								0.228	0.387
8/27/2020	0.174								
9/8/2020				4.46					
9/15/2020	0.221			4.59					
9/16/2020			0.308		0.126				
9/17/2020		0.133						0.237	0.402
9/21/2020						0.125			
9/22/2020							0.174		
2/2/2021					0.124	0.114	0.183		0.389
2/3/2021	0.181	0.135	0.195	4.28					
2/17/2021								0.219	
7/27/2021	0.254	0.127	0.2						
8/2/2021				4.45					
8/3/2021									0.419
8/9/2021					0.11			0.235	
8/10/2021						0.0924 (J)	0.166		
2/8/2022					0.0872 (JD)				
2/9/2022	0.142			4.35					
2/14/2022		0.108	0.164						0.422
2/15/2022								0.258	
2/16/2022						0.0616 (J)			
2/21/2022							0.177		
2/22/2022									
2/28/2022									

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Fluoride (mg/L) Analysis Run 11/15/2023 3:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-44HO	GS-AP-MW-6D	GS-AP-MW-6S	GS-AP-MW-6V	GS-AP-MW-7	GS-AP-MW-8 (bg)	GS-AP-MW-9V	GS-AP-PZ-16	GS-AP-PZ-22
3/1/2022									
7/19/2022							0.159		
7/20/2022									
7/25/2022		0.0978 (JD)		4.6 (D)	0.0896 (JD)				
7/26/2022			0.164					0.206	
8/2/2022						0.0815 (J)			
8/3/2022									
8/9/2022									0.338
3/6/2023	0.227								
3/8/2023				4.525 (D)					
3/14/2023		0.122 (J)	0.153		0.177				
3/15/2023									
3/21/2023								0.171	0.393
3/22/2023									
3/27/2023						0.112 (J)	0.164		
3/28/2023									
9/5/2023	0.158	0.107 (J)	0.152						
9/11/2023				4.345 (D)	0.0913 (J)				0.472
9/12/2023								0.2	
9/13/2023							0.145		
9/18/2023						0.106 (J)			
9/19/2023									

Time Series

Constituent: Fluoride (mg/L)   Analysis Run 11/15/2023 3:06 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

	GS-AP-MW-10R	GS-AP-MW-11R	GS-AP-MW-13R	GS-AP-MW-14R	GS-AP-MW-18R ...	GS-AP-MW-18VR	GS-AP-MW-1R
8/2/2016							
8/3/2016							
9/20/2016							
9/21/2016							
10/24/2016							
10/25/2016							
10/26/2016							
12/12/2016							
12/13/2016							
2/6/2017							
3/27/2017							
3/28/2017							
4/24/2017							
6/6/2017							
6/7/2017							
8/21/2017							
2/19/2018							
5/14/2018							
5/15/2018							
10/15/2018							
10/16/2018							
4/16/2019							
4/23/2019							
9/23/2019							
9/24/2019							
3/17/2020							
3/18/2020							
3/23/2020							
3/24/2020							
8/27/2020							
9/8/2020							
9/15/2020							
9/16/2020							
9/17/2020							
9/21/2020							
9/22/2020							
2/2/2021							
2/3/2021							
2/17/2021							
7/27/2021							
8/2/2021							
8/3/2021							
8/9/2021							
8/10/2021							
2/8/2022							
2/9/2022							
2/14/2022							
2/15/2022							
2/16/2022							
2/21/2022							
2/22/2022					0.124	0.199	
2/28/2022				0.215			

Time Series

Constituent: Fluoride (mg/L) Analysis Run 11/15/2023 3:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-10R	GS-AP-MW-11R	GS-AP-MW-13R	GS-AP-MW-14R	GS-AP-MW-18R ...	GS-AP-MW-18VR	GS-AP-MW-1R
3/1/2022	0.278	0.143	0.122				0.248
7/19/2022		0.0992 (J)					
7/20/2022			0.084 (J)				
7/25/2022							
7/26/2022							
8/2/2022							0.177
8/3/2022	0.265			0.145	0.0924 (J)		
8/9/2022						0.133	
3/6/2023							
3/8/2023							
3/14/2023							
3/15/2023				0.141			
3/21/2023							
3/22/2023		0.0999 (J)					
3/27/2023	0.283		0.18			0.182	0.234
3/28/2023					0.115 (J)		
9/5/2023							
9/11/2023							
9/12/2023				0.128			
9/13/2023							0.229
9/18/2023							
9/19/2023	0.263	0.0949 (J)	0.147		0.11 (J)	0.146	

Time Series

Constituent: Fluoride (mg/L) Analysis Run 11/15/2023 3:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-23V	GS-AP-MW-27HR	GS-AP-MW-31V	GS-AP-MW-36V	GS-AP-MW-37HR	GS-AP-MW-3V	GS-AP-MW-45V	GS-AP-MW-47	GS-AP-MW-5R
2/21/2022									
2/22/2022		0.292	0.179	0.259					
2/23/2022	0.141					0.241	0.204		
2/28/2022					0.194			0.121	
3/1/2022									0.147
7/19/2022									
7/20/2022						0.231			
7/26/2022	0.0773 (J)				0.143			0.0601 (J)	
7/27/2022		0.263		0.38					
8/2/2022									0.144
8/3/2022			0.237						
8/8/2022							0.154		
3/14/2023	0.189	0.335		0.344					
3/15/2023					0.116 (J)			0.107 (J)	
3/20/2023									0.117 (J)
3/21/2023						0.161			
3/27/2023			0.309						
3/28/2023							0.249		
9/6/2023	0.158	0.285		0.294					
9/11/2023					0.182				
9/12/2023						0.187		0.103 (J)	0.118 (J)
9/13/2023			0.198						
9/18/2023							0.302		
9/19/2023									

Time Series

Constituent: Fluoride (mg/L) Analysis Run 11/15/2023 3:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-9R	GS-AP-PZ-18R	GS-AP-MW-46
2/21/2022		0.207	
2/22/2022			
2/23/2022			0.226
2/28/2022			
3/1/2022	0.218		
7/19/2022	0.245		
7/20/2022			
7/26/2022			
7/27/2022		0.157	
8/2/2022			0.249
8/3/2022			
8/8/2022			
3/14/2023			
3/15/2023			
3/20/2023			
3/21/2023			
3/27/2023	0.207		0.271
3/28/2023		0.175	
9/6/2023			
9/11/2023			
9/12/2023			
9/13/2023	0.158		
9/18/2023			0.334
9/19/2023		0.123 (J)	

Time Series

Constituent: Lead (mg/L)   Analysis Run 11/15/2023 3:06 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

	GS-AP-MW-12	GS-AP-MW-12V	GS-AP-MW-13 (bg)	GS-AP-MW-15	GS-AP-MW-15V	GS-AP-MW-16D	GS-AP-MW-17	GS-AP-MW-17V ...	GS-AP-MW-19
8/1/2016				<0.000203		<0.000203	<0.000203		<0.000203
8/2/2016			<0.005						
8/3/2016	<0.000203								
9/19/2016						<0.000203	<0.000203		
9/20/2016	<0.000203		<0.005	<0.000203					
9/21/2016									<0.000203
10/24/2016							<0.000203		<0.000203
10/25/2016	<0.000203		<0.005	<0.000203		<0.000203			
12/13/2016	<0.000203		<0.005			<0.000203	<0.000203		<0.000203
12/14/2016				<0.000203					
2/6/2017							<0.000203		
2/7/2017									<0.000203
2/8/2017	<0.000203		<0.005	<0.000203		<0.000203			
3/27/2017							<0.000203		
3/28/2017				<0.000203					<0.000203
3/29/2017	<0.000203		<0.005			<0.000203			
3/30/2017									
4/24/2017							<0.000203		
4/26/2017	<0.000203		<0.005	<0.000203		<0.000203			<0.000203
6/5/2017							<0.000203		
6/6/2017				<0.000203		<0.000203			<0.000203
6/7/2017	<0.000203		<0.005						
2/19/2018							<0.000203		
2/20/2018	<0.000203		<0.005	<0.000203					
2/21/2018						<0.000203			<0.000203
5/15/2018	<0.000203		<0.005	<0.000203			<0.000203		
5/16/2018						<0.000203			<0.000203
10/15/2018				<0.000203			<0.000203		
10/16/2018	<0.000203								<0.000203
10/17/2018			<0.005			<0.000203			
2/20/2019								0.00189 (J)	
2/21/2019		<0.000203							
2/26/2019									
2/27/2019									
4/16/2019	<0.000203		<0.005						
4/17/2019				<0.000203		<0.000203	<0.000203		<0.000203
9/23/2019							<0.000203		
9/24/2019				<0.000203		<0.000203		<0.000203	<0.000203
9/25/2019	<0.000203	<0.000203							
3/16/2020							<0.000203		
3/17/2020									
3/18/2020	<0.000203			<0.000203	<0.000203				
3/23/2020									
3/24/2020		0.00279 (J)				<0.000203			<0.000203
3/25/2020								<0.000203	
5/12/2020							<0.000203		
5/13/2020									
9/17/2020									
9/21/2020					<0.000203		<0.000203		
9/22/2020						<0.000203			<0.000203
9/23/2020	<0.000203	0.0014 (J)		<0.000203				<0.000203	
2/1/2021	<0.000203	0.0013							

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Lead (mg/L) Analysis Run 11/15/2023 3:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-12	GS-AP-MW-12V	GS-AP-MW-13 (bg)	GS-AP-MW-15	GS-AP-MW-15V	GS-AP-MW-16D	GS-AP-MW-17	GS-AP-MW-17V ...	GS-AP-MW-19
2/2/2021							0.000175 (J)	<0.000203	
2/3/2021									
2/8/2021									<0.000203
2/9/2021				8.74E-05 (J)	<0.000203				
2/10/2021						0.000873			
7/27/2021									
8/2/2021								<0.000203	
8/3/2021				8E-05 (J)	<0.000203		<0.000203		
8/4/2021									
8/9/2021	<0.000203	0.00048				0.00016 (J)			
8/10/2021									<0.000203
8/11/2021									
8/12/2021									
2/8/2022									
2/14/2022							<0.000203	<0.000203	
2/15/2022						<0.000203			
2/16/2022				<0.000203	<0.000203				
2/22/2022									<0.000203
2/23/2022		0.00019 (J)							
2/28/2022	<0.000203								
7/19/2022	<0.000203								
7/20/2022		<0.000203							
7/26/2022									
7/27/2022									
8/2/2022				<0.000203	<0.000203	<0.000203			
8/3/2022									<0.000203
8/8/2022							<0.000203		
8/9/2022								<0.000203	
8/10/2022									
3/14/2023									
3/15/2023									
3/20/2023				<0.000203	<0.000203				
3/21/2023						<0.000203			<0.000203
3/22/2023	<0.000203	8.97E-05 (J)					<0.000203	<0.000203	
9/5/2023									
9/6/2023									
9/11/2023				<0.000203	<0.000203		<0.000203	<0.000203	
9/12/2023						9E-05 (J)			
9/13/2023	<0.000203	<0.000203							
9/18/2023									
9/19/2023									<0.000203

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Lead (mg/L) Analysis Run 11/15/2023 3:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-2	GS-AP-MW-21	GS-AP-MW-21V	GS-AP-MW-23H	GS-AP-MW-24H	GS-AP-MW-25HA	GS-AP-MW-26H
8/1/2016							
8/2/2016	<0.000203	<0.000203					
8/3/2016							
9/19/2016	<0.000203						
9/20/2016							
9/21/2016		<0.000203					
10/24/2016	<0.000203						
10/25/2016		<0.000203					
12/13/2016	<0.000203						
12/14/2016		<0.000203					
2/6/2017							
2/7/2017							
2/8/2017	<0.000203	<0.000203					
3/27/2017							
3/28/2017		<0.000203					
3/29/2017							
3/30/2017	<0.000203						
4/24/2017							
4/26/2017	<0.000203	<0.000203					
6/5/2017							
6/6/2017	<0.000203	<0.000203					
6/7/2017							
2/19/2018							
2/20/2018		<0.000203					
2/21/2018	<0.000203						
5/15/2018		<0.000203					
5/16/2018	<0.000203						
10/15/2018							
10/16/2018	<0.000203	<0.000203					
10/17/2018							
2/20/2019				<0.000203			
2/21/2019							
2/26/2019					<0.000203		
2/27/2019							<0.000203
4/16/2019							
4/17/2019	<0.000203	<0.000203					
9/23/2019				<0.000203			0.00109 (J)
9/24/2019		<0.000203			<0.000203		
9/25/2019	<0.000203						
3/16/2020							
3/17/2020				<0.000203			
3/18/2020		<0.000203			<0.000203		
3/23/2020			<0.000203				
3/24/2020						<0.000203	
3/25/2020	<0.000203						0.0019 (J)
5/12/2020							
5/13/2020	<0.000203						
9/17/2020				<0.000203	<0.000203	<0.000203	
9/21/2020							0.00309 (J)
9/22/2020	<0.000203						
9/23/2020		<0.000203	<0.000203				
2/1/2021	<0.000203						

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Lead (mg/L) Analysis Run 11/15/2023 3:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-2	GS-AP-MW-21	GS-AP-MW-21V	GS-AP-MW-23H	GS-AP-MW-24H	GS-AP-MW-25HA	GS-AP-MW-26H
2/2/2021					<0.000203		
2/3/2021				<0.000203			
2/8/2021		<0.000203					
2/9/2021			<0.000203				<0.000203
2/10/2021						<0.000203	
7/27/2021				<0.000203			
8/2/2021							
8/3/2021					<0.000203		
8/4/2021	<0.000203	<0.000203					
8/9/2021							
8/10/2021							<0.000203
8/11/2021			<0.000203				
8/12/2021						<0.000203	
2/8/2022		<0.000203	<0.000203				
2/14/2022				<0.000203			
2/15/2022					<0.000203		<0.000203
2/16/2022						0.00018 (J)	
2/22/2022	<0.000203						
2/23/2022							
2/28/2022							
7/19/2022	<0.000203						
7/20/2022							
7/26/2022				<0.000203			
7/27/2022					<0.000203		
8/2/2022							
8/3/2022						0.000206	
8/8/2022							
8/9/2022			<0.000203				
8/10/2022		<0.000203					<0.000203
3/14/2023				<0.000203			
3/15/2023					<0.000203		
3/20/2023							
3/21/2023		<0.000203	<0.000203				
3/22/2023	<0.000203					<0.000203	<0.000203
9/5/2023		<0.000203	<0.000203				
9/6/2023				<0.000203	<0.000203		
9/11/2023							
9/12/2023							
9/13/2023							
9/18/2023	<0.000203					<0.000203	<0.000203
9/19/2023							

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Lead (mg/L)   Analysis Run 11/15/2023 3:06 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

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	GS-AP-MW-28H	GS-AP-MW-29H	GS-AP-MW-3	GS-AP-MW-30HA	GS-AP-MW-31H	GS-AP-MW-32H	GS-AP-MW-33HO	GS-AP-MW-34HO	GS-AP-MW-35HO
2/27/2019		<0.000203							
3/13/2019	0.00208 (J)								
9/24/2019		<0.000203							
9/25/2019	<0.000203								
3/16/2020	<0.000203							<0.0002	
3/17/2020							<0.0002		<0.000203
3/18/2020				<0.005	<0.000203				
3/24/2020						<0.000203			
3/25/2020		<0.000203							
5/12/2020	<0.000203							<0.0002	<0.000203
5/13/2020				<0.005			<0.0002		
9/15/2020							<0.0002		
9/16/2020								<0.0002	<0.000203
9/17/2020									
9/21/2020				<0.005		<0.000203			
9/22/2020	<0.000203	<0.000203			<0.000203				
2/1/2021					0.000102 (J)				
2/2/2021									
2/3/2021		<0.000203					<0.0002	<0.0002	
2/4/2021									<0.000203
2/8/2021									
2/9/2021									
2/10/2021						<0.000203			
2/17/2021	<0.000203		<0.000203	0.00028					
7/27/2021							<0.0002	<0.0002	
7/28/2021									<0.000203
8/2/2021				0.00017 (J)	<0.000203				
8/3/2021			<0.000203						
8/4/2021		<0.000203							
8/9/2021	<0.000203								
8/10/2021						<0.000203			
2/8/2022				0.00012 (J)	<0.000203				
2/9/2022							<0.0002	<0.0002	<0.000203
2/14/2022	<0.000203	<0.000203				<0.000203			
2/15/2022									
2/16/2022			<0.000203						
2/21/2022									
2/22/2022									
7/20/2022			<0.000203						
7/26/2022									
7/27/2022	<0.000203					6.9E-05 (J)			
8/2/2022									
8/3/2022		<0.000203		0.000194 (J)	<0.000203				
8/10/2022									
3/8/2023								0.00103	<0.000203
3/13/2023				0.000162 (J)					
3/14/2023	<0.000203						0.000147 (J)		
3/15/2023									
3/21/2023			<0.000203			<0.000203			
3/22/2023									
3/27/2023					<0.000203				
3/28/2023		<0.000203							

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Lead (mg/L) Analysis Run 11/15/2023 3:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-28H	GS-AP-MW-29H	GS-AP-MW-3	GS-AP-MW-30HA	GS-AP-MW-31H	GS-AP-MW-32H	GS-AP-MW-33HO	GS-AP-MW-34HO	GS-AP-MW-35HO
8/30/2023							0.000224		
8/31/2023								0.000146 (J)	<0.000203
9/5/2023				0.000294					
9/6/2023									
9/11/2023	<0.000203								
9/12/2023			7.3E-05 (J)						
9/13/2023		<0.000203			<0.000203	<0.000203			
9/18/2023									
9/19/2023									

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Lead (mg/L) Analysis Run 11/15/2023 3:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-36H	GS-AP-MW-38H	GS-AP-MW-40H	GS-AP-MW-41HD	GS-AP-MW-41HS	GS-AP-MW-42H	GS-AP-MW-43HO
2/27/2019							
3/13/2019							
9/24/2019							
9/25/2019							
3/16/2020							
3/17/2020	<0.000203						
3/18/2020				<0.000203			
3/24/2020		<0.000203				<0.000203	
3/25/2020							<0.000203
5/12/2020							
5/13/2020	<0.000203						
9/15/2020							
9/16/2020							
9/17/2020	<0.000203			<0.000203			
9/21/2020							
9/22/2020		<0.000203	<0.000203			<0.000203	<0.000203
2/1/2021							
2/2/2021			<0.000203				
2/3/2021						<0.000203	
2/4/2021							
2/8/2021				<0.000203	<0.000203		
2/9/2021		8.23E-05 (J)					
2/10/2021							
2/17/2021	8.8E-05 (J)						0.000328
7/27/2021							
7/28/2021					<0.000203		
8/2/2021							
8/3/2021				<0.000203			
8/4/2021	<0.000203	<0.000203				<0.000203	0.00027
8/9/2021							
8/10/2021			<0.000203				
2/8/2022					<0.000203		
2/9/2022							
2/14/2022	<0.000203						
2/15/2022			<0.000203	<0.000203			
2/16/2022						<0.000203	
2/21/2022							0.00012 (J)
2/22/2022		<0.000203					
7/20/2022	<0.000203						
7/26/2022					<0.000203		
7/27/2022				<0.000203		<0.000203	
8/2/2022			<0.000203				
8/3/2022							<0.000203
8/10/2022		<0.000203					
3/8/2023							
3/13/2023					<0.000203		
3/14/2023							
3/15/2023	0.00019 (J)			<0.000203		<0.000203	
3/21/2023							
3/22/2023			<0.000203				
3/27/2023							
3/28/2023		<0.000203					<0.000203

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Lead (mg/L)   Analysis Run 11/15/2023 3:06 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

	GS-AP-MW-36H	GS-AP-MW-38H	GS-AP-MW-40H	GS-AP-MW-41HD	GS-AP-MW-41HS	GS-AP-MW-42H	GS-AP-MW-43HO
8/30/2023				<0.000203	<0.000203		
8/31/2023							
9/5/2023							
9/6/2023	0.000364						
9/11/2023							
9/12/2023							
9/13/2023							
9/18/2023			<0.000203				
9/19/2023		<0.000203				<0.000203	0.000197 (J)

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Lead (mg/L)   Analysis Run 11/15/2023 3:06 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

	GS-AP-MW-44HO	GS-AP-MW-6D	GS-AP-MW-6S	GS-AP-MW-6V	GS-AP-MW-7	GS-AP-MW-8 (bg)	GS-AP-MW-9V	GS-AP-PZ-16	GS-AP-PZ-22
8/2/2016					0.00279 (J)				
8/3/2016		<0.000203	<0.000203			<0.000203			
9/20/2016		<0.000203	<0.000203						
9/21/2016					0.0024 (J)	<0.000203			
10/24/2016		<0.000203			<0.005				
10/25/2016						<0.000203			
10/26/2016			<0.000203						
12/12/2016		<0.000203	<0.000203		<0.005				
12/13/2016						<0.000203			
2/6/2017		<0.000203	<0.000203		<0.005	<0.000203			
3/27/2017		<0.000203	<0.000203						
3/28/2017					<0.005	<0.000203			
4/24/2017		<0.000203	<0.000203		<0.005	<0.000203			
6/6/2017		<0.000203	<0.000203						
6/7/2017					<0.005	<0.000203			
2/19/2018		<0.000203	<0.000203		<0.005	<0.000203			
5/14/2018		<0.000203	<0.000203						
5/15/2018					<0.005	<0.000203			
10/15/2018		<0.000203	<0.000203		<0.005				
10/16/2018						<0.000203			
4/16/2019		<0.000203	<0.000203			<0.000203			
4/23/2019					0.00207 (J)				
9/23/2019		<0.000203	<0.000203						
9/24/2019					<0.005	<0.000203			
3/17/2020		<0.000203	<0.000203		0.00386 (J)				
3/18/2020						<0.000203			
3/23/2020							<0.000203		
3/24/2020								<0.005	<0.000203
8/27/2020	<0.000203								
9/8/2020				<0.005					
9/15/2020	<0.000203			<0.005					
9/16/2020			<0.000203		0.00295 (J)				
9/17/2020		<0.000203						<0.005	<0.000203
9/21/2020						<0.000203			
9/22/2020							<0.000203		
2/2/2021					0.00243	8.09E-05 (J)	<0.000203		<0.000203
2/3/2021	<0.000203	<0.000203	<0.000203	0.000155 (J)					
2/17/2021								0.000148 (J)	
7/27/2021	<0.000203	<0.000203	8E-05 (J)						
8/2/2021				0.00023					
8/3/2021									<0.000203
8/9/2021					0.00119			0.00024	
8/10/2021						0.00015 (J)	<0.000203		
2/8/2022					0.0008				
2/9/2022	<0.000203			0.00019 (J)					
2/14/2022		<0.000203	<0.000203						<0.000203
2/15/2022								0.00066	
2/16/2022						<0.000203			
2/21/2022							<0.000203		
2/22/2022									
2/28/2022									
3/1/2022									

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Lead (mg/L)   Analysis Run 11/15/2023 3:06 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

	GS-AP-MW-44HO	GS-AP-MW-6D	GS-AP-MW-6S	GS-AP-MW-6V	GS-AP-MW-7	GS-AP-MW-8 (bg)	GS-AP-MW-9V	GS-AP-PZ-16	GS-AP-PZ-22
7/19/2022							<0.000203		
7/20/2022									
7/25/2022		0.000171 (J)		0.000278	0.000431				
7/26/2022			9.8E-05 (J)					0.000603	
8/2/2022						8.3E-05 (J)			
8/3/2022									
8/9/2022									<0.000203
3/6/2023	<0.000203								
3/8/2023				0.00037					
3/14/2023		<0.000203	<0.000203		0.000188 (J)				
3/15/2023									
3/21/2023								0.000192 (J)	<0.000203
3/22/2023									
3/27/2023						<0.000203	<0.000203		
3/28/2023									
9/5/2023	<0.000203	<0.000203	<0.000203						
9/11/2023				0.000503	0.000325				0.000117 (J)
9/12/2023								0.000234	
9/13/2023							<0.000203		
9/18/2023						<0.000203			
9/19/2023									

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Lead (mg/L) Analysis Run 11/15/2023 3:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-10R	GS-AP-MW-11R	GS-AP-MW-13R	GS-AP-MW-14R	GS-AP-MW-18R ...	GS-AP-MW-18VR	GS-AP-MW-1R
8/2/2016							
8/3/2016							
9/20/2016							
9/21/2016							
10/24/2016							
10/25/2016							
10/26/2016							
12/12/2016							
12/13/2016							
2/6/2017							
3/27/2017							
3/28/2017							
4/24/2017							
6/6/2017							
6/7/2017							
2/19/2018							
5/14/2018							
5/15/2018							
10/15/2018							
10/16/2018							
4/16/2019							
4/23/2019							
9/23/2019							
9/24/2019							
3/17/2020							
3/18/2020							
3/23/2020							
3/24/2020							
8/27/2020							
9/8/2020							
9/15/2020							
9/16/2020							
9/17/2020							
9/21/2020							
9/22/2020							
2/2/2021							
2/3/2021							
2/17/2021							
7/27/2021							
8/2/2021							
8/3/2021							
8/9/2021							
8/10/2021							
2/8/2022							
2/9/2022							
2/14/2022							
2/15/2022							
2/16/2022							
2/21/2022							
2/22/2022					8E-05 (J)	9E-05 (J)	
2/28/2022				0.00045			
3/1/2022	0.00013 (J)	<0.000203	0.00013 (J)				0.00022

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Lead (mg/L) Analysis Run 11/15/2023 3:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-10R	GS-AP-MW-11R	GS-AP-MW-13R	GS-AP-MW-14R	GS-AP-MW-18R ...	GS-AP-MW-18VR	GS-AP-MW-1R
7/19/2022		<0.000203					
7/20/2022			<0.000203				
7/25/2022							
7/26/2022							
8/2/2022							0.000135 (J)
8/3/2022	<0.000203			<0.000203	<0.000203		
8/9/2022						0.000634	
3/6/2023							
3/8/2023							
3/14/2023							
3/15/2023				<0.000203			
3/21/2023							
3/22/2023		<0.000203					
3/27/2023	<0.000203		<0.000203			<0.000203	0.000134 (J)
3/28/2023					<0.000203		
9/5/2023							
9/11/2023							
9/12/2023				8.4E-05 (J)			
9/13/2023							<0.000203
9/18/2023							
9/19/2023	<0.000203	0.000187 (J)	<0.000203		<0.000203	6.9E-05 (J)	

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Lead (mg/L) Analysis Run 11/15/2023 3:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-23V	GS-AP-MW-27HR	GS-AP-MW-31V	GS-AP-MW-36V	GS-AP-MW-37HR	GS-AP-MW-3V	GS-AP-MW-45V	GS-AP-MW-47	GS-AP-MW-5R
2/21/2022									
2/22/2022		<0.000203	0.00028	0.00016 (J)					
2/23/2022	0.00021					0.00014 (J)	7E-05 (J)		
2/28/2022					<0.000203			<0.000203	
3/1/2022									<0.000203
7/19/2022									
7/20/2022						7.2E-05 (J)			
7/26/2022	<0.000203				<0.000203			<0.000203	
7/27/2022		<0.000203		<0.000203					
8/2/2022									<0.000203
8/3/2022			0.000166 (J)						
8/8/2022							<0.000203		
3/14/2023	<0.000203	<0.000203		<0.000203					
3/15/2023					<0.000203			<0.000203	
3/20/2023									<0.000203
3/21/2023						<0.000203			
3/27/2023			<0.000203						
3/28/2023							<0.000203		
9/6/2023	<0.000203	<0.000203		<0.000203					
9/11/2023					<0.000203				
9/12/2023						<0.000203		<0.000203	<0.000203
9/13/2023			<0.000203						
9/18/2023							<0.000203		
9/19/2023									

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Lead (mg/L) Analysis Run 11/15/2023 3:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-9R	GS-AP-PZ-18R	GS-AP-MW-46
2/21/2022		<0.000203	
2/22/2022			
2/23/2022			<0.000203
2/28/2022			
3/1/2022	<0.000203		
7/19/2022	<0.000203		
7/20/2022			
7/26/2022			
7/27/2022		<0.000203	
8/2/2022			<0.000203
8/3/2022			
8/8/2022			
3/14/2023			
3/15/2023			
3/20/2023			
3/21/2023			
3/27/2023	<0.000203		<0.000203
3/28/2023		<0.000203	
9/6/2023			
9/11/2023			
9/12/2023			
9/13/2023	<0.000203		
9/18/2023			<0.000203
9/19/2023		<0.000203	

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Lithium (mg/L) Analysis Run 11/15/2023 3:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-12	GS-AP-MW-12V	GS-AP-MW-13 (bg)	GS-AP-MW-15	GS-AP-MW-15V	GS-AP-MW-16D	GS-AP-MW-17	GS-AP-MW-17V ...	GS-AP-MW-19
8/1/2016				0.393		0.036 (J)	0.0479 (J)		0.0252 (J)
8/2/2016			0.0121 (J)						
8/3/2016	0.0265 (J)								
9/19/2016						0.0346 (J)	0.0467 (J)		
9/20/2016	0.0225 (J)		0.0116 (J)	0.144					
9/21/2016									0.0223 (J)
10/24/2016							0.0462 (J)		0.0247 (J)
10/25/2016	0.0217 (J)		0.0114 (J)	0.152		0.0353 (J)			
12/13/2016	0.026 (J)		0.0116 (J)			0.0361 (J)	0.0296 (J)		0.0312 (J)
12/14/2016				0.136					
2/6/2017							0.064		
2/7/2017									0.0406 (J)
2/8/2017	0.0315 (J)		0.0118 (J)	0.15		0.0401 (J)			
3/27/2017							0.0683		
3/28/2017				0.137					0.0309 (J)
3/29/2017	0.0308 (J)		0.0118 (J)			0.0379 (J)			
3/30/2017									
4/24/2017							0.0534		
4/26/2017	0.0248 (J)		<0.02	0.123		0.0318 (J)			0.0267 (J)
6/5/2017							0.0574		
6/6/2017				0.123		0.032 (J)			0.0311 (J)
6/7/2017	0.0234 (J)		<0.02						
2/19/2018							0.0481 (J)		
2/20/2018	0.058		<0.02	0.149					
2/21/2018						0.0327 (J)			0.0472 (J)
5/15/2018	0.0489 (J)		0.0101	0.159			0.0551		
5/16/2018						0.0337 (J)			0.0391 (J)
10/15/2018				0.297			0.0606		
10/16/2018	0.0341								0.0406
10/17/2018			<0.02			0.0336			
2/20/2019								0.0671	
2/21/2019		0.0468							
2/26/2019									
2/27/2019									
4/16/2019	0.0261		0.0101 (J)						
4/17/2019				0.19		0.0349	0.0574		0.0429
9/23/2019							0.0583		
9/24/2019				0.469		0.0362		0.0809	0.0392
9/25/2019	0.028	0.0611							
3/16/2020							0.0665		
3/17/2020									
3/18/2020	0.0297			0.378	0.208				
3/23/2020									
3/24/2020		0.0462				0.035			0.0417
3/25/2020								0.0646	
5/12/2020							0.0602		
5/13/2020									
9/17/2020									
9/21/2020					0.116		0.0579		
9/22/2020						0.0343			0.0435
9/23/2020	0.0279	0.0409		0.414				0.0574	
2/1/2021	0.0249	0.0384							

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Lithium (mg/L) Analysis Run 11/15/2023 3:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-12	GS-AP-MW-12V	GS-AP-MW-13 (bg)	GS-AP-MW-15	GS-AP-MW-15V	GS-AP-MW-16D	GS-AP-MW-17	GS-AP-MW-17V ...	GS-AP-MW-19
2/2/2021							0.0634	0.0585	
2/3/2021									
2/8/2021									0.0368
2/9/2021				0.493	0.122				
2/10/2021						0.0376			
7/27/2021									
8/2/2021								0.056	
8/3/2021				0.536	0.0986		0.068		
8/4/2021									
8/9/2021	0.0354	0.0398				0.0326			
8/10/2021									0.0305
8/11/2021									
8/12/2021									
2/8/2022									
2/14/2022							0.0572	0.0499	
2/15/2022						0.033			
2/16/2022				0.263	0.0788				
2/22/2022									0.0266
2/23/2022		0.0279							
2/28/2022	0.0523								
7/19/2022	0.0631								
7/20/2022		0.0309							
7/26/2022									
7/27/2022									
8/2/2022				0.529	0.096	0.0343			
8/3/2022									0.0416
8/8/2022							0.0646		
8/9/2022								0.0555	
8/10/2022									
3/14/2023									
3/15/2023									
3/20/2023				0.305	0.0787				
3/21/2023						0.034			0.0402
3/22/2023	0.0468	0.0304					0.0586	0.0507	
9/5/2023									
9/6/2023									
9/11/2023				0.307	0.0849		0.0569	0.0516	
9/12/2023						0.0348			
9/13/2023	0.0481	0.0306							
9/18/2023									
9/19/2023									0.0336

Time Series

Constituent: Lithium (mg/L) Analysis Run 11/15/2023 3:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-2	GS-AP-MW-21	GS-AP-MW-21V	GS-AP-MW-23H	GS-AP-MW-24H	GS-AP-MW-25HA	GS-AP-MW-26H
8/1/2016							
8/2/2016	0.0495 (J)	0.145					
8/3/2016							
9/19/2016	0.049 (J)						
9/20/2016							
9/21/2016		0.153					
10/24/2016	0.0488 (J)						
10/25/2016		0.171					
12/13/2016	0.0483 (J)						
12/14/2016		0.182					
2/6/2017							
2/7/2017							
2/8/2017	0.0644	0.178					
3/27/2017							
3/28/2017		0.161					
3/29/2017							
3/30/2017	0.0597						
4/24/2017							
4/26/2017	0.0459 (J)	0.126					
6/5/2017							
6/6/2017	0.0491 (J)	0.135					
6/7/2017							
2/19/2018							
2/20/2018		0.158					
2/21/2018	0.0534						
5/15/2018		0.174					
5/16/2018	0.0451 (J)						
10/15/2018							
10/16/2018	0.0511	0.219					
10/17/2018							
2/20/2019				0.031			
2/21/2019							
2/26/2019					0.0282		
2/27/2019							0.0966
4/16/2019							
4/17/2019	0.0421	0.312					
9/23/2019				0.0324			0.0945
9/24/2019		0.276			0.0275		
9/25/2019	0.0457						
3/16/2020							
3/17/2020				0.0327			
3/18/2020		0.379			0.0264		
3/23/2020			0.146				
3/24/2020						0.0461	
3/25/2020	0.0434						0.0946
5/12/2020							
5/13/2020	0.0409						
9/17/2020				0.0333	0.0237	0.0449	
9/21/2020							0.0958
9/22/2020	0.0395						
9/23/2020		0.179	0.137				
2/1/2021	0.0445						

Time Series

Constituent: Lithium (mg/L) Analysis Run 11/15/2023 3:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-2	GS-AP-MW-21	GS-AP-MW-21V	GS-AP-MW-23H	GS-AP-MW-24H	GS-AP-MW-25HA	GS-AP-MW-26H
2/2/2021					0.0247		
2/3/2021				0.0319			
2/8/2021		0.239					
2/9/2021			0.124				0.0928
2/10/2021						0.0579	
7/27/2021				0.0309			
8/2/2021							
8/3/2021					0.0249		
8/4/2021	0.0443	0.213					
8/9/2021							
8/10/2021							0.0932
8/11/2021			0.048				
8/12/2021						0.0558	
2/8/2022		0.0996	0.0835				
2/14/2022				0.0306			
2/15/2022					0.0239		0.0917
2/16/2022						0.0504	
2/22/2022	0.0354						
2/23/2022							
2/28/2022							
7/19/2022	0.033						
7/20/2022							
7/26/2022				0.032			
7/27/2022					0.0253		
8/2/2022							
8/3/2022						0.061	
8/8/2022							
8/9/2022			0.0789				
8/10/2022		0.0868					0.0924
3/14/2023				0.0286			
3/15/2023					0.0238		
3/20/2023							
3/21/2023		0.0884	0.11				
3/22/2023	0.0359					0.0564	0.085
9/5/2023		0.102	0.0928				
9/6/2023				0.0305	0.0245		
9/11/2023							
9/12/2023							
9/13/2023							
9/18/2023	0.0452					0.0574	0.0856
9/19/2023							

Time Series

Constituent: Lithium (mg/L) Analysis Run 11/15/2023 3:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-28H	GS-AP-MW-29H	GS-AP-MW-3	GS-AP-MW-30HA	GS-AP-MW-31H	GS-AP-MW-32H	GS-AP-MW-33HO	GS-AP-MW-34HO	GS-AP-MW-35HO
2/27/2019		0.07							
3/13/2019	0.0625								
9/24/2019		0.0509							
9/25/2019	0.0619								
3/16/2020	0.0627							0.205	
3/17/2020							0.0516		0.074
3/18/2020				0.0528	0.0347				
3/24/2020						0.0428			
3/25/2020		0.0528							
5/12/2020	0.0569							0.18	0.0693
5/13/2020				0.0536			0.0455		
9/15/2020							0.0479		
9/16/2020								0.18	0.0685
9/17/2020									
9/21/2020				0.0494		0.0421			
9/22/2020	0.0574	0.0586			0.0357				
2/1/2021					0.0417				
2/2/2021									
2/3/2021		0.0915					0.0534	0.249	
2/4/2021									0.0734
2/8/2021									
2/9/2021									
2/10/2021						0.0471			
2/17/2021	0.0686		0.0995	0.0548					
7/27/2021							0.0563	0.207	
7/28/2021									0.0722
8/2/2021				0.0582	0.0411				
8/3/2021			0.088						
8/4/2021		0.0809							
8/9/2021	0.0633								
8/10/2021						0.0466			
2/8/2022				0.0533	0.0366				
2/9/2022							0.0517	0.185	0.0673
2/14/2022	0.0551	0.067				0.0407			
2/15/2022									
2/16/2022			0.0732						
2/21/2022									
2/22/2022									
7/20/2022			0.07						
7/26/2022									
7/27/2022	0.0603					0.0456			
8/2/2022									
8/3/2022		0.0811		0.07	0.0512				
8/10/2022									
3/8/2023								0.14	0.0633
3/13/2023				0.0516					
3/14/2023	0.0561						0.044		
3/15/2023									
3/21/2023			0.075			0.0418			
3/22/2023									
3/27/2023					0.0435				
3/28/2023		0.0656							

Time Series

Constituent: Lithium (mg/L) Analysis Run 11/15/2023 3:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-28H	GS-AP-MW-29H	GS-AP-MW-3	GS-AP-MW-30HA	GS-AP-MW-31H	GS-AP-MW-32H	GS-AP-MW-33HO	GS-AP-MW-34HO	GS-AP-MW-35HO
8/30/2023							0.0489		
8/31/2023								0.155	0.0653
9/5/2023				0.0558					
9/6/2023									
9/11/2023	0.0607								
9/12/2023			0.0686						
9/13/2023		0.0678			0.0476	0.0424			
9/18/2023									
9/19/2023									

Time Series

Constituent: Lithium (mg/L)   Analysis Run 11/15/2023 3:06 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

	GS-AP-MW-36H	GS-AP-MW-38H	GS-AP-MW-40H	GS-AP-MW-41HD	GS-AP-MW-41HS	GS-AP-MW-42H	GS-AP-MW-43HO
2/27/2019							
3/13/2019							
9/24/2019							
9/25/2019							
3/16/2020							
3/17/2020	0.0342						
3/18/2020				0.311			
3/24/2020		0.0632				0.0346	
3/25/2020							0.0505
5/12/2020							
5/13/2020	0.0337						
9/15/2020							
9/16/2020							
9/17/2020	0.035			0.341			
9/21/2020							
9/22/2020		0.0591	0.0405			0.0333	0.0587
2/1/2021							
2/2/2021			0.0571				
2/3/2021						0.0356	
2/4/2021							
2/8/2021				0.356	0.14		
2/9/2021		0.0676					
2/10/2021							
2/17/2021	0.039						0.0723
7/27/2021							
7/28/2021					0.178		
8/2/2021							
8/3/2021				0.369			
8/4/2021	0.0455	0.0672				0.0348	0.0706
8/9/2021							
8/10/2021			0.0567				
2/8/2022					0.0817		
2/9/2022							
2/14/2022	0.0417						
2/15/2022			0.0539	0.366			
2/16/2022						0.0313	
2/21/2022							0.0579
2/22/2022		0.0594					
7/20/2022	0.0303						
7/26/2022					0.0954		
7/27/2022				0.413		0.035	
8/2/2022			0.0705				
8/3/2022							0.0749
8/10/2022		0.0705					
3/8/2023							
3/13/2023					0.0511		
3/14/2023							
3/15/2023	0.0449			0.341		0.0309	
3/21/2023							
3/22/2023			0.0548				
3/27/2023							
3/28/2023		0.0603					0.0686

Time Series

Constituent: Lithium (mg/L)   Analysis Run 11/15/2023 3:06 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

	GS-AP-MW-36H	GS-AP-MW-38H	GS-AP-MW-40H	GS-AP-MW-41HD	GS-AP-MW-41HS	GS-AP-MW-42H	GS-AP-MW-43HO
8/30/2023				0.357	0.0532		
8/31/2023							
9/5/2023							
9/6/2023	0.0489						
9/11/2023							
9/12/2023							
9/13/2023							
9/18/2023			0.0616				
9/19/2023		0.0606				0.0346	0.0686

Time Series

Constituent: Lithium (mg/L) Analysis Run 11/15/2023 3:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-44HO	GS-AP-MW-6D	GS-AP-MW-6S	GS-AP-MW-6V	GS-AP-MW-7	GS-AP-MW-8 (bg)	GS-AP-MW-9V	GS-AP-PZ-16	GS-AP-PZ-22
8/2/2016					0.144				
8/3/2016		0.204	<0.02			<0.02			
9/20/2016		0.223	<0.02						
9/21/2016					0.136	<0.02			
10/24/2016		0.243			0.135				
10/25/2016						<0.02			
10/26/2016			0.0199 (J)						
12/12/2016		0.22	<0.02		0.146				
12/13/2016						<0.02			
2/6/2017		0.247	<0.02		0.182	<0.02			
3/27/2017		0.263	<0.02						
3/28/2017					0.175	<0.02			
4/24/2017		0.237	<0.02		0.143	<0.02			
6/6/2017		0.259	<0.02						
6/7/2017					0.152	<0.02			
2/19/2018		0.213	<0.02		0.143	<0.02			
5/14/2018		0.239	0.0238 (J)						
5/15/2018					0.151	<0.02			
10/15/2018		0.236	0.03		0.155				
10/16/2018						<0.02			
4/16/2019		0.267	<0.02			<0.02			
4/23/2019					0.144				
9/23/2019		0.264	0.0105 (J)						
9/24/2019					0.156	<0.02			
3/17/2020		0.292	0.0695		0.161				
3/18/2020						<0.02			
3/23/2020							0.0309		
3/24/2020								0.0714	0.0734
8/27/2020	0.0411								
9/8/2020				0.138					
9/15/2020	0.0494			0.136					
9/16/2020			0.066		0.16				
9/17/2020		0.299						0.073	0.0862
9/21/2020						<0.02			
9/22/2020							0.0293		
2/2/2021					0.183	0.00796 (J)	0.0299		0.0743
2/3/2021	0.063	0.312	0.0455	0.156					
2/17/2021								0.0762	
7/27/2021	0.0567	0.326	0.0576						
8/2/2021				0.152					
8/3/2021									0.0685
8/9/2021					0.205			0.0657	
8/10/2021						0.00832 (J)	0.031		
2/8/2022					0.203				
2/9/2022	0.0478			0.121					
2/14/2022		0.302	0.0625						0.055
2/15/2022								0.0614	
2/16/2022						0.00826 (J)			
2/21/2022							0.0293		
2/22/2022									
2/28/2022									
3/1/2022									

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Lithium (mg/L) Analysis Run 11/15/2023 3:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-44HO	GS-AP-MW-6D	GS-AP-MW-6S	GS-AP-MW-6V	GS-AP-MW-7	GS-AP-MW-8 (bg)	GS-AP-MW-9V	GS-AP-PZ-16	GS-AP-PZ-22
7/19/2022							0.029		
7/20/2022									
7/25/2022		0.348		0.138	0.227				
7/26/2022			0.0665					0.0839	
8/2/2022						0.01 (J)			
8/3/2022									
8/9/2022									0.071
3/6/2023	0.0451								
3/8/2023				0.126					
3/14/2023		0.308	0.0468		0.207				
3/15/2023									
3/21/2023								0.0522	0.094
3/22/2023									
3/27/2023						0.00968 (J)	0.0298		
3/28/2023									
9/5/2023	0.0475	0.309	0.0806						
9/11/2023				0.138	0.213				0.094
9/12/2023								0.0526	
9/13/2023							0.0326		
9/18/2023						0.00906 (J)			
9/19/2023									

Time Series

Constituent: Lithium (mg/L) Analysis Run 11/15/2023 3:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-10R	GS-AP-MW-11R	GS-AP-MW-13R	GS-AP-MW-14R	GS-AP-MW-18R ...	GS-AP-MW-18VR	GS-AP-MW-1R
8/2/2016							
8/3/2016							
9/20/2016							
9/21/2016							
10/24/2016							
10/25/2016							
10/26/2016							
12/12/2016							
12/13/2016							
2/6/2017							
3/27/2017							
3/28/2017							
4/24/2017							
6/6/2017							
6/7/2017							
2/19/2018							
5/14/2018							
5/15/2018							
10/15/2018							
10/16/2018							
4/16/2019							
4/23/2019							
9/23/2019							
9/24/2019							
3/17/2020							
3/18/2020							
3/23/2020							
3/24/2020							
8/27/2020							
9/8/2020							
9/15/2020							
9/16/2020							
9/17/2020							
9/21/2020							
9/22/2020							
2/2/2021							
2/3/2021							
2/17/2021							
7/27/2021							
8/2/2021							
8/3/2021							
8/9/2021							
8/10/2021							
2/8/2022							
2/9/2022							
2/14/2022							
2/15/2022							
2/16/2022							
2/21/2022							
2/22/2022					<0.02	0.0446	
2/28/2022				0.0228			
3/1/2022	0.0349	0.0281	0.0272				0.0309

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Lithium (mg/L) Analysis Run 11/15/2023 3:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-10R	GS-AP-MW-11R	GS-AP-MW-13R	GS-AP-MW-14R	GS-AP-MW-18R ...	GS-AP-MW-18VR	GS-AP-MW-1R
7/19/2022		0.0289					
7/20/2022			0.027				
7/25/2022							
7/26/2022							
8/2/2022							0.0385
8/3/2022	0.0391			0.0265	0.00863 (J)		
8/9/2022						0.059	
3/6/2023							
3/8/2023							
3/14/2023							
3/15/2023				0.0248			
3/21/2023							
3/22/2023		0.0317					
3/27/2023	0.0362		0.0261			0.0536	0.0319
3/28/2023					<0.02		
9/5/2023							
9/11/2023							
9/12/2023				0.0264			
9/13/2023							0.033
9/18/2023							
9/19/2023	0.0393	0.0324	0.0279		0.00814 (J)	0.0539	

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Lithium (mg/L) Analysis Run 11/15/2023 3:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-23V	GS-AP-MW-27HR	GS-AP-MW-31V	GS-AP-MW-36V	GS-AP-MW-37HR	GS-AP-MW-3V	GS-AP-MW-45V	GS-AP-MW-47	GS-AP-MW-5R
2/21/2022									
2/22/2022		0.042	0.0316	0.0383					
2/23/2022	0.041					0.0489	0.0374		
2/28/2022					0.0312			0.04	
3/1/2022									0.0644
7/19/2022									
7/20/2022						0.071			
7/26/2022	0.0419				0.0357			0.0429	
7/27/2022		0.0935		0.0378					
8/2/2022									0.0827
8/3/2022			0.0429						
8/8/2022							0.0486		
3/14/2023	0.0406	0.108		0.0402					
3/15/2023					0.0345			0.0394	
3/20/2023									0.0711
3/21/2023						0.0825			
3/27/2023			0.0508						
3/28/2023							0.0531		
9/6/2023	0.0418	0.121		0.0545					
9/11/2023					0.0369				
9/12/2023						0.103		0.0427	0.0717
9/13/2023			0.0732						
9/18/2023							0.0931		
9/19/2023									

Time Series

Constituent: Lithium (mg/L)   Analysis Run 11/15/2023 3:06 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

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	GS-AP-MW-9R	GS-AP-PZ-18R	GS-AP-MW-46
2/21/2022		0.0157 (J)	
2/22/2022			
2/23/2022			0.0653
2/28/2022			
3/1/2022	0.0361		
7/19/2022	0.0356		
7/20/2022			
7/26/2022			
7/27/2022		0.0172 (J)	
8/2/2022			0.0756
8/3/2022			
8/8/2022			
3/14/2023			
3/15/2023			
3/20/2023			
3/21/2023			
3/27/2023	0.0351		0.0593
3/28/2023		0.0155 (J)	
9/6/2023			
9/11/2023			
9/12/2023			
9/13/2023	0.0352		
9/18/2023			0.0568
9/19/2023		0.0166 (J)	

Time Series

Constituent: Mercury (mg/L)   Analysis Run 11/15/2023 3:06 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

	GS-AP-MW-12	GS-AP-MW-12V	GS-AP-MW-13 (bg)	GS-AP-MW-15	GS-AP-MW-15V	GS-AP-MW-16D	GS-AP-MW-17	GS-AP-MW-17V ...	GS-AP-MW-19
8/1/2016				<0.0005		<0.0005	<0.0005		<0.0005
8/2/2016			<0.0005						
8/3/2016	<0.0005								
9/19/2016						<0.0005	<0.0005		
9/20/2016	<0.0005		<0.0005	<0.0005					
9/21/2016									<0.0005
10/24/2016							<0.0005		<0.0005
10/25/2016	<0.0005		<0.0005	<0.0005		<0.0005			
12/13/2016	<0.0005		<0.0005			<0.0005	<0.0005		<0.0005
12/14/2016				<0.0005					
2/6/2017							<0.0005		
2/7/2017									<0.0005
2/8/2017	<0.0005		<0.0005	<0.0005		<0.0005			
3/27/2017							<0.0005		
3/28/2017				<0.0005					<0.0005
3/29/2017	<0.0005		<0.0005			<0.0005			
3/30/2017									
4/24/2017							<0.0005		
4/26/2017	<0.0005		<0.0005	<0.0005		<0.0005			<0.0005
6/5/2017							<0.0005		
6/6/2017				<0.0005		<0.0005			<0.0005
6/7/2017	<0.0005		<0.0005						
2/19/2018							<0.0005		
2/20/2018	<0.0005		<0.0005	<0.0005					
2/21/2018						<0.0005			<0.0005
5/15/2018	<0.0005		<0.0005	<0.0005			<0.0005		
5/16/2018						<0.0005			<0.0005
10/15/2018				<0.0005			<0.0005		
10/16/2018	<0.0005								<0.0005
10/17/2018			<0.0005			<0.0005			
2/20/2019								<0.0005	
2/21/2019		<0.0005							
2/26/2019									
2/27/2019									
4/16/2019	<0.0005		<0.0005						
4/17/2019				<0.0005		<0.0005	<0.0005		<0.0005
9/23/2019							<0.0005		
9/24/2019				<0.0005		<0.0005		<0.0005	<0.0005
9/25/2019	<0.0005	<0.0005							
3/16/2020							<0.0005		
3/17/2020									
3/18/2020	<0.0005			<0.0005	<0.0005				
3/23/2020									
3/24/2020		<0.0005				<0.0005			<0.0005
3/25/2020								<0.0005	
5/12/2020							<0.0005		
5/13/2020									
9/17/2020									
9/21/2020					<0.0005		<0.0005		
9/22/2020						<0.0005			<0.0005
9/23/2020	<0.0005	<0.0005		<0.0005				<0.0005	
2/1/2021	<0.0005	<0.0005							

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Mercury (mg/L) Analysis Run 11/15/2023 3:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-12	GS-AP-MW-12V	GS-AP-MW-13 (bg)	GS-AP-MW-15	GS-AP-MW-15V	GS-AP-MW-16D	GS-AP-MW-17	GS-AP-MW-17V ...	GS-AP-MW-19
2/2/2021							<0.0005	<0.0005	
2/3/2021									
2/8/2021									<0.0005
2/9/2021				<0.0005	<0.0005				
2/10/2021						<0.0005			
7/27/2021									
8/2/2021								<0.0005	
8/3/2021				<0.0005	<0.0005		<0.0005		
8/4/2021									
8/9/2021	<0.0005	<0.0005				<0.0005			
8/10/2021									<0.0005
8/11/2021									
8/12/2021									
2/8/2022									
2/14/2022							<0.0005	<0.0005	
2/15/2022						<0.0005			
2/16/2022				<0.0005	<0.0005				
2/22/2022									<0.0005
2/23/2022		<0.0005							
2/28/2022	<0.0005								
7/19/2022	<0.0005								
7/20/2022		<0.0005							
7/26/2022									
7/27/2022									
8/2/2022				<0.0005	<0.0005	<0.0005			
8/3/2022									<0.0005
8/8/2022							<0.0005		
8/9/2022								<0.0005	
8/10/2022									
3/14/2023									
3/15/2023									
3/20/2023				<0.0005	<0.0005				
3/21/2023						<0.0005			<0.0005
3/22/2023	<0.0005	<0.0005					<0.0005	<0.0005	
9/5/2023									
9/6/2023									
9/11/2023				<0.0005	<0.0005		<0.0005	<0.0005	
9/12/2023						<0.0005			
9/13/2023	<0.0005	<0.0005							
9/18/2023									
9/19/2023									<0.0005

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Mercury (mg/L) Analysis Run 11/15/2023 3:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-2	GS-AP-MW-21	GS-AP-MW-21V	GS-AP-MW-23H	GS-AP-MW-24H	GS-AP-MW-25HA	GS-AP-MW-26H
8/1/2016							
8/2/2016	<0.0005	<0.0005					
8/3/2016							
9/19/2016	<0.0005						
9/20/2016							
9/21/2016		<0.0005					
10/24/2016	<0.0005						
10/25/2016		<0.0005					
12/13/2016	<0.0005						
12/14/2016		<0.0005					
2/6/2017							
2/7/2017							
2/8/2017	<0.0005	<0.0005					
3/27/2017							
3/28/2017		<0.0005					
3/29/2017							
3/30/2017	<0.0005						
4/24/2017							
4/26/2017	<0.0005	<0.0005					
6/5/2017							
6/6/2017	<0.0005	<0.0005					
6/7/2017							
2/19/2018							
2/20/2018		<0.0005					
2/21/2018	<0.0005						
5/15/2018		<0.0005					
5/16/2018	<0.0005						
10/15/2018							
10/16/2018	<0.0005	<0.0005					
10/17/2018							
2/20/2019				<0.0005			
2/21/2019							
2/26/2019					<0.0005		
2/27/2019							<0.0005
4/16/2019							
4/17/2019	<0.0005	<0.0005					
9/23/2019				<0.0005			<0.0005
9/24/2019		<0.0005			<0.0005		
9/25/2019	<0.0005						
3/16/2020							
3/17/2020				<0.0005			
3/18/2020		<0.0005			<0.0005		
3/23/2020			<0.0005				
3/24/2020						<0.0005	
3/25/2020	<0.0005						<0.0005
5/12/2020							
5/13/2020	<0.0005						
9/17/2020				<0.0005	<0.0005	<0.0005	
9/21/2020							<0.0005
9/22/2020	<0.0005						
9/23/2020		<0.0005	<0.0005				
2/1/2021	<0.0005						

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Mercury (mg/L)   Analysis Run 11/15/2023 3:06 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

	GS-AP-MW-2	GS-AP-MW-21	GS-AP-MW-21V	GS-AP-MW-23H	GS-AP-MW-24H	GS-AP-MW-25HA	GS-AP-MW-26H
2/2/2021					<0.0005		
2/3/2021				<0.0005			
2/8/2021		<0.0005					
2/9/2021			<0.0005				<0.0005
2/10/2021						<0.0005	
7/27/2021				<0.0005			
8/2/2021							
8/3/2021					<0.0005		
8/4/2021	<0.0005	<0.0005					
8/9/2021							
8/10/2021							<0.0005
8/11/2021			<0.0005				
8/12/2021						<0.0005	
2/8/2022		<0.0005	<0.0005				
2/14/2022				<0.0005			
2/15/2022					<0.0005		<0.0005
2/16/2022						<0.0005	
2/22/2022	<0.0005						
2/23/2022							
2/28/2022							
7/19/2022	<0.0005						
7/20/2022							
7/26/2022				<0.0005			
7/27/2022					<0.0005		
8/2/2022							
8/3/2022						<0.0005	
8/8/2022							
8/9/2022			<0.0005				
8/10/2022		<0.0005					<0.0005
3/14/2023				<0.0005			
3/15/2023					<0.0005		
3/20/2023							
3/21/2023		<0.0005	<0.0005				
3/22/2023	<0.0005					<0.0005	<0.0005
9/5/2023		<0.0005	<0.0005				
9/6/2023				<0.0005	<0.0005		
9/11/2023							
9/12/2023							
9/13/2023							
9/18/2023	<0.0005					<0.0005	<0.0005
9/19/2023							

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Mercury (mg/L) Analysis Run 11/15/2023 3:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-28H	GS-AP-MW-29H	GS-AP-MW-3	GS-AP-MW-30HA	GS-AP-MW-31H	GS-AP-MW-32H	GS-AP-MW-33HO	GS-AP-MW-34HO	GS-AP-MW-35HO
2/27/2019		<0.0005							
3/13/2019	<0.0005								
9/24/2019		<0.0005							
9/25/2019	<0.0005								
3/16/2020	<0.0005							<0.0005	
3/17/2020							<0.0005		<0.0005
3/18/2020				<0.0005	<0.0005				
3/24/2020						<0.0005			
3/25/2020		<0.0005							
5/12/2020	<0.0005							<0.0005	<0.0005
5/13/2020				<0.0005			<0.0005		
9/15/2020							<0.0005		
9/16/2020								<0.0005	<0.0005
9/17/2020									
9/21/2020				<0.0005		<0.0005			
9/22/2020	<0.0005	<0.0005			<0.0005				
2/1/2021					<0.0005				
2/2/2021									
2/3/2021		<0.0005					<0.0005	<0.0005	
2/4/2021									<0.0005
2/8/2021									
2/9/2021									
2/10/2021						<0.0005			
2/17/2021	<0.0005		<0.0005	<0.0005					
7/27/2021							<0.0005	<0.0005	
7/28/2021									<0.0005
8/2/2021				<0.0005	<0.0005				
8/3/2021			<0.0005						
8/4/2021		<0.0005							
8/9/2021	<0.0005								
8/10/2021						<0.0005			
2/8/2022				<0.0005	<0.0005				
2/9/2022							<0.0005	<0.0005	<0.0005
2/14/2022	<0.0005	<0.0005				<0.0005			
2/15/2022									
2/16/2022			<0.0005						
2/21/2022									
2/22/2022									
7/20/2022			<0.0005						
7/26/2022									
7/27/2022	<0.0005					<0.0005			
8/2/2022									
8/3/2022		<0.0005		<0.0005	<0.0005				
8/10/2022									
3/8/2023								<0.0005	<0.0005
3/13/2023				<0.0005					
3/14/2023	<0.0005						<0.0005		
3/15/2023									
3/21/2023			<0.0005			<0.0005			
3/22/2023									
3/27/2023					<0.0005				
3/28/2023		<0.0005							

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Mercury (mg/L) Analysis Run 11/15/2023 3:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-28H	GS-AP-MW-29H	GS-AP-MW-3	GS-AP-MW-30HA	GS-AP-MW-31H	GS-AP-MW-32H	GS-AP-MW-33HO	GS-AP-MW-34HO	GS-AP-MW-35HO
8/30/2023							<0.0005		
8/31/2023								<0.0005	<0.0005
9/5/2023				<0.0005					
9/6/2023									
9/11/2023	<0.0005								
9/12/2023			<0.0005						
9/13/2023		<0.0005			<0.0005	<0.0005			
9/18/2023									
9/19/2023									

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Mercury (mg/L)   Analysis Run 11/15/2023 3:06 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

	GS-AP-MW-36H	GS-AP-MW-38H	GS-AP-MW-40H	GS-AP-MW-41HD	GS-AP-MW-41HS	GS-AP-MW-42H	GS-AP-MW-43HO
2/27/2019							
3/13/2019							
9/24/2019							
9/25/2019							
3/16/2020							
3/17/2020	<0.0005						
3/18/2020				<0.0005			
3/24/2020		<0.0005				<0.0005	
3/25/2020							<0.0005
5/12/2020							
5/13/2020	<0.0005						
9/15/2020							
9/16/2020							
9/17/2020	<0.0005			<0.0005			
9/21/2020							
9/22/2020		<0.0005	<0.0005			<0.0005	<0.0005
2/1/2021							
2/2/2021			<0.0005				
2/3/2021						<0.0005	
2/4/2021							
2/8/2021				<0.0005	<0.0005		
2/9/2021		<0.0005					
2/10/2021							
2/17/2021	<0.0005						<0.0005
7/27/2021							
7/28/2021					<0.0005		
8/2/2021							
8/3/2021				<0.0005			
8/4/2021	<0.0005	<0.0005				<0.0005	<0.0005
8/9/2021							
8/10/2021			<0.0005				
2/8/2022					<0.0005		
2/9/2022							
2/14/2022	<0.0005						
2/15/2022			<0.0005	<0.0005			
2/16/2022						<0.0005	
2/21/2022							<0.0005
2/22/2022		<0.0005					
7/20/2022	<0.0005						
7/26/2022					<0.0005		
7/27/2022				<0.0005		<0.0005	
8/2/2022			<0.0005				
8/3/2022							<0.0005
8/10/2022		<0.0005					
3/8/2023							
3/13/2023					<0.0005		
3/14/2023							
3/15/2023	<0.0005			<0.0005		<0.0005	
3/21/2023							
3/22/2023			<0.0005				
3/27/2023							
3/28/2023		<0.0005					<0.0005

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Mercury (mg/L) Analysis Run 11/15/2023 3:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-36H	GS-AP-MW-38H	GS-AP-MW-40H	GS-AP-MW-41HD	GS-AP-MW-41HS	GS-AP-MW-42H	GS-AP-MW-43HO
8/30/2023				<0.0005	<0.0005		
8/31/2023							
9/5/2023							
9/6/2023	<0.0005						
9/11/2023							
9/12/2023							
9/13/2023							
9/18/2023			<0.0005				
9/19/2023		<0.0005				<0.0005	<0.0005

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Mercury (mg/L)   Analysis Run 11/15/2023 3:06 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

	GS-AP-MW-44HO	GS-AP-MW-6D	GS-AP-MW-6S	GS-AP-MW-6V	GS-AP-MW-7	GS-AP-MW-8 (bg)	GS-AP-MW-9V	GS-AP-PZ-16	GS-AP-PZ-22
8/2/2016					<0.0005				
8/3/2016		<0.0005	<0.0005			<0.0005			
9/20/2016		<0.0005	<0.0005						
9/21/2016					<0.0005	<0.0005			
10/24/2016		<0.0005			<0.0005				
10/25/2016						<0.0005			
10/26/2016			<0.0005						
12/12/2016		<0.0005	<0.0005		<0.0005				
12/13/2016						<0.0005			
2/6/2017		<0.0005	<0.0005		<0.0005	<0.0005			
3/27/2017		<0.0005	<0.0005						
3/28/2017					<0.0005	<0.0005			
4/24/2017		<0.0005	<0.0005		<0.0005	<0.0005			
6/6/2017		<0.0005	<0.0005						
6/7/2017					<0.0005	<0.0005			
2/19/2018		<0.0005	<0.0005		<0.0005	<0.0005			
5/14/2018		<0.0005	<0.0005						
5/15/2018					<0.0005	<0.0005			
10/15/2018		<0.0005	<0.0005		<0.0005				
10/16/2018						<0.0005			
4/16/2019		<0.0005	<0.0005			<0.0005			
4/23/2019					<0.0005				
9/23/2019		<0.0005	<0.0005						
9/24/2019					<0.0005	<0.0005			
3/17/2020		<0.0005	<0.0005		<0.0005				
3/18/2020						<0.0005			
3/23/2020							<0.0005		
3/24/2020								<0.0005	<0.0005
8/27/2020	<0.0005								
9/8/2020				<0.0005					
9/15/2020	<0.0005			<0.0005					
9/16/2020			<0.0005		<0.0005				
9/17/2020		<0.0005						<0.0005	<0.0005
9/21/2020						<0.0005			
9/22/2020							<0.0005		
2/2/2021					<0.0005	<0.0005	<0.0005		<0.0005
2/3/2021	<0.0005	<0.0005	<0.0005	<0.0005					
2/17/2021								<0.0005	
7/27/2021	<0.0005	<0.0005	<0.0005						
8/2/2021				<0.0005					
8/3/2021									<0.0005
8/9/2021					<0.0005			<0.0005	
8/10/2021						<0.0005	<0.0005		
2/8/2022					<0.0005				
2/9/2022	<0.0005			<0.0005					
2/14/2022		<0.0005	<0.0005						<0.0005
2/15/2022								<0.0005	
2/16/2022						<0.0005			
2/21/2022							<0.0005		
2/22/2022									
2/28/2022									
3/1/2022									

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Mercury (mg/L) Analysis Run 11/15/2023 3:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-44HO	GS-AP-MW-6D	GS-AP-MW-6S	GS-AP-MW-6V	GS-AP-MW-7	GS-AP-MW-8 (bg)	GS-AP-MW-9V	GS-AP-PZ-16	GS-AP-PZ-22
7/19/2022							<0.0005		
7/20/2022									
7/25/2022		<0.0005		<0.0005	<0.0005				
7/26/2022			<0.0005					<0.0005	
8/2/2022						<0.0005			
8/3/2022									
8/9/2022									<0.0005
3/6/2023	<0.0005								
3/8/2023				<0.0005					
3/14/2023		<0.0005	<0.0005		<0.0005				
3/15/2023									
3/21/2023								<0.0005	<0.0005
3/22/2023									
3/27/2023						<0.0005	<0.0005		
3/28/2023									
9/5/2023	<0.0005	<0.0005	<0.0005						
9/11/2023				<0.0005	<0.0005				<0.0005
9/12/2023								<0.0005	
9/13/2023							<0.0005		
9/18/2023						<0.0005			
9/19/2023									

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Mercury (mg/L)   Analysis Run 11/15/2023 3:06 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

	GS-AP-MW-10R	GS-AP-MW-11R	GS-AP-MW-13R	GS-AP-MW-14R	GS-AP-MW-18R ...	GS-AP-MW-18VR	GS-AP-MW-1R
8/2/2016							
8/3/2016							
9/20/2016							
9/21/2016							
10/24/2016							
10/25/2016							
10/26/2016							
12/12/2016							
12/13/2016							
2/6/2017							
3/27/2017							
3/28/2017							
4/24/2017							
6/6/2017							
6/7/2017							
2/19/2018							
5/14/2018							
5/15/2018							
10/15/2018							
10/16/2018							
4/16/2019							
4/23/2019							
9/23/2019							
9/24/2019							
3/17/2020							
3/18/2020							
3/23/2020							
3/24/2020							
8/27/2020							
9/8/2020							
9/15/2020							
9/16/2020							
9/17/2020							
9/21/2020							
9/22/2020							
2/2/2021							
2/3/2021							
2/17/2021							
7/27/2021							
8/2/2021							
8/3/2021							
8/9/2021							
8/10/2021							
2/8/2022							
2/9/2022							
2/14/2022							
2/15/2022							
2/16/2022							
2/21/2022							
2/22/2022					<0.0005	<0.0005	
2/28/2022				<0.0005			
3/1/2022	<0.0005	<0.0005	<0.0005				<0.0005

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Mercury (mg/L) Analysis Run 11/15/2023 3:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-10R	GS-AP-MW-11R	GS-AP-MW-13R	GS-AP-MW-14R	GS-AP-MW-18R ...	GS-AP-MW-18VR	GS-AP-MW-1R
7/19/2022		<0.0005					
7/20/2022			<0.0005				
7/25/2022							
7/26/2022							
8/2/2022							<0.0005
8/3/2022	<0.0005			<0.0005	<0.0005		
8/9/2022						<0.0005	
3/6/2023							
3/8/2023							
3/14/2023							
3/15/2023				<0.0005			
3/21/2023							
3/22/2023		<0.0005					
3/27/2023	<0.0005		<0.0005			<0.0005	<0.0005
3/28/2023					<0.0005		
9/5/2023							
9/11/2023							
9/12/2023				<0.0005			
9/13/2023							<0.0005
9/18/2023							
9/19/2023	<0.0005	<0.0005	<0.0005		<0.0005	<0.0005	

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Mercury (mg/L) Analysis Run 11/15/2023 3:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-23V	GS-AP-MW-27HR	GS-AP-MW-31V	GS-AP-MW-36V	GS-AP-MW-37HR	GS-AP-MW-3V	GS-AP-MW-45V	GS-AP-MW-47	GS-AP-MW-5R
2/21/2022									
2/22/2022		<0.0005	<0.0005	<0.0005					
2/23/2022	<0.0005					<0.0005	<0.0005		
2/28/2022					<0.0005			<0.0005	
3/1/2022									<0.0005
7/19/2022									
7/20/2022						<0.0005			
7/26/2022	<0.0005				<0.0005			<0.0005	
7/27/2022		<0.0005		<0.0005					
8/2/2022									<0.0005
8/3/2022			<0.0005						
8/8/2022							<0.0005		
3/14/2023	<0.0005	<0.0005		<0.0005					
3/15/2023					<0.0005			<0.0005	
3/20/2023									<0.0005
3/21/2023						<0.0005			
3/27/2023			<0.0005						
3/28/2023							<0.0005		
9/6/2023	<0.0005	<0.0005		<0.0005					
9/11/2023					<0.0005				
9/12/2023						<0.0005		<0.0005	<0.0005
9/13/2023			<0.0005						
9/18/2023							<0.0005		
9/19/2023									

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Mercury (mg/L)   Analysis Run 11/15/2023 3:06 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

	GS-AP-MW-9R	GS-AP-PZ-18R	GS-AP-MW-46
2/21/2022		<0.0005	
2/22/2022			
2/23/2022			<0.0005
2/28/2022			
3/1/2022	<0.0005		
7/19/2022	<0.0005		
7/20/2022			
7/26/2022			
7/27/2022		<0.0005	
8/2/2022			<0.0005
8/3/2022			
8/8/2022			
3/14/2023			
3/15/2023			
3/20/2023			
3/21/2023			
3/27/2023	<0.0005		<0.0005
3/28/2023		<0.0005	
9/6/2023			
9/11/2023			
9/12/2023			
9/13/2023	<0.0005		
9/18/2023			<0.0005
9/19/2023		<0.0005	

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 11/15/2023 3:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-12	GS-AP-MW-12V	GS-AP-MW-13 (bg)	GS-AP-MW-15	GS-AP-MW-15V	GS-AP-MW-16D	GS-AP-MW-17	GS-AP-MW-17V ...	GS-AP-MW-19
8/1/2016				0.142		<0.01015	0.00738 (J)		0.00752 (J)
8/2/2016			<0.01						
8/3/2016	0.0269								
9/19/2016						<0.01015	0.00889 (J)		
9/20/2016	0.00762 (J)		<0.01	0.0683					
9/21/2016									0.0117
10/24/2016							0.00819 (J)		0.0198
10/25/2016	0.00456 (J)		<0.01	0.063		<0.01015			
12/13/2016	0.00411 (J)		<0.01			<0.01015	0.0189		0.00703 (J)
12/14/2016				0.0604					
2/6/2017							0.00852 (J)		
2/7/2017									0.0103
2/8/2017	0.00235 (J)		<0.01	0.0346		<0.01015			
3/27/2017							0.00592 (J)		
3/28/2017				0.0331					0.00599 (J)
3/29/2017	<0.01		<0.01			<0.01015			
3/30/2017									
4/24/2017							0.00644 (J)		
4/26/2017	<0.01		<0.01	0.038		<0.01015			0.00845 (J)
6/5/2017							0.00537 (J)		
6/6/2017				0.0327		<0.01015			0.00624 (J)
6/7/2017	<0.01		<0.01						
2/19/2018							0.0134		
2/20/2018	<0.01		<0.01	0.0362					
2/21/2018						<0.01015			0.00903 (J)
5/15/2018	<0.01		<0.01	0.0344			0.00789 (J)		
5/16/2018						<0.01015			0.00515 (J)
10/15/2018				0.0525			0.00376 (J)		
10/16/2018	<0.01								0.00593 (J)
10/17/2018			<0.01			<0.01015			
2/20/2019								0.00577 (J)	
2/21/2019		0.00253 (J)							
2/26/2019									
2/27/2019									
4/16/2019	<0.01		<0.01						
4/17/2019				0.029		<0.01015	0.00661 (J)		0.00703 (J)
9/23/2019							0.011		
9/24/2019				0.0597		<0.01015		0.00906 (J)	0.00562 (J)
9/25/2019	<0.01	0.00942 (J)							
3/16/2020							0.00504 (J)		
3/17/2020									
3/18/2020	0.00444 (J)			0.0673	0.0327				
3/23/2020									
3/24/2020		0.00454 (J)				<0.01015			0.00605 (J)
3/25/2020								0.00508 (J)	
5/12/2020							0.00436 (J)		
5/13/2020									
9/17/2020									
9/21/2020					0.0538		0.00776 (J)		
9/22/2020						<0.01015			0.0063 (J)
9/23/2020	0.00577 (J)	0.00463 (J)		0.0744				0.00664 (J)	
2/1/2021	0.00792	0.00164							

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 11/15/2023 3:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-12	GS-AP-MW-12V	GS-AP-MW-13 (bg)	GS-AP-MW-15	GS-AP-MW-15V	GS-AP-MW-16D	GS-AP-MW-17	GS-AP-MW-17V ...	GS-AP-MW-19
2/2/2021							0.00538	0.00252	
2/3/2021									
2/8/2021									0.00366
2/9/2021				0.0644	0.0522				
2/10/2021						0.00014 (J)			
7/27/2021									
8/2/2021								0.00206	
8/3/2021				0.0663	0.0311		0.00157		
8/4/2021									
8/9/2021	0.00452	0.00302				0.00069			
8/10/2021									0.00269
8/11/2021									
8/12/2021									
2/8/2022									
2/14/2022							0.00252	0.00276	
2/15/2022						0.00032			
2/16/2022				0.0306	0.0272				
2/22/2022									0.00267
2/23/2022		0.00144							
2/28/2022	0.00903								
7/19/2022	0.0112								
7/20/2022		0.00204							
7/26/2022									
7/27/2022									
8/2/2022				0.0642	0.0295	0.000984			
8/3/2022									0.00355
8/8/2022							0.00154		
8/9/2022								0.00298	
8/10/2022									
3/14/2023									
3/15/2023									
3/20/2023				0.0315	0.0195				
3/21/2023						<0.01015			<0.01015
3/22/2023	0.00512 (J)	<0.01015					<0.01015	<0.01015	
9/5/2023									
9/6/2023									
9/11/2023				0.0387	0.0205		<0.01015	<0.01015	
9/12/2023						<0.01015			
9/13/2023	0.00555 (J)	<0.01015							
9/18/2023									
9/19/2023									<0.01015

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Molybdenum (mg/L)   Analysis Run 11/15/2023 3:06 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

	GS-AP-MW-2	GS-AP-MW-21	GS-AP-MW-21V	GS-AP-MW-23H	GS-AP-MW-24H	GS-AP-MW-25HA	GS-AP-MW-26H
8/1/2016							
8/2/2016	<0.01015	0.0365					
8/3/2016							
9/19/2016	<0.01015						
9/20/2016							
9/21/2016		0.0362					
10/24/2016	<0.01015						
10/25/2016		0.0326					
12/13/2016	<0.01015						
12/14/2016		0.0345					
2/6/2017							
2/7/2017							
2/8/2017	0.00359 (J)	0.0419					
3/27/2017							
3/28/2017		0.0523					
3/29/2017							
3/30/2017	0.00485 (J)						
4/24/2017							
4/26/2017	0.00444 (J)	0.0502					
6/5/2017							
6/6/2017	0.00489 (J)	0.05					
6/7/2017							
2/19/2018							
2/20/2018		0.0966					
2/21/2018	0.0112						
5/15/2018		0.0687					
5/16/2018	0.00547 (J)						
10/15/2018							
10/16/2018	0.00919 (J)	0.061					
10/17/2018							
2/20/2019				<0.01015			
2/21/2019							
2/26/2019					<0.01015		
2/27/2019							0.00286 (J)
4/16/2019							
4/17/2019	0.00293 (J)	0.0885					
9/23/2019				<0.01015			<0.01015
9/24/2019		0.0613			<0.01015		
9/25/2019	0.00803 (J)						
3/16/2020							
3/17/2020				<0.01015			
3/18/2020		0.102			<0.01015		
3/23/2020			0.117				
3/24/2020						0.0176	
3/25/2020	0.00343 (J)						<0.01015
5/12/2020							
5/13/2020	0.00224 (J)						
9/17/2020				<0.01015	<0.01015	0.0182	
9/21/2020							<0.01015
9/22/2020	0.00308 (J)						
9/23/2020		0.0404	0.12				
2/1/2021	0.00427						

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 11/15/2023 3:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-2	GS-AP-MW-21	GS-AP-MW-21V	GS-AP-MW-23H	GS-AP-MW-24H	GS-AP-MW-25HA	GS-AP-MW-26H
2/2/2021					0.000563		
2/3/2021				0.000902			
2/8/2021		0.0396					
2/9/2021			0.0983				0.000207
2/10/2021						0.0158	
7/27/2021				0.0009			
8/2/2021							
8/3/2021					0.00052		
8/4/2021	0.00168	0.0367					
8/9/2021							
8/10/2021							0.00016 (J)
8/11/2021			0.0394				
8/12/2021						0.0125	
2/8/2022		0.0153	0.0819				
2/14/2022				0.00097			
2/15/2022					0.00053		7E-05 (J)
2/16/2022						0.00977	
2/22/2022	0.00327						
2/23/2022							
2/28/2022							
7/19/2022	0.00146						
7/20/2022							
7/26/2022				0.000783			
7/27/2022					0.00055		
8/2/2022							
8/3/2022						0.00758	
8/8/2022							
8/9/2022			0.0509				
8/10/2022		0.00802					<0.01015
3/14/2023				<0.01015			
3/15/2023					<0.01015		
3/20/2023							
3/21/2023		0.0103	0.0361				
3/22/2023	<0.01015					0.00584 (J)	<0.01015
9/5/2023		0.0139	0.0307				
9/6/2023				<0.01015	<0.01015		
9/11/2023							
9/12/2023							
9/13/2023							
9/18/2023	0.0052 (J)					<0.01015	<0.01015
9/19/2023							

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 11/15/2023 3:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-28H	GS-AP-MW-29H	GS-AP-MW-3	GS-AP-MW-30HA	GS-AP-MW-31H	GS-AP-MW-32H	GS-AP-MW-33HO	GS-AP-MW-34HO	GS-AP-MW-35HO
2/27/2019		<0.01							
3/13/2019	0.00555 (J)								
9/24/2019		0.00424 (J)							
9/25/2019	0.00338 (J)								
3/16/2020	0.00463 (J)							0.00386 (J)	
3/17/2020							<0.01015		0.00222 (J)
3/18/2020				0.00603 (J)	0.0102				
3/24/2020						0.0826			
3/25/2020		0.0025 (J)							
5/12/2020	0.00644 (J)							0.0088 (J)	<0.01015
5/13/2020				0.00519 (J)			0.00626 (J)		
9/15/2020							0.00496 (J)		
9/16/2020								0.00598 (J)	<0.01015
9/17/2020									
9/21/2020				0.00254 (J)		0.0896			
9/22/2020	0.00616 (J)	0.0281			0.00438 (J)				
2/1/2021					0.00447				
2/2/2021									
2/3/2021		0.0623					0.00346	0.00753	
2/4/2021									0.00273
2/8/2021									
2/9/2021									
2/10/2021						0.0889			
2/17/2021	0.00454		0.0113	0.0019					
7/27/2021							0.00574	0.0143	
7/28/2021									0.0017
8/2/2021				0.00394	0.00486				
8/3/2021			0.00977						
8/4/2021		0.0377							
8/9/2021	0.00412								
8/10/2021						0.0858			
2/8/2022				0.00529	0.00596				
2/9/2022							0.00513	0.00959	0.00175
2/14/2022	0.00481	0.0622				0.0933			
2/15/2022									
2/16/2022			0.00722						
2/21/2022									
2/22/2022									
7/20/2022			0.0066						
7/26/2022									
7/27/2022	0.00336					0.0865			
8/2/2022									
8/3/2022		0.0341		0.00614	0.00255				
8/10/2022									
3/8/2023								0.0104	0.0006
3/13/2023				<0.01015					
3/14/2023	<0.01015						<0.01015		
3/15/2023									
3/21/2023			0.00847 (J)			0.086			
3/22/2023									
3/27/2023					<0.01015				
3/28/2023		0.0333							

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 11/15/2023 3:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-28H	GS-AP-MW-29H	GS-AP-MW-3	GS-AP-MW-30HA	GS-AP-MW-31H	GS-AP-MW-32H	GS-AP-MW-33HO	GS-AP-MW-34HO	GS-AP-MW-35HO
8/30/2023							<0.01015		
8/31/2023								<0.01015	<0.01015
9/5/2023				<0.01015					
9/6/2023									
9/11/2023	0.00893 (J)								
9/12/2023			<0.01015						
9/13/2023		0.0658			0.00646 (J)	0.0898			
9/18/2023									
9/19/2023									

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 11/15/2023 3:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-36H	GS-AP-MW-38H	GS-AP-MW-40H	GS-AP-MW-41HD	GS-AP-MW-41HS	GS-AP-MW-42H	GS-AP-MW-43HO
2/27/2019							
3/13/2019							
9/24/2019							
9/25/2019							
3/16/2020							
3/17/2020	0.00571 (J)						
3/18/2020				0.0158			
3/24/2020		0.00445 (J)				<0.01015	
3/25/2020							<0.01015
5/12/2020							
5/13/2020	0.00475 (J)						
9/15/2020							
9/16/2020							
9/17/2020	0.0105			0.026			
9/21/2020							
9/22/2020		0.00423 (J)	0.00293 (J)			<0.01015	<0.01015
2/1/2021							
2/2/2021			0.00257				
2/3/2021						0.00174	
2/4/2021							
2/8/2021				0.0284	0.00288		
2/9/2021		0.00267					
2/10/2021							
2/17/2021	0.0054						0.00292
7/27/2021							
7/28/2021					0.0044		
8/2/2021							
8/3/2021				0.0286			
8/4/2021	0.017	0.00377				0.00169	0.00385
8/9/2021							
8/10/2021			0.00171				
2/8/2022					0.00104		
2/9/2022							
2/14/2022	0.0189						
2/15/2022			0.002	0.0331			
2/16/2022						0.00155	
2/21/2022							0.00309
2/22/2022		0.00322					
7/20/2022	0.00183						
7/26/2022					0.000889		
7/27/2022				0.0351		0.00131	
8/2/2022			0.00114				
8/3/2022							0.00526
8/10/2022		0.00406					
3/8/2023							
3/13/2023					<0.01015		
3/14/2023							
3/15/2023	0.0183			0.0339		<0.01015	
3/21/2023							
3/22/2023			<0.01015				
3/27/2023							
3/28/2023		<0.01015					0.0074 (J)

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 11/15/2023 3:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-36H	GS-AP-MW-38H	GS-AP-MW-40H	GS-AP-MW-41HD	GS-AP-MW-41HS	GS-AP-MW-42H	GS-AP-MW-43HO
8/30/2023				0.0337	<0.01015		
8/31/2023							
9/5/2023							
9/6/2023	0.0195						
9/11/2023							
9/12/2023							
9/13/2023							
9/18/2023			<0.01015				
9/19/2023		<0.01015				<0.01015	<0.01015

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 11/15/2023 3:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-44HO	GS-AP-MW-6D	GS-AP-MW-6S	GS-AP-MW-6V	GS-AP-MW-7	GS-AP-MW-8 (bg)	GS-AP-MW-9V	GS-AP-PZ-16	GS-AP-PZ-22
8/2/2016					0.146				
8/3/2016		0.00372 (J)	<0.01			<0.01015			
9/20/2016		0.00481 (J)	0.00202 (J)						
9/21/2016					0.146	<0.01015			
10/24/2016		0.00496 (J)			0.136				
10/25/2016						<0.01015			
10/26/2016			0.00599 (J)						
12/12/2016		0.00467 (J)	0.00214 (J)		0.14				
12/13/2016						<0.01015			
2/6/2017		0.00468 (J)	<0.01		0.15	<0.01015			
3/27/2017		0.00548 (J)	<0.01						
3/28/2017					0.159	<0.01015			
4/24/2017		0.00606 (J)	<0.01		0.16	<0.01015			
6/6/2017		0.00545 (J)	<0.01						
6/7/2017					0.15	<0.01015			
2/19/2018		0.00537 (J)	<0.01		0.172	<0.01015			
5/14/2018		0.00564 (J)	0.00526 (J)						
5/15/2018					0.177	<0.01015			
10/15/2018		0.00538 (J)	0.00644 (J)		0.168				
10/16/2018						<0.01015			
4/16/2019		0.00747 (J)	0.00246 (J)			<0.01015			
4/23/2019					0.185				
9/23/2019		0.00758 (J)	0.00412 (J)						
9/24/2019					0.178	<0.01015			
3/17/2020		0.00959 (J)	0.0272		0.193				
3/18/2020						<0.01015			
3/23/2020							<0.01015		
3/24/2020								<0.01015	0.00333 (J)
8/27/2020	0.0071 (J)								
9/8/2020				0.00317 (J)					
9/15/2020	0.00858 (J)			0.00256 (J)					
9/16/2020			0.0427		0.215				
9/17/2020		0.00924 (J)						0.00241 (J)	0.00357 (J)
9/21/2020						<0.01015			
9/22/2020							<0.01015		
2/2/2021					0.202	<0.01015	0.000538		0.00367
2/3/2021	0.00429	0.0095	0.0218	0.00284					
2/17/2021								0.00132	
7/27/2021	0.0035	0.0101	0.0452						
8/2/2021				0.00438					
8/3/2021									0.00352
8/9/2021					0.207			0.00221	
8/10/2021						<0.01015	0.00269		
2/8/2022					0.221				
2/9/2022	0.00348			0.00336					
2/14/2022		0.0115	0.0411						0.00419
2/15/2022								0.00266	
2/16/2022						0.00012 (J)			
2/21/2022							0.0022		
2/22/2022									
2/28/2022									
3/1/2022									

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 11/15/2023 3:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-44HO	GS-AP-MW-6D	GS-AP-MW-6S	GS-AP-MW-6V	GS-AP-MW-7	GS-AP-MW-8 (bg)	GS-AP-MW-9V	GS-AP-PZ-16	GS-AP-PZ-22
7/19/2022							0.00146		
7/20/2022									
7/25/2022		0.011		0.00208	0.214				
7/26/2022			0.0377					0.0044	
8/2/2022						<0.01015			
8/3/2022									
8/9/2022									0.00294
3/6/2023	0.00325								
3/8/2023				<0.01015					
3/14/2023		0.0104	0.0298		0.215				
3/15/2023									
3/21/2023								<0.01015	0.00545 (J)
3/22/2023									
3/27/2023						<0.01015	<0.01015		
3/28/2023									
9/5/2023	<0.01015	0.011	0.0408						
9/11/2023				<0.01015	0.228				0.00755 (J)
9/12/2023								<0.01015	
9/13/2023							<0.01015		
9/18/2023						<0.01015			
9/19/2023									

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Molybdenum (mg/L)   Analysis Run 11/15/2023 3:06 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

	GS-AP-MW-10R	GS-AP-MW-11R	GS-AP-MW-13R	GS-AP-MW-14R	GS-AP-MW-18R ...	GS-AP-MW-18VR	GS-AP-MW-1R
8/2/2016							
8/3/2016							
9/20/2016							
9/21/2016							
10/24/2016							
10/25/2016							
10/26/2016							
12/12/2016							
12/13/2016							
2/6/2017							
3/27/2017							
3/28/2017							
4/24/2017							
6/6/2017							
6/7/2017							
2/19/2018							
5/14/2018							
5/15/2018							
10/15/2018							
10/16/2018							
4/16/2019							
4/23/2019							
9/23/2019							
9/24/2019							
3/17/2020							
3/18/2020							
3/23/2020							
3/24/2020							
8/27/2020							
9/8/2020							
9/15/2020							
9/16/2020							
9/17/2020							
9/21/2020							
9/22/2020							
2/2/2021							
2/3/2021							
2/17/2021							
7/27/2021							
8/2/2021							
8/3/2021							
8/9/2021							
8/10/2021							
2/8/2022							
2/9/2022							
2/14/2022							
2/15/2022							
2/16/2022							
2/21/2022							
2/22/2022					0.00028	0.0336	
2/28/2022				0.00097			
3/1/2022	0.00288	0.00014 (J)	0.00061				0.00143

Time Series

Constituent: Molybdenum (mg/L)   Analysis Run 11/15/2023 3:06 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

	GS-AP-MW-10R	GS-AP-MW-11R	GS-AP-MW-13R	GS-AP-MW-14R	GS-AP-MW-18R ...	GS-AP-MW-18VR	GS-AP-MW-1R
7/19/2022		<0.01015					
7/20/2022			0.000155 (J)				
7/25/2022							
7/26/2022							
8/2/2022							0.00102
8/3/2022	0.00163			0.000479	0.000529		
8/9/2022						0.0456	
3/6/2023							
3/8/2023							
3/14/2023							
3/15/2023				<0.01015			
3/21/2023							
3/22/2023		<0.01015					
3/27/2023	<0.01015		<0.01015			0.0495	<0.01015
3/28/2023					<0.01015		
9/5/2023							
9/11/2023							
9/12/2023				<0.01015			
9/13/2023							<0.01015
9/18/2023							
9/19/2023	<0.01015	<0.01015	<0.01015		<0.01015	0.0516	

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Molybdenum (mg/L)   Analysis Run 11/15/2023 3:06 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

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	GS-AP-MW-23V	GS-AP-MW-27HR	GS-AP-MW-31V	GS-AP-MW-36V	GS-AP-MW-37HR	GS-AP-MW-3V	GS-AP-MW-45V	GS-AP-MW-47	GS-AP-MW-5R
2/21/2022									
2/22/2022		0.00083	0.00536	0.00427					
2/23/2022	0.00013 (J)					0.0191	0.0047		
2/28/2022					0.00315			0.00165	
3/1/2022									0.00212
7/19/2022									
7/20/2022						0.0489			
7/26/2022	<0.01015				0.00536			0.00213	
7/27/2022		0.0101		0.0268					
8/2/2022									0.00237
8/3/2022			0.0243						
8/8/2022							0.00454		
3/14/2023	<0.01015	0.0095 (J)		0.00789 (J)					
3/15/2023					<0.01015			<0.01015	
3/20/2023									<0.01015
3/21/2023						0.02			
3/27/2023			0.0409						
3/28/2023							0.0123		
9/6/2023	<0.01015	0.0279		0.0381					
9/11/2023					0.0093 (J)				
9/12/2023						0.0449		0.0112	<0.01015
9/13/2023			0.0649						
9/18/2023							0.0326		
9/19/2023									

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 11/15/2023 3:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-9R	GS-AP-PZ-18R	GS-AP-MW-46
2/21/2022		0.00091	
2/22/2022			
2/23/2022			0.00678
2/28/2022			
3/1/2022	0.00313		
7/19/2022	0.00308		
7/20/2022			
7/26/2022			
7/27/2022		0.000765	
8/2/2022			0.00955
8/3/2022			
8/8/2022			
3/14/2023			
3/15/2023			
3/20/2023			
3/21/2023			
3/27/2023	<0.01015		0.0114
3/28/2023		<0.01015	
9/6/2023			
9/11/2023			
9/12/2023			
9/13/2023	<0.01015		
9/18/2023			0.0168
9/19/2023		<0.01015	

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: pH (SU)   Analysis Run 11/15/2023 3:06 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

	GS-AP-MW-12	GS-AP-MW-12V	GS-AP-MW-13 (bg)	GS-AP-MW-15	GS-AP-MW-15V	GS-AP-MW-16D	GS-AP-MW-17	GS-AP-MW-17V ...	GS-AP-MW-19
8/1/2016				11.74		7.53	8.39		8.05
8/2/2016			6.8						
8/3/2016	7.36								
9/19/2016						7.5	8.42		
9/20/2016	7.28		6.8	10.33					
9/21/2016									8.14
10/24/2016							8.42		8.55
10/25/2016	7.23		6.85	10.24		7.44			
12/13/2016	7.27		6.8			7.45	8.43		8.08
12/14/2016				10.09					
2/6/2017							8.38		
2/7/2017									8.61
2/8/2017	7.25		6.76	9.75		7.41			
3/27/2017							8.43		
3/28/2017				9.9					7.94
3/29/2017	7.34		6.76			7.44			
3/30/2017									
4/24/2017							8.39		
4/26/2017	7.19		6.71	10.08		7.47			8.26
6/5/2017							8.42		
6/6/2017				10.2		7.37			8.23
6/7/2017	7.24		6.71						
8/21/2017									
8/22/2017	7.31		6.84	10.57		7.48	8.4		8.1
8/23/2017									
2/19/2018							8.33		
2/20/2018	7.69		6.77	10.63					
2/21/2018						7.44			8.48
5/15/2018	7.69		6.8	10.71			8.3		
5/16/2018						7.45			8.12
10/15/2018				11.51			8.37		
10/16/2018	7.51								8.22
10/17/2018			6.67			7.41			
2/20/2019								7.76	
2/21/2019		7.46							
2/26/2019									
2/27/2019									
4/16/2019	7.41		6.64						
4/17/2019				10.76		7.33	8.36		8.06
9/23/2019							8.37		
9/24/2019				11.7		7.43		7.65	7.8
9/25/2019	7.38	9.29							
3/16/2020							8.45		
3/17/2020									
3/18/2020	7.56			11.47	10.89				
3/23/2020									
3/24/2020		7.8				7.46			7.93
3/25/2020								7.63	
5/12/2020							8.42		
5/13/2020									
9/17/2020									
9/21/2020					10.07		8.22		

Time Series

Constituent: pH (SU) Analysis Run 11/15/2023 3:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-12	GS-AP-MW-12V	GS-AP-MW-13 (bg)	GS-AP-MW-15	GS-AP-MW-15V	GS-AP-MW-16D	GS-AP-MW-17	GS-AP-MW-17V ...	GS-AP-MW-19
9/22/2020						7.52			8.17
9/23/2020	8.3	8.84		11.89				7.53	
2/1/2021	7.55	7.3							
2/2/2021							8.43	7.58	
2/3/2021									
2/8/2021									7.89
2/9/2021				11.88	9.55				
2/10/2021						7.73			
7/27/2021									
8/2/2021								7.65	
8/3/2021				11.56	8.97		8.6		
8/4/2021									
8/9/2021	7.98	8.77				7.53			
8/10/2021									7.72
8/11/2021									
8/12/2021									
2/8/2022									
2/14/2022							8.32	7.43	
2/15/2022						7.48			
2/16/2022				11.57	8.65				
2/22/2022									7.71
2/23/2022		7.73							
2/28/2022	8.12								
7/19/2022	8.79								
7/20/2022		8.52							
7/26/2022									
7/27/2022									
8/2/2022				11.84	8.21	7.49			
8/3/2022									7.87
8/8/2022							8.38		
8/9/2022								7.55	
8/10/2022									
3/14/2023									
3/15/2023									
3/20/2023				11.26	7.96				
3/21/2023						7.51			7.85
3/22/2023	8.15	9					8.56	7.61	
9/5/2023									
9/6/2023									
9/11/2023				11.61	7.64		8.19	7.61	
9/12/2023						7.22			
9/13/2023	8.96	8.95							
9/18/2023									
9/19/2023									7.3

Time Series

Constituent: pH (SU)   Analysis Run 11/15/2023 3:06 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

	GS-AP-MW-2	GS-AP-MW-21	GS-AP-MW-21V	GS-AP-MW-23H	GS-AP-MW-24H	GS-AP-MW-25HA	GS-AP-MW-26H
8/1/2016							
8/2/2016	9.18	10.26					
8/3/2016							
9/19/2016	9.18						
9/20/2016							
9/21/2016		10.45					
10/24/2016	9.14						
10/25/2016		10.42					
12/13/2016	9.2						
12/14/2016		10.12					
2/6/2017							
2/7/2017							
2/8/2017	9.17	10.28					
3/27/2017							
3/28/2017		10.67					
3/29/2017							
3/30/2017	9.08						
4/24/2017							
4/26/2017	9.22	10.42					
6/5/2017							
6/6/2017	9.22	10.51					
6/7/2017							
8/21/2017	9.12						
8/22/2017							
8/23/2017		11.91					
2/19/2018							
2/20/2018		11.57					
2/21/2018	9.17						
5/15/2018		11.26					
5/16/2018	9.28						
10/15/2018							
10/16/2018	9.35	11.34					
10/17/2018							
2/20/2019				6.17			
2/21/2019							
2/26/2019					7.04		
2/27/2019							7.25
4/16/2019							
4/17/2019	9.26	11.71					
9/23/2019				5.76			7.25
9/24/2019		11.24			6.59		
9/25/2019	9.31						
3/16/2020							
3/17/2020				5.95			
3/18/2020		11.37			7		
3/23/2020			7.93				
3/24/2020						8.67	
3/25/2020	9.29						7.24
5/12/2020							
5/13/2020	9.43						
9/17/2020				5.74	7.02	8.83	
9/21/2020							7.25

Time Series

Constituent: pH (SU)   Analysis Run 11/15/2023 3:06 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

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	GS-AP-MW-2	GS-AP-MW-21	GS-AP-MW-21V	GS-AP-MW-23H	GS-AP-MW-24H	GS-AP-MW-25HA	GS-AP-MW-26H
9/22/2020	9.41						
9/23/2020		10.71	7.81				
2/1/2021	9.31						
2/2/2021					6.93		
2/3/2021				6.22			
2/8/2021		10.69					
2/9/2021			7.87				7.38
2/10/2021						8.77	
7/27/2021				5.65			
8/2/2021							
8/3/2021					6.94		
8/4/2021	9.08	10.95					
8/9/2021							
8/10/2021							6.69
8/11/2021			8.28				
8/12/2021						8.78	
2/8/2022		10.26	7.98				
2/14/2022				5.8			
2/15/2022					7		6.82
2/16/2022						8.5	
2/22/2022	9.42						
2/23/2022							
2/28/2022							
7/19/2022	9.6						
7/20/2022							
7/26/2022				5.73			
7/27/2022					6.98		
8/2/2022							
8/3/2022						8.55	
8/8/2022							
8/9/2022			7.9				
8/10/2022		9.26					7.13
3/14/2023				5.93			
3/15/2023					6.93		
3/20/2023							
3/21/2023		9.56	7.67				
3/22/2023	9.27					8.78	7.23
9/5/2023		9.81	7.68				
9/6/2023				5.49	5.56		
9/11/2023							
9/12/2023							
9/13/2023							
9/18/2023	9					8.88	7.25
9/19/2023							

Time Series

Constituent: pH (SU) Analysis Run 11/15/2023 3:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-28H	GS-AP-MW-29H	GS-AP-MW-3	GS-AP-MW-30HA	GS-AP-MW-31H	GS-AP-MW-32H	GS-AP-MW-33HO	GS-AP-MW-34HO	GS-AP-MW-35HO
2/27/2019		8.01							
3/13/2019	8.3								
9/24/2019		7.11							
9/25/2019	8.57								
3/16/2020	8.31							7.35	
3/17/2020							7.67		8.4
3/18/2020				7.2	8.73				
3/24/2020						8.47			
3/25/2020		7.45							
5/12/2020	8.35							7.44	8.46
5/13/2020				7.27			7.7		
9/15/2020							7.66		
9/16/2020								7.45	8.48
9/17/2020									
9/21/2020				7.56		8.15			
9/22/2020	8.24	7.42			8.76				
2/1/2021					8.66				
2/2/2021									
2/3/2021		7.63					7.64	7.26	
2/4/2021									8.35
2/8/2021									
2/9/2021									
2/10/2021						8.03			
2/17/2021	8.31		7.71	7.29					
7/27/2021							7.59	7.32	
7/28/2021									8.45
8/2/2021				7.27	8.69				
8/3/2021			7.82						
8/4/2021		7.68							
8/9/2021	8.5								
8/10/2021						8.35			
2/8/2022				7.35	8.53				
2/9/2022							7.64	7.4	8.55
2/14/2022	8.37	7.77				8.22			
2/15/2022									
2/16/2022			7.78						
2/21/2022									
2/22/2022									
7/20/2022			8.1						
7/26/2022									
7/27/2022	8.43					7.88			
8/2/2022									
8/3/2022		7.83		7.17	8.85				
8/10/2022									
3/8/2023								7.26	8.42
3/13/2023				7.22					
3/14/2023	8.31						7.71		
3/15/2023									
3/21/2023			8.19			8.3			
3/22/2023									
3/27/2023					8.86				
3/28/2023		7.82							

Time Series

Constituent: pH (SU) Analysis Run 11/15/2023 3:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-28H	GS-AP-MW-29H	GS-AP-MW-3	GS-AP-MW-30HA	GS-AP-MW-31H	GS-AP-MW-32H	GS-AP-MW-33HO	GS-AP-MW-34HO	GS-AP-MW-35HO
8/30/2023							7.58		
8/31/2023								7.42	8.24
9/5/2023				7.32					
9/6/2023									
9/11/2023	8.16								
9/12/2023			7.86						
9/13/2023		7.83			8.49	8.07			
9/18/2023									
9/19/2023									

Time Series

Constituent: pH (SU) Analysis Run 11/15/2023 3:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-36H	GS-AP-MW-38H	GS-AP-MW-40H	GS-AP-MW-41HD	GS-AP-MW-41HS	GS-AP-MW-42H	GS-AP-MW-43HO
2/27/2019							
3/13/2019							
9/24/2019							
9/25/2019							
3/16/2020							
3/17/2020	8.44						
3/18/2020				7.2			
3/24/2020		7.99				6.28	
3/25/2020							8.24
5/12/2020							
5/13/2020	8.52						
9/15/2020							
9/16/2020							
9/17/2020	8.18			7.22			
9/21/2020							
9/22/2020		7.96	6.64			6.51	8.66
2/1/2021							
2/2/2021			6.55				
2/3/2021						6.47	
2/4/2021							
2/8/2021				7.36	6.77		
2/9/2021		8.06					
2/10/2021							
2/17/2021	8.36						8.72
7/27/2021							
7/28/2021					6.86		
8/2/2021							
8/3/2021				6.97			
8/4/2021	8.37	7.75				6.41	8.75
8/9/2021							
8/10/2021			6.56				
2/8/2022					6.66		
2/9/2022							
2/14/2022	8.22						
2/15/2022			6.6	7.35			
2/16/2022						6.54	
2/21/2022							8.58
2/22/2022		7.89					
7/20/2022	8.05						
7/26/2022					6.19		
7/27/2022				7.16		6.59	
8/2/2022			6.47				
8/3/2022							8.51
8/10/2022		7.49					
3/8/2023							
3/13/2023					6.49		
3/14/2023							
3/15/2023	8.06			7.43		6.63	
3/21/2023							
3/22/2023			6.6				
3/27/2023							
3/28/2023		7.85					7.92

Time Series

Constituent: pH (SU) Analysis Run 11/15/2023 3:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-36H	GS-AP-MW-38H	GS-AP-MW-40H	GS-AP-MW-41HD	GS-AP-MW-41HS	GS-AP-MW-42H	GS-AP-MW-43HO
8/30/2023				7.27	6.13		
8/31/2023							
9/5/2023							
9/6/2023	7.95						
9/11/2023							
9/12/2023							
9/13/2023							
9/18/2023			6.7				
9/19/2023		7.59				6.58	8.25

Time Series

Constituent: pH (SU)   Analysis Run 11/15/2023 3:06 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

	GS-AP-MW-44HO	GS-AP-MW-6D	GS-AP-MW-6S	GS-AP-MW-6V	GS-AP-MW-7	GS-AP-MW-8 (bg)	GS-AP-MW-9V	GS-AP-PZ-16	GS-AP-PZ-22
8/2/2016					7.72				
8/3/2016		7.27	6.81			5.84			
9/20/2016		7.27	6.72						
9/21/2016					7.6	5.99			
10/24/2016		7.25			7.68				
10/25/2016						5.94			
10/26/2016			6.68						
12/12/2016		7.26	6.76		7.72				
12/13/2016						5.84			
2/6/2017		7.24	6.75		7.64	5.9			
3/27/2017		7.29	6.67						
3/28/2017					7.58	5.67			
4/24/2017		7.46	6.81		7.68	5.79			
6/6/2017		7.29	6.8						
6/7/2017					7.56	5.71			
8/21/2017		7.21	6.78		7.61	5.7			
2/19/2018		7.36	6.85		7.65	5.78			
5/14/2018		7.36	6.82						
5/15/2018					7.69	5.84			
10/15/2018		7.33	6.78		7.62				
10/16/2018						5.75			
4/16/2019		7.26	6.82			5.76			
4/23/2019					7.83				
9/23/2019		7.23	6.51						
9/24/2019					7.38	5.27			
3/17/2020		7.39	6.92		7.72				
3/18/2020						5.81			
3/23/2020							6.97		
3/24/2020								7.89	7.77
8/27/2020	8.9								
9/8/2020				8.67					
9/15/2020	8.94			8.76					
9/16/2020			6.93		7.74				
9/17/2020		7.41						9.15	8.81
9/21/2020						5.75			
9/22/2020							7.08		
2/2/2021					7.77	5.69	6.94		7.5
2/3/2021	8.9	7.55	7.05	8.9					
2/17/2021								8.32	
7/27/2021	9.04	6.79	6.67						
8/2/2021				8.76					
8/3/2021									7.74
8/9/2021					7.49			9.09	
8/10/2021						5.02	7.12		
2/8/2022					7.71				
2/9/2022	8.94			8.8					
2/14/2022		7.43	6.99						7.4
2/15/2022								9.34	
2/16/2022						5.8			
2/21/2022							7		
2/22/2022									
2/28/2022									

Time Series

Constituent: pH (SU) Analysis Run 11/15/2023 3:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-44HO	GS-AP-MW-6D	GS-AP-MW-6S	GS-AP-MW-6V	GS-AP-MW-7	GS-AP-MW-8 (bg)	GS-AP-MW-9V	GS-AP-PZ-16	GS-AP-PZ-22
3/1/2022									
7/19/2022							6.99		
7/20/2022									
7/25/2022		6.95 (D)		8.66	7.64 (D)				
7/26/2022			6.97					9.29	
8/2/2022						5.78			
8/3/2022									
8/9/2022									8.78
3/6/2023	9.06								
3/8/2023				8.7					
3/14/2023		7.33	7.04		7.67				
3/15/2023									
3/21/2023								8.44	9.53
3/22/2023									
3/27/2023						5.82	7		
3/28/2023									
9/5/2023	8.88	7.23	6.69						
9/11/2023				8.44	7.23				9.27
9/12/2023								7.95	
9/13/2023							6.97		
9/18/2023						5.42			
9/19/2023									

Time Series

Constituent: pH (SU) Analysis Run 11/15/2023 3:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-10R	GS-AP-MW-11R	GS-AP-MW-13R	GS-AP-MW-14R	GS-AP-MW-18R ...	GS-AP-MW-18VR	GS-AP-MW-1R
8/2/2016							
8/3/2016							
9/20/2016							
9/21/2016							
10/24/2016							
10/25/2016							
10/26/2016							
12/12/2016							
12/13/2016							
2/6/2017							
3/27/2017							
3/28/2017							
4/24/2017							
6/6/2017							
6/7/2017							
8/21/2017							
2/19/2018							
5/14/2018							
5/15/2018							
10/15/2018							
10/16/2018							
4/16/2019							
4/23/2019							
9/23/2019							
9/24/2019							
3/17/2020							
3/18/2020							
3/23/2020							
3/24/2020							
8/27/2020							
9/8/2020							
9/15/2020							
9/16/2020							
9/17/2020							
9/21/2020							
9/22/2020							
2/2/2021							
2/3/2021							
2/17/2021							
7/27/2021							
8/2/2021							
8/3/2021							
8/9/2021							
8/10/2021							
2/8/2022							
2/9/2022							
2/14/2022							
2/15/2022							
2/16/2022							
2/21/2022							
2/22/2022					6.29	7.88	
2/28/2022				7.04			

Time Series

Constituent: pH (SU)   Analysis Run 11/15/2023 3:06 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

	GS-AP-MW-10R	GS-AP-MW-11R	GS-AP-MW-13R	GS-AP-MW-14R	GS-AP-MW-18R ...	GS-AP-MW-18VR	GS-AP-MW-1R
3/1/2022	6.87	6.68	6.47				8.86
7/19/2022		6.13					
7/20/2022			6.39				
7/25/2022							
7/26/2022							
8/2/2022							8.35
8/3/2022	6.7			6.44	6.46		
8/9/2022						7.93	
3/6/2023							
3/8/2023							
3/14/2023							
3/15/2023				6.63			
3/21/2023							
3/22/2023		6.69					
3/27/2023	6.68		6.47			8.03	8.84
3/28/2023					6.48		
9/5/2023							
9/11/2023							
9/12/2023				6.63			
9/13/2023							8.63
9/18/2023							
9/19/2023	6.87	6.49	6.17		6.39	8.15	

Time Series

Constituent: pH (SU)   Analysis Run 11/15/2023 3:06 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

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	GS-AP-MW-23V	GS-AP-MW-27HR	GS-AP-MW-31V	GS-AP-MW-36V	GS-AP-MW-37HR	GS-AP-MW-3V	GS-AP-MW-45V	GS-AP-MW-47	GS-AP-MW-5R
2/21/2022									
2/22/2022		7.83	8	7.35					
2/23/2022	7.38					7.45	7.86		
2/28/2022					7.88			7.15	
3/1/2022									6.77
7/19/2022									
7/20/2022						7.41			
7/26/2022	7.1				7.88			7.32	
7/27/2022		7.44		7.14					
8/2/2022									6.72
8/3/2022			7.88						
8/8/2022							7.74		
3/14/2023	7.37	7.28		7.27					
3/15/2023					7.81			7.44	
3/20/2023									6.8
3/21/2023						7.71			
3/27/2023			7.8						
3/28/2023							7.47		
9/6/2023	6.12	7.35		7.11					
9/11/2023					7.51				
9/12/2023						7.49		7.07	6.84
9/13/2023			7.49						
9/18/2023							7.44		
9/19/2023									

Time Series

Constituent: pH (SU) Analysis Run 11/15/2023 3:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-9R	GS-AP-PZ-18R	GS-AP-MW-46
2/21/2022		7.37	
2/22/2022			
2/23/2022			8.69
2/28/2022			
3/1/2022	6.4		
7/19/2022	6.31		
7/20/2022			
7/26/2022			
7/27/2022		7.18	
8/2/2022			8.67
8/3/2022			
8/8/2022			
3/14/2023			
3/15/2023			
3/20/2023			
3/21/2023			
3/27/2023	6.01		8.81
3/28/2023		7.22	
9/6/2023			
9/11/2023			
9/12/2023			
9/13/2023	6.25		
9/18/2023			8.63
9/19/2023		7.08	

Time Series

Constituent: Selenium (mg/L) Analysis Run 11/15/2023 3:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-12	GS-AP-MW-12V	GS-AP-MW-13 (bg)	GS-AP-MW-15	GS-AP-MW-15V	GS-AP-MW-16D	GS-AP-MW-17	GS-AP-MW-17V ...	GS-AP-MW-19
8/1/2016				<0.001015		<0.001015	<0.001015		<0.001015
8/2/2016			<0.01						
8/3/2016	<0.001015								
9/19/2016						<0.001015	<0.001015		
9/20/2016	<0.001015		<0.01	<0.001015					
9/21/2016									<0.001015
10/24/2016							<0.001015		<0.001015
10/25/2016	<0.001015		<0.01	<0.001015		<0.001015			
12/13/2016	<0.001015		<0.01			<0.001015	<0.001015		<0.001015
12/14/2016				<0.001015					
2/6/2017							<0.001015		
2/7/2017									<0.001015
2/8/2017	<0.001015		<0.01	<0.001015		<0.001015			
3/27/2017							<0.001015		
3/28/2017				<0.001015					<0.001015
3/29/2017	<0.001015		<0.01			<0.001015			
3/30/2017									
4/24/2017							<0.001015		
4/26/2017	<0.001015		<0.01	<0.001015		<0.001015			<0.001015
6/5/2017							<0.001015		
6/6/2017				<0.001015		<0.001015			<0.001015
6/7/2017	<0.001015		<0.01						
2/19/2018							<0.001015		
2/20/2018	<0.001015		<0.01	<0.001015					
2/21/2018						<0.001015			<0.001015
5/15/2018	<0.001015		<0.01	<0.001015			<0.001015		
5/16/2018						<0.001015			<0.001015
10/15/2018				<0.001015			<0.001015		
10/16/2018	<0.001015								<0.001015
10/17/2018			<0.01			<0.001015			
2/20/2019								<0.001015	
2/21/2019		<0.001015							
2/26/2019									
2/27/2019									
4/16/2019	<0.001015		<0.01						
4/17/2019				<0.001015		<0.001015	<0.001015		<0.001015
9/23/2019							<0.001015		
9/24/2019				<0.001015		<0.001015		<0.001015	<0.001015
9/25/2019	<0.001015	<0.001015							
3/16/2020							<0.001015		
3/17/2020									
3/18/2020	<0.001015			<0.001015	<0.001015				
3/23/2020									
3/24/2020		<0.001015				<0.001015			<0.001015
3/25/2020								<0.001015	
5/12/2020							<0.001015		
5/13/2020									
9/17/2020									
9/21/2020					<0.001015		<0.001015		
9/22/2020						<0.001015			<0.001015
9/23/2020	<0.001015	<0.001015		<0.001015				<0.001015	
2/1/2021	<0.001015	<0.001015							

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Selenium (mg/L) Analysis Run 11/15/2023 3:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-12	GS-AP-MW-12V	GS-AP-MW-13 (bg)	GS-AP-MW-15	GS-AP-MW-15V	GS-AP-MW-16D	GS-AP-MW-17	GS-AP-MW-17V ...	GS-AP-MW-19
2/2/2021							<0.001015	<0.001015	
2/3/2021									
2/8/2021									<0.001015
2/9/2021				<0.001015	<0.001015				
2/10/2021						<0.001015			
7/27/2021									
8/2/2021								<0.001015	
8/3/2021				<0.001015	<0.001015		<0.001015		
8/4/2021									
8/9/2021	<0.001015	<0.001015				<0.001015			
8/10/2021									<0.001015
8/11/2021									
8/12/2021									
2/8/2022									
2/14/2022							<0.001015	<0.001015	
2/15/2022						<0.001015			
2/16/2022				<0.001015	<0.001015				
2/22/2022									<0.001015
2/23/2022		<0.001015							
2/28/2022	<0.001015								
7/19/2022	<0.001015								
7/20/2022		<0.001015							
7/26/2022									
7/27/2022									
8/2/2022				<0.001015	<0.001015	<0.001015			
8/3/2022									<0.001015
8/8/2022							<0.001015		
8/9/2022								<0.001015	
8/10/2022									
3/14/2023									
3/15/2023									
3/20/2023				<0.001015	<0.001015				
3/21/2023						<0.001015			<0.001015
3/22/2023	<0.001015	<0.001015					<0.001015	<0.001015	
9/5/2023									
9/6/2023									
9/11/2023				<0.001015	<0.001015		<0.001015	<0.001015	
9/12/2023						<0.001015			
9/13/2023	<0.001015	<0.001015							
9/18/2023									
9/19/2023									<0.001015

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Selenium (mg/L) Analysis Run 11/15/2023 3:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-2	GS-AP-MW-21	GS-AP-MW-21V	GS-AP-MW-23H	GS-AP-MW-24H	GS-AP-MW-25HA	GS-AP-MW-26H
8/1/2016							
8/2/2016	<0.001015	<0.001015					
8/3/2016							
9/19/2016	<0.001015						
9/20/2016							
9/21/2016		<0.001015					
10/24/2016	<0.001015						
10/25/2016		<0.001015					
12/13/2016	<0.001015						
12/14/2016		<0.001015					
2/6/2017							
2/7/2017							
2/8/2017	<0.001015	<0.001015					
3/27/2017							
3/28/2017		<0.001015					
3/29/2017							
3/30/2017	<0.001015						
4/24/2017							
4/26/2017	<0.001015	<0.001015					
6/5/2017							
6/6/2017	<0.001015	<0.001015					
6/7/2017							
2/19/2018							
2/20/2018		<0.001015					
2/21/2018	<0.001015						
5/15/2018		<0.001015					
5/16/2018	<0.001015						
10/15/2018							
10/16/2018	<0.001015	<0.001015					
10/17/2018							
2/20/2019				<0.001015			
2/21/2019							
2/26/2019					<0.001015		
2/27/2019							<0.001015
4/16/2019							
4/17/2019	<0.001015	<0.001015					
9/23/2019				<0.001015			<0.001015
9/24/2019		<0.001015			<0.001015		
9/25/2019	<0.001015						
3/16/2020							
3/17/2020				<0.001015			
3/18/2020		<0.001015			<0.001015		
3/23/2020			<0.001015				
3/24/2020						<0.001015	
3/25/2020	<0.001015						<0.001015
5/12/2020							
5/13/2020	<0.001015						
9/17/2020				<0.001015	<0.001015	0.00636 (J)	
9/21/2020							<0.001015
9/22/2020	<0.001015						
9/23/2020		<0.001015	<0.001015				
2/1/2021	<0.001015						

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Selenium (mg/L) Analysis Run 11/15/2023 3:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-2	GS-AP-MW-21	GS-AP-MW-21V	GS-AP-MW-23H	GS-AP-MW-24H	GS-AP-MW-25HA	GS-AP-MW-26H
2/2/2021					<0.001015		
2/3/2021				<0.001015			
2/8/2021		<0.001015					
2/9/2021			<0.001015				<0.001015
2/10/2021						<0.001015	
7/27/2021				<0.001015			
8/2/2021							
8/3/2021					<0.001015		
8/4/2021	<0.001015	<0.001015					
8/9/2021							
8/10/2021							<0.001015
8/11/2021			<0.001015				
8/12/2021						<0.001015	
2/8/2022		<0.001015	<0.001015				
2/14/2022				<0.001015			
2/15/2022					<0.001015		<0.001015
2/16/2022						<0.001015	
2/22/2022	<0.001015						
2/23/2022							
2/28/2022							
7/19/2022	<0.001015						
7/20/2022							
7/26/2022				<0.001015			
7/27/2022					<0.001015		
8/2/2022							
8/3/2022						<0.001015	
8/8/2022							
8/9/2022			<0.001015				
8/10/2022		<0.001015					<0.001015
3/14/2023				<0.001015			
3/15/2023					<0.001015		
3/20/2023							
3/21/2023		<0.001015	<0.001015				
3/22/2023	<0.001015					<0.001015	<0.001015
9/5/2023		<0.001015	<0.001015				
9/6/2023				<0.001015	<0.001015		
9/11/2023							
9/12/2023							
9/13/2023							
9/18/2023	<0.001015					<0.001015	<0.001015
9/19/2023							

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Selenium (mg/L)   Analysis Run 11/15/2023 3:06 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

	GS-AP-MW-28H	GS-AP-MW-29H	GS-AP-MW-3	GS-AP-MW-30HA	GS-AP-MW-31H	GS-AP-MW-32H	GS-AP-MW-33HO	GS-AP-MW-34HO	GS-AP-MW-35HO
2/27/2019		<0.001015							
3/13/2019	<0.001015								
9/24/2019		<0.001015							
9/25/2019	<0.001015								
3/16/2020	<0.001015							<0.001015	
3/17/2020							<0.001015		<0.001015
3/18/2020				<0.001015	<0.001015				
3/24/2020						<0.001015			
3/25/2020		<0.001015							
5/12/2020	<0.001015							<0.001015	<0.001015
5/13/2020				<0.001015			<0.001015		
9/15/2020							<0.001015		
9/16/2020								<0.001015	<0.001015
9/17/2020									
9/21/2020				<0.001015		<0.001015			
9/22/2020	<0.001015	<0.001015			<0.001015				
2/1/2021					<0.001015				
2/2/2021									
2/3/2021		<0.001015					<0.001015	<0.001015	
2/4/2021									<0.001015
2/8/2021									
2/9/2021									
2/10/2021						<0.001015			
2/17/2021	<0.001015		<0.001015	<0.001015					
7/27/2021							<0.001015	<0.001015	
7/28/2021									<0.001015
8/2/2021				<0.001015	<0.001015				
8/3/2021			<0.001015						
8/4/2021		<0.001015							
8/9/2021	<0.001015								
8/10/2021						<0.001015			
2/8/2022				<0.001015	<0.001015				
2/9/2022							<0.001015	<0.001015	<0.001015
2/14/2022	<0.001015	<0.001015				<0.001015			
2/15/2022									
2/16/2022			<0.001015						
2/21/2022									
2/22/2022									
7/20/2022			<0.001015						
7/26/2022									
7/27/2022	<0.001015					<0.001015			
8/2/2022									
8/3/2022		<0.001015		<0.001015	<0.001015				
8/10/2022									
3/8/2023								<0.001015	<0.001015
3/13/2023				<0.001015					
3/14/2023	<0.001015						<0.001015		
3/15/2023									
3/21/2023			<0.001015			<0.001015			
3/22/2023									
3/27/2023					<0.001015				
3/28/2023		<0.001015							

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Selenium (mg/L) Analysis Run 11/15/2023 3:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-28H	GS-AP-MW-29H	GS-AP-MW-3	GS-AP-MW-30HA	GS-AP-MW-31H	GS-AP-MW-32H	GS-AP-MW-33HO	GS-AP-MW-34HO	GS-AP-MW-35HO
8/30/2023							<0.001015		
8/31/2023								<0.001015	<0.001015
9/5/2023				<0.001015					
9/6/2023									
9/11/2023	<0.001015								
9/12/2023			<0.001015						
9/13/2023		<0.001015			<0.001015	<0.001015			
9/18/2023									
9/19/2023									

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Selenium (mg/L)   Analysis Run 11/15/2023 3:06 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

	GS-AP-MW-36H	GS-AP-MW-38H	GS-AP-MW-40H	GS-AP-MW-41HD	GS-AP-MW-41HS	GS-AP-MW-42H	GS-AP-MW-43HO
2/27/2019							
3/13/2019							
9/24/2019							
9/25/2019							
3/16/2020							
3/17/2020	<0.001015						
3/18/2020				<0.001015			
3/24/2020		<0.001015				<0.001015	
3/25/2020							<0.001015
5/12/2020							
5/13/2020	<0.001015						
9/15/2020							
9/16/2020							
9/17/2020	<0.001015			<0.001015			
9/21/2020							
9/22/2020		<0.001015	<0.001015			<0.001015	<0.001015
2/1/2021							
2/2/2021			<0.001015				
2/3/2021						<0.001015	
2/4/2021							
2/8/2021				<0.001015	<0.001015		
2/9/2021		<0.001015					
2/10/2021							
2/17/2021	<0.001015						<0.001015
7/27/2021							
7/28/2021					<0.001015		
8/2/2021							
8/3/2021				<0.001015			
8/4/2021	<0.001015	<0.001015				<0.001015	<0.001015
8/9/2021							
8/10/2021			<0.001015				
2/8/2022					<0.001015		
2/9/2022							
2/14/2022	<0.001015						
2/15/2022			<0.001015	<0.001015			
2/16/2022						<0.001015	
2/21/2022							<0.001015
2/22/2022		<0.001015					
7/20/2022	<0.001015						
7/26/2022					<0.001015		
7/27/2022				<0.001015		<0.001015	
8/2/2022			<0.001015				
8/3/2022							<0.001015
8/10/2022		<0.001015					
3/8/2023							
3/13/2023					<0.001015		
3/14/2023							
3/15/2023	<0.001015			<0.001015		<0.001015	
3/21/2023							
3/22/2023			<0.001015				
3/27/2023							
3/28/2023		<0.001015					<0.001015

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Selenium (mg/L) Analysis Run 11/15/2023 3:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-36H	GS-AP-MW-38H	GS-AP-MW-40H	GS-AP-MW-41HD	GS-AP-MW-41HS	GS-AP-MW-42H	GS-AP-MW-43HO
8/30/2023				<0.001015	<0.001015		
8/31/2023							
9/5/2023							
9/6/2023	<0.001015						
9/11/2023							
9/12/2023							
9/13/2023							
9/18/2023			<0.001015				
9/19/2023		<0.001015				<0.001015	<0.001015

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Selenium (mg/L) Analysis Run 11/15/2023 3:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-44HO	GS-AP-MW-6D	GS-AP-MW-6S	GS-AP-MW-6V	GS-AP-MW-7	GS-AP-MW-8 (bg)	GS-AP-MW-9V	GS-AP-PZ-16	GS-AP-PZ-22
8/2/2016					<0.001015				
8/3/2016		<0.001015	<0.001015			<0.001015			
9/20/2016		<0.001015	<0.001015						
9/21/2016					<0.001015	<0.001015			
10/24/2016		<0.001015			<0.001015				
10/25/2016						<0.001015			
10/26/2016			<0.001015						
12/12/2016		<0.001015	<0.001015		<0.001015				
12/13/2016						<0.001015			
2/6/2017		<0.001015	<0.001015		<0.001015	<0.001015			
3/27/2017		<0.001015	<0.001015						
3/28/2017					<0.001015	<0.001015			
4/24/2017		<0.001015	<0.001015		<0.001015	<0.001015			
6/6/2017		<0.001015	<0.001015						
6/7/2017					<0.001015	<0.001015			
2/19/2018		<0.001015	<0.001015		<0.001015	<0.001015			
5/14/2018		<0.001015	<0.001015						
5/15/2018					<0.001015	<0.001015			
10/15/2018		<0.001015	<0.001015		<0.001015				
10/16/2018						<0.001015			
4/16/2019		<0.001015	<0.001015			<0.001015			
4/23/2019					<0.001015				
9/23/2019		<0.001015	<0.001015						
9/24/2019					<0.001015	<0.001015			
3/17/2020		<0.001015	<0.001015		<0.001015				
3/18/2020						<0.001015			
3/23/2020							<0.001015		
3/24/2020								<0.001015	<0.001015
8/27/2020	<0.001015								
9/8/2020				<0.001015					
9/15/2020	<0.001015			<0.001015					
9/16/2020			<0.001015		<0.001015				
9/17/2020		<0.001015						<0.001015	<0.001015
9/21/2020						<0.001015			
9/22/2020							<0.001015		
2/2/2021					<0.001015	<0.001015	<0.001015		<0.001015
2/3/2021	<0.001015	<0.001015	0.000794 (J)	<0.001015					
2/17/2021								<0.001015	
7/27/2021	<0.001015	<0.001015	0.00124						
8/2/2021				<0.001015					
8/3/2021									<0.001015
8/9/2021					<0.001015			<0.001015	
8/10/2021						<0.001015	<0.001015		
2/8/2022					<0.001015				
2/9/2022	<0.001015			<0.001015					
2/14/2022		<0.001015	0.00085 (J)						<0.001015
2/15/2022								<0.001015	
2/16/2022						<0.001015			
2/21/2022							<0.001015		
2/22/2022									
2/28/2022									
3/1/2022									

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Selenium (mg/L) Analysis Run 11/15/2023 3:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-44HO	GS-AP-MW-6D	GS-AP-MW-6S	GS-AP-MW-6V	GS-AP-MW-7	GS-AP-MW-8 (bg)	GS-AP-MW-9V	GS-AP-PZ-16	GS-AP-PZ-22
7/19/2022							<0.001015		
7/20/2022									
7/25/2022		<0.001015		<0.001015	<0.001015				
7/26/2022			0.00086 (J)					<0.001015	
8/2/2022						<0.001015			
8/3/2022									
8/9/2022									<0.001015
3/6/2023	<0.001015								
3/8/2023				<0.001015					
3/14/2023		<0.001015	0.000886 (J)		<0.001015				
3/15/2023									
3/21/2023								<0.001015	<0.001015
3/22/2023									
3/27/2023						<0.001015	<0.001015		
3/28/2023									
9/5/2023	<0.001015	<0.001015	<0.001015						
9/11/2023				<0.001015	<0.001015				<0.001015
9/12/2023								<0.001015	
9/13/2023							<0.001015		
9/18/2023						<0.001015			
9/19/2023									

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Selenium (mg/L) Analysis Run 11/15/2023 3:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-10R	GS-AP-MW-11R	GS-AP-MW-13R	GS-AP-MW-14R	GS-AP-MW-18R ...	GS-AP-MW-18VR	GS-AP-MW-1R
8/2/2016							
8/3/2016							
9/20/2016							
9/21/2016							
10/24/2016							
10/25/2016							
10/26/2016							
12/12/2016							
12/13/2016							
2/6/2017							
3/27/2017							
3/28/2017							
4/24/2017							
6/6/2017							
6/7/2017							
2/19/2018							
5/14/2018							
5/15/2018							
10/15/2018							
10/16/2018							
4/16/2019							
4/23/2019							
9/23/2019							
9/24/2019							
3/17/2020							
3/18/2020							
3/23/2020							
3/24/2020							
8/27/2020							
9/8/2020							
9/15/2020							
9/16/2020							
9/17/2020							
9/21/2020							
9/22/2020							
2/2/2021							
2/3/2021							
2/17/2021							
7/27/2021							
8/2/2021							
8/3/2021							
8/9/2021							
8/10/2021							
2/8/2022							
2/9/2022							
2/14/2022							
2/15/2022							
2/16/2022							
2/21/2022							
2/22/2022					<0.001015	<0.001015	
2/28/2022				<0.001015			
3/1/2022	<0.001015	<0.001015	<0.001015				<0.001015

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Selenium (mg/L) Analysis Run 11/15/2023 3:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-10R	GS-AP-MW-11R	GS-AP-MW-13R	GS-AP-MW-14R	GS-AP-MW-18R ...	GS-AP-MW-18VR	GS-AP-MW-1R
7/19/2022		<0.001015					
7/20/2022			<0.001015				
7/25/2022							
7/26/2022							
8/2/2022							<0.001015
8/3/2022	<0.001015			<0.001015	<0.001015		
8/9/2022						<0.001015	
3/6/2023							
3/8/2023							
3/14/2023							
3/15/2023				<0.001015			
3/21/2023							
3/22/2023		<0.001015					
3/27/2023	<0.001015		<0.001015			<0.001015	<0.001015
3/28/2023					<0.001015		
9/5/2023							
9/11/2023							
9/12/2023				<0.001015			
9/13/2023							<0.001015
9/18/2023							
9/19/2023	<0.001015	<0.001015	<0.001015		<0.001015	<0.001015	

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Selenium (mg/L) Analysis Run 11/15/2023 3:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-23V	GS-AP-MW-27HR	GS-AP-MW-31V	GS-AP-MW-36V	GS-AP-MW-37HR	GS-AP-MW-3V	GS-AP-MW-45V	GS-AP-MW-47	GS-AP-MW-5R
2/21/2022									
2/22/2022		<0.001015	<0.001015	<0.001015					
2/23/2022	<0.001015					<0.001015	<0.001015		
2/28/2022					<0.001015			<0.001015	
3/1/2022									<0.001015
7/19/2022									
7/20/2022						<0.001015			
7/26/2022	<0.001015				<0.001015			<0.001015	
7/27/2022		<0.001015		<0.001015					
8/2/2022									<0.001015
8/3/2022			<0.001015						
8/8/2022							<0.001015		
3/14/2023	<0.001015	<0.001015		<0.001015					
3/15/2023					<0.001015			<0.001015	
3/20/2023									<0.001015
3/21/2023						<0.001015			
3/27/2023			<0.001015						
3/28/2023							<0.001015		
9/6/2023	<0.001015	<0.001015		<0.001015					
9/11/2023					<0.001015				
9/12/2023						<0.001015		<0.001015	<0.001015
9/13/2023			<0.001015						
9/18/2023							<0.001015		
9/19/2023									

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Selenium (mg/L) Analysis Run 11/15/2023 3:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-9R	GS-AP-PZ-18R	GS-AP-MW-46
2/21/2022		<0.001015	
2/22/2022			
2/23/2022			<0.001015
2/28/2022			
3/1/2022	<0.001015		
7/19/2022	<0.001015		
7/20/2022			
7/26/2022			
7/27/2022		<0.001015	
8/2/2022			<0.001015
8/3/2022			
8/8/2022			
3/14/2023			
3/15/2023			
3/20/2023			
3/21/2023			
3/27/2023	<0.001015		<0.001015
3/28/2023		<0.001015	
9/6/2023			
9/11/2023			
9/12/2023			
9/13/2023	<0.001015		
9/18/2023			<0.001015
9/19/2023		<0.001015	

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Sulfate (mg/L) Analysis Run 11/15/2023 3:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-12	GS-AP-MW-12V	GS-AP-MW-13 (bg)	GS-AP-MW-15	GS-AP-MW-15V	GS-AP-MW-16D	GS-AP-MW-17	GS-AP-MW-17V ...	GS-AP-MW-19
8/1/2016				102		13.4	9.56		9.02
8/2/2016			12						
8/3/2016	19.2								
9/19/2016						12.9	12.7		
9/20/2016	1.42		11.2	53.3					
9/21/2016									8.38
10/24/2016							8.58		18.5
10/25/2016	<1		10.1	49.8		11.6			
12/13/2016	3.21		11.4			12.7	31		7.4
12/14/2016				40.9					
2/6/2017							14.7		
2/7/2017									8.16
2/8/2017	3.3		10.9	25		12.2			
3/27/2017							14		
3/28/2017				27					6.4
3/29/2017	3.8 (J)		11			12			
3/30/2017									
4/24/2017							22		
4/26/2017	1.4 (J)		11	29		13			4.6 (J)
6/5/2017							30		
6/6/2017				23		12			5.2
6/7/2017	1.7 (J)		11						
8/21/2017									
8/22/2017	4.2 (J)		11	22		12	42		5.3
8/23/2017									
5/15/2018	14		11	13			54		
5/16/2018						13			6
10/15/2018				14			34		
10/16/2018	13								5.6
10/17/2018			12			13			
2/20/2019								15.2	
2/21/2019		<1							
2/26/2019									
2/27/2019									
4/16/2019	13.3		12.1						
4/17/2019				9.02		14.1	76.6		14.3
9/23/2019							124		
9/24/2019				12.4		14.1		11.8	13.8
9/25/2019	25.5	1.61							
3/16/2020							48.6		
3/17/2020									
3/18/2020	20.8			15.9	261				
3/23/2020									
3/24/2020		<1				14.1			15.2
3/25/2020								9.69	
5/12/2020							44.4		
5/13/2020									
9/17/2020									
9/21/2020					348		104		
9/22/2020						13.6			16.9
9/23/2020	19.1	6.56		13.2				11.1	
2/1/2021	18.7	<1							

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Sulfate (mg/L)   Analysis Run 11/15/2023 3:06 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

	GS-AP-MW-12	GS-AP-MW-12V	GS-AP-MW-13 (bg)	GS-AP-MW-15	GS-AP-MW-15V	GS-AP-MW-16D	GS-AP-MW-17	GS-AP-MW-17V ...	GS-AP-MW-19
2/2/2021							55.1	8.81	
2/3/2021									
2/8/2021									16.2
2/9/2021				10.6	350				
2/10/2021						15.8			
7/27/2021									
8/2/2021								10.2	
8/3/2021				9.77	241		7.58		
8/4/2021									
8/9/2021	17.3	1.85				14.4			
8/10/2021									15.2
8/11/2021									
8/12/2021									
2/8/2022									
2/14/2022							14.4	9.09	
2/15/2022						14.7			
2/16/2022				7.37	224				
2/22/2022									13.7
2/23/2022		0.741 (J)							
2/28/2022	17.9								
7/19/2022	18.5								
7/20/2022		1.08 (J)							
7/26/2022									
7/27/2022									
8/2/2022				9.11	218	15.6			
8/3/2022									17.1
8/8/2022							8.35		
8/9/2022								8.13	
8/10/2022									
3/14/2023									
3/15/2023									
3/20/2023				6.57	176				
3/21/2023						14.7			16.4
3/22/2023	18.3	1.52 (J)					7	10.6	
9/5/2023									
9/6/2023									
9/11/2023				8.43	140		23.1	10.7	
9/12/2023						15.3			
9/13/2023	18.9	1.61 (J)							
9/18/2023									
9/19/2023									13.5

Time Series

Constituent: Sulfate (mg/L) Analysis Run 11/15/2023 3:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-2	GS-AP-MW-21	GS-AP-MW-21V	GS-AP-MW-23H	GS-AP-MW-24H	GS-AP-MW-25HA	GS-AP-MW-26H
8/1/2016							
8/2/2016	2.87	9.14					
8/3/2016							
9/19/2016	1.22						
9/20/2016							
9/21/2016		8.71					
10/24/2016	<1						
10/25/2016		8.54					
12/13/2016	<1						
12/14/2016		11.5					
2/6/2017							
2/7/2017							
2/8/2017	19.4	17					
3/27/2017							
3/28/2017		25					
3/29/2017							
3/30/2017	31						
4/24/2017							
4/26/2017	29	28					
6/5/2017							
6/6/2017	37	33					
6/7/2017							
8/21/2017	55						
8/22/2017							
8/23/2017		43					
5/15/2018		110					
5/16/2018	34						
10/15/2018							
10/16/2018	90	160					
10/17/2018							
2/20/2019				352			
2/21/2019							
2/26/2019					10.9		
2/27/2019							4.89
4/16/2019							
4/17/2019	48.6	215					
9/23/2019				394			16.9
9/24/2019		224			15.3		
9/25/2019	47.7						
3/16/2020							
3/17/2020				356			
3/18/2020		228			12.2		
3/23/2020			1050				
3/24/2020						201	
3/25/2020	38.5						3.25
5/12/2020							
5/13/2020	33.6						
9/17/2020				361	6.7	173	
9/21/2020							4.54
9/22/2020	21.5						
9/23/2020		248	1120				
2/1/2021	21.3						

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Sulfate (mg/L) Analysis Run 11/15/2023 3:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-2	GS-AP-MW-21	GS-AP-MW-21V	GS-AP-MW-23H	GS-AP-MW-24H	GS-AP-MW-25HA	GS-AP-MW-26H
2/2/2021					6.43		
2/3/2021				339			
2/8/2021		232					
2/9/2021			645				5.76
2/10/2021						171	
7/27/2021				339			
8/2/2021							
8/3/2021					6.21		
8/4/2021	16.8	231					
8/9/2021							
8/10/2021							4.73
8/11/2021			137				
8/12/2021						125	
2/8/2022		241	451				
2/14/2022				356			
2/15/2022					12.1		7.16
2/16/2022						130	
2/22/2022	17.1						
2/23/2022							
2/28/2022							
7/19/2022	19.4						
7/20/2022							
7/26/2022				322			
7/27/2022					6.24		
8/2/2022							
8/3/2022						81.800003	
8/8/2022							
8/9/2022			360				
8/10/2022		245					4.09
3/14/2023				292			
3/15/2023					7.51		
3/20/2023							
3/21/2023		238	595				
3/22/2023	8.17					62.1	4.65
9/5/2023		214	430				
9/6/2023				335	7.72		
9/11/2023							
9/12/2023							
9/13/2023							
9/18/2023	2.96					23.6	4.78
9/19/2023							

Time Series

Constituent: Sulfate (mg/L)   Analysis Run 11/15/2023 3:06 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

	GS-AP-MW-28H	GS-AP-MW-29H	GS-AP-MW-3	GS-AP-MW-30HA	GS-AP-MW-31H	GS-AP-MW-32H	GS-AP-MW-33HO	GS-AP-MW-34HO	GS-AP-MW-35HO
2/27/2019		20.7							
3/13/2019	30								
9/24/2019		32.6							
9/25/2019	10.2								
3/16/2020	9.91							1480	
3/17/2020							172		40.1
3/18/2020				184	50.4				
3/24/2020						33.2			
3/25/2020		29.4							
5/12/2020	14.3							1330	22.6
5/13/2020				194			60		
9/15/2020							98.6		
9/16/2020								1390	24.6
9/17/2020									
9/21/2020				128		38.7			
9/22/2020	10.5	81.6			22.1				
2/1/2021					32.2				
2/2/2021									
2/3/2021		135					70.7	1610	
2/4/2021									25.3
2/8/2021									
2/9/2021									
2/10/2021						50.8			
2/17/2021	6.39		158	136					
7/27/2021							100	1580	
7/28/2021									20.7
8/2/2021				201	35.1				
8/3/2021			99.4						
8/4/2021		74							
8/9/2021	3.49								
8/10/2021						45.6			
2/8/2022				215	29.5				
2/9/2022							77.8	1570	21.7
2/14/2022	3.99	49.7				38.4			
2/15/2022									
2/16/2022			91.2						
2/21/2022									
2/22/2022									
7/20/2022			78.599998						
7/26/2022									
7/27/2022	2.87					41.299999			
8/2/2022									
8/3/2022		28.299999		279	12.5				
8/10/2022									
3/8/2023								1200	15
3/13/2023				228					
3/14/2023	5.24						15.9		
3/15/2023									
3/21/2023			83.1			38.5			
3/22/2023									
3/27/2023					8.13				
3/28/2023		27.3							

Time Series

Constituent: Sulfate (mg/L) Analysis Run 11/15/2023 3:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-28H	GS-AP-MW-29H	GS-AP-MW-3	GS-AP-MW-30HA	GS-AP-MW-31H	GS-AP-MW-32H	GS-AP-MW-33HO	GS-AP-MW-34HO	GS-AP-MW-35HO
8/30/2023							32.799999		
8/31/2023								1210	14.5
9/5/2023				244					
9/6/2023									
9/11/2023	9.05								
9/12/2023			47.900002						
9/13/2023		28.5			33.799999	35.599998			
9/18/2023									
9/19/2023									

Time Series

Constituent: Sulfate (mg/L) Analysis Run 11/15/2023 3:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-36H	GS-AP-MW-38H	GS-AP-MW-40H	GS-AP-MW-41HD	GS-AP-MW-41HS	GS-AP-MW-42H	GS-AP-MW-43HO
2/27/2019							
3/13/2019							
9/24/2019							
9/25/2019							
3/16/2020							
3/17/2020	57.1						
3/18/2020				122			
3/24/2020		16.7				449	
3/25/2020							327
5/12/2020							
5/13/2020	47.8						
9/15/2020							
9/16/2020							
9/17/2020	50.2			105			
9/21/2020							
9/22/2020		27	626			372	269
2/1/2021							
2/2/2021			644				
2/3/2021						373	
2/4/2021							
2/8/2021				111	95.1		
2/9/2021		27					
2/10/2021							
2/17/2021	28.9						285
7/27/2021							
7/28/2021					103		
8/2/2021							
8/3/2021				94.1			
8/4/2021	83.7	32.3				372	301
8/9/2021							
8/10/2021			661				
2/8/2022					105		
2/9/2022							
2/14/2022	112						
2/15/2022			684	110			
2/16/2022						396	
2/21/2022							347
2/22/2022		27.9					
7/20/2022	11						
7/26/2022					109		
7/27/2022				116		363	
8/2/2022			732				
8/3/2022							250
8/10/2022		58.599998					
3/8/2023							
3/13/2023					88.6		
3/14/2023							
3/15/2023	77			103		329	
3/21/2023							
3/22/2023			683				
3/27/2023							
3/28/2023		39.5					322

Time Series

Constituent: Sulfate (mg/L) Analysis Run 11/15/2023 3:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-36H	GS-AP-MW-38H	GS-AP-MW-40H	GS-AP-MW-41HD	GS-AP-MW-41HS	GS-AP-MW-42H	GS-AP-MW-43HO
8/30/2023				113	89		
8/31/2023							
9/5/2023							
9/6/2023	152						
9/11/2023							
9/12/2023							
9/13/2023							
9/18/2023			692				
9/19/2023		29.1				339	237

Time Series

Constituent: Sulfate (mg/L) Analysis Run 11/15/2023 3:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-44HO	GS-AP-MW-6D	GS-AP-MW-6S	GS-AP-MW-6V	GS-AP-MW-7	GS-AP-MW-8 (bg)	GS-AP-MW-9V	GS-AP-PZ-16	GS-AP-PZ-22
8/2/2016					154				
8/3/2016		52	203			4.2			
9/20/2016		56	209						
9/21/2016					146	4.27			
10/24/2016		57.5			131				
10/25/2016						2.78			
10/26/2016			224						
12/12/2016		50	249		141				
12/13/2016						3.18			
2/6/2017		54.9	309		135	3.74			
3/27/2017		50	290						
3/28/2017					140	3.4 (J)			
4/24/2017		56	300		140	2.7 (J)			
6/6/2017		63	310						
6/7/2017					150	2.7 (J)			
8/21/2017		35	260		140	3.9 (J)			
5/14/2018		46	210						
5/15/2018					120	2.5 (J)			
10/15/2018		37	170		130				
10/16/2018						2.4 (J)			
4/16/2019		46.8	195			4.53			
4/23/2019					156				
9/23/2019		47.9	176						
9/24/2019					145	6.61			
3/17/2020		59.5	148		149				
3/18/2020						4.86			
3/23/2020							18.7		
3/24/2020								27.7	70.1
8/27/2020	33.5								
9/8/2020				9.06					
9/15/2020	71.6			7.02					
9/16/2020			115		131				
9/17/2020		65.1						15.2	79.9
9/21/2020						4.69			
9/22/2020							21.2		
2/2/2021					130	4.83	31.2		84.1
2/3/2021	57	58.9	116	4.29					
2/17/2021								14.1	
7/27/2021	36.9	64.4	114						
8/2/2021				14.1					
8/3/2021									74.7
8/9/2021					133			13.6	
8/10/2021						3.77	32.7		
2/8/2022					137 (D)				
2/9/2022	27.7			8.6					
2/14/2022		58.3	115						91.1
2/15/2022								23.1	
2/16/2022						4.68			
2/21/2022							32.4		
2/22/2022									
2/28/2022									
3/1/2022									

Time Series

Constituent: Sulfate (mg/L) Analysis Run 11/15/2023 3:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-44HO	GS-AP-MW-6D	GS-AP-MW-6S	GS-AP-MW-6V	GS-AP-MW-7	GS-AP-MW-8 (bg)	GS-AP-MW-9V	GS-AP-PZ-16	GS-AP-PZ-22
7/19/2022							37.099998		
7/20/2022									
7/25/2022		57.6 (D)		4.355 (D)	137.75 (D)				
7/26/2022			106					38	
8/2/2022						4.18			
8/3/2022									
8/9/2022									53.799999
3/6/2023	23.1								
3/8/2023				11.235 (D)					
3/14/2023		57.5	96.099998		130				
3/15/2023									
3/21/2023								8.8	62.9
3/22/2023									
3/27/2023						4.41	47.9		
3/28/2023									
9/5/2023	24.4	58.700001	107						
9/11/2023				4.715 (D)	124				64.199997
9/12/2023								8.92	
9/13/2023							85.199997		
9/18/2023						10.1			
9/19/2023									

Time Series

Constituent: Sulfate (mg/L) Analysis Run 11/15/2023 3:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-10R	GS-AP-MW-11R	GS-AP-MW-13R	GS-AP-MW-14R	GS-AP-MW-18R ...	GS-AP-MW-18VR	GS-AP-MW-1R
8/2/2016							
8/3/2016							
9/20/2016							
9/21/2016							
10/24/2016							
10/25/2016							
10/26/2016							
12/12/2016							
12/13/2016							
2/6/2017							
3/27/2017							
3/28/2017							
4/24/2017							
6/6/2017							
6/7/2017							
8/21/2017							
5/14/2018							
5/15/2018							
10/15/2018							
10/16/2018							
4/16/2019							
4/23/2019							
9/23/2019							
9/24/2019							
3/17/2020							
3/18/2020							
3/23/2020							
3/24/2020							
8/27/2020							
9/8/2020							
9/15/2020							
9/16/2020							
9/17/2020							
9/21/2020							
9/22/2020							
2/2/2021							
2/3/2021							
2/17/2021							
7/27/2021							
8/2/2021							
8/3/2021							
8/9/2021							
8/10/2021							
2/8/2022							
2/9/2022							
2/14/2022							
2/15/2022							
2/16/2022							
2/21/2022							
2/22/2022					27	13	
2/28/2022				33.3			
3/1/2022	21.6	39.4	38				5.88

Time Series

Constituent: Sulfate (mg/L) Analysis Run 11/15/2023 3:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-10R	GS-AP-MW-11R	GS-AP-MW-13R	GS-AP-MW-14R	GS-AP-MW-18R ...	GS-AP-MW-18VR	GS-AP-MW-1R
7/19/2022		39.400002					
7/20/2022			38.900002				
7/25/2022							
7/26/2022							
8/2/2022							4.28
8/3/2022	30.9			24.700001	21.200001		
8/9/2022						5.54	
3/6/2023							
3/8/2023							
3/14/2023							
3/15/2023				20.9			
3/21/2023							
3/22/2023		45.6					
3/27/2023	17.5		33.1			1.61 (J)	5.43
3/28/2023					26.299999		
9/5/2023							
9/11/2023							
9/12/2023				24.6			
9/13/2023							4.81
9/18/2023							
9/19/2023	17	54	39.900002		23.5	2.85	

Time Series

Constituent: Sulfate (mg/L) Analysis Run 11/15/2023 3:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-23V	GS-AP-MW-27HR	GS-AP-MW-31V	GS-AP-MW-36V	GS-AP-MW-37HR	GS-AP-MW-3V	GS-AP-MW-45V	GS-AP-MW-47	GS-AP-MW-5R
2/21/2022									
2/22/2022		268	26.2	53.9					
2/23/2022	331					370	273		
2/28/2022					22.6			14.4	
3/1/2022									348
7/19/2022									
7/20/2022						454			
7/26/2022	286				32.200001			16.700001	
7/27/2022		593		387					
8/2/2022									294
8/3/2022			111						
8/8/2022							273		
3/14/2023	113	864		346					
3/15/2023					40.9			24.3	
3/20/2023									290
3/21/2023						330			
3/27/2023			214						
3/28/2023							489		
9/6/2023	77.5	858		517					
9/11/2023					81.400002				
9/12/2023						396		72.900002	271
9/13/2023			324						
9/18/2023							746		
9/19/2023									

Time Series

Constituent: Sulfate (mg/L) Analysis Run 11/15/2023 3:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-9R	GS-AP-PZ-18R	GS-AP-MW-46
2/21/2022		55.5	
2/22/2022			
2/23/2022			317
2/28/2022			
3/1/2022	104		
7/19/2022	86.599998		
7/20/2022			
7/26/2022			
7/27/2022		48.200001	
8/2/2022			200
8/3/2022			
8/8/2022			
3/14/2023			
3/15/2023			
3/20/2023			
3/21/2023			
3/27/2023	80.6		168
3/28/2023		44.900002	
9/6/2023			
9/11/2023			
9/12/2023			
9/13/2023	57.5		
9/18/2023			130
9/19/2023		42.700001	

Time Series

Constituent: TDS (mg/L)   Analysis Run 11/15/2023 3:06 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

	GS-AP-MW-12	GS-AP-MW-12V	GS-AP-MW-13 (bg)	GS-AP-MW-15	GS-AP-MW-15V	GS-AP-MW-16D	GS-AP-MW-17	GS-AP-MW-17V ...	GS-AP-MW-19
8/1/2016				640		222	408		245
8/2/2016			221						
8/3/2016	546								
9/19/2016						220	441		
9/20/2016	542		221	434					
9/21/2016									267
10/24/2016							424		275
10/25/2016	518		226	394		223			
12/13/2016	424		211			211	466		255
12/14/2016				387					
2/6/2017							414		
2/7/2017									272
2/8/2017	379		212	303		206			
3/27/2017							444		
3/28/2017				305					271
3/29/2017	334		217			215			
3/30/2017									
4/24/2017							446		
4/26/2017	332		202	329		212			265
6/5/2017							493		
6/6/2017				331		227			287
6/7/2017	308		218						
8/21/2017									
8/22/2017	286		224	364		230	500		293
8/23/2017									
5/15/2018	235		209	340			528		
5/16/2018						216			301
10/15/2018				448			462		
10/16/2018	211								303
10/17/2018			208			191			
2/20/2019								346	
2/21/2019		237							
2/26/2019									
2/27/2019									
4/16/2019	193		185						
4/17/2019				354		207	540		296
9/23/2019							684		
9/24/2019				536		208		365	302
9/25/2019	253	183							
3/16/2020							516		
3/17/2020									
3/18/2020	236			515	873				
3/23/2020									
3/24/2020		206				205			302
3/25/2020								364	
5/12/2020							493		
5/13/2020									
9/17/2020									
9/21/2020					1090		658		
9/22/2020						218			300
9/23/2020	216	195		600				368	
2/1/2021	224	240							

Time Series

Constituent: TDS (mg/L)   Analysis Run 11/15/2023 3:06 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

	GS-AP-MW-12	GS-AP-MW-12V	GS-AP-MW-13 (bg)	GS-AP-MW-15	GS-AP-MW-15V	GS-AP-MW-16D	GS-AP-MW-17	GS-AP-MW-17V ...	GS-AP-MW-19
2/2/2021							548	356	
2/3/2021									
2/8/2021									324
2/9/2021				616	1040				
2/10/2021						224			
7/27/2021									
8/2/2021								333	
8/3/2021				632	782		435		
8/4/2021									
8/9/2021	219	145				207			
8/10/2021									307
8/11/2021									
8/12/2021									
2/8/2022									
2/14/2022							448	365	
2/15/2022						214			
2/16/2022				426	782				
2/22/2022									304
2/23/2022		209							
2/28/2022	195								
7/19/2022	199								
7/20/2022		189							
7/26/2022									
7/27/2022									
8/2/2022				592	788	210			
8/3/2022									327
8/8/2022							446		
8/9/2022								344	
8/10/2022									
3/14/2023									
3/15/2023									
3/20/2023				444	694				
3/21/2023						221			320
3/22/2023	203	182					441	344	
9/5/2023									
9/6/2023									
9/11/2023				565	615		480	338	
9/12/2023						219			
9/13/2023	208	180							
9/18/2023									
9/19/2023									335

Time Series

Constituent: TDS (mg/L) Analysis Run 11/15/2023 3:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-2	GS-AP-MW-21	GS-AP-MW-21V	GS-AP-MW-23H	GS-AP-MW-24H	GS-AP-MW-25HA	GS-AP-MW-26H
8/1/2016							
8/2/2016	390	348					
8/3/2016							
9/19/2016	398						
9/20/2016							
9/21/2016		368					
10/24/2016	395						
10/25/2016		348					
12/13/2016	381						
12/14/2016		352					
2/6/2017							
2/7/2017							
2/8/2017	376	352					
3/27/2017							
3/28/2017		370					
3/29/2017							
3/30/2017	391						
4/24/2017							
4/26/2017	384	342					
6/5/2017							
6/6/2017	404	367					
6/7/2017							
8/21/2017	416						
8/22/2017							
8/23/2017		508					
5/15/2018		438					
5/16/2018	365						
10/15/2018							
10/16/2018	430	520					
10/17/2018							
2/20/2019				560			
2/21/2019							
2/26/2019					249		
2/27/2019							266
4/16/2019							
4/17/2019	341	582					
9/23/2019				598			278
9/24/2019		630			253		
9/25/2019	358						
3/16/2020							
3/17/2020				626			
3/18/2020		661			250		
3/23/2020			3410				
3/24/2020						948	
3/25/2020	337						269
5/12/2020							
5/13/2020	328						
9/17/2020				648	250	960	
9/21/2020							287
9/22/2020	318						
9/23/2020		642	3690				
2/1/2021	333						

Time Series

Constituent: TDS (mg/L) Analysis Run 11/15/2023 3:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-2	GS-AP-MW-21	GS-AP-MW-21V	GS-AP-MW-23H	GS-AP-MW-24H	GS-AP-MW-25HA	GS-AP-MW-26H
2/2/2021					259		
2/3/2021				612			
2/8/2021		684					
2/9/2021			2250				280
2/10/2021						887	
7/27/2021				580			
8/2/2021							
8/3/2021					191		
8/4/2021	316	594					
8/9/2021							
8/10/2021							271
8/11/2021			712				
8/12/2021						967	
2/8/2022		570	1360				
2/14/2022				592			
2/15/2022					241		273
2/16/2022						945	
2/22/2022	295						
2/23/2022							
2/28/2022							
7/19/2022	262						
7/20/2022							
7/26/2022				626			
7/27/2022					252		
8/2/2022							
8/3/2022						897	
8/8/2022							
8/9/2022			1240				
8/10/2022		592					282
3/14/2023				587			
3/15/2023					255		
3/20/2023							
3/21/2023		606	1950				
3/22/2023	297					873	280
9/5/2023		572	1550				
9/6/2023				591	251		
9/11/2023							
9/12/2023							
9/13/2023							
9/18/2023	405					902	324
9/19/2023							

Time Series

Constituent: TDS (mg/L)   Analysis Run 11/15/2023 3:06 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

	GS-AP-MW-28H	GS-AP-MW-29H	GS-AP-MW-3	GS-AP-MW-30HA	GS-AP-MW-31H	GS-AP-MW-32H	GS-AP-MW-33HO	GS-AP-MW-34HO	GS-AP-MW-35HO
2/27/2019		414							
3/13/2019	514								
9/24/2019		389							
9/25/2019	443								
3/16/2020	449							2460	
3/17/2020							827		365
3/18/2020				612	326				
3/24/2020						331			
3/25/2020		371							
5/12/2020	464							2440	311
5/13/2020				624			457		
9/15/2020							538		
9/16/2020								2720	326
9/17/2020									
9/21/2020				592		357			
9/22/2020	456	430			298				
2/1/2021					339				
2/2/2021									
2/3/2021		480					443	2930	
2/4/2021									339
2/8/2021									
2/9/2021									
2/10/2021						379			
2/17/2021	451		387	534					
7/27/2021							472	2930	
7/28/2021									302
8/2/2021				602	332				
8/3/2021			333						
8/4/2021		407							
8/9/2021	436								
8/10/2021						379			
2/8/2022				628	285				
2/9/2022							471	3130	322
2/14/2022	433	392				354			
2/15/2022									
2/16/2022			307						
2/21/2022									
2/22/2022									
7/20/2022			294						
7/26/2022									
7/27/2022	426					357			
8/2/2022									
8/3/2022		373		758	383				
8/10/2022									
3/8/2023								2740	287
3/13/2023				680					
3/14/2023	445						267		
3/15/2023									
3/21/2023			295			359			
3/22/2023									
3/27/2023					373				
3/28/2023		373							

Time Series

Constituent: TDS (mg/L) Analysis Run 11/15/2023 3:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-28H	GS-AP-MW-29H	GS-AP-MW-3	GS-AP-MW-30HA	GS-AP-MW-31H	GS-AP-MW-32H	GS-AP-MW-33HO	GS-AP-MW-34HO	GS-AP-MW-35HO
8/30/2023							328		
8/31/2023								2680	292
9/5/2023				696					
9/6/2023									
9/11/2023	466								
9/12/2023			280						
9/13/2023		373			422	349			
9/18/2023									
9/19/2023									

Time Series

Constituent: TDS (mg/L)   Analysis Run 11/15/2023 3:06 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

	GS-AP-MW-36H	GS-AP-MW-38H	GS-AP-MW-40H	GS-AP-MW-41HD	GS-AP-MW-41HS	GS-AP-MW-42H	GS-AP-MW-43HO
2/27/2019							
3/13/2019							
9/24/2019							
9/25/2019							
3/16/2020							
3/17/2020	362						
3/18/2020				309			
3/24/2020		335				850	
3/25/2020							930
5/12/2020							
5/13/2020	333						
9/15/2020							
9/16/2020							
9/17/2020	348			318			
9/21/2020							
9/22/2020		339	1310			800	910
2/1/2021							
2/2/2021			1320				
2/3/2021						768	
2/4/2021							
2/8/2021				326	317		
2/9/2021		355					
2/10/2021							
2/17/2021	292						853
7/27/2021							
7/28/2021					283		
8/2/2021							
8/3/2021				307			
8/4/2021	449	368				740	855
8/9/2021							
8/10/2021			1240				
2/8/2022					265		
2/9/2022							
2/14/2022	514						
2/15/2022			1230	307			
2/16/2022						774	
2/21/2022							894
2/22/2022		345					
7/20/2022	248						
7/26/2022					265		
7/27/2022				305		728	
8/2/2022			1220				
8/3/2022							864
8/10/2022		456					
3/8/2023							
3/13/2023					267		
3/14/2023							
3/15/2023	452			317		744	
3/21/2023							
3/22/2023			1300				
3/27/2023							
3/28/2023		403					1280

Time Series

Constituent: TDS (mg/L) Analysis Run 11/15/2023 3:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-36H	GS-AP-MW-38H	GS-AP-MW-40H	GS-AP-MW-41HD	GS-AP-MW-41HS	GS-AP-MW-42H	GS-AP-MW-43HO
8/30/2023				315	234		
8/31/2023							
9/5/2023							
9/6/2023	622						
9/11/2023							
9/12/2023							
9/13/2023							
9/18/2023			1310				
9/19/2023		349				798	991

Time Series

Constituent: TDS (mg/L) Analysis Run 11/15/2023 3:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-44HO	GS-AP-MW-6D	GS-AP-MW-6S	GS-AP-MW-6V	GS-AP-MW-7	GS-AP-MW-8 (bg)	GS-AP-MW-9V	GS-AP-PZ-16	GS-AP-PZ-22
8/2/2016					358				
8/3/2016		302	394			113			
9/20/2016		298	444						
9/21/2016					370	128			
10/24/2016		306			370				
10/25/2016						121			
10/26/2016			456						
12/12/2016		291	491		353				
12/13/2016						101			
2/6/2017		285	580		338	108			
3/27/2017		305	554						
3/28/2017					352	91			
4/24/2017		301	566		362	89.3			
6/6/2017		311	580						
6/7/2017					348	84			
8/21/2017		289	524		362	91.3			
5/14/2018		303	458						
5/15/2018					338	94.7			
10/15/2018		309	404		333				
10/16/2018						76.7			
4/16/2019		285	382			92			
4/23/2019					354				
9/23/2019		296	381						
9/24/2019					344	109			
3/17/2020		303	328		334				
3/18/2020						90.7			
3/23/2020							268		
3/24/2020								381	412
8/27/2020	435								
9/8/2020				810					
9/15/2020	564			857					
9/16/2020			269		351				
9/17/2020		314						387	438
9/21/2020						94			
9/22/2020							285		
2/2/2021					349	98.7	314		446
2/3/2021	592	301	274	840					
2/17/2021								397	
7/27/2021	510	262	273						
8/2/2021				833					
8/3/2021									414
8/9/2021					340			384	
8/10/2021						101	309		
2/8/2022					325 (D)				
2/9/2022	480			818					
2/14/2022		297	299						423
2/15/2022								402	
2/16/2022						90.7			
2/21/2022							299		
2/22/2022									
2/28/2022									
3/1/2022									

Time Series

Constituent: TDS (mg/L)   Analysis Run 11/15/2023 3:06 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

	GS-AP-MW-44HO	GS-AP-MW-6D	GS-AP-MW-6S	GS-AP-MW-6V	GS-AP-MW-7	GS-AP-MW-8 (bg)	GS-AP-MW-9V	GS-AP-PZ-16	GS-AP-PZ-22
7/19/2022							310		
7/20/2022									
7/25/2022		286 (D)		857.5 (D)	308.25 (D)				
7/26/2022			311					369	
8/2/2022						97.300003			
8/3/2022									
8/9/2022									383
3/6/2023	490								
3/8/2023				873 (D)					
3/14/2023		300	298		340				
3/15/2023									
3/21/2023								372	421
3/22/2023									
3/27/2023						100	335		
3/28/2023									
9/5/2023	500	294	307						
9/11/2023				848.5 (D)	327				420
9/12/2023								355	
9/13/2023							395		
9/18/2023						91.300003			
9/19/2023									

Time Series

Constituent: TDS (mg/L) Analysis Run 11/15/2023 3:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-10R	GS-AP-MW-11R	GS-AP-MW-13R	GS-AP-MW-14R	GS-AP-MW-18R ...	GS-AP-MW-18VR	GS-AP-MW-1R
8/2/2016							
8/3/2016							
9/20/2016							
9/21/2016							
10/24/2016							
10/25/2016							
10/26/2016							
12/12/2016							
12/13/2016							
2/6/2017							
3/27/2017							
3/28/2017							
4/24/2017							
6/6/2017							
6/7/2017							
8/21/2017							
5/14/2018							
5/15/2018							
10/15/2018							
10/16/2018							
4/16/2019							
4/23/2019							
9/23/2019							
9/24/2019							
3/17/2020							
3/18/2020							
3/23/2020							
3/24/2020							
8/27/2020							
9/8/2020							
9/15/2020							
9/16/2020							
9/17/2020							
9/21/2020							
9/22/2020							
2/2/2021							
2/3/2021							
2/17/2021							
7/27/2021							
8/2/2021							
8/3/2021							
8/9/2021							
8/10/2021							
2/8/2022							
2/9/2022							
2/14/2022							
2/15/2022							
2/16/2022							
2/21/2022							
2/22/2022					136	298	
2/28/2022				305			
3/1/2022	250	244	201				288

Time Series

Constituent: TDS (mg/L) Analysis Run 11/15/2023 3:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-10R	GS-AP-MW-11R	GS-AP-MW-13R	GS-AP-MW-14R	GS-AP-MW-18R ...	GS-AP-MW-18VR	GS-AP-MW-1R
7/19/2022		251					
7/20/2022			210				
7/25/2022							
7/26/2022							
8/2/2022							309
8/3/2022	313			245	167		
8/9/2022						259	
3/6/2023							
3/8/2023							
3/14/2023							
3/15/2023				229			
3/21/2023							
3/22/2023		277					
3/27/2023	266		200			256	314
3/28/2023					154		
9/5/2023							
9/11/2023							
9/12/2023				226			
9/13/2023							313
9/18/2023							
9/19/2023	289	313	244		185	275	

Time Series

Constituent: TDS (mg/L)   Analysis Run 11/15/2023 3:06 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

	GS-AP-MW-23V	GS-AP-MW-27HR	GS-AP-MW-31V	GS-AP-MW-36V	GS-AP-MW-37HR	GS-AP-MW-3V	GS-AP-MW-45V	GS-AP-MW-47	GS-AP-MW-5R
2/21/2022									
2/22/2022		1100	406	438					
2/23/2022	752					1050	674		
2/28/2022					287			180	
3/1/2022									762
7/19/2022									
7/20/2022						1520			
7/26/2022	740				331			190	
7/27/2022		2290		1480					
8/2/2022									788
8/3/2022			767						
8/8/2022							696		
3/14/2023	418	2840		1540					
3/15/2023					367			234	
3/20/2023									767
3/21/2023						942			
3/27/2023			1010						
3/28/2023							1310		
9/6/2023	364	2750		1990					
9/11/2023					518				
9/12/2023						1340		383	730
9/13/2023			1500						
9/18/2023							2180		
9/19/2023									

Time Series

Constituent: TDS (mg/L) Analysis Run 11/15/2023 3:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-9R	GS-AP-PZ-18R	GS-AP-MW-46
2/21/2022		303	
2/22/2022			
2/23/2022			614
2/28/2022			
3/1/2022	398		
7/19/2022	297		
7/20/2022			
7/26/2022			
7/27/2022		307	
8/2/2022			594
8/3/2022			
8/8/2022			
3/14/2023			
3/15/2023			
3/20/2023			
3/21/2023			
3/27/2023	281		554
3/28/2023		297	
9/6/2023			
9/11/2023			
9/12/2023			
9/13/2023	246		
9/18/2023			529
9/19/2023		300	

Time Series

Constituent: Thallium (mg/L) Analysis Run 11/15/2023 3:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-12	GS-AP-MW-12V	GS-AP-MW-13 (bg)	GS-AP-MW-15	GS-AP-MW-15V	GS-AP-MW-16D	GS-AP-MW-17	GS-AP-MW-17V ...	GS-AP-MW-19
8/1/2016				<0.000203		<0.000203	<0.000203		<0.000203
8/2/2016			<0.001						
8/3/2016	<0.000203								
9/19/2016						<0.000203	<0.000203		
9/20/2016	<0.000203		<0.001	<0.000203					
9/21/2016									<0.000203
10/24/2016							<0.000203		<0.000203
10/25/2016	<0.000203		<0.001	<0.000203		<0.000203			
12/13/2016	<0.000203		<0.001			<0.000203	<0.000203		<0.000203
12/14/2016				<0.000203					
2/6/2017							<0.000203		
2/7/2017									<0.000203
2/8/2017	<0.000203		<0.001	<0.000203		<0.000203			
3/27/2017							<0.000203		
3/28/2017				<0.000203					<0.000203
3/29/2017	<0.000203		<0.001			<0.000203			
3/30/2017									
4/24/2017							<0.000203		
4/26/2017	<0.000203		<0.001	<0.000203		<0.000203			<0.000203
6/5/2017							<0.000203		
6/6/2017				<0.000203		<0.000203			<0.000203
6/7/2017	<0.000203		<0.001						
2/19/2018							<0.000203		
2/20/2018	<0.000203		<0.001	<0.000203					
2/21/2018						<0.000203			<0.000203
5/15/2018	<0.000203		<0.001	<0.000203			<0.000203		
5/16/2018						<0.000203			<0.000203
10/15/2018				<0.000203			<0.000203		
10/16/2018	<0.000203								<0.000203
10/17/2018			<0.001			<0.000203			
2/20/2019								<0.000203	
2/21/2019		<0.000203							
2/26/2019									
2/27/2019									
4/16/2019	<0.000203		<0.001						
4/17/2019				<0.000203		<0.000203	<0.000203		<0.000203
9/23/2019							<0.000203		
9/24/2019				<0.000203		<0.000203		<0.000203	<0.000203
9/25/2019	<0.000203	<0.000203							
3/16/2020							<0.000203		
3/17/2020									
3/18/2020	<0.000203			<0.000203	<0.000203				
3/23/2020									
3/24/2020		<0.000203				<0.000203			<0.000203
3/25/2020								<0.000203	
5/12/2020							<0.000203		
5/13/2020									
9/17/2020									
9/21/2020					<0.000203		<0.000203		
9/22/2020						<0.000203			<0.000203
9/23/2020	<0.000203	<0.000203		<0.000203				<0.000203	
2/1/2021	<0.000203	<0.000203							

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Thallium (mg/L)   Analysis Run 11/15/2023 3:06 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

	GS-AP-MW-12	GS-AP-MW-12V	GS-AP-MW-13 (bg)	GS-AP-MW-15	GS-AP-MW-15V	GS-AP-MW-16D	GS-AP-MW-17	GS-AP-MW-17V ...	GS-AP-MW-19
2/2/2021							<0.000203	<0.000203	
2/3/2021									
2/8/2021									<0.000203
2/9/2021				<0.000203	<0.000203				
2/10/2021						<0.000203			
7/27/2021									
8/2/2021								<0.000203	
8/3/2021				<0.000203	<0.000203		<0.000203		
8/4/2021									
8/9/2021	<0.000203	<0.000203				<0.000203			
8/10/2021									<0.000203
8/11/2021									
8/12/2021									
2/8/2022									
2/14/2022							<0.000203	<0.000203	
2/15/2022						<0.000203			
2/16/2022				<0.000203	<0.000203				
2/22/2022									<0.000203
2/23/2022		<0.000203							
2/28/2022	<0.000203								
7/19/2022	<0.000203								
7/20/2022		<0.000203							
7/26/2022									
7/27/2022									
8/2/2022				<0.000203	<0.000203	<0.000203			
8/3/2022									<0.000203
8/8/2022							<0.000203		
8/9/2022								<0.000203	
8/10/2022									
3/14/2023									
3/15/2023									
3/20/2023				<0.000203	<0.000203				
3/21/2023						<0.000203			<0.000203
3/22/2023	<0.000203	<0.000203					<0.000203	<0.000203	
9/5/2023									
9/6/2023									
9/11/2023				<0.000203	<0.000203		<0.000203	<0.000203	
9/12/2023						<0.000203			
9/13/2023	<0.000203	<0.000203							
9/18/2023									
9/19/2023									<0.000203

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Thallium (mg/L)   Analysis Run 11/15/2023 3:06 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

	GS-AP-MW-2	GS-AP-MW-21	GS-AP-MW-21V	GS-AP-MW-23H	GS-AP-MW-24H	GS-AP-MW-25HA	GS-AP-MW-26H
8/1/2016							
8/2/2016	<0.000203	<0.000203					
8/3/2016							
9/19/2016	<0.000203						
9/20/2016							
9/21/2016		<0.000203					
10/24/2016	<0.000203						
10/25/2016		<0.000203					
12/13/2016	<0.000203						
12/14/2016		<0.000203					
2/6/2017							
2/7/2017							
2/8/2017	<0.000203	<0.000203					
3/27/2017							
3/28/2017		<0.000203					
3/29/2017							
3/30/2017	<0.000203						
4/24/2017							
4/26/2017	<0.000203	<0.000203					
6/5/2017							
6/6/2017	<0.000203	<0.000203					
6/7/2017							
2/19/2018							
2/20/2018		<0.000203					
2/21/2018	<0.000203						
5/15/2018		<0.000203					
5/16/2018	<0.000203						
10/15/2018							
10/16/2018	<0.000203	<0.000203					
10/17/2018							
2/20/2019				<0.000203			
2/21/2019							
2/26/2019					<0.000203		
2/27/2019							<0.000203
4/16/2019							
4/17/2019	<0.000203	<0.000203					
9/23/2019				<0.000203			<0.000203
9/24/2019		<0.000203			<0.000203		
9/25/2019	<0.000203						
3/16/2020							
3/17/2020				<0.000203			
3/18/2020		<0.000203			<0.000203		
3/23/2020			<0.000203				
3/24/2020						<0.000203	
3/25/2020	<0.000203						<0.000203
5/12/2020							
5/13/2020	<0.000203						
9/17/2020				<0.000203	<0.000203	<0.000203	
9/21/2020							<0.000203
9/22/2020	<0.000203						
9/23/2020		<0.000203	<0.000203				
2/1/2021	<0.000203						

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Thallium (mg/L) Analysis Run 11/15/2023 3:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-2	GS-AP-MW-21	GS-AP-MW-21V	GS-AP-MW-23H	GS-AP-MW-24H	GS-AP-MW-25HA	GS-AP-MW-26H
2/2/2021					<0.000203		
2/3/2021				<0.000203			
2/8/2021		<0.000203					
2/9/2021			<0.000203				<0.000203
2/10/2021						<0.000203	
7/27/2021				<0.000203			
8/2/2021							
8/3/2021					<0.000203		
8/4/2021	<0.000203	<0.000203					
8/9/2021							
8/10/2021							<0.000203
8/11/2021			<0.000203				
8/12/2021						<0.000203	
2/8/2022		<0.000203	<0.000203				
2/14/2022				<0.000203			
2/15/2022					<0.000203		<0.000203
2/16/2022						<0.000203	
2/22/2022	<0.000203						
2/23/2022							
2/28/2022							
7/19/2022	<0.000203						
7/20/2022							
7/26/2022				<0.000203			
7/27/2022					<0.000203		
8/2/2022							
8/3/2022						<0.000203	
8/8/2022							
8/9/2022			<0.000203				
8/10/2022		<0.000203					<0.000203
3/14/2023				<0.000203			
3/15/2023					<0.000203		
3/20/2023							
3/21/2023		<0.000203	<0.000203				
3/22/2023	<0.000203					<0.000203	<0.000203
9/5/2023		<0.000203	<0.000203				
9/6/2023				<0.000203	<0.000203		
9/11/2023							
9/12/2023							
9/13/2023							
9/18/2023	<0.000203					<0.000203	<0.000203
9/19/2023							

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Thallium (mg/L) Analysis Run 11/15/2023 3:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-28H	GS-AP-MW-29H	GS-AP-MW-3	GS-AP-MW-30HA	GS-AP-MW-31H	GS-AP-MW-32H	GS-AP-MW-33HO	GS-AP-MW-34HO	GS-AP-MW-35HO
2/27/2019		<0.000203							
3/13/2019	<0.000203								
9/24/2019		<0.000203							
9/25/2019	<0.000203								
3/16/2020	<0.000203							<0.000203	
3/17/2020							<0.000203		<0.000203
3/18/2020				<0.000203	<0.000203				
3/24/2020						<0.000203			
3/25/2020		<0.000203							
5/12/2020	<0.000203							<0.000203	<0.000203
5/13/2020				<0.000203			<0.000203		
9/15/2020							<0.000203		
9/16/2020								<0.000203	<0.000203
9/17/2020									
9/21/2020				<0.000203		<0.000203			
9/22/2020	<0.000203	<0.000203			<0.000203				
2/1/2021					<0.000203				
2/2/2021									
2/3/2021		<0.000203					<0.000203	<0.000203	
2/4/2021									<0.000203
2/8/2021									
2/9/2021									
2/10/2021						<0.000203			
2/17/2021	<0.000203		<0.000203	<0.000203					
7/27/2021							<0.000203	<0.000203	
7/28/2021									<0.000203
8/2/2021				<0.000203	<0.000203				
8/3/2021			<0.000203						
8/4/2021		<0.000203							
8/9/2021	<0.000203								
8/10/2021						<0.000203			
2/8/2022				<0.000203	<0.000203				
2/9/2022							<0.000203	<0.000203	<0.000203
2/14/2022	<0.000203	<0.000203				<0.000203			
2/15/2022									
2/16/2022			<0.000203						
2/21/2022									
2/22/2022									
7/20/2022			<0.000203						
7/26/2022									
7/27/2022	<0.000203					<0.000203			
8/2/2022									
8/3/2022		<0.000203		<0.000203	<0.000203				
8/10/2022									
3/8/2023								<0.000203	<0.000203
3/13/2023				<0.000203					
3/14/2023	<0.000203						<0.000203		
3/15/2023									
3/21/2023			<0.000203			<0.000203			
3/22/2023									
3/27/2023					<0.000203				
3/28/2023		<0.000203							

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Thallium (mg/L)   Analysis Run 11/15/2023 3:06 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

	GS-AP-MW-28H	GS-AP-MW-29H	GS-AP-MW-3	GS-AP-MW-30HA	GS-AP-MW-31H	GS-AP-MW-32H	GS-AP-MW-33HO	GS-AP-MW-34HO	GS-AP-MW-35HO
8/30/2023							<0.000203		
8/31/2023								<0.000203	<0.000203
9/5/2023				<0.000203					
9/6/2023									
9/11/2023	<0.000203								
9/12/2023			<0.000203						
9/13/2023		<0.000203			<0.000203	<0.000203			
9/18/2023									
9/19/2023									

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Thallium (mg/L) Analysis Run 11/15/2023 3:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-36H	GS-AP-MW-38H	GS-AP-MW-40H	GS-AP-MW-41HD	GS-AP-MW-41HS	GS-AP-MW-42H	GS-AP-MW-43HO
2/27/2019							
3/13/2019							
9/24/2019							
9/25/2019							
3/16/2020							
3/17/2020	<0.000203						
3/18/2020				<0.000203			
3/24/2020		<0.000203				<0.000203	
3/25/2020							<0.000203
5/12/2020							
5/13/2020	<0.000203						
9/15/2020							
9/16/2020							
9/17/2020	<0.000203			<0.000203			
9/21/2020							
9/22/2020		<0.000203	<0.000203			<0.000203	<0.000203
2/1/2021							
2/2/2021			<0.000203				
2/3/2021						<0.000203	
2/4/2021							
2/8/2021				<0.000203	<0.000203		
2/9/2021		<0.000203					
2/10/2021							
2/17/2021	<0.000203						<0.000203
7/27/2021							
7/28/2021					<0.000203		
8/2/2021							
8/3/2021				<0.000203			
8/4/2021	<0.000203	<0.000203				<0.000203	<0.000203
8/9/2021							
8/10/2021			<0.000203				
2/8/2022					<0.000203		
2/9/2022							
2/14/2022	<0.000203						
2/15/2022			<0.000203	<0.000203			
2/16/2022						<0.000203	
2/21/2022							<0.000203
2/22/2022		<0.000203					
7/20/2022	<0.000203						
7/26/2022					<0.000203		
7/27/2022				<0.000203		<0.000203	
8/2/2022			<0.000203				
8/3/2022							<0.000203
8/10/2022		<0.000203					
3/8/2023							
3/13/2023					<0.000203		
3/14/2023							
3/15/2023	<0.000203			<0.000203		<0.000203	
3/21/2023							
3/22/2023			<0.000203				
3/27/2023							
3/28/2023		<0.000203					<0.000203

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Thallium (mg/L) Analysis Run 11/15/2023 3:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-36H	GS-AP-MW-38H	GS-AP-MW-40H	GS-AP-MW-41HD	GS-AP-MW-41HS	GS-AP-MW-42H	GS-AP-MW-43HO
8/30/2023				<0.000203	<0.000203		
8/31/2023							
9/5/2023							
9/6/2023	<0.000203						
9/11/2023							
9/12/2023							
9/13/2023							
9/18/2023			<0.000203				
9/19/2023		<0.000203				<0.000203	<0.000203

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Thallium (mg/L) Analysis Run 11/15/2023 3:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-44HO	GS-AP-MW-6D	GS-AP-MW-6S	GS-AP-MW-6V	GS-AP-MW-7	GS-AP-MW-8 (bg)	GS-AP-MW-9V	GS-AP-PZ-16	GS-AP-PZ-22
8/2/2016					<0.000203				
8/3/2016		<0.000203	<0.000203			<0.000203			
9/20/2016		<0.000203	<0.000203						
9/21/2016					<0.000203	<0.000203			
10/24/2016		<0.000203			<0.000203				
10/25/2016						<0.000203			
10/26/2016			<0.000203						
12/12/2016		<0.000203	<0.000203		<0.000203				
12/13/2016						<0.000203			
2/6/2017		<0.000203	<0.000203		<0.000203	<0.000203			
3/27/2017		<0.000203	<0.000203						
3/28/2017					<0.000203	<0.000203			
4/24/2017		<0.000203	<0.000203		<0.000203	<0.000203			
6/6/2017		<0.000203	<0.000203						
6/7/2017					<0.000203	<0.000203			
2/19/2018		<0.000203	<0.000203		<0.000203	<0.000203			
5/14/2018		<0.000203	<0.000203						
5/15/2018					<0.000203	<0.000203			
10/15/2018		<0.000203	<0.000203		<0.000203				
10/16/2018						<0.000203			
4/16/2019		<0.000203	<0.000203			<0.000203			
4/23/2019					<0.000203				
9/23/2019		<0.000203	<0.000203						
9/24/2019					<0.000203	<0.000203			
3/17/2020		<0.000203	<0.000203		<0.000203				
3/18/2020						<0.000203			
3/23/2020							<0.000203		
3/24/2020								<0.000203	<0.000203
8/27/2020	<0.000203								
9/8/2020				<0.000203					
9/15/2020	<0.000203			<0.000203					
9/16/2020			<0.000203		<0.000203				
9/17/2020		<0.000203						<0.000203	<0.000203
9/21/2020						<0.000203			
9/22/2020							<0.000203		
2/2/2021					<0.000203	<0.000203	<0.000203		<0.000203
2/3/2021	<0.000203	<0.000203	<0.000203	<0.000203					
2/17/2021								<0.000203	
7/27/2021	<0.000203	<0.000203	<0.000203						
8/2/2021				<0.000203					
8/3/2021									<0.000203
8/9/2021					<0.000203			<0.000203	
8/10/2021						<0.000203	<0.000203		
2/8/2022					<0.000203				
2/9/2022	<0.000203			<0.000203					
2/14/2022		<0.000203	<0.000203						<0.000203
2/15/2022								<0.000203	
2/16/2022						<0.000203			
2/21/2022							<0.000203		
2/22/2022									
2/28/2022									
3/1/2022									

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Thallium (mg/L) Analysis Run 11/15/2023 3:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-44HO	GS-AP-MW-6D	GS-AP-MW-6S	GS-AP-MW-6V	GS-AP-MW-7	GS-AP-MW-8 (bg)	GS-AP-MW-9V	GS-AP-PZ-16	GS-AP-PZ-22
7/19/2022							<0.000203		
7/20/2022									
7/25/2022		<0.000203		<0.000203	<0.000203				
7/26/2022			<0.000203					<0.000203	
8/2/2022						<0.000203			
8/3/2022									
8/9/2022									<0.000203
3/6/2023	<0.000203								
3/8/2023				<0.000203					
3/14/2023		<0.000203	<0.000203		<0.000203				
3/15/2023									
3/21/2023								<0.000203	<0.000203
3/22/2023									
3/27/2023						<0.000203	<0.000203		
3/28/2023									
9/5/2023	<0.000203	<0.000203	<0.000203						
9/11/2023				<0.000203	<0.000203				<0.000203
9/12/2023								<0.000203	
9/13/2023							<0.000203		
9/18/2023						<0.000203			
9/19/2023									

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Thallium (mg/L) Analysis Run 11/15/2023 3:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-10R	GS-AP-MW-11R	GS-AP-MW-13R	GS-AP-MW-14R	GS-AP-MW-18R ...	GS-AP-MW-18VR	GS-AP-MW-1R
8/2/2016							
8/3/2016							
9/20/2016							
9/21/2016							
10/24/2016							
10/25/2016							
10/26/2016							
12/12/2016							
12/13/2016							
2/6/2017							
3/27/2017							
3/28/2017							
4/24/2017							
6/6/2017							
6/7/2017							
2/19/2018							
5/14/2018							
5/15/2018							
10/15/2018							
10/16/2018							
4/16/2019							
4/23/2019							
9/23/2019							
9/24/2019							
3/17/2020							
3/18/2020							
3/23/2020							
3/24/2020							
8/27/2020							
9/8/2020							
9/15/2020							
9/16/2020							
9/17/2020							
9/21/2020							
9/22/2020							
2/2/2021							
2/3/2021							
2/17/2021							
7/27/2021							
8/2/2021							
8/3/2021							
8/9/2021							
8/10/2021							
2/8/2022							
2/9/2022							
2/14/2022							
2/15/2022							
2/16/2022							
2/21/2022							
2/22/2022					<0.000203	<0.000203	
2/28/2022				<0.000203			
3/1/2022	<0.000203	<0.000203	<0.000203				<0.000203

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Thallium (mg/L) Analysis Run 11/15/2023 3:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-10R	GS-AP-MW-11R	GS-AP-MW-13R	GS-AP-MW-14R	GS-AP-MW-18R ...	GS-AP-MW-18VR	GS-AP-MW-1R
7/19/2022		<0.000203					
7/20/2022			<0.000203				
7/25/2022							
7/26/2022							
8/2/2022							<0.000203
8/3/2022	<0.000203			<0.000203	<0.000203		
8/9/2022						7.7E-05 (J)	
3/6/2023							
3/8/2023							
3/14/2023							
3/15/2023				<0.000203			
3/21/2023							
3/22/2023		<0.000203					
3/27/2023	<0.000203		<0.000203			<0.000203	<0.000203
3/28/2023					<0.000203		
9/5/2023							
9/11/2023							
9/12/2023				<0.000203			
9/13/2023							<0.000203
9/18/2023							
9/19/2023	<0.000203	<0.000203	<0.000203		<0.000203	<0.000203	

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Thallium (mg/L) Analysis Run 11/15/2023 3:06 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-23V	GS-AP-MW-27HR	GS-AP-MW-31V	GS-AP-MW-36V	GS-AP-MW-37HR	GS-AP-MW-3V	GS-AP-MW-45V	GS-AP-MW-47	GS-AP-MW-5R
2/21/2022									
2/22/2022		<0.000203	<0.000203	<0.000203					
2/23/2022	<0.000203					<0.000203	<0.000203		
2/28/2022					<0.000203			<0.000203	
3/1/2022									<0.000203
7/19/2022									
7/20/2022						<0.000203			
7/26/2022	<0.000203				<0.000203			<0.000203	
7/27/2022		<0.000203		<0.000203					
8/2/2022									<0.000203
8/3/2022			<0.000203						
8/8/2022							<0.000203		
3/14/2023	<0.000203	<0.000203		<0.000203					
3/15/2023					<0.000203			<0.000203	
3/20/2023									<0.000203
3/21/2023						<0.000203			
3/27/2023			<0.000203						
3/28/2023							<0.000203		
9/6/2023	<0.000203	<0.000203		<0.000203					
9/11/2023					<0.000203				
9/12/2023						<0.000203		<0.000203	<0.000203
9/13/2023			<0.000203						
9/18/2023							<0.000203		
9/19/2023									

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Thallium (mg/L)   Analysis Run 11/15/2023 3:06 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

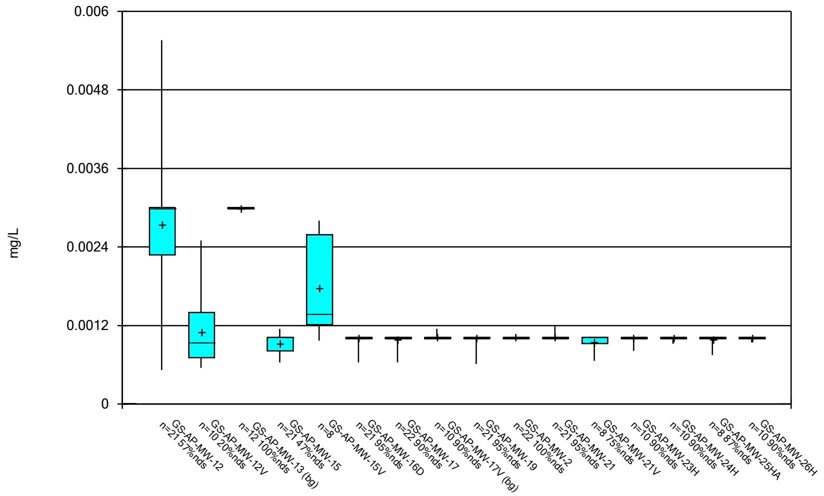
	GS-AP-MW-9R	GS-AP-PZ-18R	GS-AP-MW-46
2/21/2022		<0.000203	
2/22/2022			
2/23/2022			<0.000203
2/28/2022			
3/1/2022	<0.000203		
7/19/2022	<0.000203		
7/20/2022			
7/26/2022			
7/27/2022		<0.000203	
8/2/2022			<0.000203
8/3/2022			
8/8/2022			
3/14/2023			
3/15/2023			
3/20/2023			
3/21/2023			
3/27/2023	<0.000203		<0.000203
3/28/2023		<0.000203	
9/6/2023			
9/11/2023			
9/12/2023			
9/13/2023	<0.000203		
9/18/2023			<0.000203
9/19/2023		<0.000203	

ND substitution: RL or RL/2 if <15% NDs.

FIGURE B.

Sanitas™ v.10.0.13 . UG

Box & Whiskers Plot

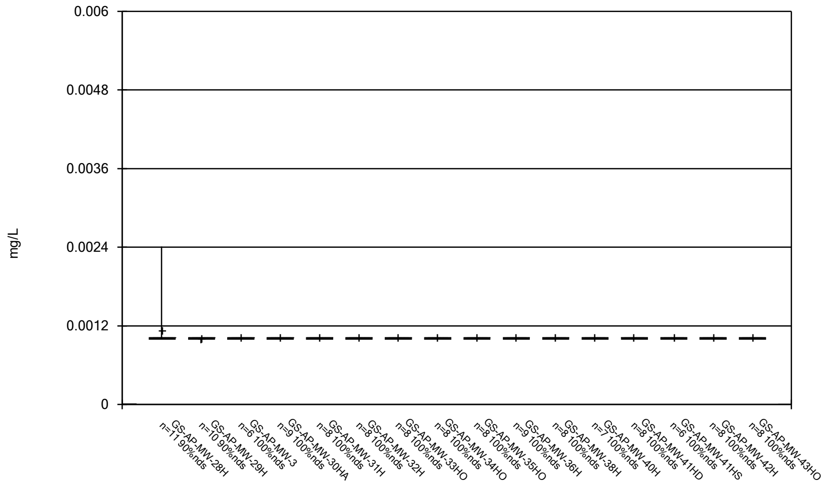


Constituent: Antimony Analysis Run 11/15/2023 3:08 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG

Box & Whiskers Plot

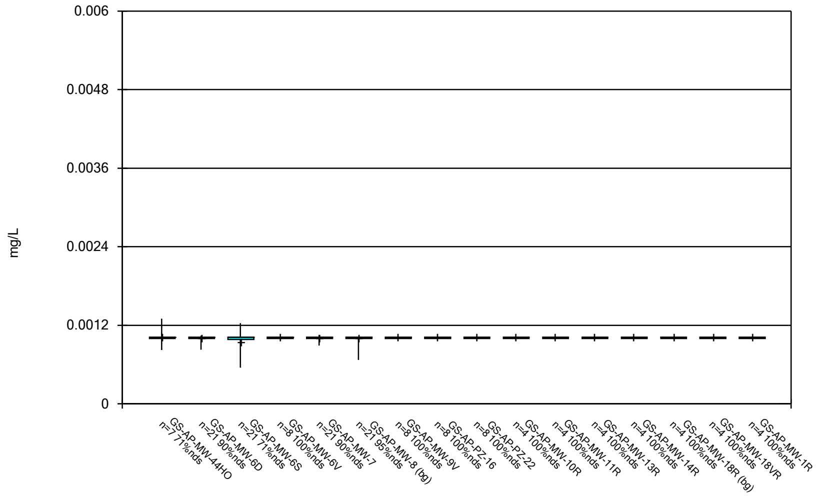


Constituent: Antimony Analysis Run 11/15/2023 3:08 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG

Box & Whiskers Plot

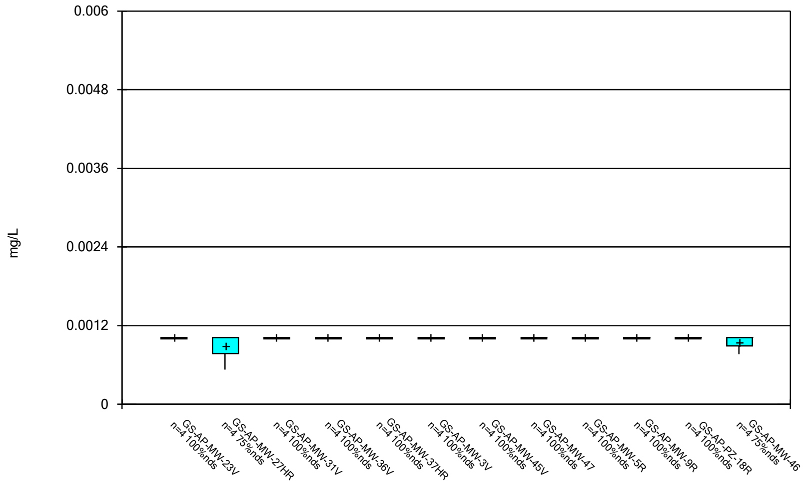


Constituent: Antimony Analysis Run 11/15/2023 3:08 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG

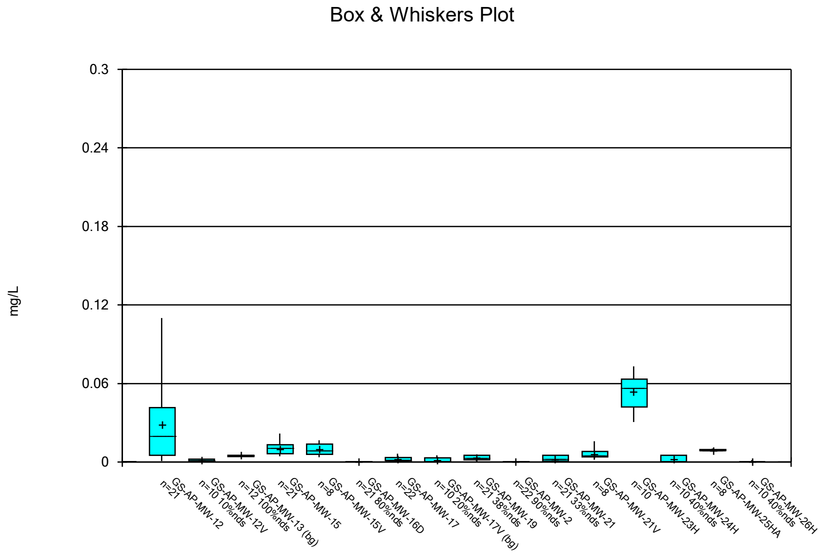
Box & Whiskers Plot



Constituent: Antimony Analysis Run 11/15/2023 3:08 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

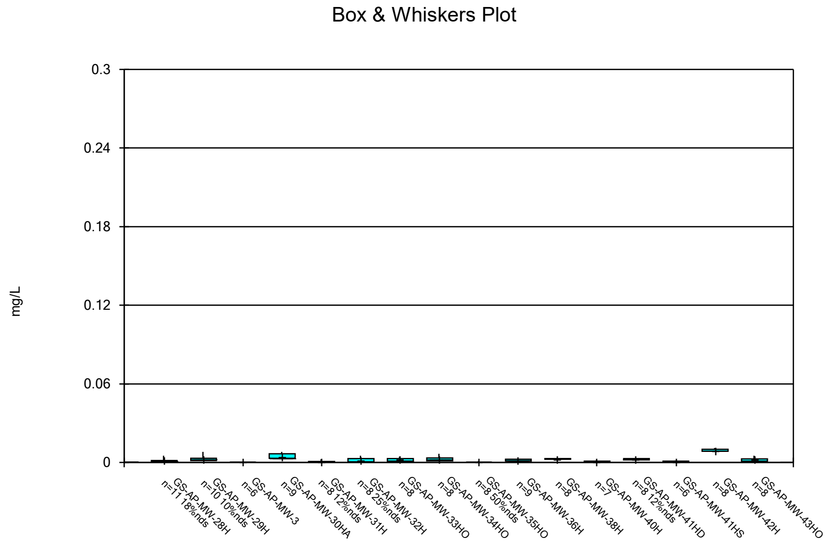
Sanitas™ v.10.0.13 . UG



Constituent: Arsenic Analysis Run 11/15/2023 3:08 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

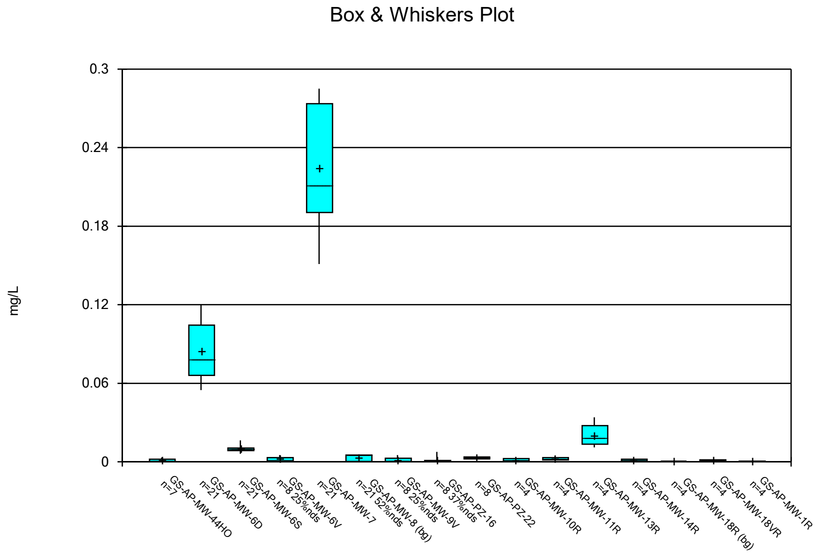
Sanitas™ v.10.0.13 . UG



Constituent: Arsenic Analysis Run 11/15/2023 3:08 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

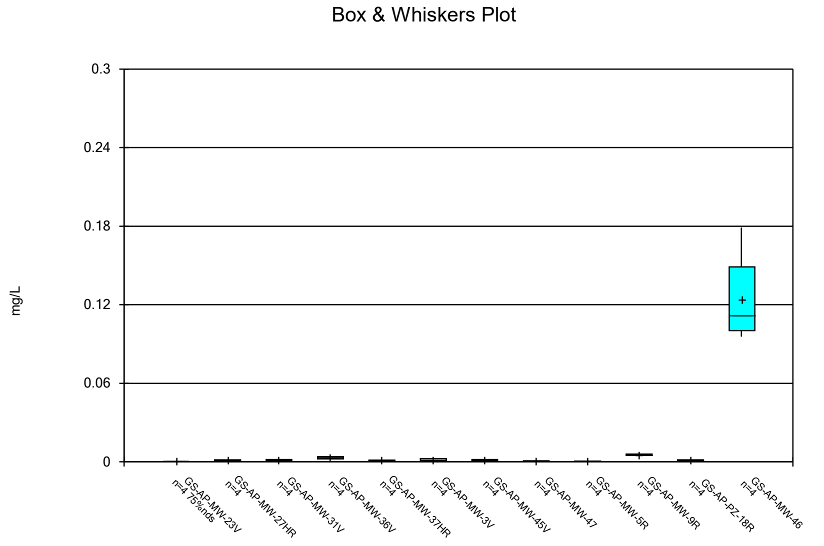
Sanitas™ v.10.0.13 . UG



Constituent: Arsenic Analysis Run 11/15/2023 3:08 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG

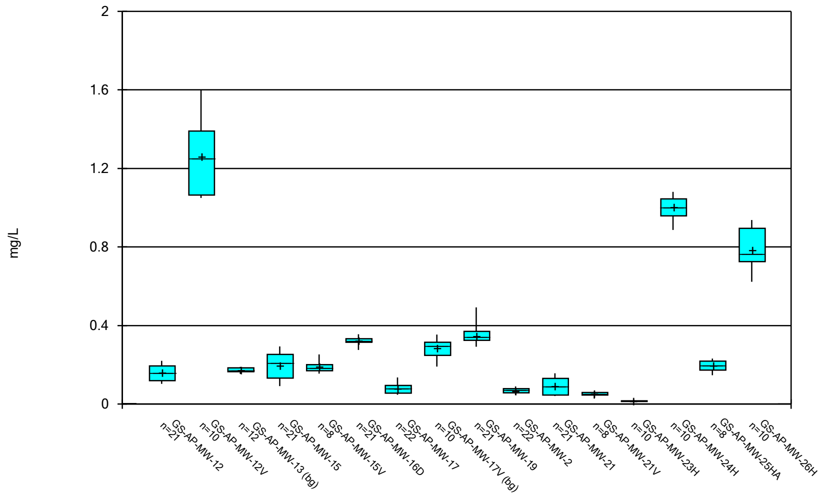


Constituent: Arsenic Analysis Run 11/15/2023 3:08 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG

Box & Whiskers Plot

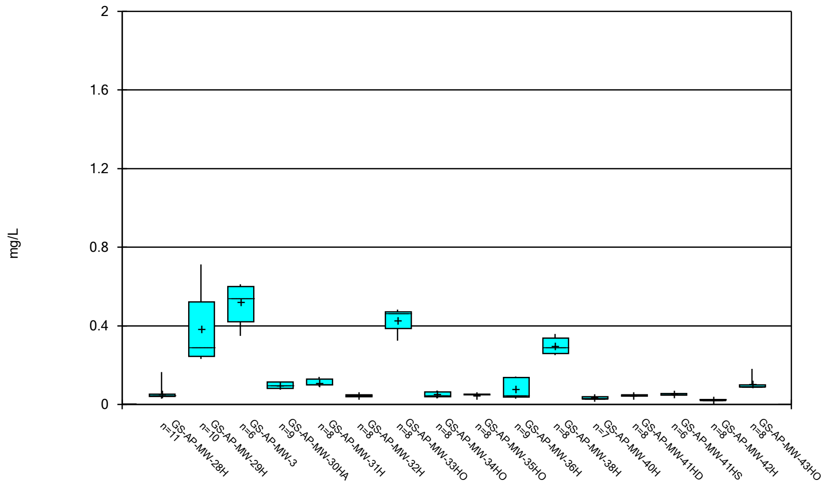


Constituent: Barium   Analysis Run 11/15/2023 3:08 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG

Box & Whiskers Plot

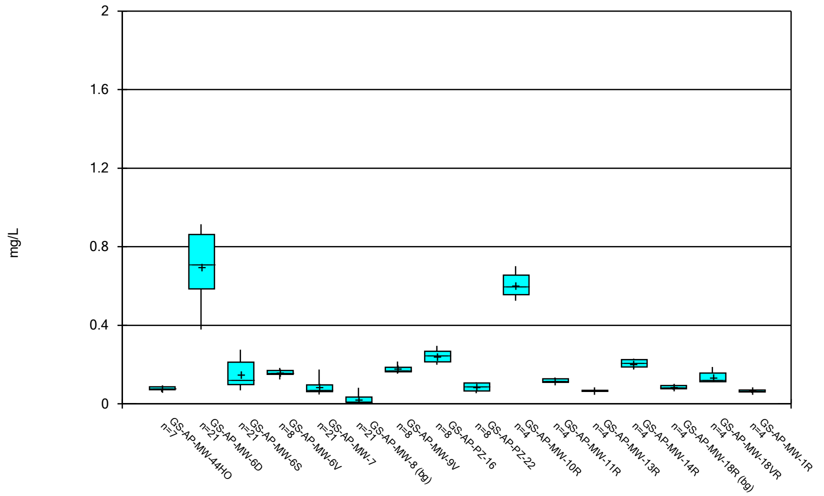


Constituent: Barium   Analysis Run 11/15/2023 3:08 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG

Box & Whiskers Plot

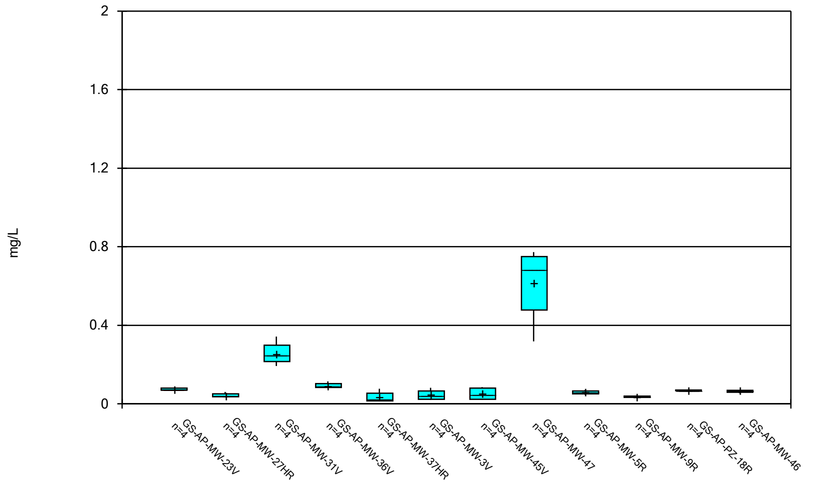


Constituent: Barium   Analysis Run 11/15/2023 3:08 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG

Box & Whiskers Plot

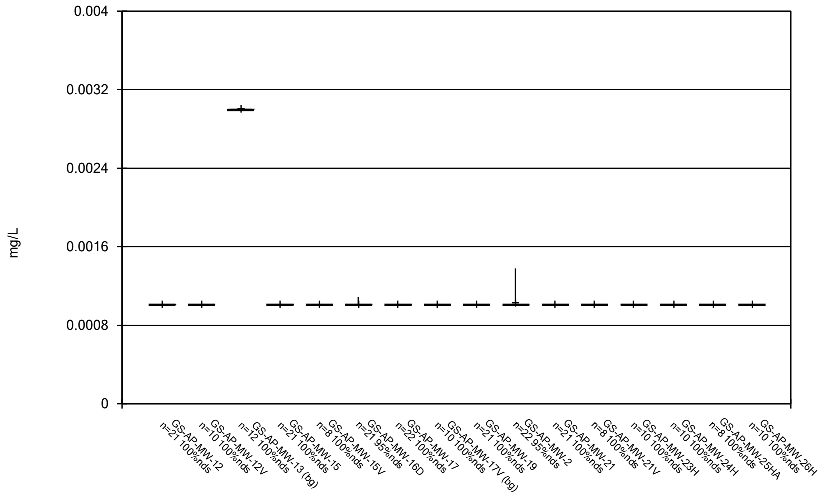


Constituent: Barium   Analysis Run 11/15/2023 3:08 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG

Box & Whiskers Plot

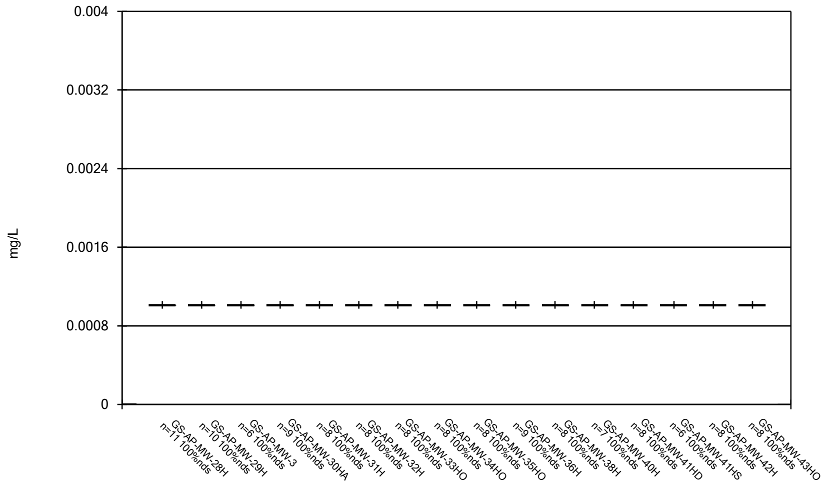


Constituent: Beryllium   Analysis Run 11/15/2023 3:08 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG

Box & Whiskers Plot

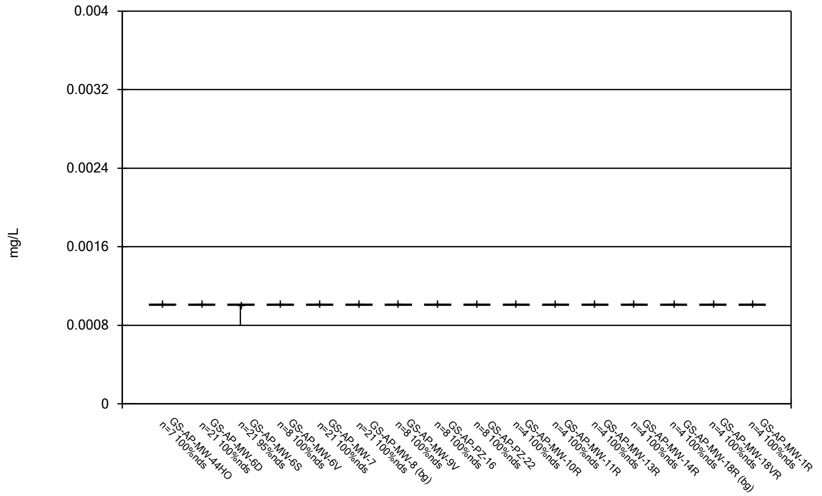


Constituent: Beryllium   Analysis Run 11/15/2023 3:08 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG

Box & Whiskers Plot

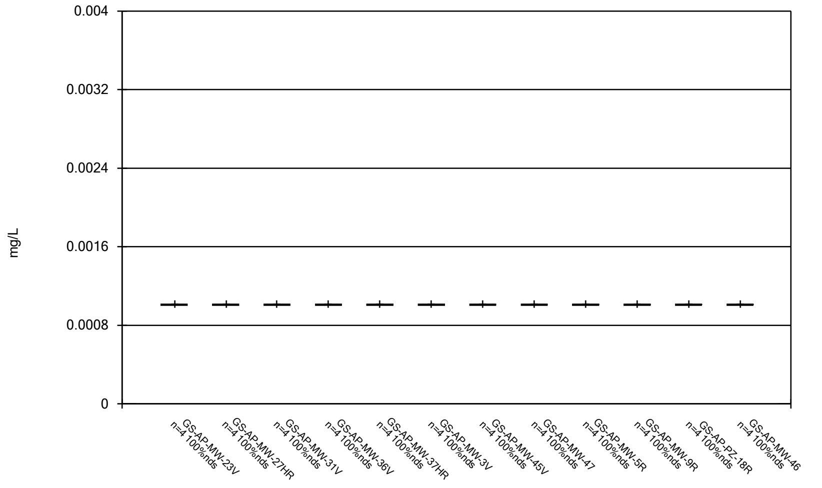


Constituent: Beryllium   Analysis Run 11/15/2023 3:08 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG

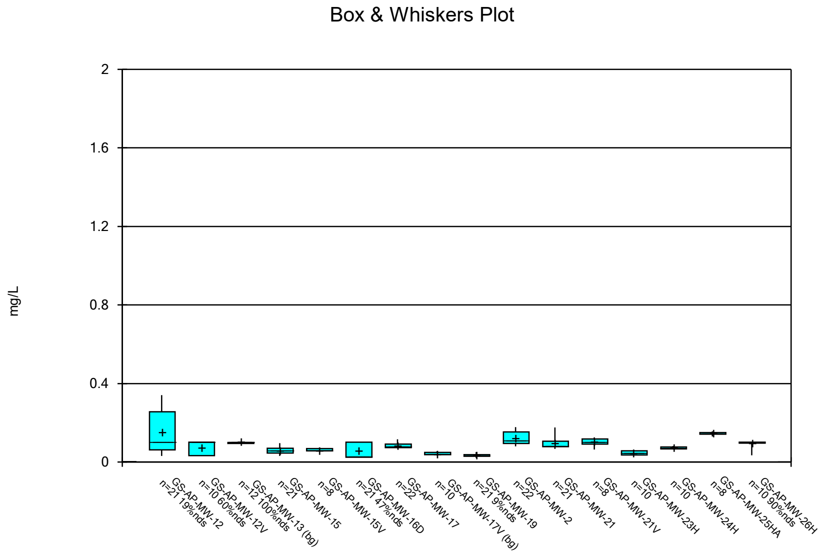
Box & Whiskers Plot



Constituent: Beryllium   Analysis Run 11/15/2023 3:09 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

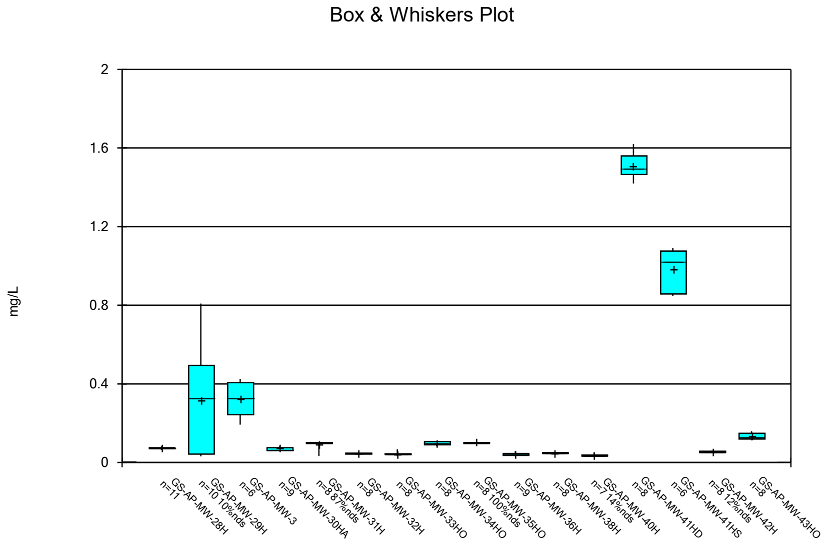
Sanitas™ v.10.0.13 . UG



Constituent: Boron Analysis Run 11/15/2023 3:09 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

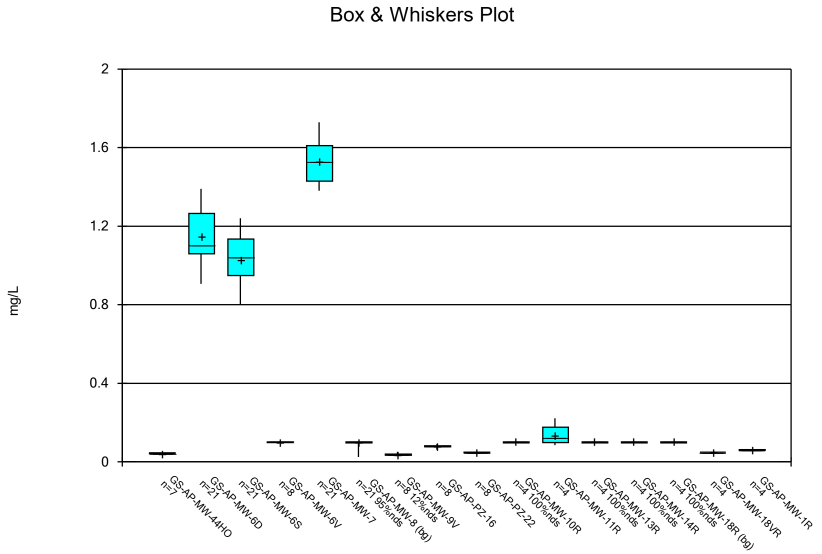
Sanitas™ v.10.0.13 . UG



Constituent: Boron Analysis Run 11/15/2023 3:09 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

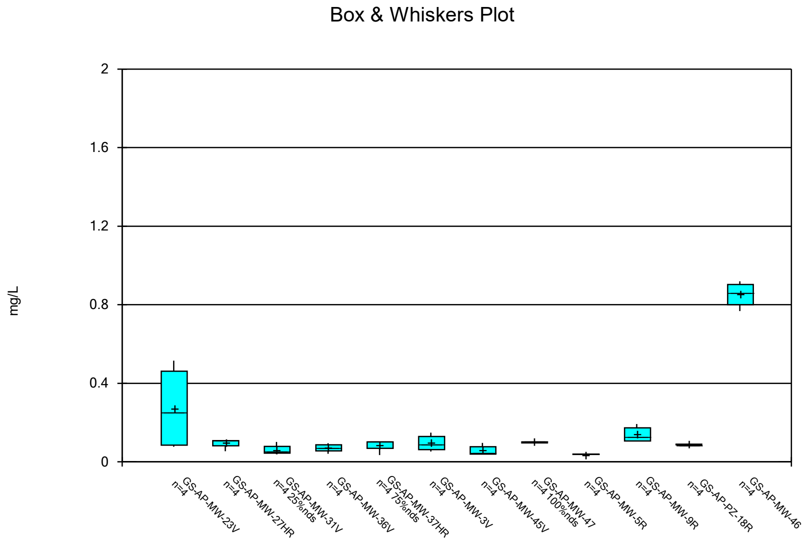
Sanitas™ v.10.0.13 . UG



Constituent: Boron Analysis Run 11/15/2023 3:09 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG

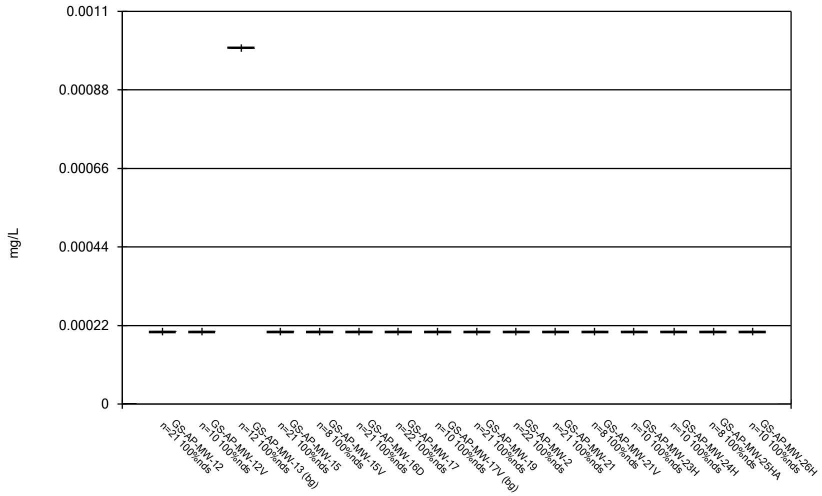


Constituent: Boron Analysis Run 11/15/2023 3:09 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG

Box & Whiskers Plot

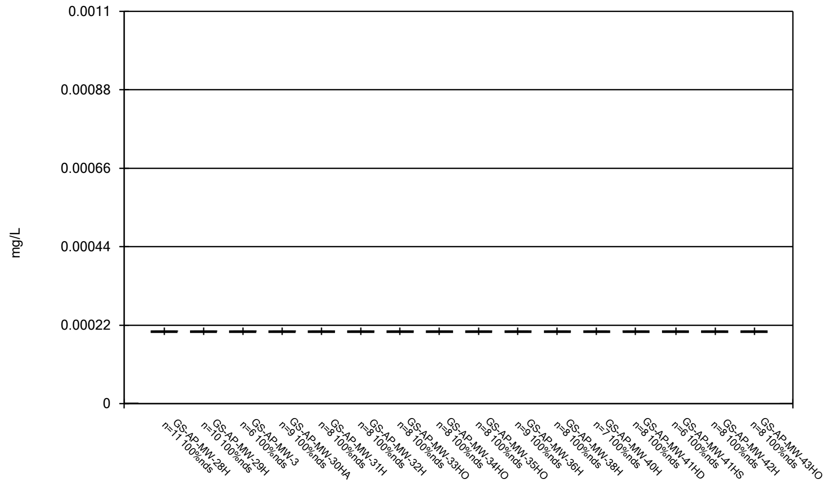


Constituent: Cadmium Analysis Run 11/15/2023 3:09 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG

Box & Whiskers Plot

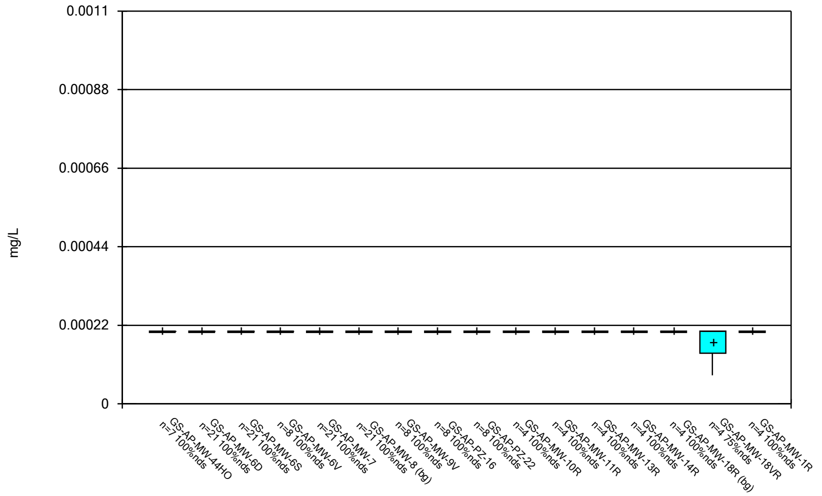


Constituent: Cadmium Analysis Run 11/15/2023 3:09 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG

Box & Whiskers Plot

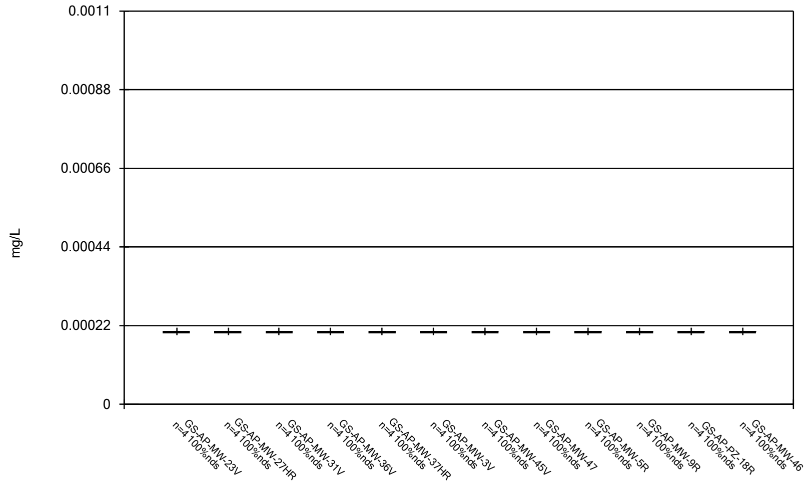


Constituent: Cadmium Analysis Run 11/15/2023 3:09 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG

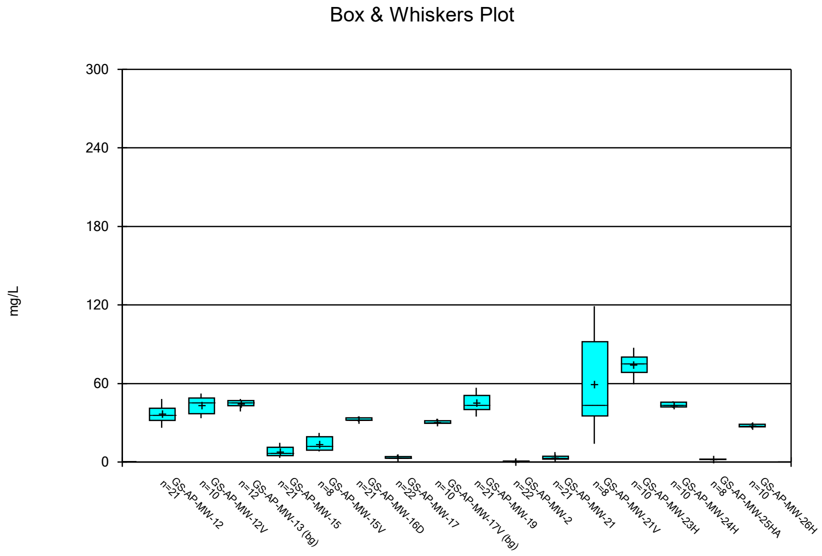
Box & Whiskers Plot



Constituent: Cadmium Analysis Run 11/15/2023 3:09 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

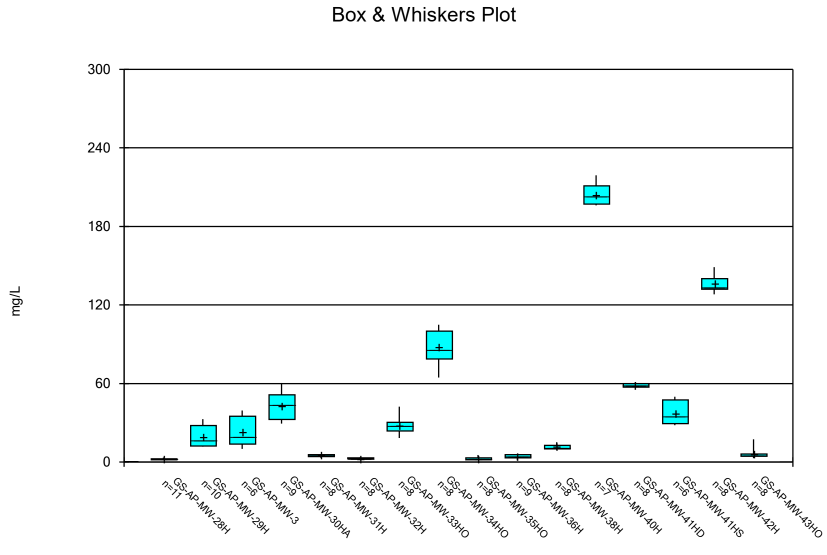
Sanitas™ v.10.0.13 . UG



Constituent: Calcium   Analysis Run 11/15/2023 3:09 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

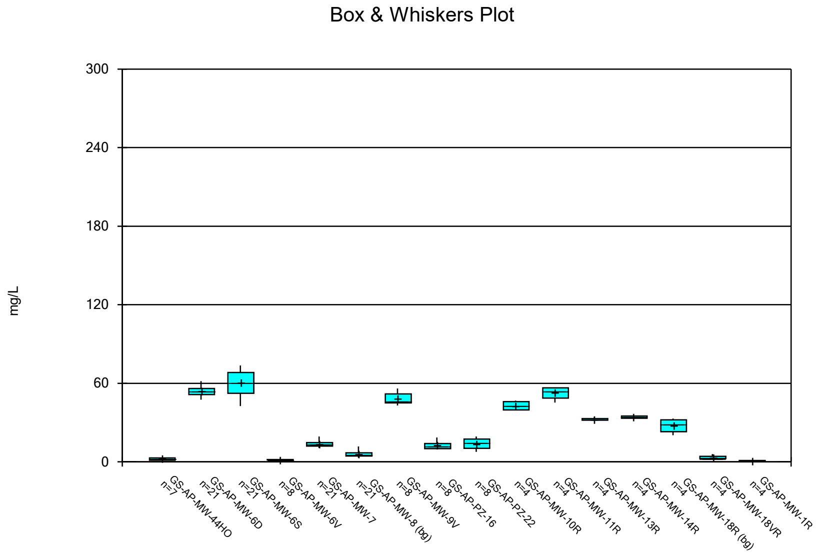
Sanitas™ v.10.0.13 . UG



Constituent: Calcium   Analysis Run 11/15/2023 3:09 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

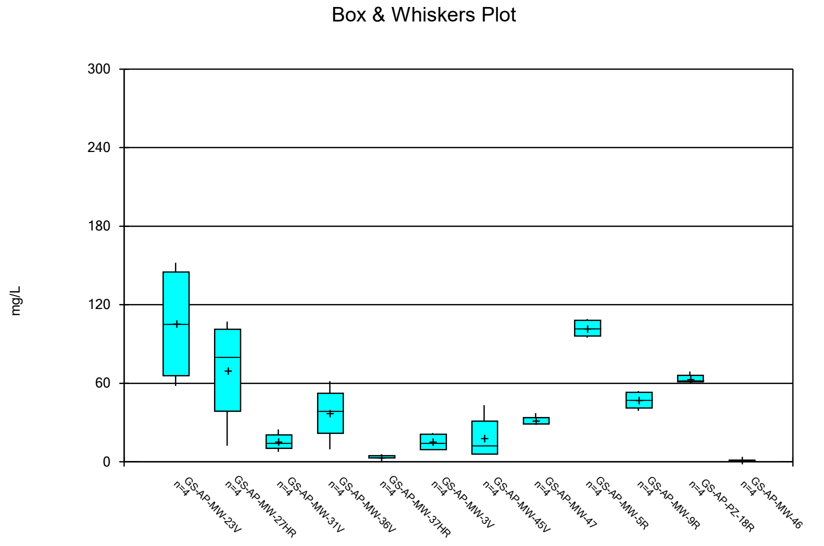
Sanitas™ v.10.0.13 . UG



Constituent: Calcium   Analysis Run 11/15/2023 3:09 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG

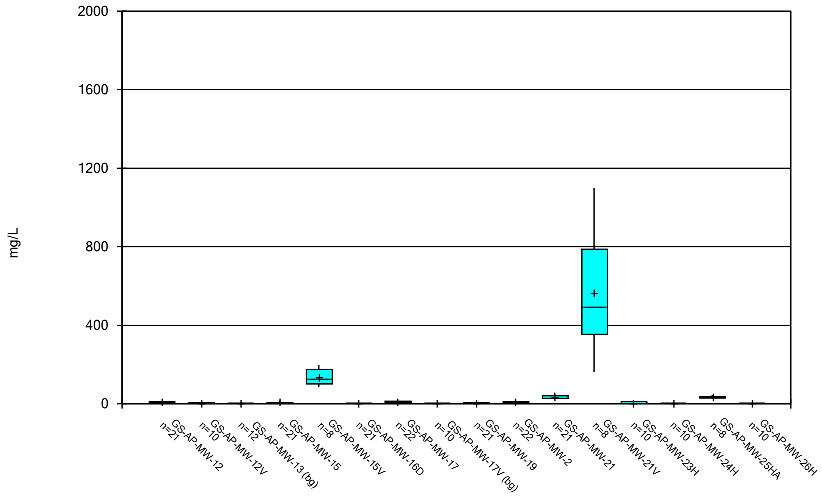


Constituent: Calcium   Analysis Run 11/15/2023 3:09 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG

Box & Whiskers Plot

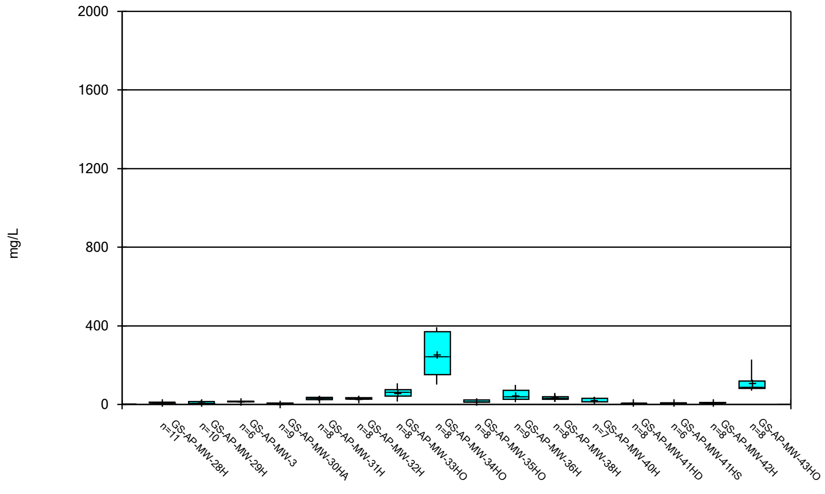


Constituent: Chloride Analysis Run 11/15/2023 3:09 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG

Box & Whiskers Plot

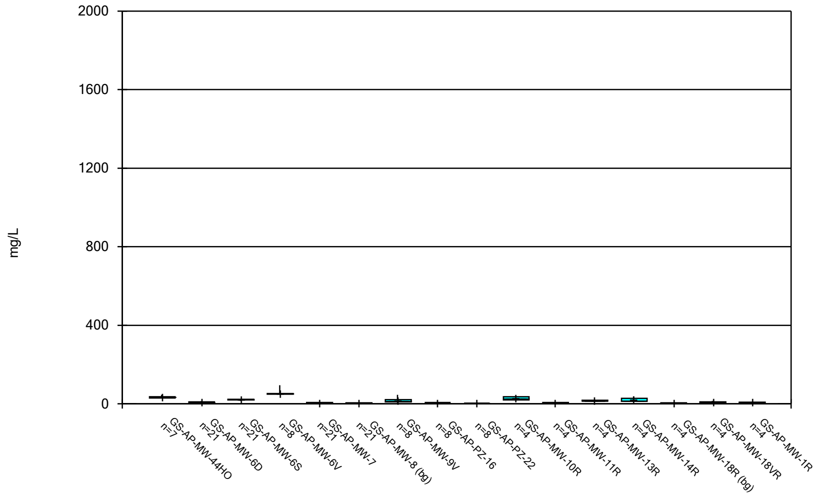


Constituent: Chloride Analysis Run 11/15/2023 3:09 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG

Box & Whiskers Plot

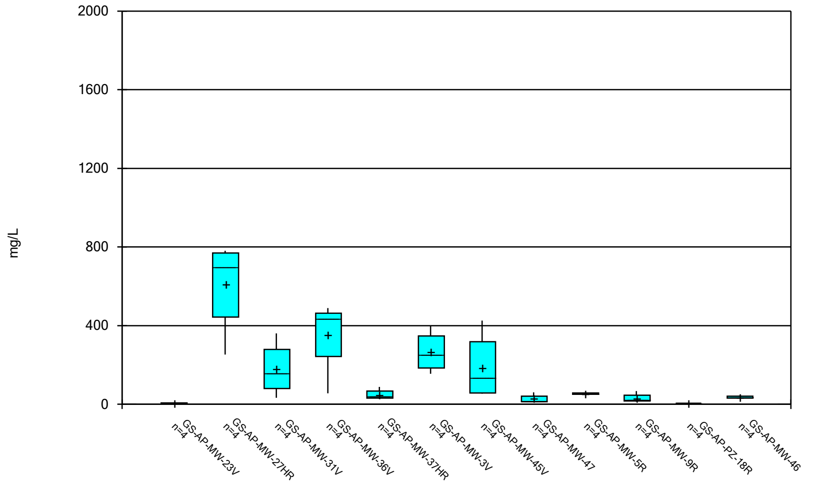


Constituent: Chloride Analysis Run 11/15/2023 3:09 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG

Box & Whiskers Plot

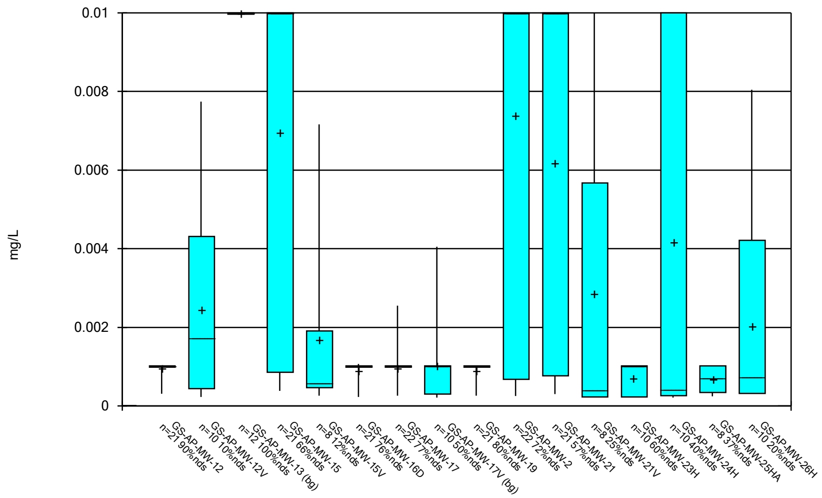


Constituent: Chloride Analysis Run 11/15/2023 3:09 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG

Box & Whiskers Plot

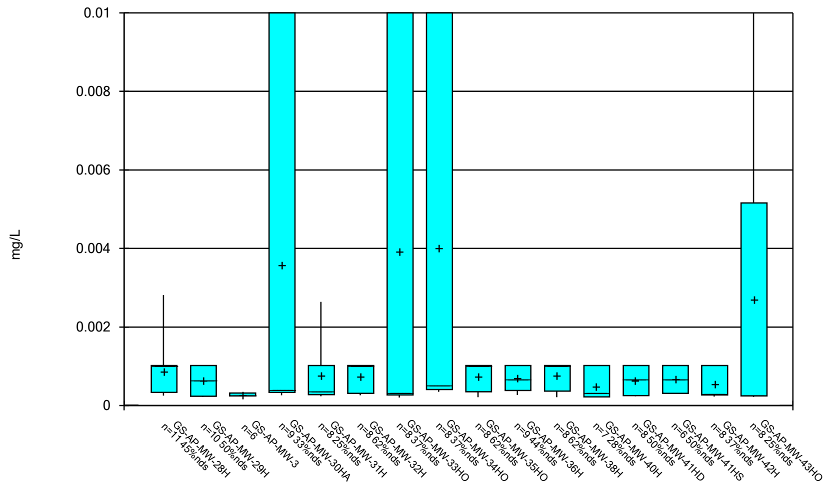


Constituent: Chromium   Analysis Run 11/15/2023 3:09 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG

Box & Whiskers Plot

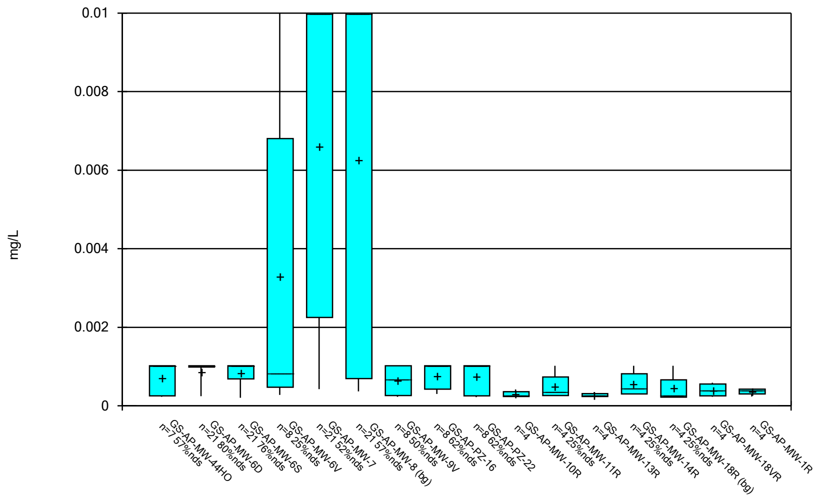


Constituent: Chromium   Analysis Run 11/15/2023 3:09 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG

Box & Whiskers Plot

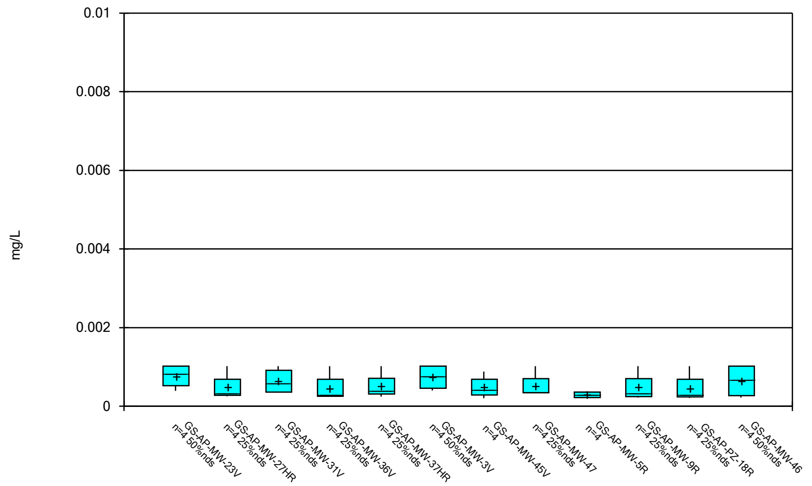


Constituent: Chromium   Analysis Run 11/15/2023 3:09 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG

Box & Whiskers Plot

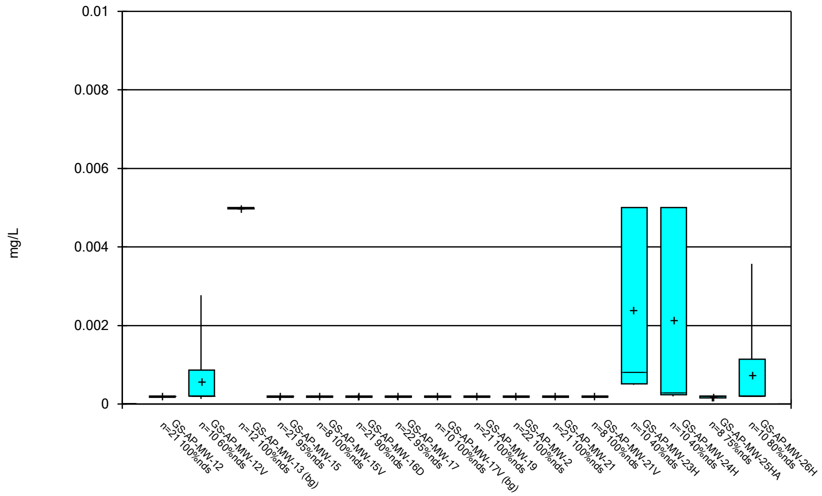


Constituent: Chromium   Analysis Run 11/15/2023 3:09 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG

Box & Whiskers Plot

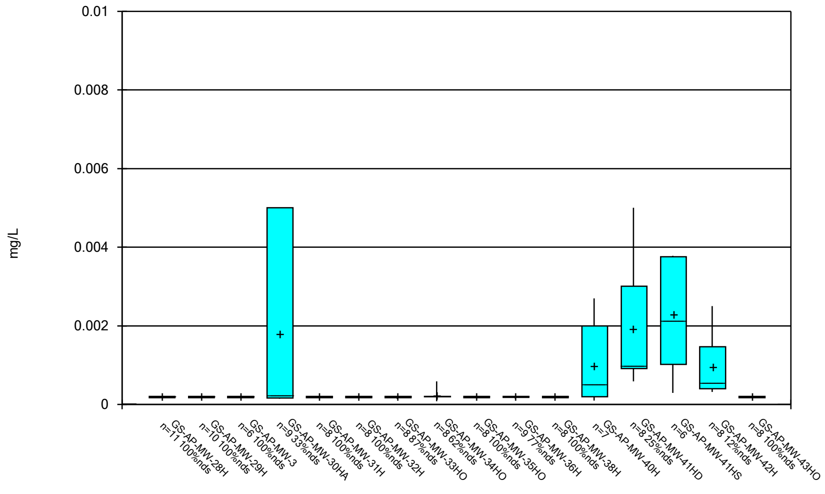


Constituent: Cobalt   Analysis Run 11/15/2023 3:09 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG

Box & Whiskers Plot

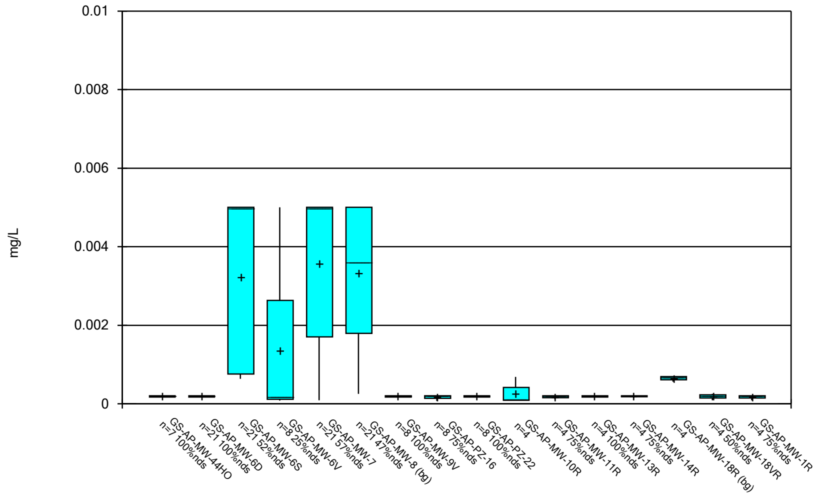


Constituent: Cobalt   Analysis Run 11/15/2023 3:09 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG

Box & Whiskers Plot



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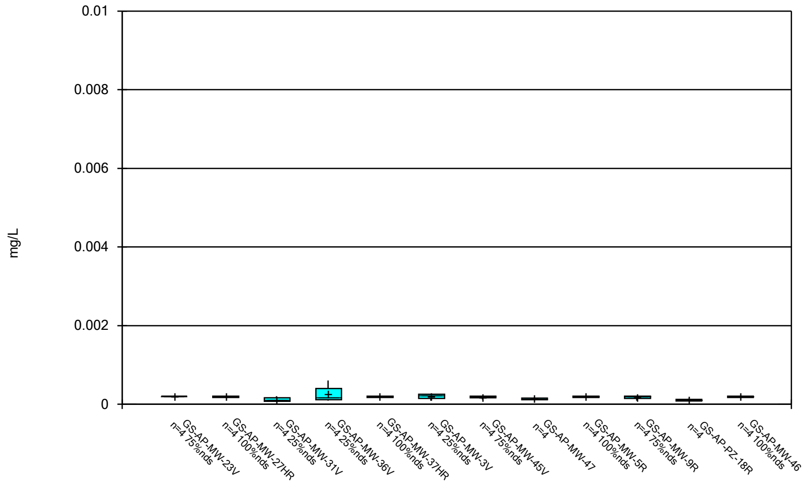
Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG

Box & Whiskers Plot

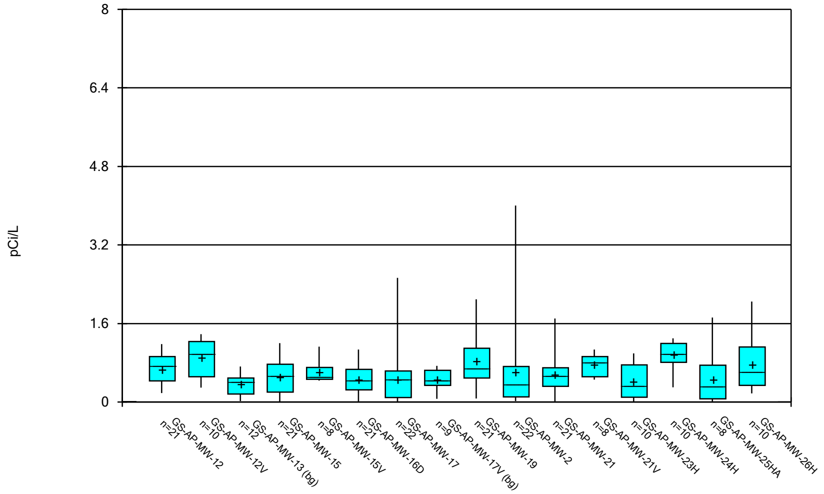


Constituent: Cobalt   Analysis Run 11/15/2023 3:09 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG

Box & Whiskers Plot

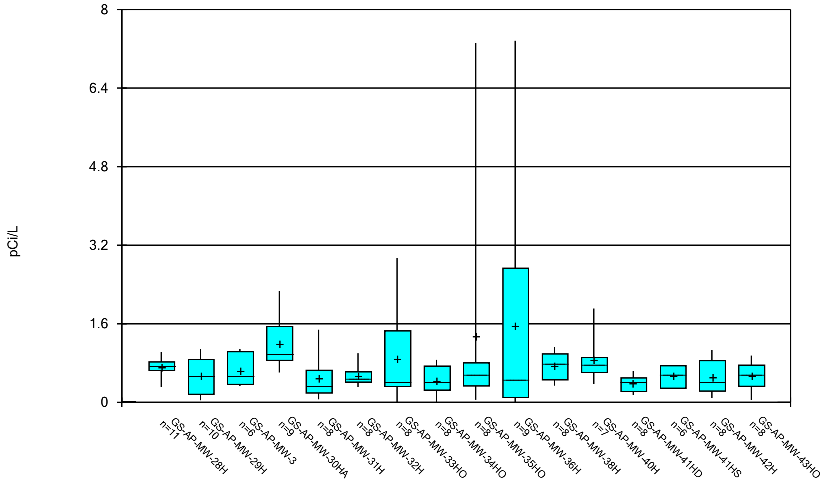


Constituent: Combined Radium 226 + 228   Analysis Run 11/15/2023 3:09 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG

Box & Whiskers Plot



Constituent: Combined Radium 226 + 228   Analysis Run 11/15/2023 3:09 PM

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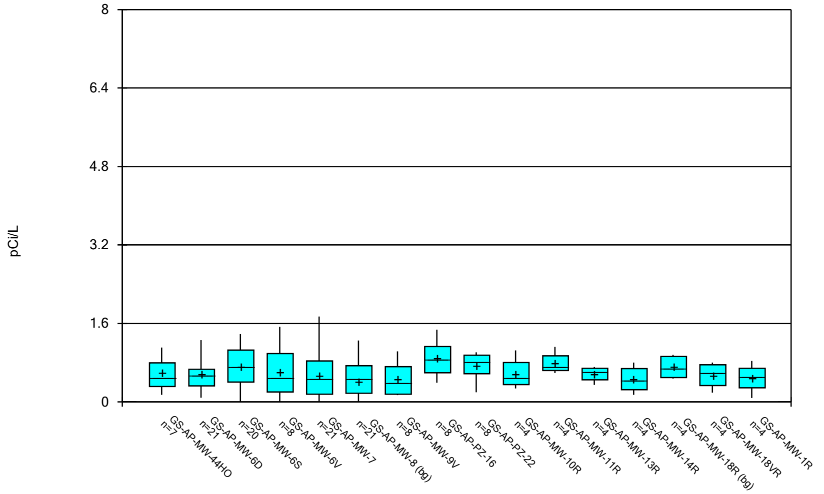
Sanitas™ v.10.0.13 . UG

Box & Whiskers Plot



Constituent: Combined Radium 226 + 228   Analysis Run 11/15/2023 3:09 PM

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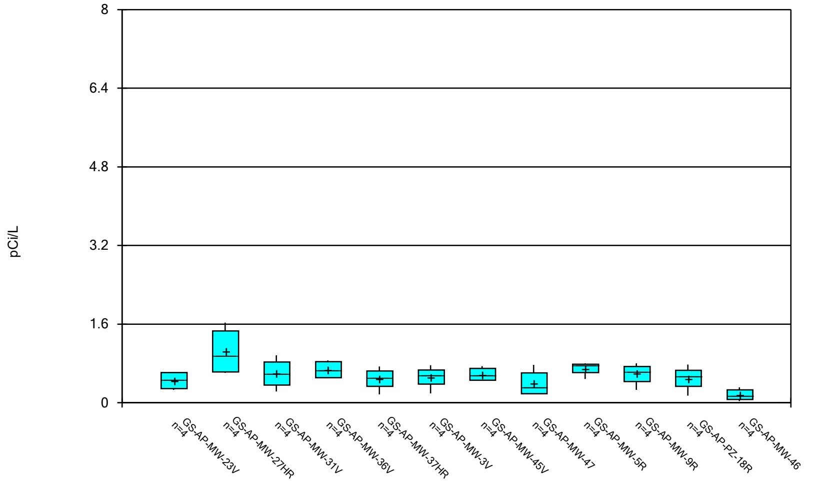
Sanitas™ v.10.0.13 . UG

Box & Whiskers Plot

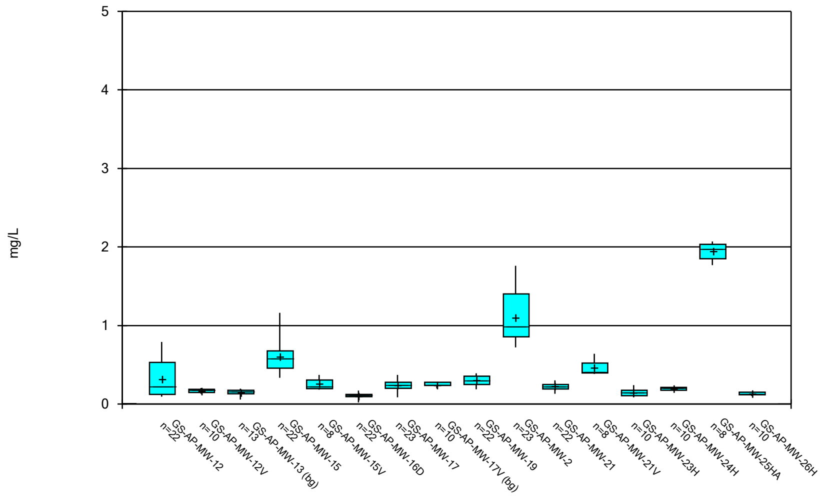


Constituent: Combined Radium 226 + 228   Analysis Run 11/15/2023 3:09 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG

Box & Whiskers Plot

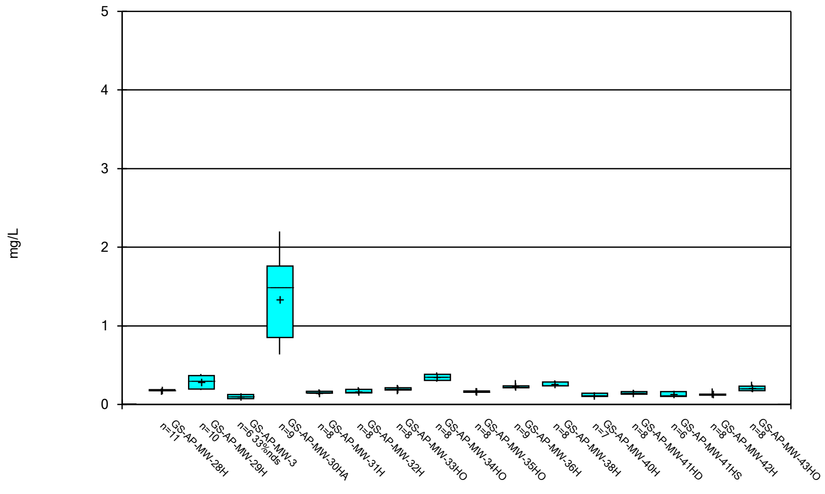


Constituent: Fluoride   Analysis Run 11/15/2023 3:09 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG

Box & Whiskers Plot



Constituent: Fluoride   Analysis Run 11/15/2023 3:09 PM

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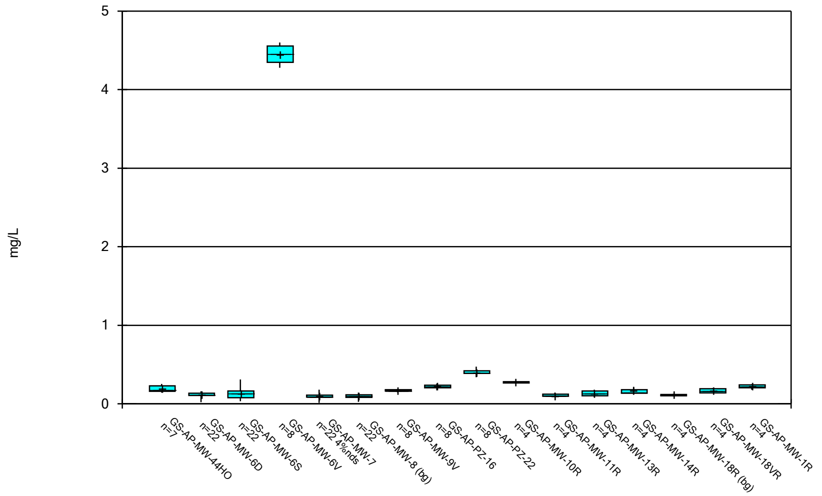
Sanitas™ v.10.0.13 . UG

Box & Whiskers Plot



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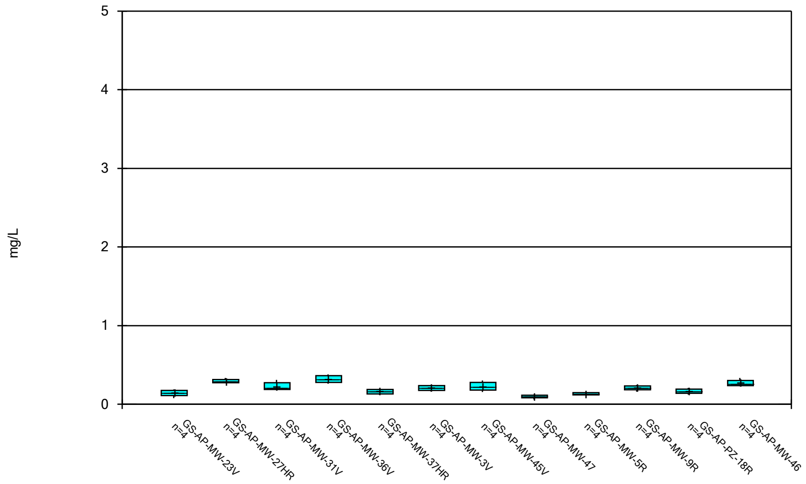
Sanitas™ v.10.0.13 . UG

Box & Whiskers Plot



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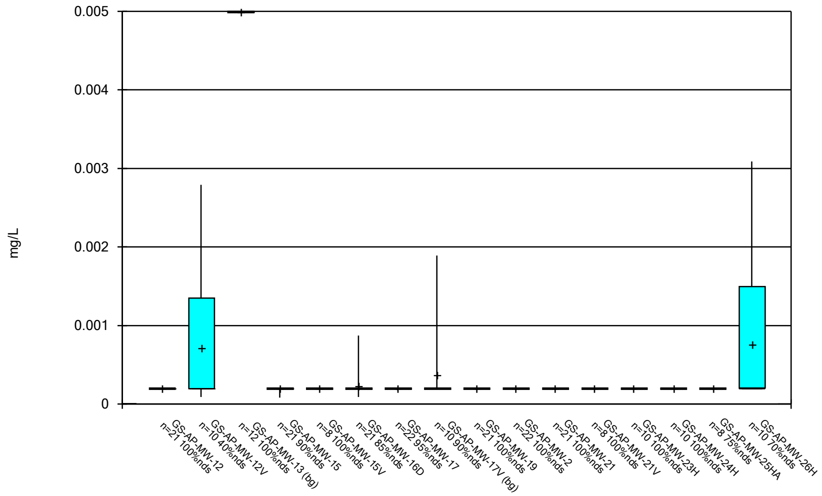
Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG

Box & Whiskers Plot



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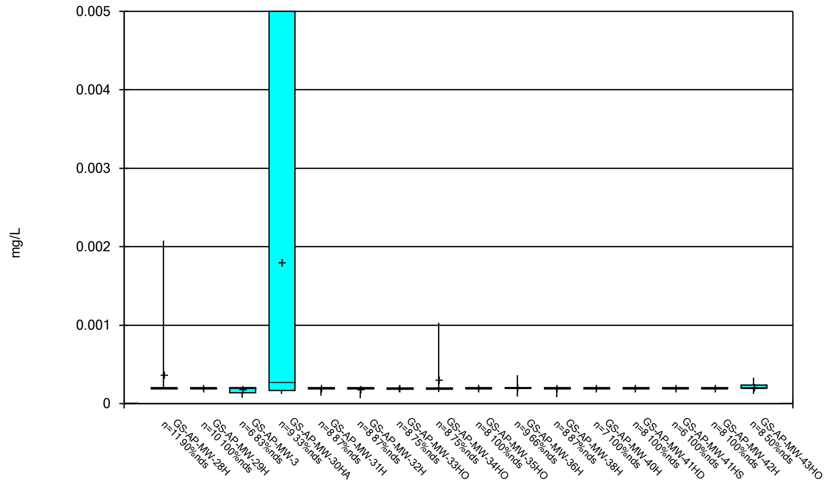
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG

Box & Whiskers Plot



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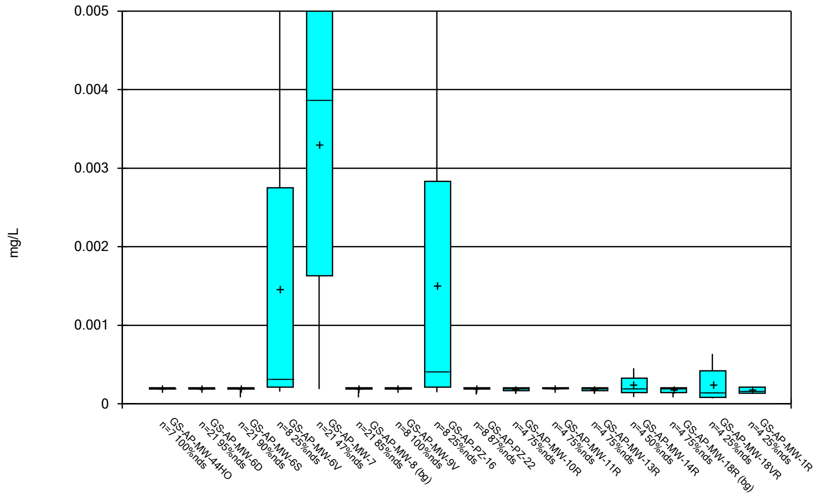
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG

Box & Whiskers Plot



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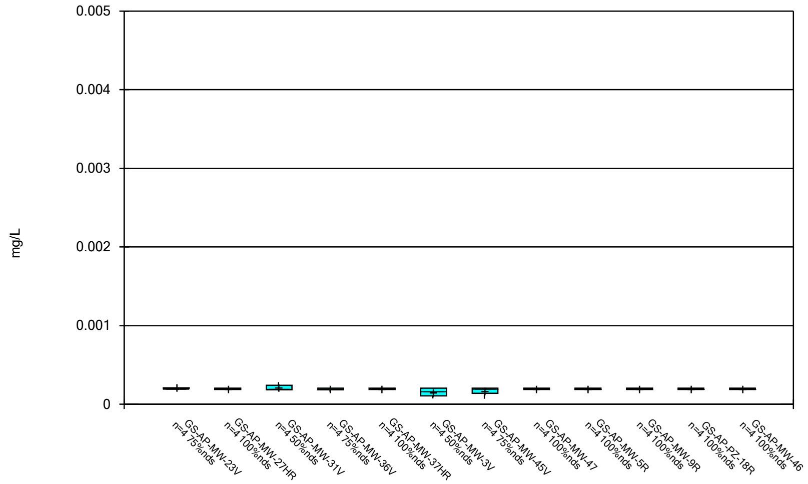
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG

Box & Whiskers Plot



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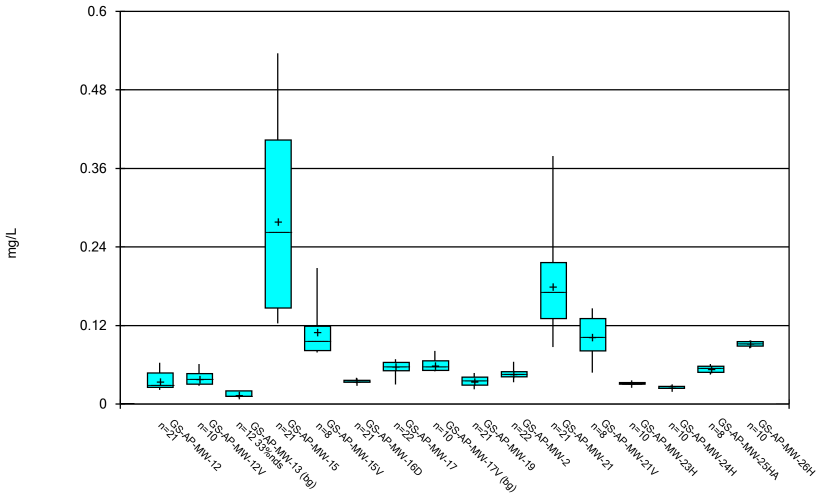
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG

Box & Whiskers Plot

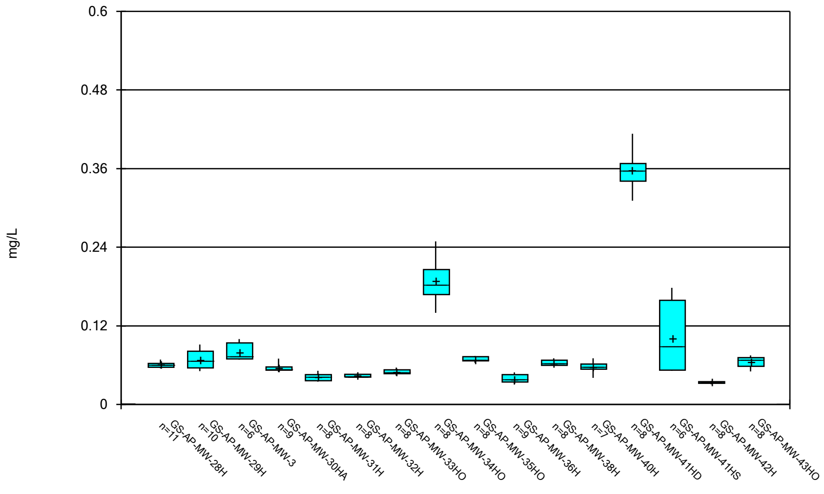


Constituent: Lithium Analysis Run 11/15/2023 3:09 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG

Box & Whiskers Plot



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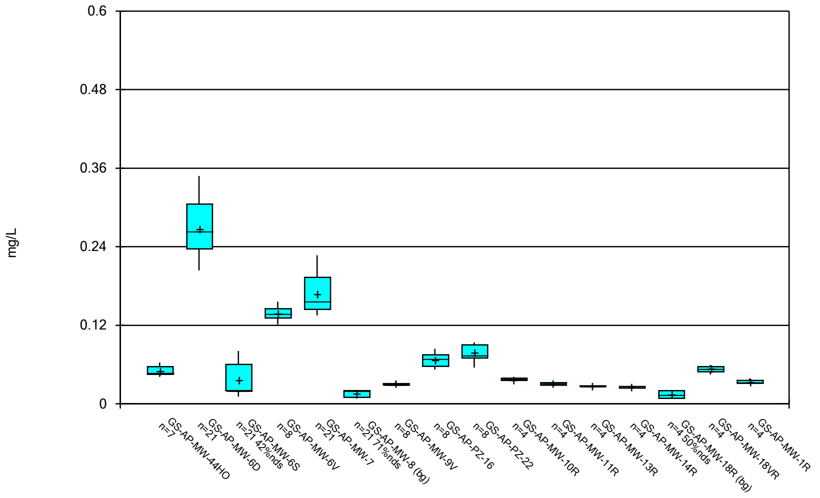
Box & Whiskers Plot



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Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

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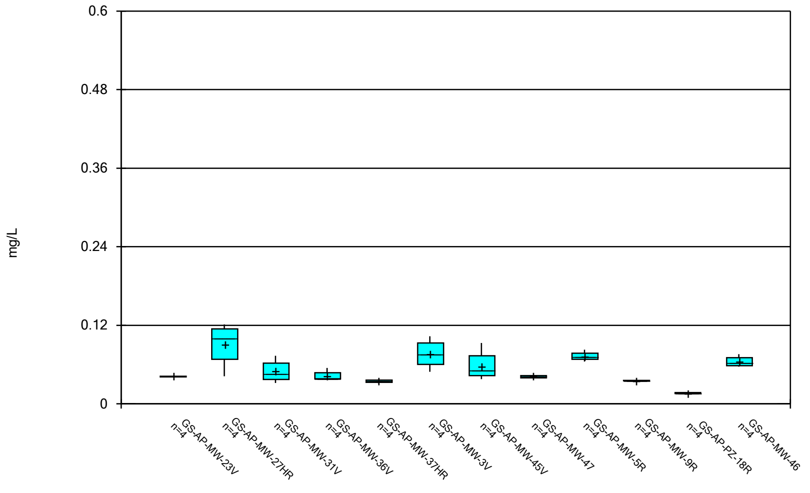
Box & Whiskers Plot



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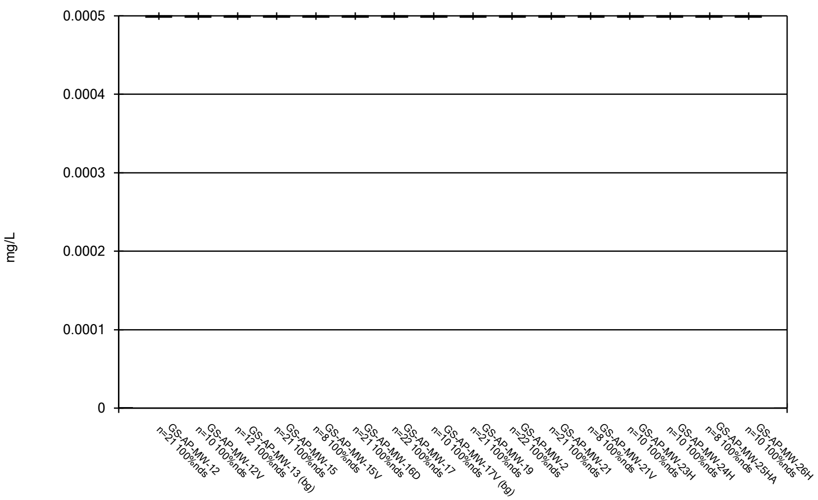
Box & Whiskers Plot

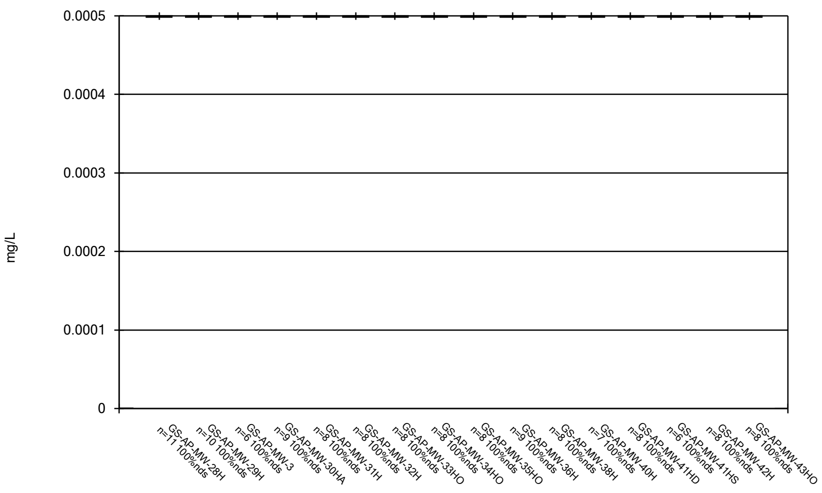


Constituent: Mercury Analysis Run 11/15/2023 3:09 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG

Box & Whiskers Plot

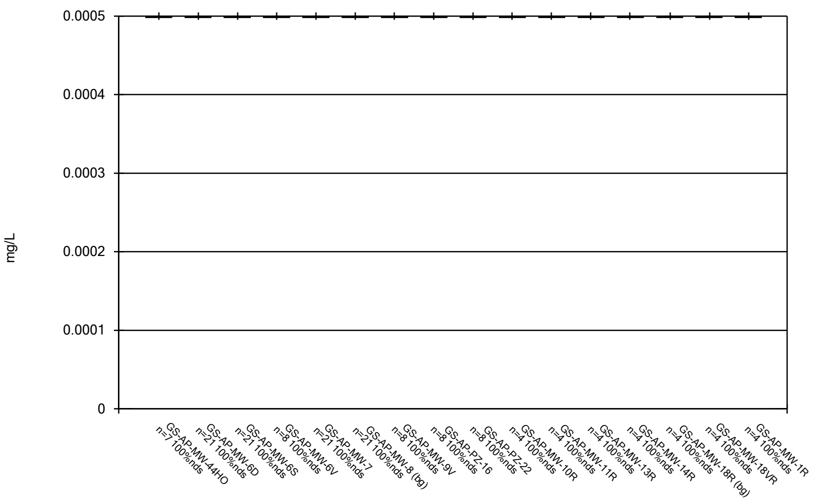


Constituent: Mercury Analysis Run 11/15/2023 3:09 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG

Box & Whiskers Plot



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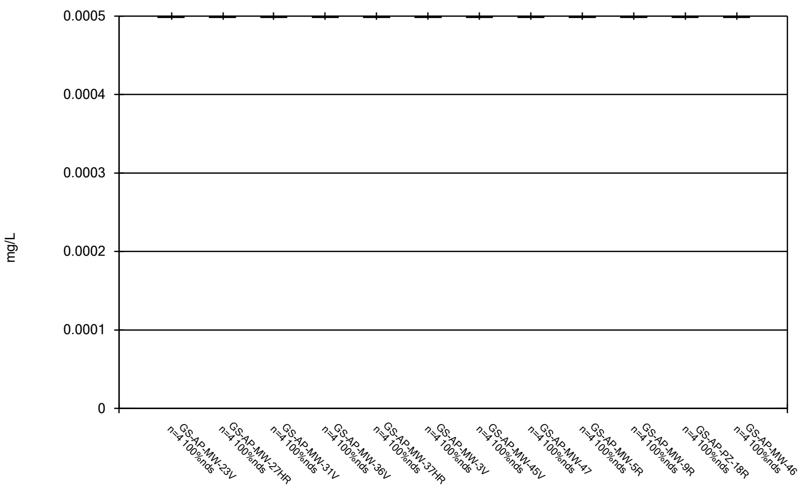
Box & Whiskers Plot

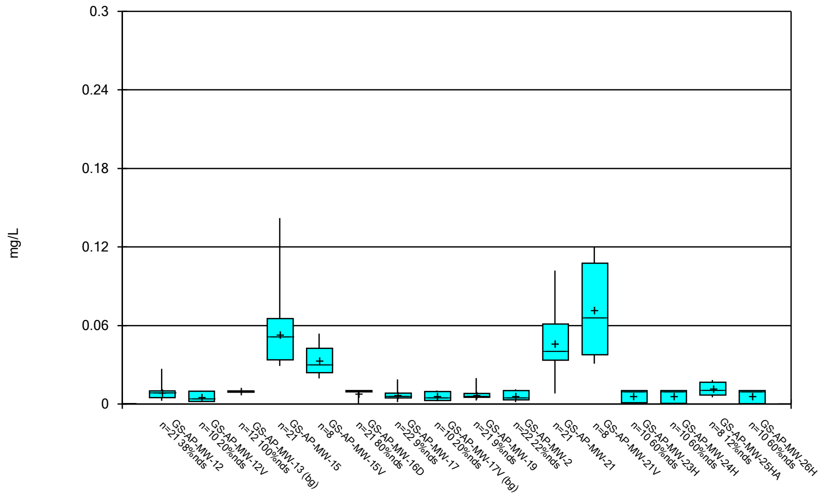


Constituent: Mercury Analysis Run 11/15/2023 3:09 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG

Box & Whiskers Plot

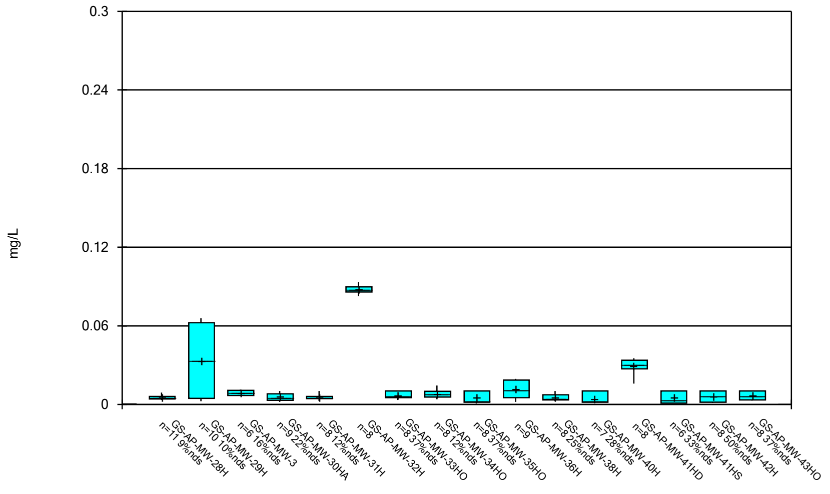


Constituent: Molybdenum   Analysis Run 11/15/2023 3:09 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG

Box & Whiskers Plot

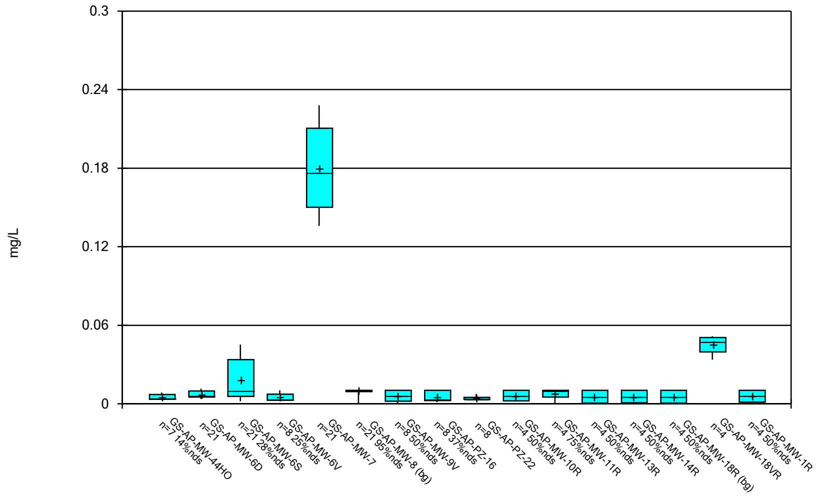


Constituent: Molybdenum   Analysis Run 11/15/2023 3:09 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG

Box & Whiskers Plot



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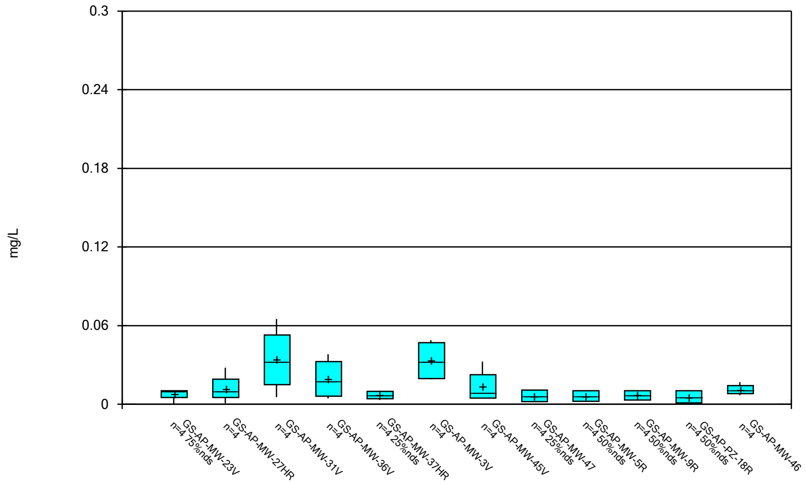
Box & Whiskers Plot



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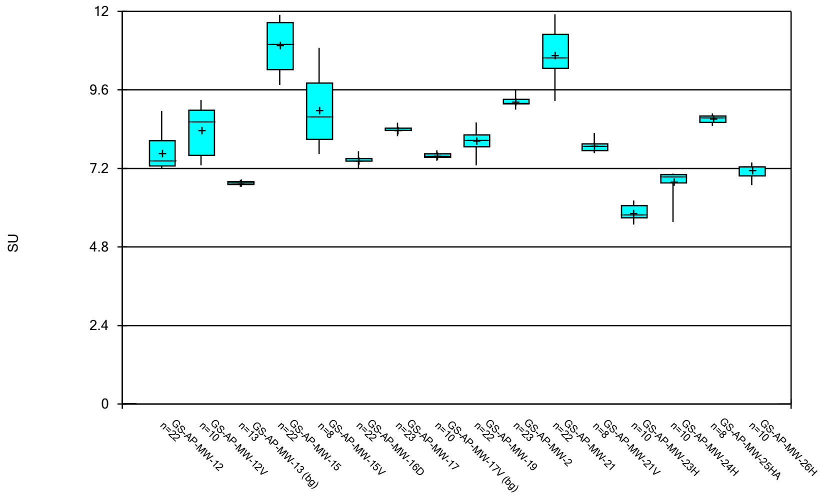
Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG

Box & Whiskers Plot

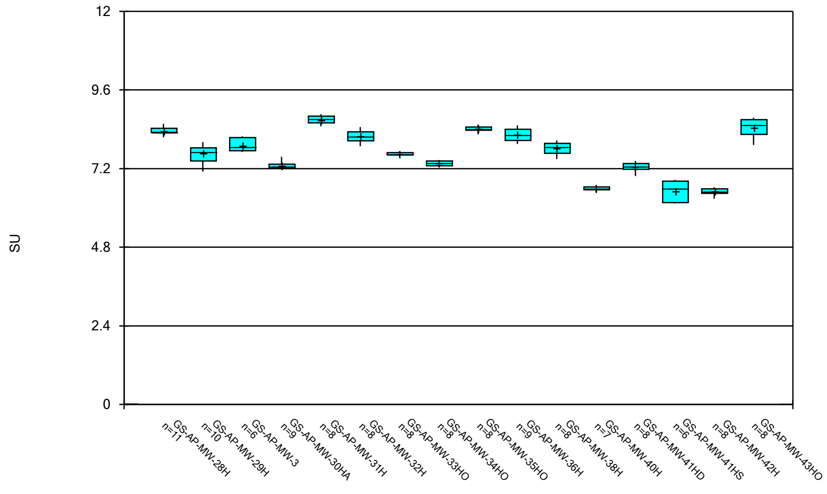


Constituent: pH   Analysis Run 11/15/2023 3:09 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG

Box & Whiskers Plot

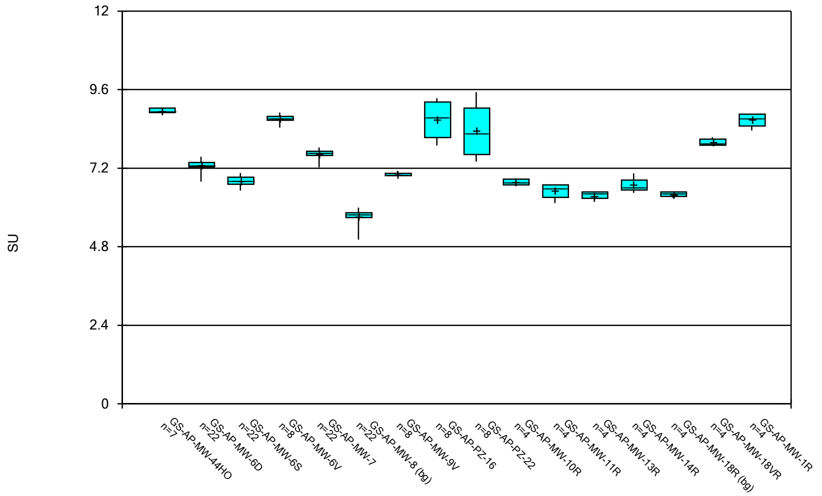


Constituent: pH   Analysis Run 11/15/2023 3:09 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG

Box & Whiskers Plot



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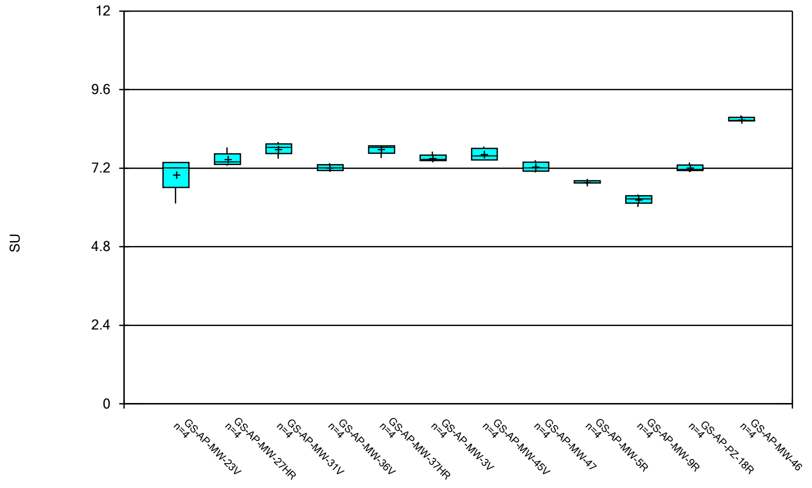
Sanitas™ v.10.0.13 . UG

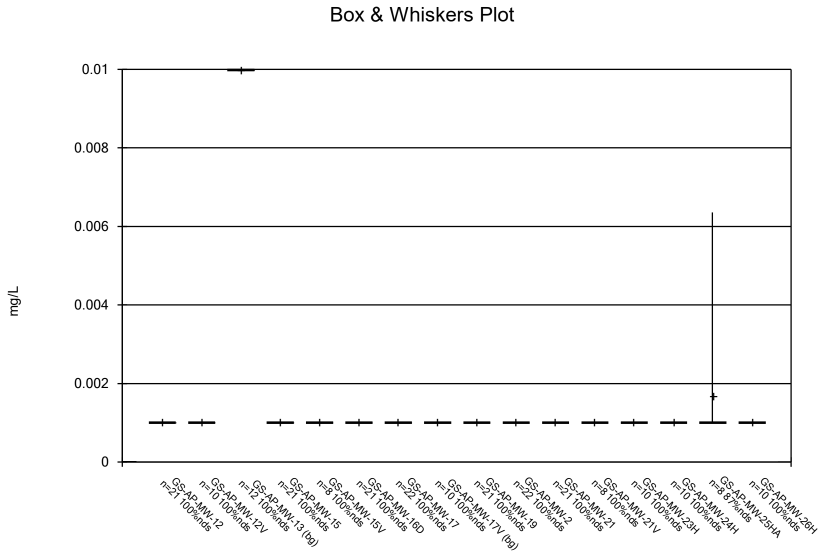
Box & Whiskers Plot



Constituent: pH   Analysis Run 11/15/2023 3:09 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

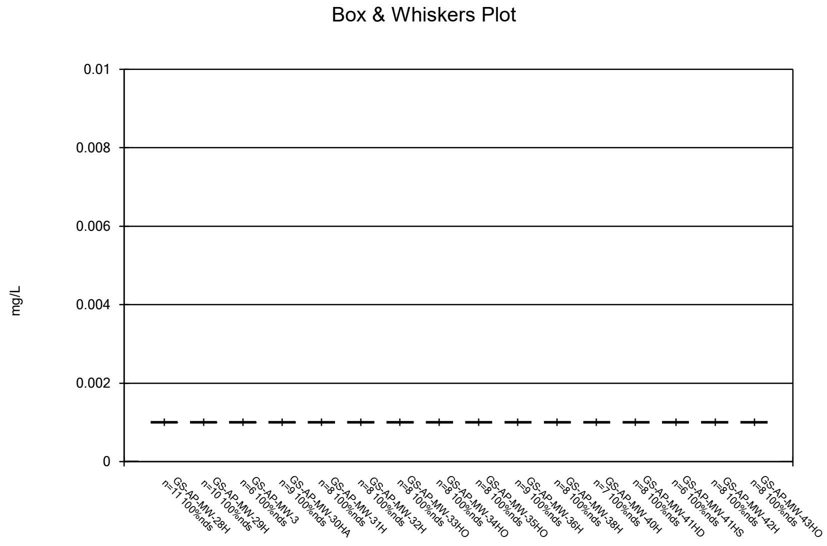
Sanitas™ v.10.0.13 . UG



Constituent: Selenium   Analysis Run 11/15/2023 3:09 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

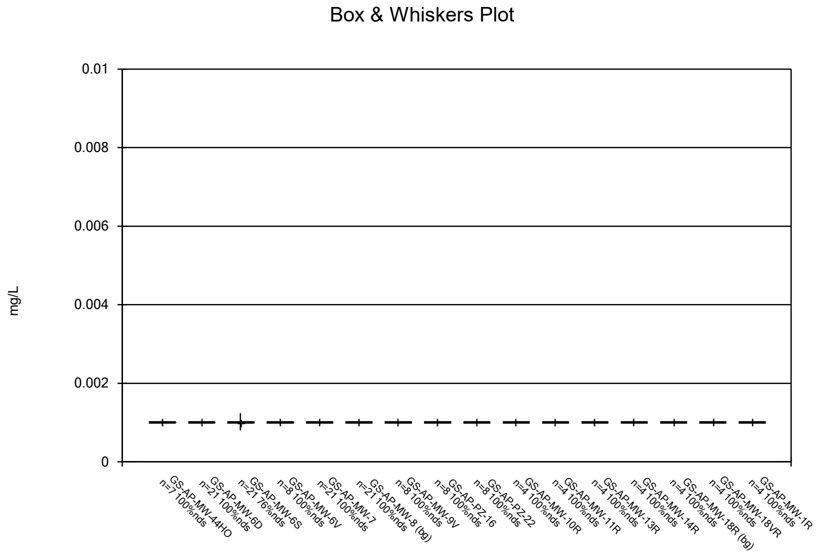
Sanitas™ v.10.0.13 . UG



Constituent: Selenium   Analysis Run 11/15/2023 3:09 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

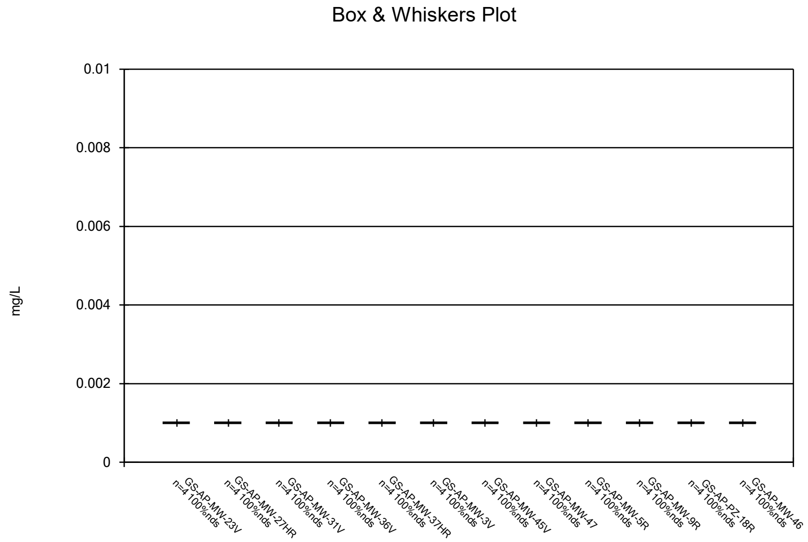
Sanitas™ v.10.0.13 . UG



Constituent: Selenium   Analysis Run 11/15/2023 3:09 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG

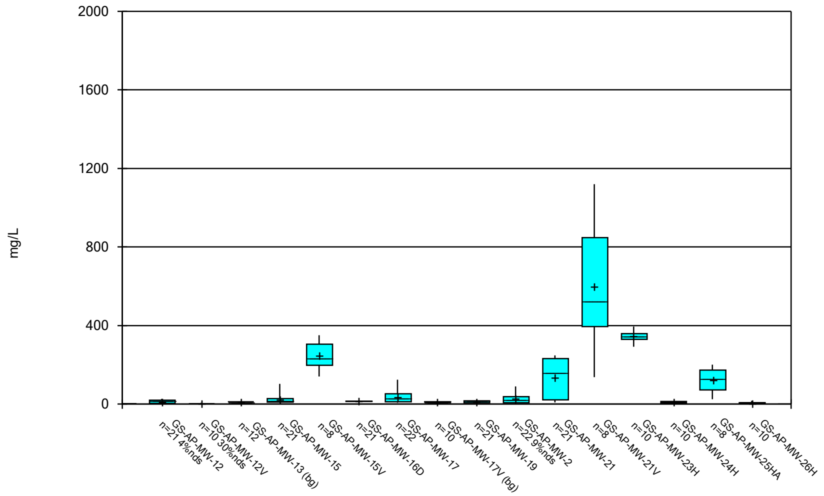


Constituent: Selenium   Analysis Run 11/15/2023 3:09 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG

Box & Whiskers Plot

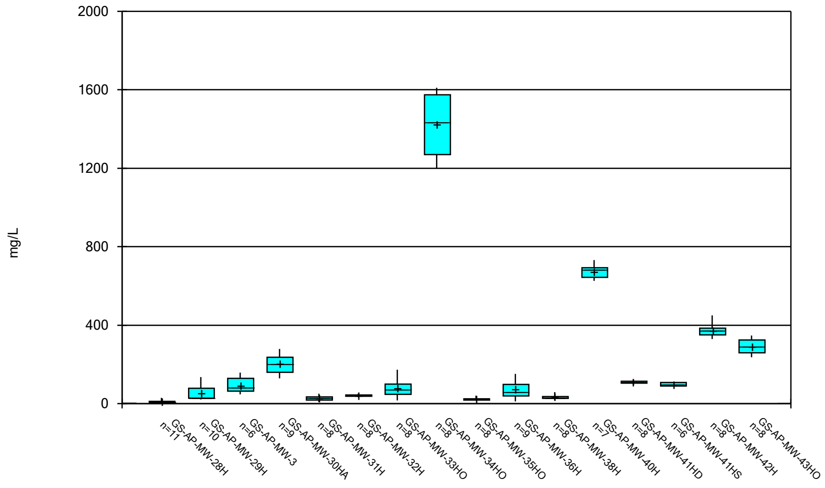


Constituent: Sulfate   Analysis Run 11/15/2023 3:09 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG

Box & Whiskers Plot

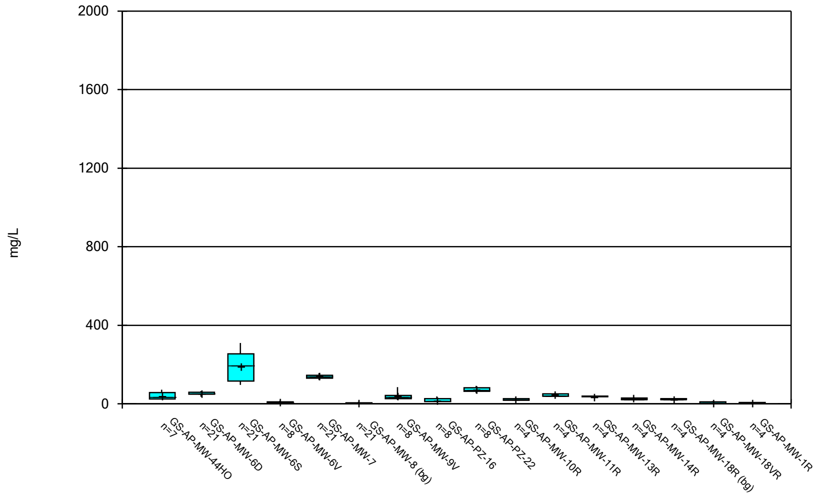


Constituent: Sulfate   Analysis Run 11/15/2023 3:09 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG

Box & Whiskers Plot

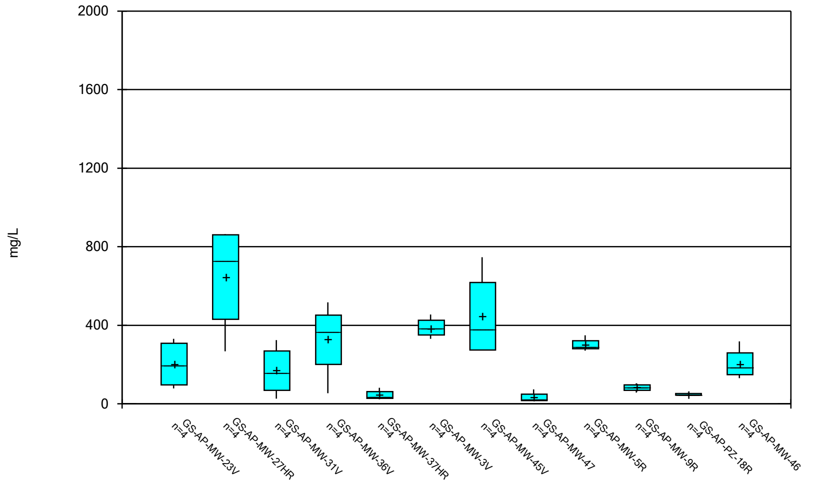


Constituent: Sulfate   Analysis Run 11/15/2023 3:09 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG

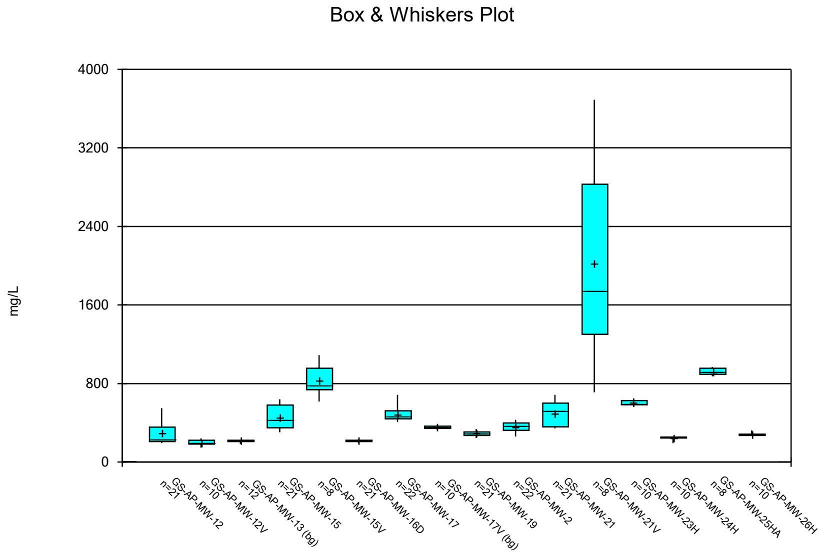
Box & Whiskers Plot



Constituent: Sulfate   Analysis Run 11/15/2023 3:09 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

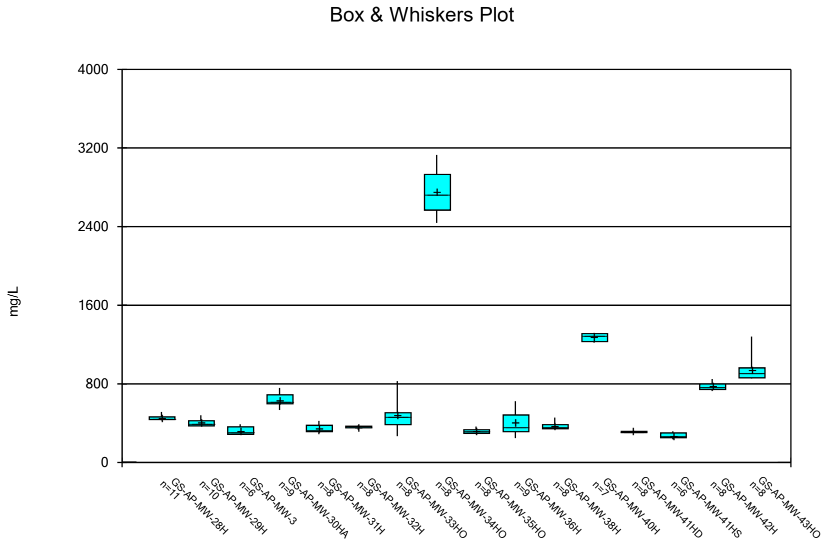
Sanitas™ v.10.0.13 . UG



Constituent: TDS Analysis Run 11/15/2023 3:09 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

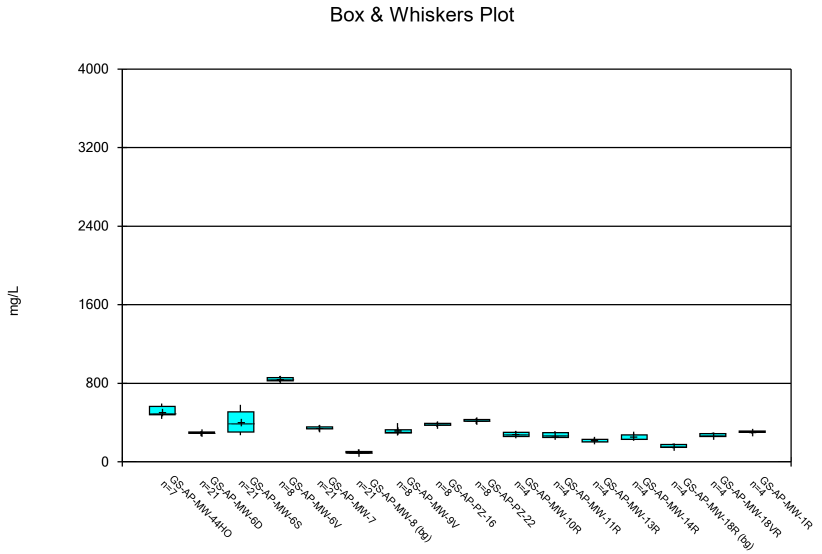
Sanitas™ v.10.0.13 . UG



Constituent: TDS Analysis Run 11/15/2023 3:09 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG



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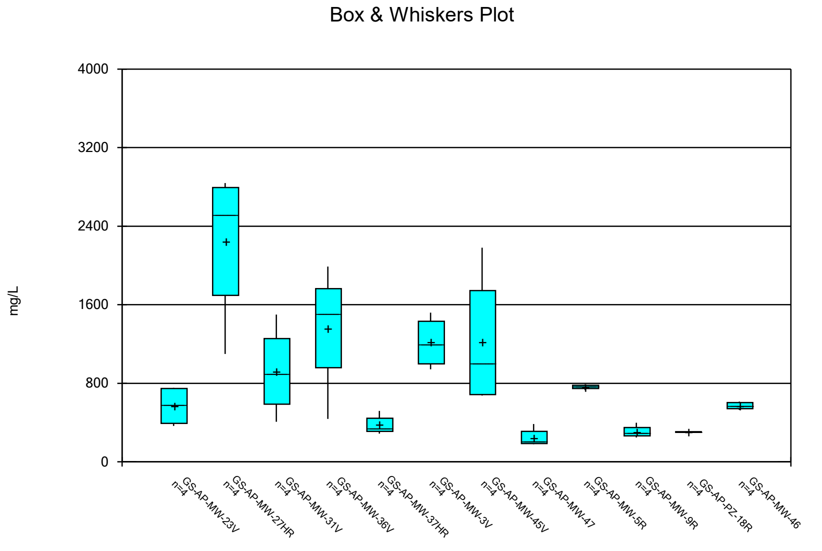
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG

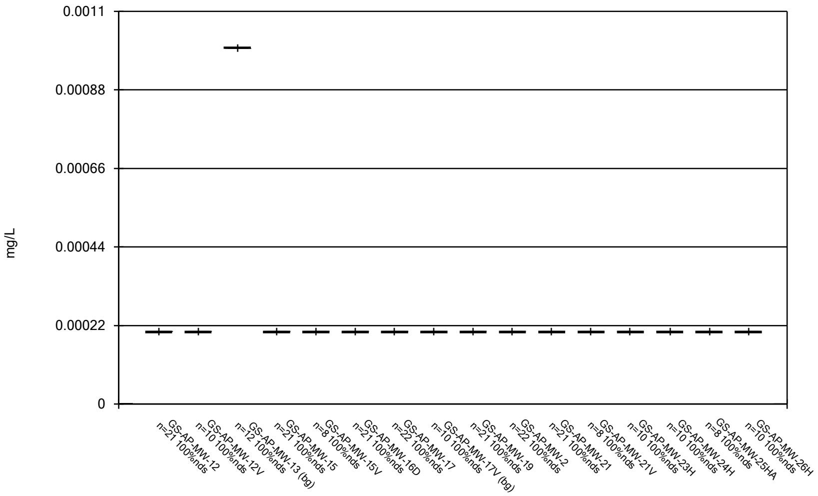


Constituent: TDS Analysis Run 11/15/2023 3:09 PM

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG

Box & Whiskers Plot

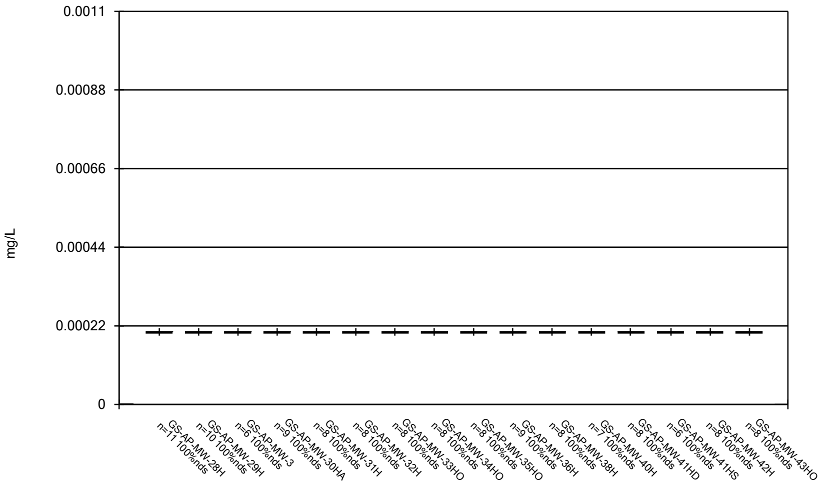


Constituent: Thallium   Analysis Run 11/15/2023 3:09 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG

Box & Whiskers Plot

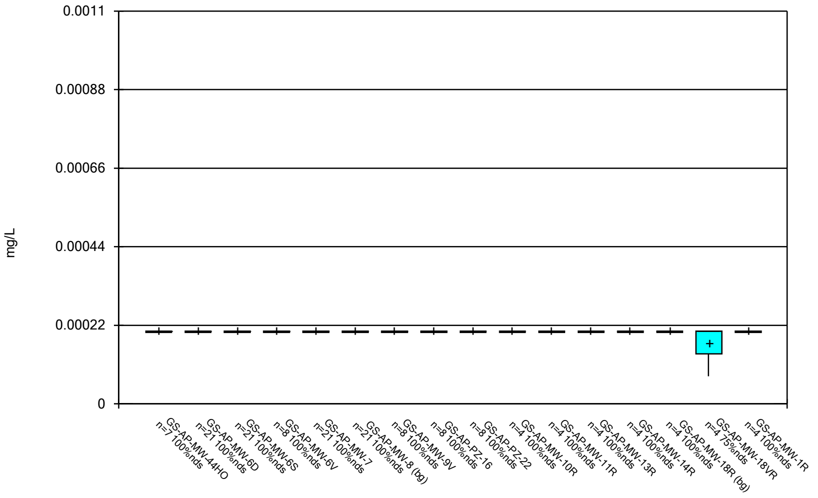


Constituent: Thallium   Analysis Run 11/15/2023 3:10 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG

Box & Whiskers Plot

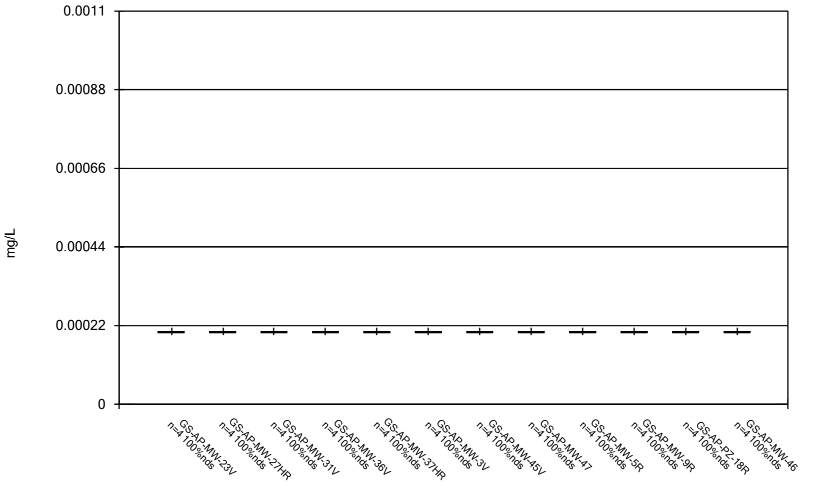


Constituent: Thallium   Analysis Run 11/15/2023 3:10 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG

Box & Whiskers Plot



Constituent: Thallium   Analysis Run 11/15/2023 3:10 PM

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

FIGURE C.

Outlier Summary

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond   Printed 11/9/2023, 3:01 PM

	GS-AP-MW-17V Combined Radium 226 + 228 (pCi/L)
2/14/2022	7.76 (o)

Tukey's Outlier Test - Upgradient Wells - Significant Results

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond   Printed 11/15/2023, 2:52 PM

Constituent	Well	Outlier	Value(s)	Method	Alpha	N	Mean	Std. Dev.	Distribution	Normality Test
Combined Radium 226 + 228 (pCi/L)	**GS-AP-MW-13,GS-AP...**	**Yes**	**7.76,-0.109,-0.601**	**NP**	**NaN**	**47**	**0.5871**	**1.114**	**x^(1/3)**	**ShapiroWilk**

Tukey's Outlier Test - Upgradient Wells - All Results

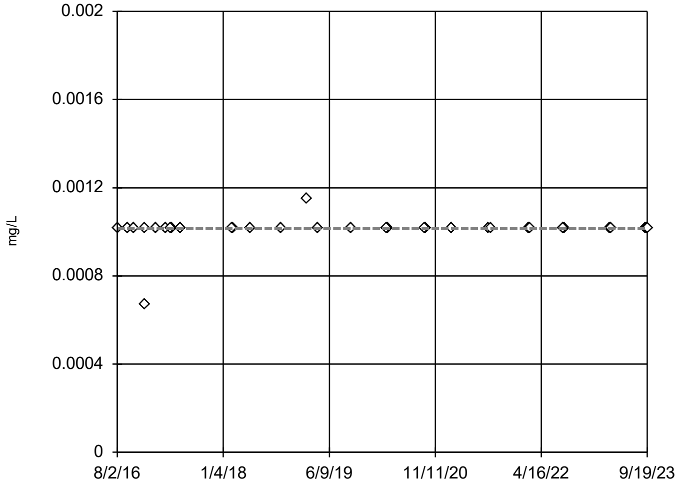
Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond   Printed 11/15/2023, 2:52 PM

Constituent	Well	Outlier	Value(s)	Method	Alpha	N	Mean	Std. Dev.	Distribution	Normality Test
Antimony (mg/L)	GS-AP-MW-13,GS-AP...	n/a	n/a	NP	NaN	47	0.001011	0.00005444	unknown	ShapiroWilk
Arsenic (mg/L)	GS-AP-MW-13,GS-AP...	No	n/a	NP	NaN	47	0.002952	0.002234	ln(x)	ShapiroWilk
Barium (mg/L)	GS-AP-MW-13,GS-AP...	No	n/a	NP	NaN	47	0.1228	0.1084	sqrt(x)	ShapiroWilk
Beryllium (mg/L)	GS-AP-MW-13,GS-AP...	n/a	n/a	NP	NaN	47	0.001015	0	unknown	ShapiroWilk
Boron (mg/L)	GS-AP-MW-13,GS-AP...	n/a	n/a	NP	NaN	47	0.08711	0.02656	unknown	ShapiroWilk
Cadmium (mg/L)	GS-AP-MW-13,GS-AP...	n/a	n/a	NP	NaN	47	0.000203	0	unknown	ShapiroWilk
Calcium (mg/L)	GS-AP-MW-13,GS-AP...	No	n/a	NP	NaN	47	22.93	16.74	normal	ShapiroWilk
Chloride (mg/L)	GS-AP-MW-13,GS-AP...	No	n/a	NP	NaN	47	3.389	0.4653	ln(x)	ShapiroWilk
Chromium (mg/L)	GS-AP-MW-13,GS-AP...	No	n/a	NP	NaN	47	0.001014	0.0007202	ln(x)	ShapiroWilk
Cobalt (mg/L)	GS-AP-MW-13,GS-AP...	No	n/a	NP	NaN	47	0.0006238	0.0009037	ln(x)	ShapiroWilk
Combined Radium 226 + 228 (pCi/L)	**GS-AP-MW-13,GS-AP...**	**Yes**	**7.76,-0.109,-0.601**	**NP**	**NaN**	**47**	**0.5871**	**1.114**	**x^(1/3)**	**ShapiroWilk**
Fluoride (mg/L)	GS-AP-MW-13,GS-AP...	No	n/a	NP	NaN	49	0.1412	0.06637	x^(1/3)	ShapiroWilk
Lead (mg/L)	GS-AP-MW-13,GS-AP...	n/a	n/a	NP	NaN	47	0.00023	0.0002493	unknown	ShapiroWilk
Lithium (mg/L)	GS-AP-MW-13,GS-AP...	No	n/a	NP	NaN	47	0.02495	0.01903	ln(x)	ShapiroWilk
Mercury (mg/L)	GS-AP-MW-13,GS-AP...	n/a	n/a	NP	NaN	47	0.0005	0	unknown	ShapiroWilk
Molybdenum (mg/L)	GS-AP-MW-13,GS-AP...	n/a	n/a	NP	NaN	47	0.008579	0.003171	unknown	ShapiroWilk
pH (SU)	GS-AP-MW-13,GS-AP...	No	n/a	NP	NaN	49	6.437	0.7546	ln(x)	ShapiroWilk
Selenium (mg/L)	GS-AP-MW-13,GS-AP...	n/a	n/a	NP	NaN	47	0.001015	0	unknown	ShapiroWilk
Sulfate (mg/L)	GS-AP-MW-13,GS-AP...	No	n/a	NP	NaN	47	9.073	5.976	ln(x)	ShapiroWilk
TDS (mg/L)	GS-AP-MW-13,GS-AP...	No	n/a	NP	NaN	47	186.8	99.64	ln(x)	ShapiroWilk
Thallium (mg/L)	GS-AP-MW-13,GS-AP...	n/a	n/a	NP	NaN	47	0.000203	0	unknown	ShapiroWilk

Sanitas™ v.10.0.13 . UG

Tukey's Outlier Screening, Pooled Background

GS-AP-MW-13,GS-AP-MW-17V,GS-AP-MW-8...



n = 47

No outliers found. Tukey's method selected by user.

Data were x^5 transformed to achieve best W statistic (graph shown in original units).

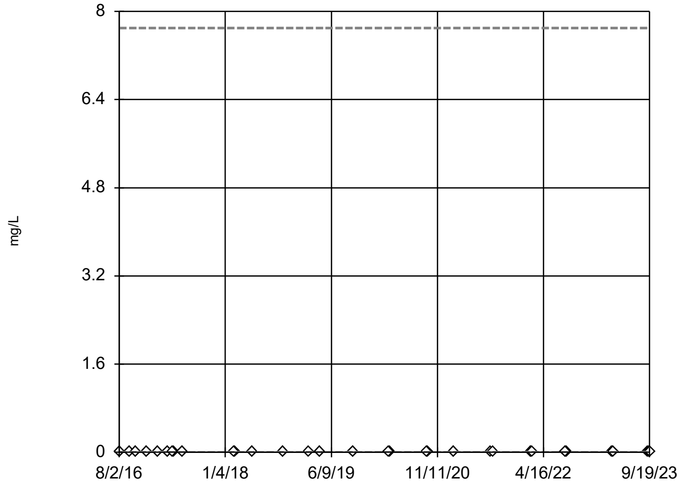
The results were invalidated, because the lower and upper quartiles are equal.

Constituent: Antimony Analysis Run 11/15/2023 2:46 PM View: Pooled Upgradient Wells
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG

Tukey's Outlier Screening, Pooled Background

GS-AP-MW-13,GS-AP-MW-17V,GS-AP-MW-8...



n = 47

No outliers found. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

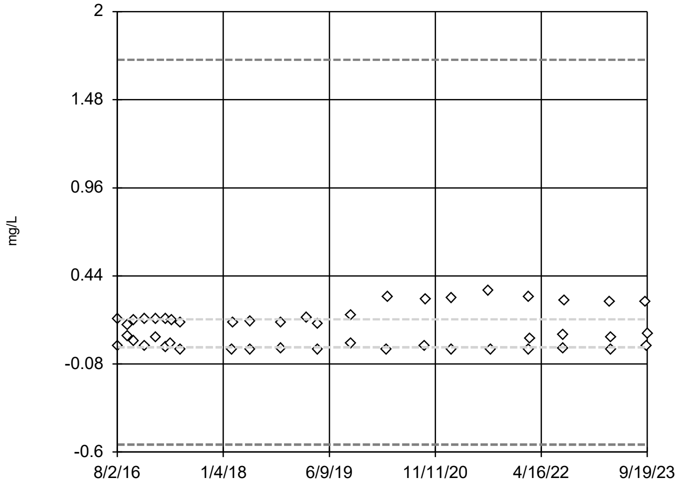
High cutoff = 7.699, low cutoff = 2.8e-7, based on IQR multiplier of 3.

Constituent: Arsenic Analysis Run 11/15/2023 2:46 PM View: Pooled Upgradient Wells
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG

Tukey's Outlier Screening, Pooled Background

GS-AP-MW-13,GS-AP-MW-17V,GS-AP-MW-8...



n = 47

No outliers found. Tukey's method selected by user.

Data were square root transformed to achieve best W statistic (graph shown in original units).

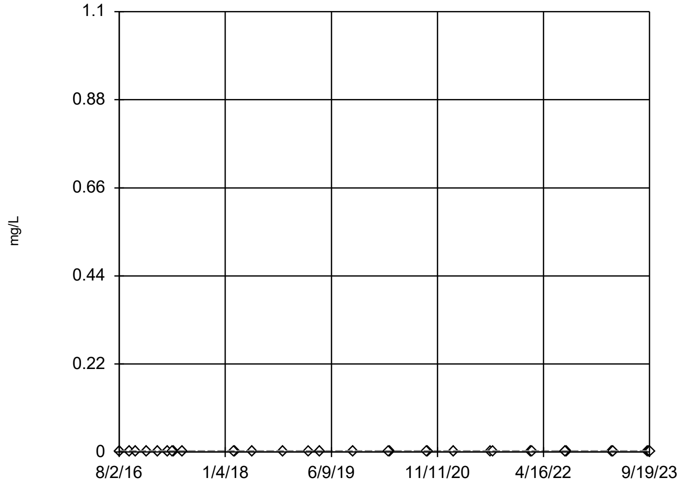
High cutoff = 1.716, low cutoff = -0.5561, based on IQR multiplier of 3.

Constituent: Barium Analysis Run 11/15/2023 2:46 PM View: Pooled Upgradient Wells
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG

Tukey's Outlier Screening, Pooled Background

GS-AP-MW-13,GS-AP-MW-17V,GS-AP-MW-8...



n = 47

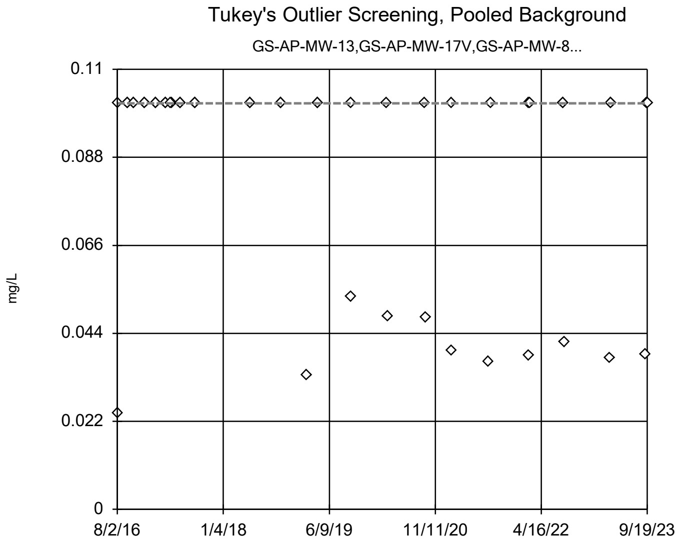
No outliers found. Tukey's method selected by user.

Data were square root transformed to achieve best W statistic (graph shown in original units).

The results were invalidated, because the lower and upper quartiles are equal.

Constituent: Beryllium Analysis Run 11/15/2023 2:46 PM View: Pooled Upgradient Wells
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG



n = 47

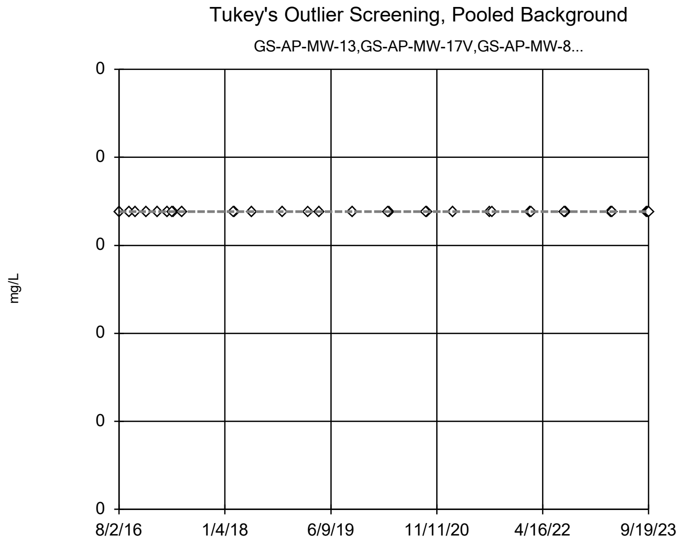
No outliers found. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

The results were invalidated, because the lower and upper quartiles are equal.

Constituent: Boron Analysis Run 11/15/2023 2:46 PM View: Pooled Upgradient Wells
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG



n = 47

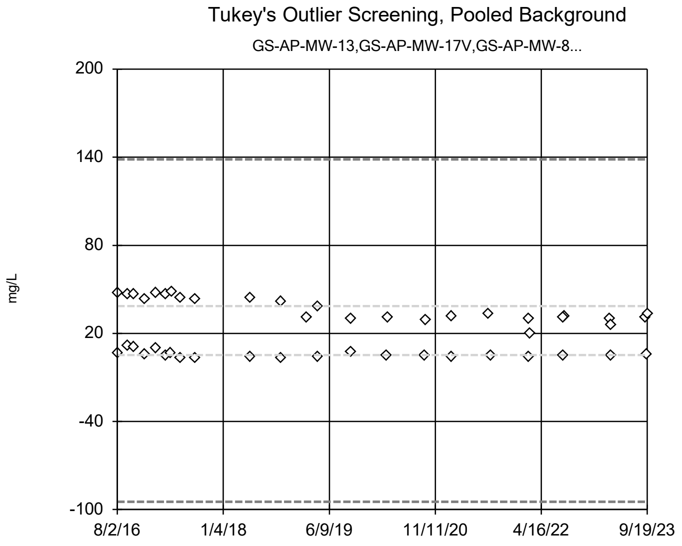
No outliers found. Tukey's method selected by user.

Data were square root transformed to achieve best W statistic (graph shown in original units).

The results were invalidated, because the lower and upper quartiles are equal.

Constituent: Cadmium Analysis Run 11/15/2023 2:46 PM View: Pooled Upgradient Wells
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG



n = 47

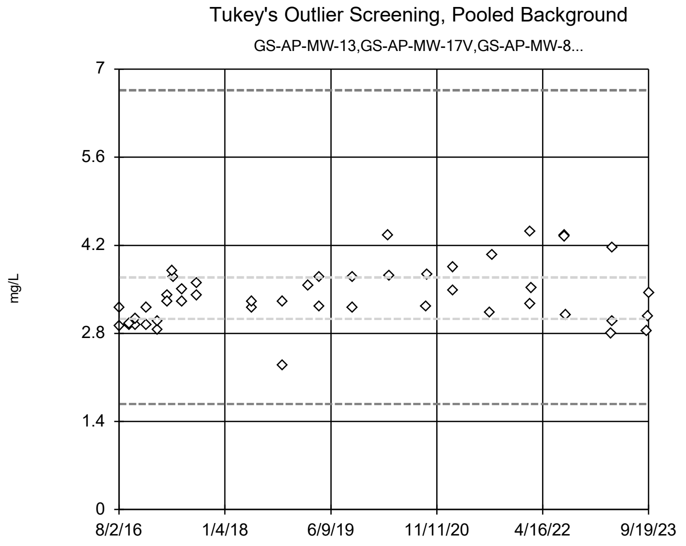
No outliers found. Tukey's method selected by user.

Ladder of Powers transformations did not improve normality; analysis run on raw data.

High cutoff = 138.6, low cutoff = -94.68, based on IQR multiplier of 3.

Constituent: Calcium Analysis Run 11/15/2023 2:46 PM View: Pooled Upgradient Wells
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG



n = 47

No outliers found. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

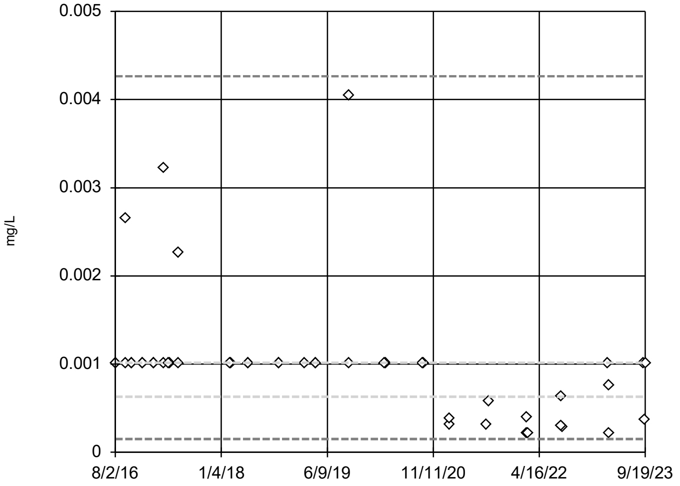
High cutoff = 6.665, low cutoff = 1.678, based on IQR multiplier of 3.

Constituent: Chloride Analysis Run 11/15/2023 2:46 PM View: Pooled Upgradient Wells
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG

Tukey's Outlier Screening, Pooled Background

GS-AP-MW-13,GS-AP-MW-17V,GS-AP-MW-8...



n = 47

No outliers found.
Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

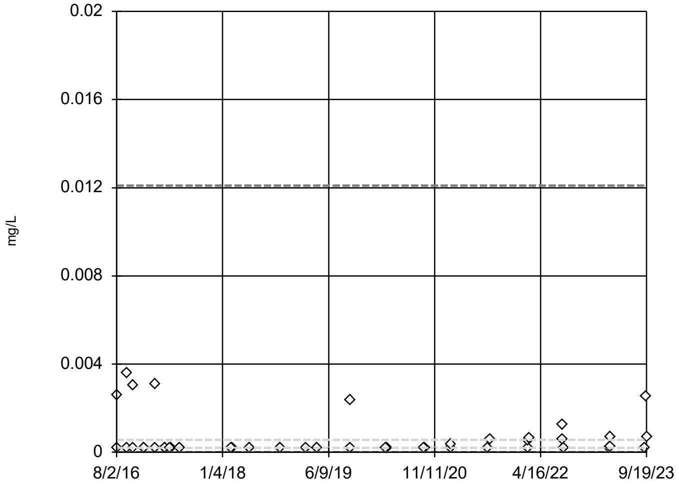
High cutoff = 0.004265, low cutoff = 0.0001497, based on IQR multiplier of 3.

Constituent: Chromium Analysis Run 11/15/2023 2:46 PM View: Pooled Upgradient Wells
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG

Tukey's Outlier Screening, Pooled Background

GS-AP-MW-13,GS-AP-MW-17V,GS-AP-MW-8...



n = 47

No outliers found.
Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

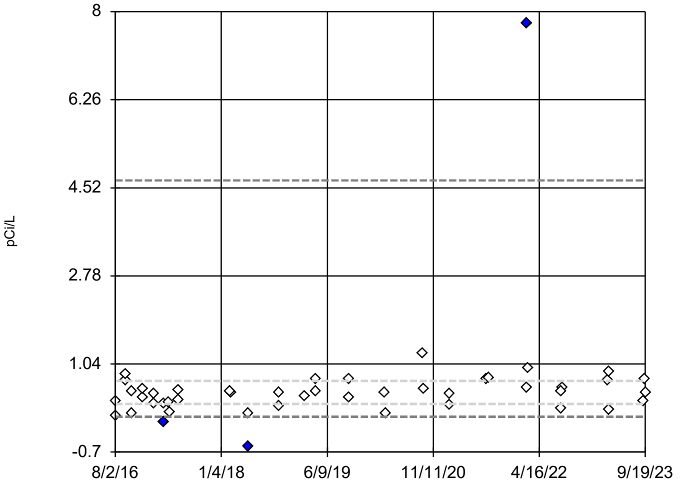
High cutoff = 0.0121, low cutoff = 0.000009466, based on IQR multiplier of 3.

Constituent: Cobalt Analysis Run 11/15/2023 2:46 PM View: Pooled Upgradient Wells
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG

Tukey's Outlier Screening, Pooled Background

GS-AP-MW-13,GS-AP-MW-17V,GS-AP-MW-8...



n = 47

Outliers are drawn as solid.
Tukey's method selected by user.

Data were cube root transformed to achieve best W statistic (graph shown in original units).

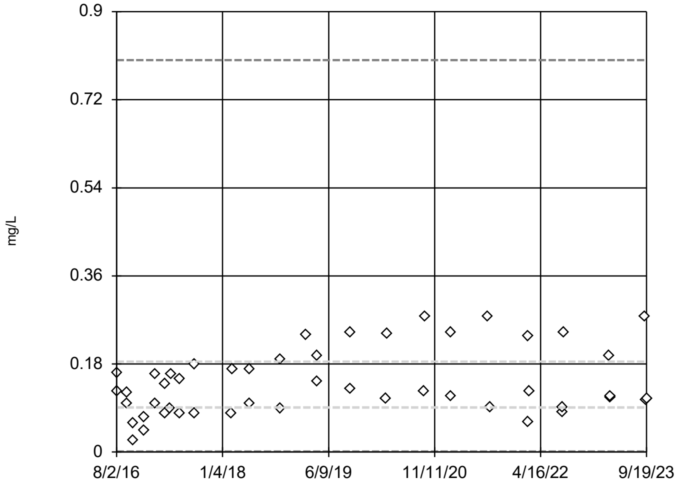
High cutoff = 4.666, low cutoff = -0.003332, based on IQR multiplier of 3.

Constituent: Combined Radium 226 + 228 Analysis Run 11/15/2023 2:46 PM View: Pooled Upgradient W
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG

Tukey's Outlier Screening, Pooled Background

GS-AP-MW-13,GS-AP-MW-17V,GS-AP-MW-8...



n = 49

No outliers found.
Tukey's method selected by user.

Data were cube root transformed to achieve best W statistic (graph shown in original units).

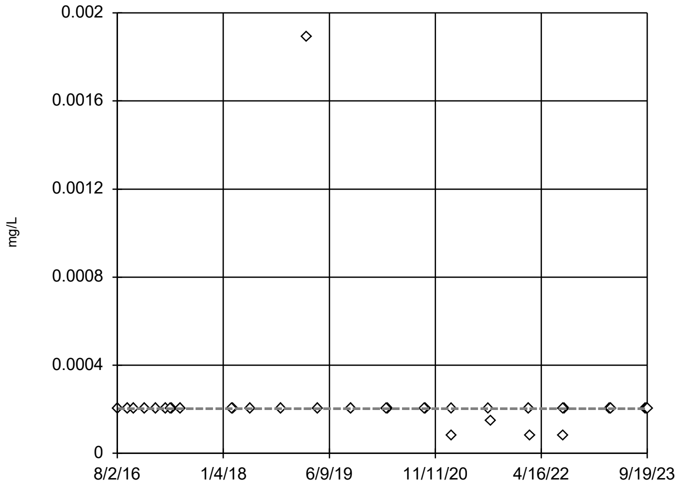
High cutoff = 0.8009, low cutoff = 0.0007584, based on IQR multiplier of 3.

Constituent: Fluoride Analysis Run 11/15/2023 2:46 PM View: Pooled Upgradient Wells
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG

Tukey's Outlier Screening, Pooled Background

GS-AP-MW-13,GS-AP-MW-17V,GS-AP-MW-8...



n = 47

No outliers found. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

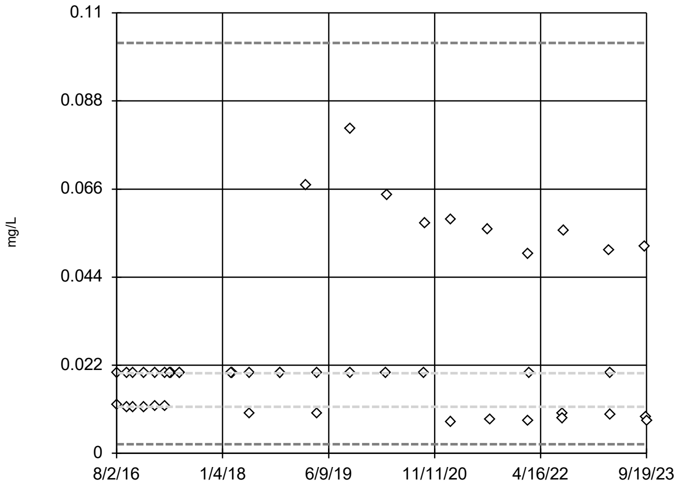
The results were invalidated, because the lower and upper quartiles are equal.

Constituent: Lead Analysis Run 11/15/2023 2:46 PM View: Pooled Upgradient Wells
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG

Tukey's Outlier Screening, Pooled Background

GS-AP-MW-13,GS-AP-MW-17V,GS-AP-MW-8...



n = 47

No outliers found. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

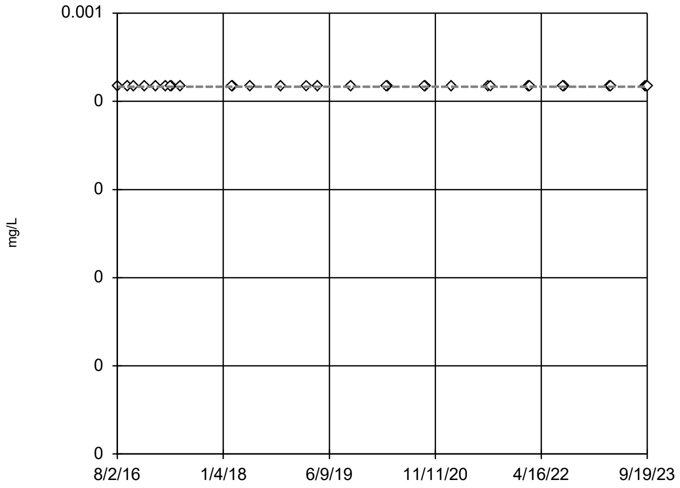
High cutoff = 0.1025, low cutoff = 0.002263, based on IQR multiplier of 3.

Constituent: Lithium Analysis Run 11/15/2023 2:46 PM View: Pooled Upgradient Wells
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG

Tukey's Outlier Screening, Pooled Background

GS-AP-MW-13,GS-AP-MW-17V,GS-AP-MW-8...



n = 47

No outliers found. Tukey's method selected by user.

Data were square root transformed to achieve best W statistic (graph shown in original units).

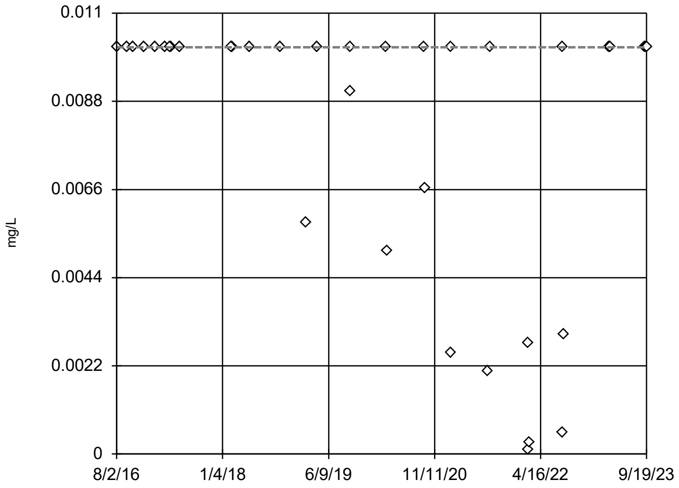
The results were invalidated, because the lower and upper quartiles are equal.

Constituent: Mercury Analysis Run 11/15/2023 2:46 PM View: Pooled Upgradient Wells
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG

Tukey's Outlier Screening, Pooled Background

GS-AP-MW-13,GS-AP-MW-17V,GS-AP-MW-8...



n = 47

No outliers found. Tukey's method selected by user.

Ladder of Powers transformations did not improve normality; analysis run on raw data.

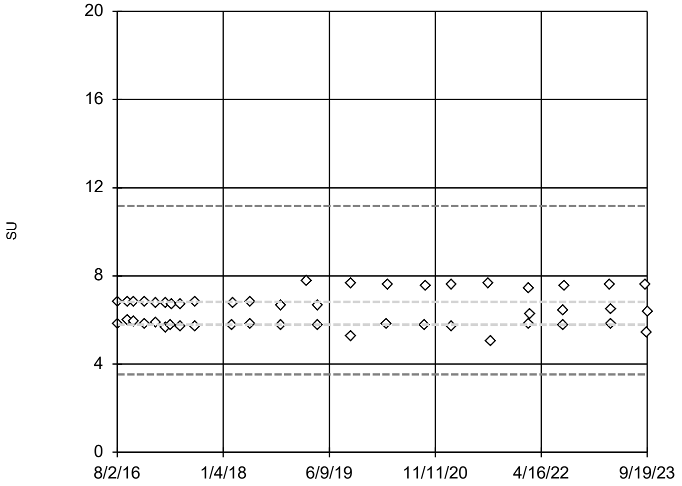
The results were invalidated, because the lower and upper quartiles are equal.

Constituent: Molybdenum Analysis Run 11/15/2023 2:46 PM View: Pooled Upgradient Wells
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG

Tukey's Outlier Screening, Pooled Background

GS-AP-MW-13,GS-AP-MW-17V,GS-AP-MW-8...



n = 49

No outliers found. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

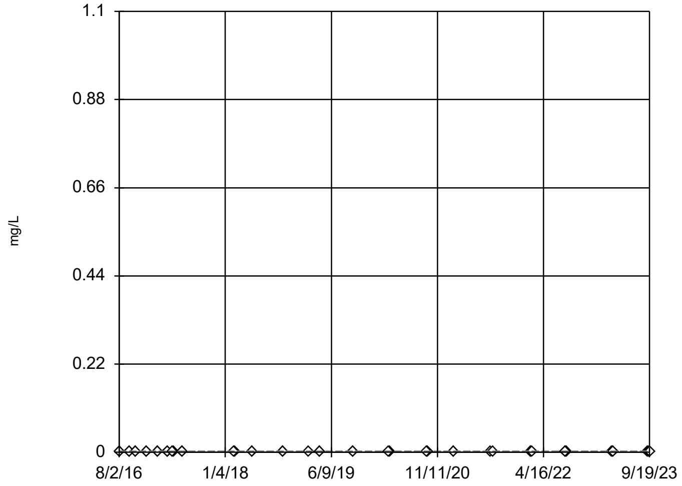
High cutoff = 11.17, low cutoff = 3.531, based on IQR multiplier of 3.

Constituent: pH Analysis Run 11/15/2023 2:46 PM View: Pooled Upgradient Wells
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG

Tukey's Outlier Screening, Pooled Background

GS-AP-MW-13,GS-AP-MW-17V,GS-AP-MW-8...



n = 47

No outliers found. Tukey's method selected by user.

Data were square root transformed to achieve best W statistic (graph shown in original units).

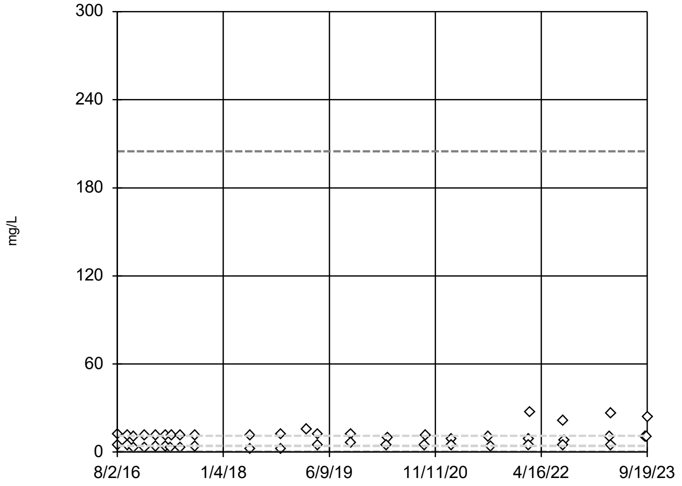
The results were invalidated, because the lower and upper quartiles are equal.

Constituent: Selenium Analysis Run 11/15/2023 2:46 PM View: Pooled Upgradient Wells
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG

Tukey's Outlier Screening, Pooled Background

GS-AP-MW-13,GS-AP-MW-17V,GS-AP-MW-8...



n = 47

No outliers found. Tukey's method selected by user.

Data were natural log transformed to achieve best W statistic (graph shown in original units).

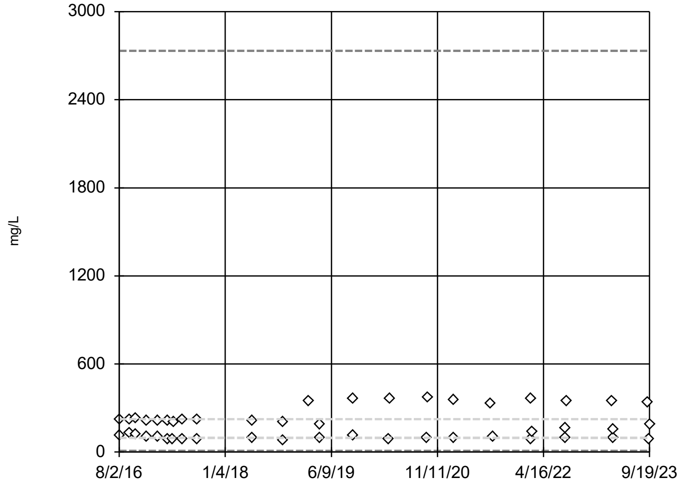
High cutoff = 204.9, low cutoff = 0.2275, based on IQR multiplier of 3.

Constituent: Sulfate Analysis Run 11/15/2023 2:46 PM View: Pooled Upgradient Wells
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG

Tukey's Outlier Screening, Pooled Background

GS-AP-MW-13,GS-AP-MW-17V,GS-AP-MW-8...



n = 47

No outliers found. Tukey's method selected by user.

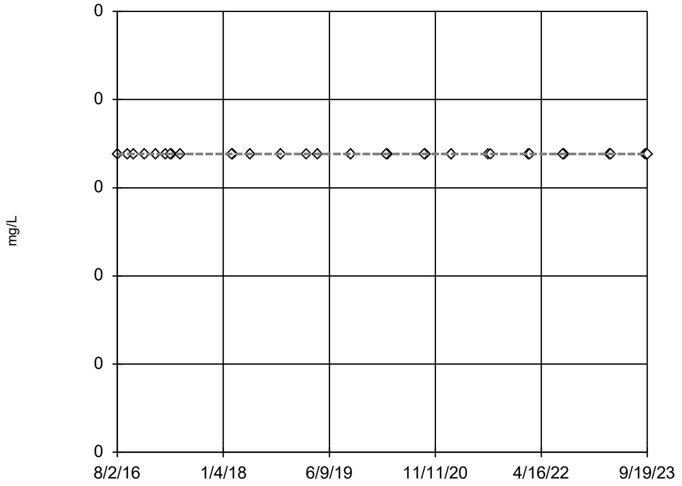
Data were natural log transformed to achieve best W statistic (graph shown in original units).

High cutoff = 2733, low cutoff = 7.975, based on IQR multiplier of 3.

Constituent: TDS Analysis Run 11/15/2023 2:46 PM View: Pooled Upgradient Wells
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Tukey's Outlier Screening, Pooled Background

GS-AP-MW-13,GS-AP-MW-17V,GS-AP-MW-8...



n = 47

No outliers found. Tukey's method selected by user.

Data were square root transformed to achieve best W statistic (graph shown in original units).

The results were invalidated, because the lower and upper quartiles are equal.

Constituent: Thallium   Analysis Run 11/15/2023 2:46 PM   View: Pooled Upgradient Wells
Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

FIGURE D.

Upgradient Wells Trend Tests - Significant Results

Plant Gorgas   Data: Gorgas Ash Pond   Printed 11/6/2023, 7:13 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Chloride (mg/L)	**GS-AP-MW-8 (bg)**	**0.1651**	**99**	**87**	**Yes**	**21**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Fluoride (mg/L)	**GS-AP-MW-13 (bg)**	**0.02914**	**48**	**43**	**Yes**	**13**	**0**	**n/a**	**n/a**	**0.01**	**NP**

Upgradient Wells Trend Tests - All Results

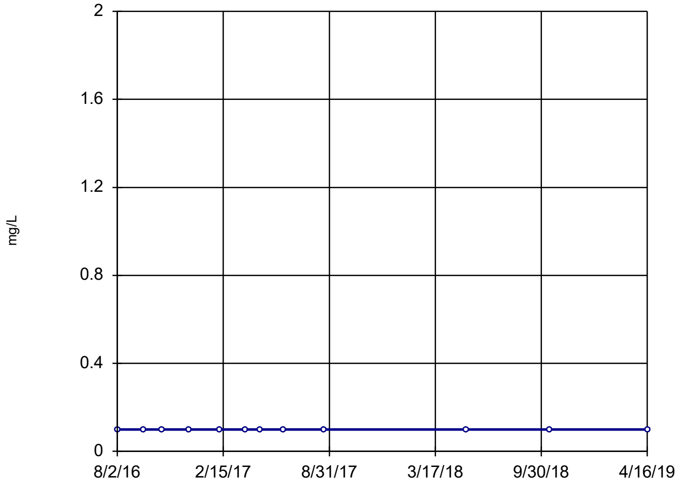
Plant Gorgas   Data: Gorgas Ash Pond   Printed 11/6/2023, 7:13 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	GS-AP-MW-13 (bg)	0	0	38	No	12	100	n/a	n/a	0.01	NP
Boron (mg/L)	GS-AP-MW-17V (bg)	-0.002694	-11	-30	No	10	0	n/a	n/a	0.01	NP
Boron (mg/L)	GS-AP-MW-8 (bg)	0	20	87	No	21	95.24	n/a	n/a	0.01	NP
Calcium (mg/L)	GS-AP-MW-13 (bg)	-2.607	-32	-38	No	12	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GS-AP-MW-17V (bg)	0.1203	4	30	No	10	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GS-AP-MW-8 (bg)	-0.2946	-47	-87	No	21	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GS-AP-MW-13 (bg)	0.1178	10	38	No	12	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GS-AP-MW-17V (bg)	-0.2384	-29	-30	No	10	0	n/a	n/a	0.01	NP
Chloride (mg/L)	**GS-AP-MW-8 (bg)**	**0.1651**	**99**	**87**	**Yes**	**21**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Fluoride (mg/L)	**GS-AP-MW-13 (bg)**	**0.02914**	**48**	**43**	**Yes**	**13**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Fluoride (mg/L)	GS-AP-MW-17V (bg)	0.00066	3	30	No	10	0	n/a	n/a	0.01	NP
Fluoride (mg/L)	GS-AP-MW-8 (bg)	0.002865	46	92	No	22	0	n/a	n/a	0.01	NP
pH (SU)	GS-AP-MW-13 (bg)	-0.05825	-34	-43	No	13	0	n/a	n/a	0.01	NP
pH (SU)	GS-AP-MW-17V (bg)	-0.02446	-15	-30	No	10	0	n/a	n/a	0.01	NP
pH (SU)	GS-AP-MW-8 (bg)	-0.0333	-82	-92	No	22	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GS-AP-MW-13 (bg)	0.01849	11	38	No	12	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GS-AP-MW-17V (bg)	-0.7	-15	-30	No	10	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GS-AP-MW-8 (bg)	0.2514	63	87	No	21	0	n/a	n/a	0.01	NP
TDS (mg/L)	GS-AP-MW-13 (bg)	-7.182	-29	-38	No	12	0	n/a	n/a	0.01	NP
TDS (mg/L)	GS-AP-MW-17V (bg)	-5.63	-17	-30	No	10	0	n/a	n/a	0.01	NP
TDS (mg/L)	GS-AP-MW-8 (bg)	-1.421	-39	-87	No	21	0	n/a	n/a	0.01	NP

Sanitas™ v.10.0.13 . UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

GS-AP-MW-13 (bg)



n = 12

Slope = 0
units per year.

Mann-Kendall
statistic = 0
critical = 38

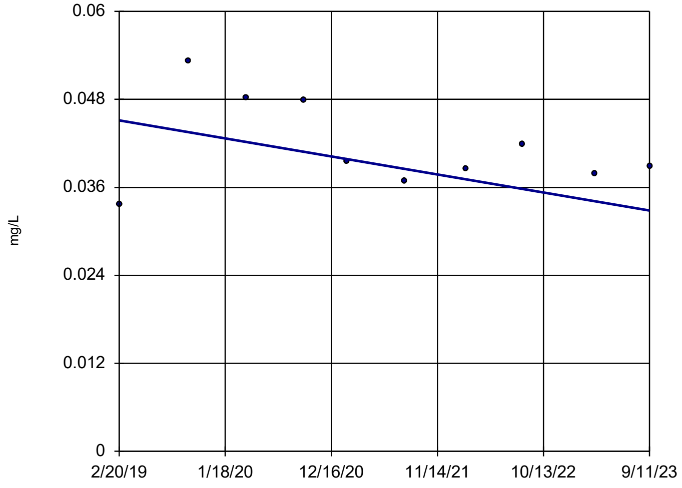
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron   Analysis Run 11/6/2023 7:11 PM   View: Appendix III - Upgradient Wells
Plant Gorgas   Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG

Sen's Slope Estimator

GS-AP-MW-17V (bg)



n = 10

Slope = -0.002694
units per year.

Mann-Kendall
statistic = -11
critical = -30

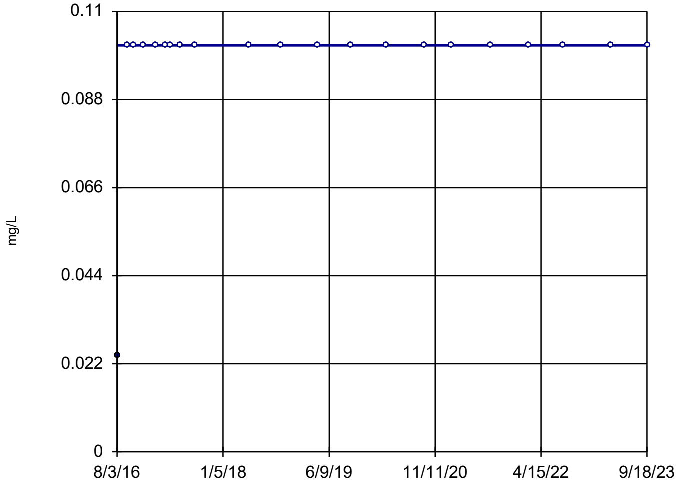
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron   Analysis Run 11/6/2023 7:11 PM   View: Appendix III - Upgradient Wells
Plant Gorgas   Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

GS-AP-MW-8 (bg)



n = 21

Slope = 0
units per year.

Mann-Kendall
statistic = 20
critical = 87

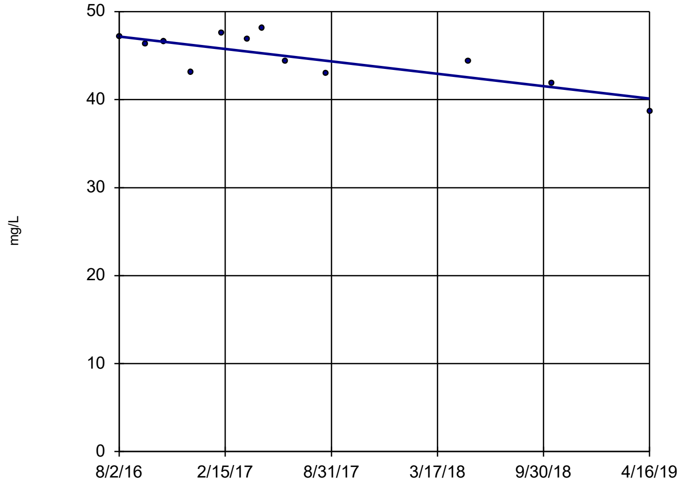
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron   Analysis Run 11/6/2023 7:11 PM   View: Appendix III - Upgradient Wells
Plant Gorgas   Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG

Sen's Slope Estimator

GS-AP-MW-13 (bg)



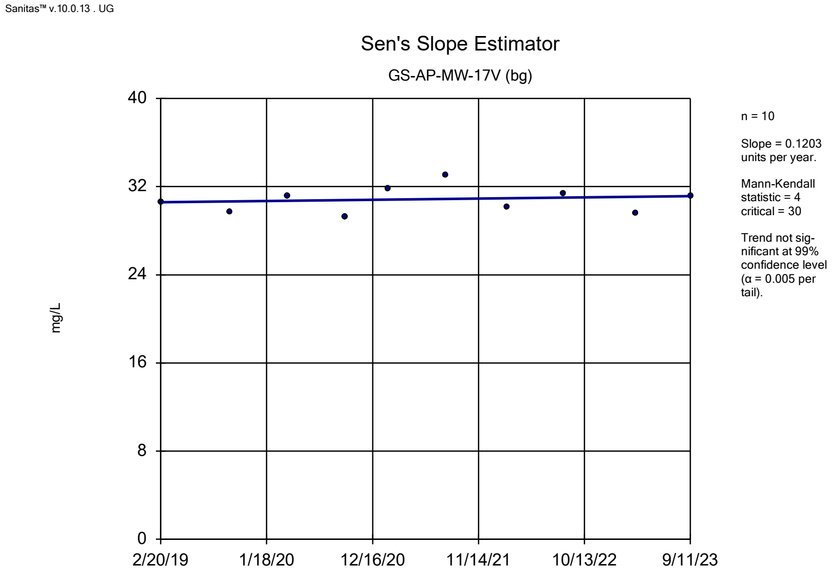
n = 12

Slope = -2.607
units per year.

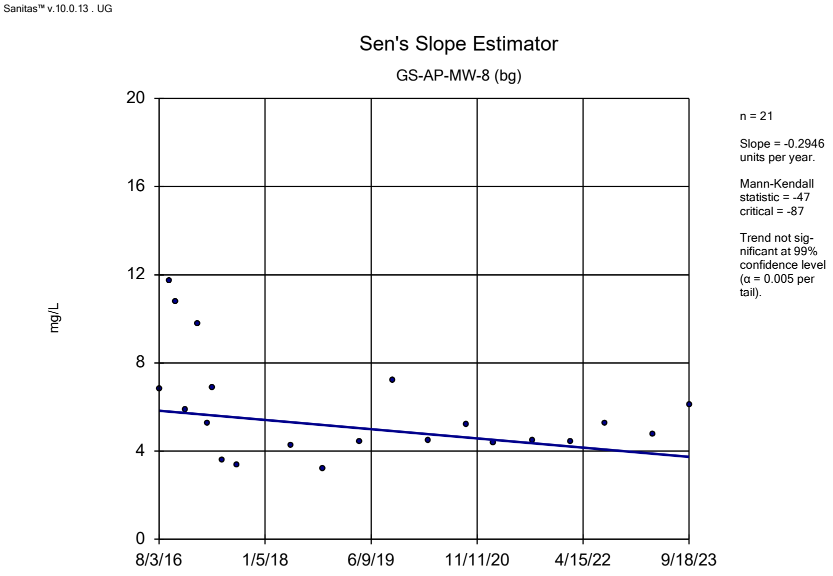
Mann-Kendall
statistic = -32
critical = -38

Trend not significant at 99% confidence level (α = 0.005 per tail).

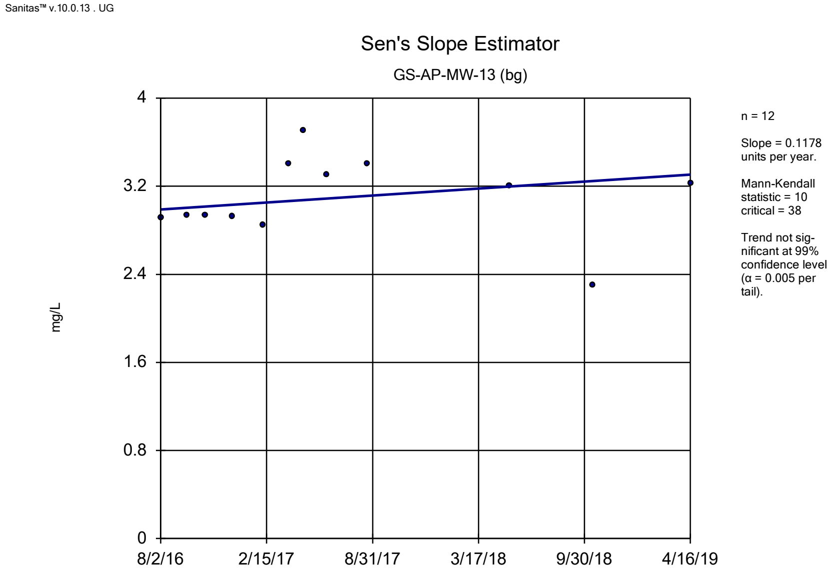
Constituent: Calcium   Analysis Run 11/6/2023 7:11 PM   View: Appendix III - Upgradient Wells
Plant Gorgas   Data: Gorgas Ash Pond



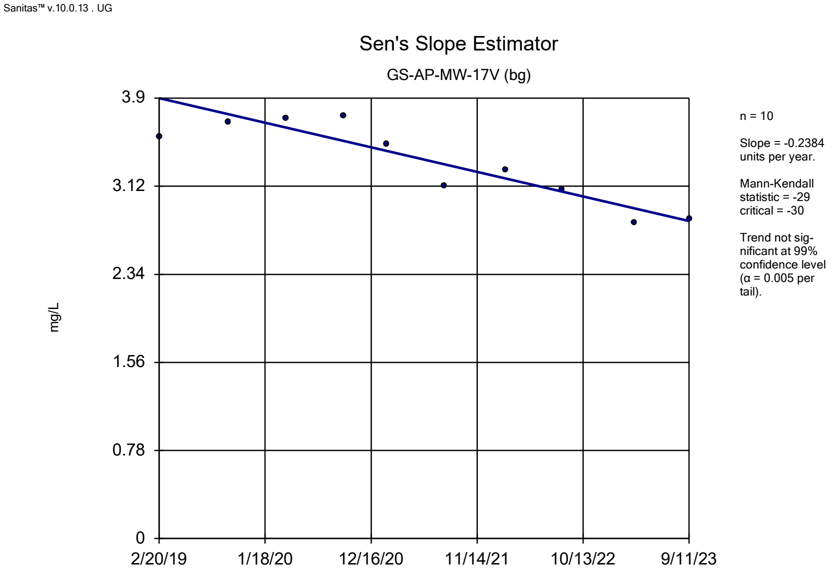
Constituent: Calcium   Analysis Run 11/6/2023 7:11 PM   View: Appendix III - Upgradient Wells
Plant Gorgas   Data: Gorgas Ash Pond



Constituent: Calcium   Analysis Run 11/6/2023 7:11 PM   View: Appendix III - Upgradient Wells
Plant Gorgas   Data: Gorgas Ash Pond

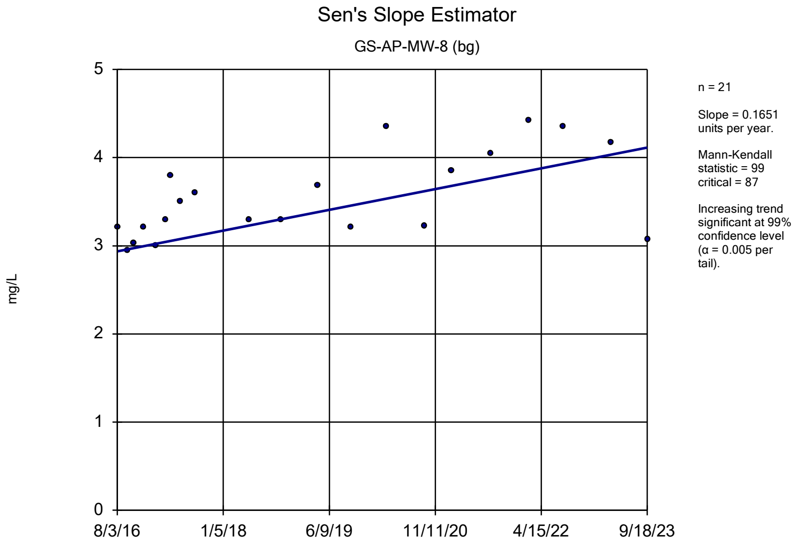


Constituent: Chloride   Analysis Run 11/6/2023 7:11 PM   View: Appendix III - Upgradient Wells
Plant Gorgas   Data: Gorgas Ash Pond



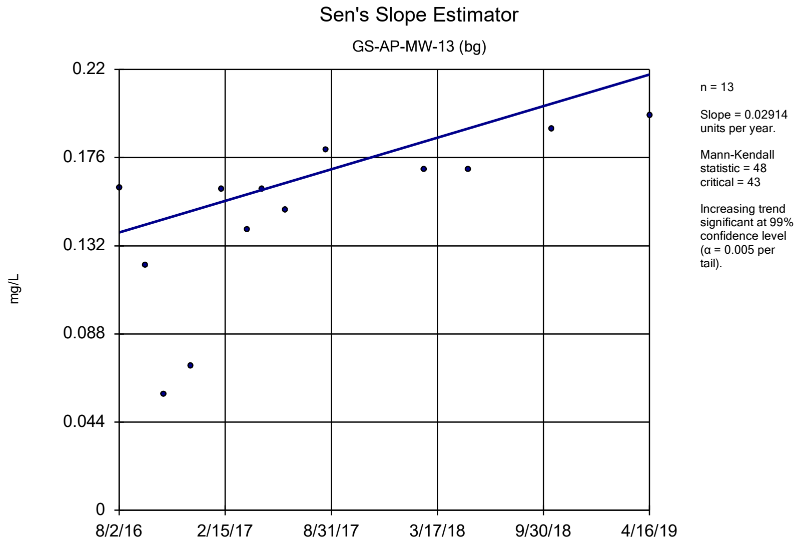
Constituent: Chloride   Analysis Run 11/6/2023 7:11 PM   View: Appendix III - Upgradient Wells
Plant Gorgas   Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG



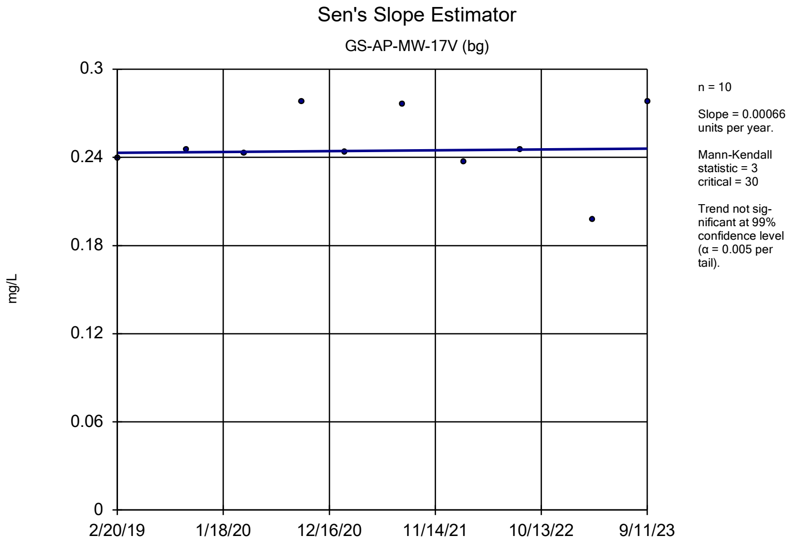
Constituent: Chloride Analysis Run 11/6/2023 7:11 PM View: Appendix III - Upgradient Wells
Plant Gorgas Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG



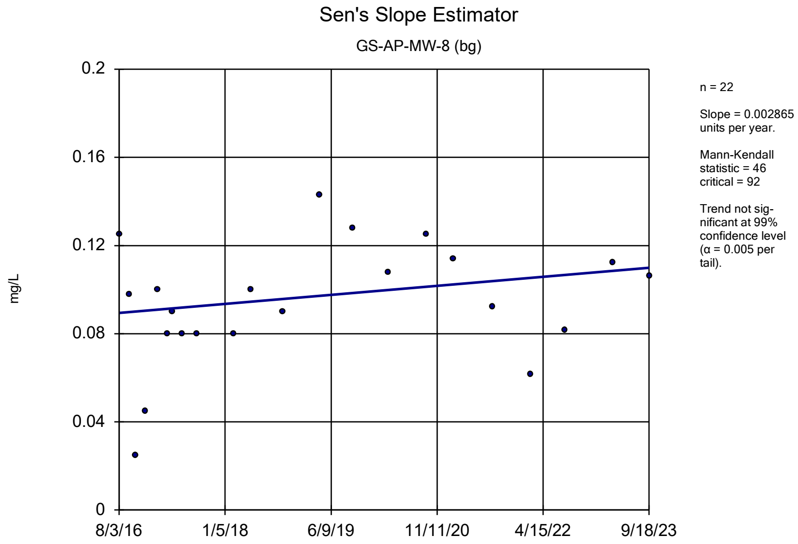
Constituent: Fluoride Analysis Run 11/6/2023 7:11 PM View: Appendix III - Upgradient Wells
Plant Gorgas Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG



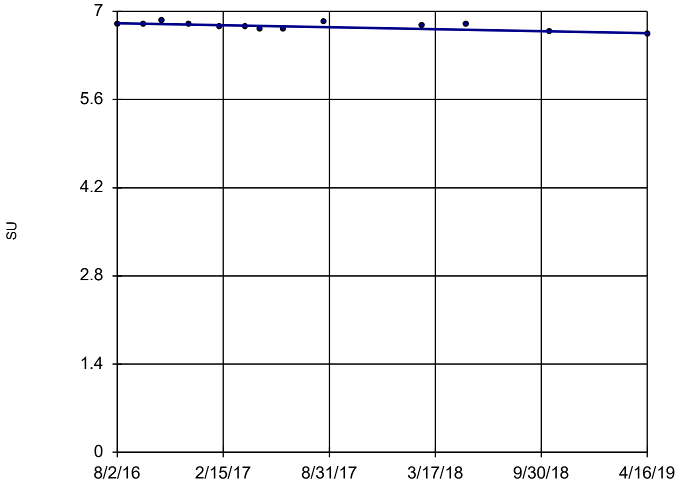
Constituent: Fluoride Analysis Run 11/6/2023 7:11 PM View: Appendix III - Upgradient Wells
Plant Gorgas Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG



Constituent: Fluoride Analysis Run 11/6/2023 7:11 PM View: Appendix III - Upgradient Wells
Plant Gorgas Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG



Sen's Slope Estimator

GS-AP-MW-13 (bg)

n = 13

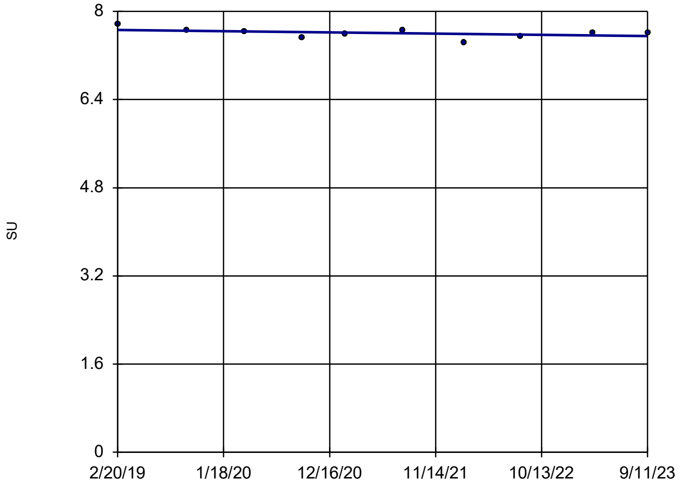
Slope = -0.05825 units per year.

Mann-Kendall statistic = -34 critical = -43

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: pH   Analysis Run 11/6/2023 7:11 PM   View: Appendix III - Upgradient Wells
Plant Gorgas   Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG



Sen's Slope Estimator

GS-AP-MW-17V (bg)

n = 10

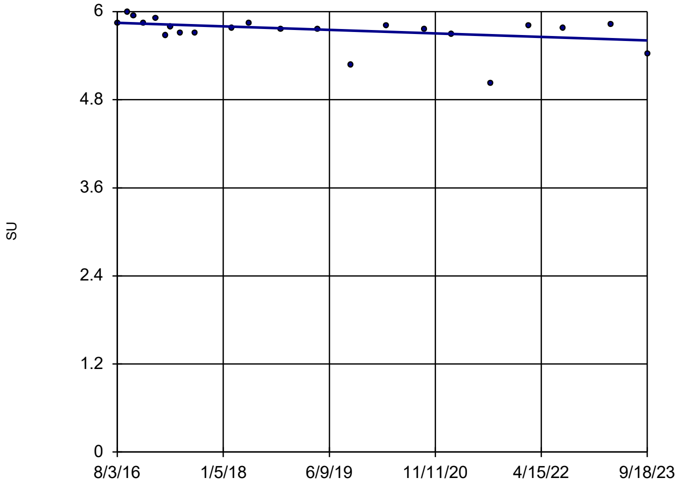
Slope = -0.02446 units per year.

Mann-Kendall statistic = -15 critical = -30

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: pH   Analysis Run 11/6/2023 7:11 PM   View: Appendix III - Upgradient Wells
Plant Gorgas   Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG



Sen's Slope Estimator

GS-AP-MW-8 (bg)

n = 22

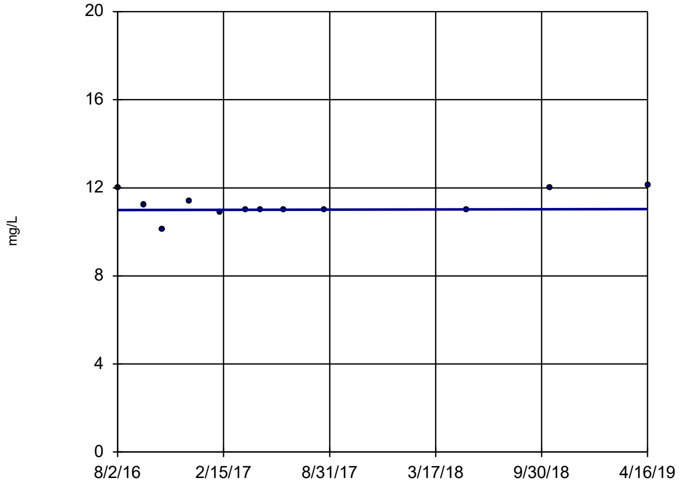
Slope = -0.0333 units per year.

Mann-Kendall statistic = -82 critical = -92

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: pH   Analysis Run 11/6/2023 7:11 PM   View: Appendix III - Upgradient Wells
Plant Gorgas   Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG



Sen's Slope Estimator

GS-AP-MW-13 (bg)

n = 12

Slope = 0.01849 units per year.

Mann-Kendall statistic = 11 critical = 38

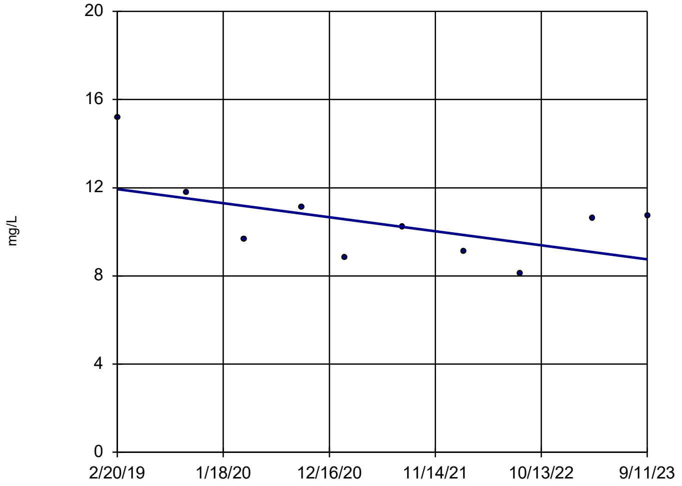
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate   Analysis Run 11/6/2023 7:11 PM   View: Appendix III - Upgradient Wells
Plant Gorgas   Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG

Sen's Slope Estimator

GS-AP-MW-17V (bg)



n = 10

Slope = -0.7 units per year.

Mann-Kendall statistic = -15 critical = -30

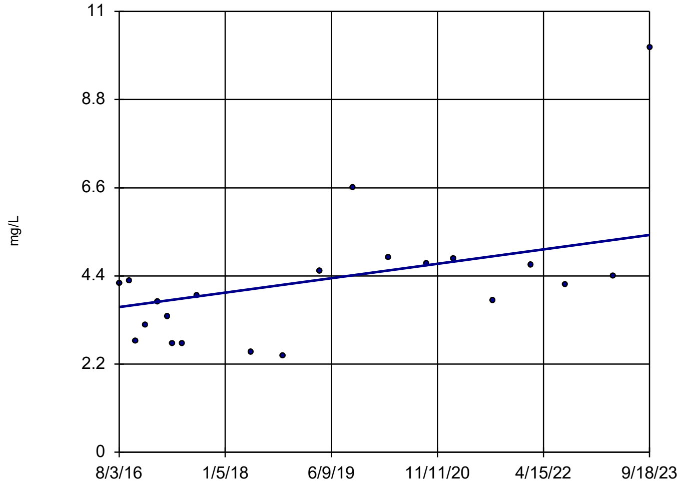
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 11/6/2023 7:11 PM View: Appendix III - Upgradient Wells
Plant Gorgas Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG

Sen's Slope Estimator

GS-AP-MW-8 (bg)



n = 21

Slope = 0.2514 units per year.

Mann-Kendall statistic = 63 critical = 87

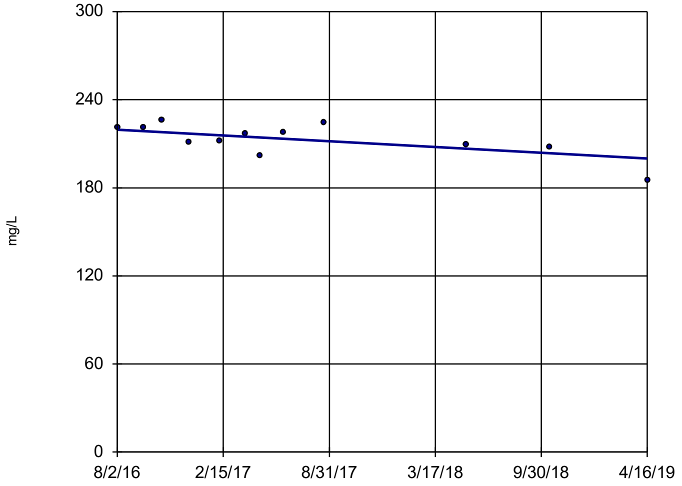
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 11/6/2023 7:11 PM View: Appendix III - Upgradient Wells
Plant Gorgas Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG

Sen's Slope Estimator

GS-AP-MW-13 (bg)



n = 12

Slope = -7.182 units per year.

Mann-Kendall statistic = -29 critical = -38

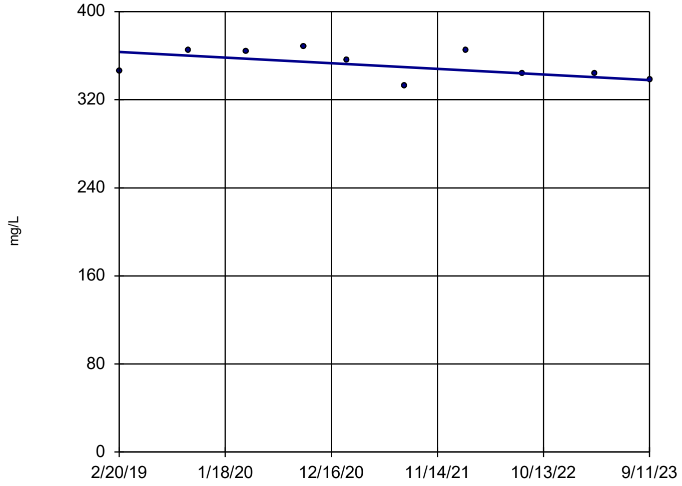
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: TDS Analysis Run 11/6/2023 7:12 PM View: Appendix III - Upgradient Wells
Plant Gorgas Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG

Sen's Slope Estimator

GS-AP-MW-17V (bg)



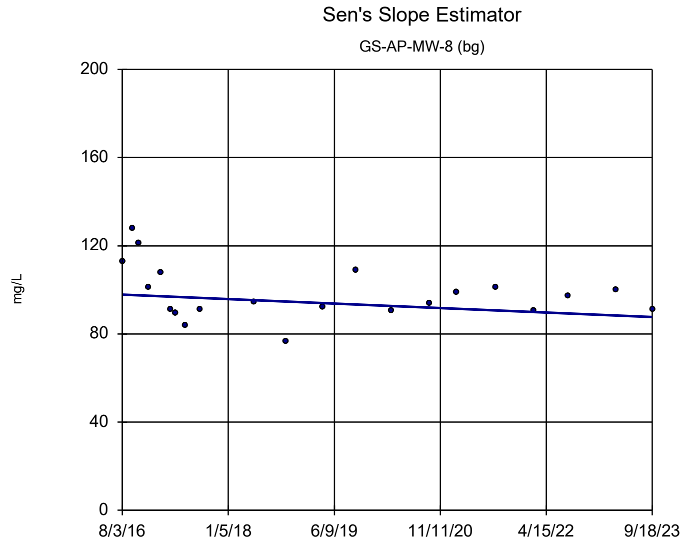
n = 10

Slope = -5.63 units per year.

Mann-Kendall statistic = -17 critical = -30

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: TDS Analysis Run 11/6/2023 7:12 PM View: Appendix III - Upgradient Wells
Plant Gorgas Data: Gorgas Ash Pond



n = 21

Slope = -1.421
units per year.

Mann-Kendall
statistic = -39
critical = -87

Trend not significant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: TDS   Analysis Run 11/6/2023 7:12 PM   View: Appendix III - Upgradient Wells

Plant Gorgas   Data: Gorgas Ash Pond

FIGURE E.

Appendix III - Interwell Prediction Limits - Significant Results

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond Printed 11/16/2023, 2:00 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	**GS-AP-MW-21**	**0.1015**	**n/a**	**9/5/2023**	**0.14**	**Yes**	**47**	**n/a**	**n/a**	**76.6**	**n/a**	**n/a**	**0.000831**	**NP Inter (NDs) 1 of 2**
Boron (mg/L)	**GS-AP-MW-21V**	**0.1015**	**n/a**	**9/5/2023**	**0.103**	**Yes**	**47**	**n/a**	**n/a**	**76.6**	**n/a**	**n/a**	**0.000831**	**NP Inter (NDs) 1 of 2**
Boron (mg/L)	**GS-AP-MW-6D**	**0.1015**	**n/a**	**9/5/2023**	**1.36**	**Yes**	**47**	**n/a**	**n/a**	**76.6**	**n/a**	**n/a**	**0.000831**	**NP Inter (NDs) 1 of 2**
Boron (mg/L)	**GS-AP-MW-6S**	**0.1015**	**n/a**	**9/5/2023**	**1.16**	**Yes**	**47**	**n/a**	**n/a**	**76.6**	**n/a**	**n/a**	**0.000831**	**NP Inter (NDs) 1 of 2**
Boron (mg/L)	**GS-AP-MW-7**	**0.1015**	**n/a**	**9/11/2023**	**1.71**	**Yes**	**47**	**n/a**	**n/a**	**76.6**	**n/a**	**n/a**	**0.000831**	**NP Inter (NDs) 1 of 2**
Calcium (mg/L)	**GS-AP-MW-19**	**48.1**	**n/a**	**9/19/2023**	**53.5**	**Yes**	**47**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.000831**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**GS-AP-MW-6D**	**48.1**	**n/a**	**9/5/2023**	**53.9**	**Yes**	**47**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.000831**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**GS-AP-MW-6S**	**48.1**	**n/a**	**9/5/2023**	**55.7**	**Yes**	**47**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.000831**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**GS-AP-MW-9V**	**48.1**	**n/a**	**9/13/2023**	**56**	**Yes**	**47**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.000831**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	**GS-AP-MW-12V**	**4.38**	**n/a**	**9/13/2023**	**4.38**	**Yes**	**47**	**3.389**	**0.4653**	**0**	**None**	**No**	**0.0005374**	**Param Inter 1 of 2**
Chloride (mg/L)	**GS-AP-MW-15**	**4.38**	**n/a**	**9/11/2023**	**5.04**	**Yes**	**47**	**3.389**	**0.4653**	**0**	**None**	**No**	**0.0005374**	**Param Inter 1 of 2**
Chloride (mg/L)	**GS-AP-MW-15V**	**4.38**	**n/a**	**9/11/2023**	**83.9**	**Yes**	**47**	**3.389**	**0.4653**	**0**	**None**	**No**	**0.0005374**	**Param Inter 1 of 2**
Chloride (mg/L)	**GS-AP-MW-17**	**4.38**	**n/a**	**9/11/2023**	**7.59**	**Yes**	**47**	**3.389**	**0.4653**	**0**	**None**	**No**	**0.0005374**	**Param Inter 1 of 2**
Chloride (mg/L)	**GS-AP-MW-19**	**4.38**	**n/a**	**9/19/2023**	**4.82**	**Yes**	**47**	**3.389**	**0.4653**	**0**	**None**	**No**	**0.0005374**	**Param Inter 1 of 2**
Chloride (mg/L)	**GS-AP-MW-2**	**4.38**	**n/a**	**9/18/2023**	**6.28**	**Yes**	**47**	**3.389**	**0.4653**	**0**	**None**	**No**	**0.0005374**	**Param Inter 1 of 2**
Chloride (mg/L)	**GS-AP-MW-21**	**4.38**	**n/a**	**9/5/2023**	**36.6**	**Yes**	**47**	**3.389**	**0.4653**	**0**	**None**	**No**	**0.0005374**	**Param Inter 1 of 2**
Chloride (mg/L)	**GS-AP-MW-21V**	**4.38**	**n/a**	**9/5/2023**	**380**	**Yes**	**47**	**3.389**	**0.4653**	**0**	**None**	**No**	**0.0005374**	**Param Inter 1 of 2**
Chloride (mg/L)	**GS-AP-MW-6D**	**4.38**	**n/a**	**9/5/2023**	**9.14**	**Yes**	**47**	**3.389**	**0.4653**	**0**	**None**	**No**	**0.0005374**	**Param Inter 1 of 2**
Chloride (mg/L)	**GS-AP-MW-6S**	**4.38**	**n/a**	**9/5/2023**	**19.2**	**Yes**	**47**	**3.389**	**0.4653**	**0**	**None**	**No**	**0.0005374**	**Param Inter 1 of 2**
Chloride (mg/L)	**GS-AP-MW-7**	**4.38**	**n/a**	**9/11/2023**	**8.17**	**Yes**	**47**	**3.389**	**0.4653**	**0**	**None**	**No**	**0.0005374**	**Param Inter 1 of 2**
Chloride (mg/L)	**GS-AP-MW-9V**	**4.38**	**n/a**	**9/13/2023**	**45.8**	**Yes**	**47**	**3.389**	**0.4653**	**0**	**None**	**No**	**0.0005374**	**Param Inter 1 of 2**
Fluoride (mg/L)	**GS-AP-MW-15**	**0.3057**	**n/a**	**9/11/2023**	**0.425**	**Yes**	**49**	**0.3655**	**0.08825**	**0**	**None**	**sqrt(x)**	**0.0005374**	**Param Inter 1 of 2**
Fluoride (mg/L)	**GS-AP-MW-2**	**0.3057**	**n/a**	**9/18/2023**	**0.822**	**Yes**	**49**	**0.3655**	**0.08825**	**0**	**None**	**sqrt(x)**	**0.0005374**	**Param Inter 1 of 2**
Fluoride (mg/L)	**GS-AP-MW-21V**	**0.3057**	**n/a**	**9/5/2023**	**0.391**	**Yes**	**49**	**0.3655**	**0.08825**	**0**	**None**	**sqrt(x)**	**0.0005374**	**Param Inter 1 of 2**
pH (SU)	**GS-AP-MW-12**	**7.76**	**5.02**	**9/13/2023**	**8.96**	**Yes**	**49**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.001516**	**NP Inter (normality) 1 of 2**
pH (SU)	**GS-AP-MW-12V**	**7.76**	**5.02**	**9/13/2023**	**8.95**	**Yes**	**49**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.001516**	**NP Inter (normality) 1 of 2**
pH (SU)	**GS-AP-MW-15**	**7.76**	**5.02**	**9/11/2023**	**11.61**	**Yes**	**49**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.001516**	**NP Inter (normality) 1 of 2**
pH (SU)	**GS-AP-MW-17**	**7.76**	**5.02**	**9/11/2023**	**8.19**	**Yes**	**49**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.001516**	**NP Inter (normality) 1 of 2**
pH (SU)	**GS-AP-MW-2**	**7.76**	**5.02**	**9/18/2023**	**9**	**Yes**	**49**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.001516**	**NP Inter (normality) 1 of 2**
pH (SU)	**GS-AP-MW-21**	**7.76**	**5.02**	**9/5/2023**	**9.81**	**Yes**	**49**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.001516**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**GS-AP-MW-15V**	**27**	**n/a**	**9/11/2023**	**140**	**Yes**	**47**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.000831**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**GS-AP-MW-21**	**27**	**n/a**	**9/5/2023**	**214**	**Yes**	**47**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.000831**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**GS-AP-MW-21V**	**27**	**n/a**	**9/5/2023**	**430**	**Yes**	**47**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.000831**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**GS-AP-MW-6D**	**27**	**n/a**	**9/5/2023**	**58.7**	**Yes**	**47**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.000831**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**GS-AP-MW-6S**	**27**	**n/a**	**9/5/2023**	**107**	**Yes**	**47**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.000831**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**GS-AP-MW-7**	**27**	**n/a**	**9/11/2023**	**124**	**Yes**	**47**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.000831**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**GS-AP-MW-9V**	**27**	**n/a**	**9/13/2023**	**85.2**	**Yes**	**47**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.000831**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	**GS-AP-MW-15**	**368**	**n/a**	**9/11/2023**	**565**	**Yes**	**47**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.000831**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	**GS-AP-MW-15V**	**368**	**n/a**	**9/11/2023**	**615**	**Yes**	**47**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.000831**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	**GS-AP-MW-17**	**368**	**n/a**	**9/11/2023**	**480**	**Yes**	**47**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.000831**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	**GS-AP-MW-2**	**368**	**n/a**	**9/18/2023**	**405**	**Yes**	**47**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.000831**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	**GS-AP-MW-21**	**368**	**n/a**	**9/5/2023**	**572**	**Yes**	**47**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.000831**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	**GS-AP-MW-21V**	**368**	**n/a**	**9/5/2023**	**1550**	**Yes**	**47**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.000831**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	**GS-AP-MW-9V**	**368**	**n/a**	**9/13/2023**	**395**	**Yes**	**47**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.000831**	**NP Inter (normality) 1 of 2**

Appendix III - Interwell Prediction Limits - All Results

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond Printed 11/16/2023, 2:00 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	GS-AP-MW-12	0.1015	n/a	9/13/2023	0.1015ND	No	47	n/a	n/a	76.6	n/a	n/a	0.000831	NP Inter (NDs) 1 of 2
Boron (mg/L)	GS-AP-MW-12V	0.1015	n/a	9/13/2023	0.1015ND	No	47	n/a	n/a	76.6	n/a	n/a	0.000831	NP Inter (NDs) 1 of 2
Boron (mg/L)	GS-AP-MW-15	0.1015	n/a	9/11/2023	0.0337J	No	47	n/a	n/a	76.6	n/a	n/a	0.000831	NP Inter (NDs) 1 of 2
Boron (mg/L)	GS-AP-MW-15V	0.1015	n/a	9/11/2023	0.0573J	No	47	n/a	n/a	76.6	n/a	n/a	0.000831	NP Inter (NDs) 1 of 2
Boron (mg/L)	GS-AP-MW-16D	0.1015	n/a	9/12/2023	0.1015ND	No	47	n/a	n/a	76.6	n/a	n/a	0.000831	NP Inter (NDs) 1 of 2
Boron (mg/L)	GS-AP-MW-17	0.1015	n/a	9/11/2023	0.0835J	No	47	n/a	n/a	76.6	n/a	n/a	0.000831	NP Inter (NDs) 1 of 2
Boron (mg/L)	GS-AP-MW-19	0.1015	n/a	9/19/2023	0.0314J	No	47	n/a	n/a	76.6	n/a	n/a	0.000831	NP Inter (NDs) 1 of 2
Boron (mg/L)	GS-AP-MW-2	0.1015	n/a	9/18/2023	0.0952J	No	47	n/a	n/a	76.6	n/a	n/a	0.000831	NP Inter (NDs) 1 of 2
Boron (mg/L)	**GS-AP-MW-21**	**0.1015**	**n/a**	**9/5/2023**	**0.14**	**Yes**	**47**	**n/a**	**n/a**	**76.6**	**n/a**	**n/a**	**0.000831**	**NP Inter (NDs) 1 of 2**
Boron (mg/L)	**GS-AP-MW-21V**	**0.1015**	**n/a**	**9/5/2023**	**0.103**	**Yes**	**47**	**n/a**	**n/a**	**76.6**	**n/a**	**n/a**	**0.000831**	**NP Inter (NDs) 1 of 2**
Boron (mg/L)	**GS-AP-MW-6D**	**0.1015**	**n/a**	**9/5/2023**	**1.36**	**Yes**	**47**	**n/a**	**n/a**	**76.6**	**n/a**	**n/a**	**0.000831**	**NP Inter (NDs) 1 of 2**
Boron (mg/L)	**GS-AP-MW-6S**	**0.1015**	**n/a**	**9/5/2023**	**1.16**	**Yes**	**47**	**n/a**	**n/a**	**76.6**	**n/a**	**n/a**	**0.000831**	**NP Inter (NDs) 1 of 2**
Boron (mg/L)	**GS-AP-MW-7**	**0.1015**	**n/a**	**9/11/2023**	**1.71**	**Yes**	**47**	**n/a**	**n/a**	**76.6**	**n/a**	**n/a**	**0.000831**	**NP Inter (NDs) 1 of 2**
Boron (mg/L)	GS-AP-MW-9V	0.1015	n/a	9/13/2023	0.0414J	No	47	n/a	n/a	76.6	n/a	n/a	0.000831	NP Inter (NDs) 1 of 2
Calcium (mg/L)	GS-AP-MW-12	48.1	n/a	9/13/2023	41.8	No	47	n/a	n/a	0	n/a	n/a	0.000831	NP Inter (normality) 1 of 2
Calcium (mg/L)	GS-AP-MW-12V	48.1	n/a	9/13/2023	39.2	No	47	n/a	n/a	0	n/a	n/a	0.000831	NP Inter (normality) 1 of 2
Calcium (mg/L)	GS-AP-MW-15	48.1	n/a	9/11/2023	5.21	No	47	n/a	n/a	0	n/a	n/a	0.000831	NP Inter (normality) 1 of 2
Calcium (mg/L)	GS-AP-MW-15V	48.1	n/a	9/11/2023	20.3	No	47	n/a	n/a	0	n/a	n/a	0.000831	NP Inter (normality) 1 of 2
Calcium (mg/L)	GS-AP-MW-16D	48.1	n/a	9/12/2023	33.1	No	47	n/a	n/a	0	n/a	n/a	0.000831	NP Inter (normality) 1 of 2
Calcium (mg/L)	GS-AP-MW-17	48.1	n/a	9/11/2023	2.93	No	47	n/a	n/a	0	n/a	n/a	0.000831	NP Inter (normality) 1 of 2
Calcium (mg/L)	**GS-AP-MW-19**	**48.1**	**n/a**	**9/19/2023**	**53.5**	**Yes**	**47**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.000831**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	GS-AP-MW-2	48.1	n/a	9/18/2023	0.668	No	47	n/a	n/a	0	n/a	n/a	0.000831	NP Inter (normality) 1 of 2
Calcium (mg/L)	GS-AP-MW-21	48.1	n/a	9/5/2023	2	No	47	n/a	n/a	0	n/a	n/a	0.000831	NP Inter (normality) 1 of 2
Calcium (mg/L)	GS-AP-MW-21V	48.1	n/a	9/5/2023	39.8	No	47	n/a	n/a	0	n/a	n/a	0.000831	NP Inter (normality) 1 of 2
Calcium (mg/L)	**GS-AP-MW-6D**	**48.1**	**n/a**	**9/5/2023**	**53.9**	**Yes**	**47**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.000831**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**GS-AP-MW-6S**	**48.1**	**n/a**	**9/5/2023**	**55.7**	**Yes**	**47**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.000831**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	GS-AP-MW-7	48.1	n/a	9/11/2023	11.2	No	47	n/a	n/a	0	n/a	n/a	0.000831	NP Inter (normality) 1 of 2
Calcium (mg/L)	**GS-AP-MW-9V**	**48.1**	**n/a**	**9/13/2023**	**56**	**Yes**	**47**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.000831**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	GS-AP-MW-12	4.38	n/a	9/13/2023	3.19	No	47	3.389	0.4653	0	None	No	0.0005374	Param Inter 1 of 2
Chloride (mg/L)	**GS-AP-MW-12V**	**4.38**	**n/a**	**9/13/2023**	**4.38**	**Yes**	**47**	**3.389**	**0.4653**	**0**	**None**	**No**	**0.0005374**	**Param Inter 1 of 2**
Chloride (mg/L)	**GS-AP-MW-15**	**4.38**	**n/a**	**9/11/2023**	**5.04**	**Yes**	**47**	**3.389**	**0.4653**	**0**	**None**	**No**	**0.0005374**	**Param Inter 1 of 2**
Chloride (mg/L)	**GS-AP-MW-15V**	**4.38**	**n/a**	**9/11/2023**	**83.9**	**Yes**	**47**	**3.389**	**0.4653**	**0**	**None**	**No**	**0.0005374**	**Param Inter 1 of 2**
Chloride (mg/L)	GS-AP-MW-16D	4.38	n/a	9/12/2023	4.14	No	47	3.389	0.4653	0	None	No	0.0005374	Param Inter 1 of 2
Chloride (mg/L)	**GS-AP-MW-17**	**4.38**	**n/a**	**9/11/2023**	**7.59**	**Yes**	**47**	**3.389**	**0.4653**	**0**	**None**	**No**	**0.0005374**	**Param Inter 1 of 2**
Chloride (mg/L)	**GS-AP-MW-19**	**4.38**	**n/a**	**9/19/2023**	**4.82**	**Yes**	**47**	**3.389**	**0.4653**	**0**	**None**	**No**	**0.0005374**	**Param Inter 1 of 2**
Chloride (mg/L)	**GS-AP-MW-2**	**4.38**	**n/a**	**9/18/2023**	**6.28**	**Yes**	**47**	**3.389**	**0.4653**	**0**	**None**	**No**	**0.0005374**	**Param Inter 1 of 2**
Chloride (mg/L)	**GS-AP-MW-21**	**4.38**	**n/a**	**9/5/2023**	**36.6**	**Yes**	**47**	**3.389**	**0.4653**	**0**	**None**	**No**	**0.0005374**	**Param Inter 1 of 2**
Chloride (mg/L)	**GS-AP-MW-21V**	**4.38**	**n/a**	**9/5/2023**	**380**	**Yes**	**47**	**3.389**	**0.4653**	**0**	**None**	**No**	**0.0005374**	**Param Inter 1 of 2**
Chloride (mg/L)	**GS-AP-MW-6D**	**4.38**	**n/a**	**9/5/2023**	**9.14**	**Yes**	**47**	**3.389**	**0.4653**	**0**	**None**	**No**	**0.0005374**	**Param Inter 1 of 2**
Chloride (mg/L)	**GS-AP-MW-6S**	**4.38**	**n/a**	**9/5/2023**	**19.2**	**Yes**	**47**	**3.389**	**0.4653**	**0**	**None**	**No**	**0.0005374**	**Param Inter 1 of 2**
Chloride (mg/L)	**GS-AP-MW-7**	**4.38**	**n/a**	**9/11/2023**	**8.17**	**Yes**	**47**	**3.389**	**0.4653**	**0**	**None**	**No**	**0.0005374**	**Param Inter 1 of 2**
Chloride (mg/L)	**GS-AP-MW-9V**	**4.38**	**n/a**	**9/13/2023**	**45.8**	**Yes**	**47**	**3.389**	**0.4653**	**0**	**None**	**No**	**0.0005374**	**Param Inter 1 of 2**
Fluoride (mg/L)	GS-AP-MW-12	0.3057	n/a	9/13/2023	0.0944J	No	49	0.3655	0.08825	0	None	sqrt(x)	0.0005374	Param Inter 1 of 2
Fluoride (mg/L)	GS-AP-MW-12V	0.3057	n/a	9/13/2023	0.129	No	49	0.3655	0.08825	0	None	sqrt(x)	0.0005374	Param Inter 1 of 2
Fluoride (mg/L)	**GS-AP-MW-15**	**0.3057**	**n/a**	**9/11/2023**	**0.425**	**Yes**	**49**	**0.3655**	**0.08825**	**0**	**None**	**sqrt(x)**	**0.0005374**	**Param Inter 1 of 2**
Fluoride (mg/L)	GS-AP-MW-15V	0.3057	n/a	9/11/2023	0.183	No	49	0.3655	0.08825	0	None	sqrt(x)	0.0005374	Param Inter 1 of 2
Fluoride (mg/L)	GS-AP-MW-16D	0.3057	n/a	9/12/2023	0.106J	No	49	0.3655	0.08825	0	None	sqrt(x)	0.0005374	Param Inter 1 of 2
Fluoride (mg/L)	GS-AP-MW-17	0.3057	n/a	9/11/2023	0.269	No	49	0.3655	0.08825	0	None	sqrt(x)	0.0005374	Param Inter 1 of 2
Fluoride (mg/L)	GS-AP-MW-19	0.3057	n/a	9/19/2023	0.211	No	49	0.3655	0.08825	0	None	sqrt(x)	0.0005374	Param Inter 1 of 2
Fluoride (mg/L)	**GS-AP-MW-2**	**0.3057**	**n/a**	**9/18/2023**	**0.822**	**Yes**	**49**	**0.3655**	**0.08825**	**0**	**None**	**sqrt(x)**	**0.0005374**	**Param Inter 1 of 2**
Fluoride (mg/L)	GS-AP-MW-21	0.3057	n/a	9/5/2023	0.188	No	49	0.3655	0.08825	0	None	sqrt(x)	0.0005374	Param Inter 1 of 2
Fluoride (mg/L)	**GS-AP-MW-21V**	**0.3057**	**n/a**	**9/5/2023**	**0.391**	**Yes**	**49**	**0.3655**	**0.08825**	**0**	**None**	**sqrt(x)**	**0.0005374**	**Param Inter 1 of 2**
Fluoride (mg/L)	GS-AP-MW-6D	0.3057	n/a	9/5/2023	0.107J	No	49	0.3655	0.08825	0	None	sqrt(x)	0.0005374	Param Inter 1 of 2
Fluoride (mg/L)	GS-AP-MW-6S	0.3057	n/a	9/5/2023	0.152	No	49	0.3655	0.08825	0	None	sqrt(x)	0.0005374	Param Inter 1 of 2
Fluoride (mg/L)	GS-AP-MW-7	0.3057	n/a	9/11/2023	0.0913J	No	49	0.3655	0.08825	0	None	sqrt(x)	0.0005374	Param Inter 1 of 2
Fluoride (mg/L)	GS-AP-MW-9V	0.3057	n/a	9/13/2023	0.145	No	49	0.3655	0.08825	0	None	sqrt(x)	0.0005374	Param Inter 1 of 2
pH (SU)	**GS-AP-MW-12**	**7.76**	**5.02**	**9/13/2023**	**8.96**	**Yes**	**49**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.001516**	**NP Inter (normality) 1 of 2**
pH (SU)	**GS-AP-MW-12V**	**7.76**	**5.02**	**9/13/2023**	**8.95**	**Yes**	**49**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.001516**	**NP Inter (normality) 1 of 2**
pH (SU)	**GS-AP-MW-15**	**7.76**	**5.02**	**9/11/2023**	**11.61**	**Yes**	**49**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.001516**	**NP Inter (normality) 1 of 2**
pH (SU)	GS-AP-MW-15V	7.76	5.02	9/11/2023	7.64	No	49	n/a	n/a	0	n/a	n/a	0.001516	NP Inter (normality) 1 of 2
pH (SU)	GS-AP-MW-16D	7.76	5.02	9/12/2023	7.22	No	49	n/a	n/a	0	n/a	n/a	0.001516	NP Inter (normality) 1 of 2
pH (SU)	**GS-AP-MW-17**	**7.76**	**5.02**	**9/11/2023**	**8.19**	**Yes**	**49**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.001516**	**NP Inter (normality) 1 of 2**
pH (SU)	GS-AP-MW-19	7.76	5.02	9/19/2023	7.3	No	49	n/a	n/a	0	n/a	n/a	0.001516	NP Inter (normality) 1 of 2
pH (SU)	**GS-AP-MW-2**	**7.76**	**5.02**	**9/18/2023**	**9**	**Yes**	**49**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.001516**	**NP Inter (normality) 1 of 2**
pH (SU)	**GS-AP-MW-21**	**7.76**	**5.02**	**9/5/2023**	**9.81**	**Yes**	**49**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.001516**	**NP Inter (normality) 1 of 2**
pH (SU)	GS-AP-MW-21V	7.76	5.02	9/5/2023	7.68	No	49	n/a	n/a	0	n/a	n/a	0.001516	NP Inter (normality) 1 of 2
pH (SU)	GS-AP-MW-6D	7.76	5.02	9/5/2023	7.23	No	49	n/a	n/a	0	n/a	n/a	0.001516	NP Inter (normality) 1 of 2
pH (SU)	GS-AP-MW-6S	7.76	5.02	9/5/2023	6.69	No	49	n/a	n/a	0	n/a	n/a	0.001516	NP Inter (normality) 1 of 2

Appendix III - Interwell Prediction Limits - All Results

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond   Printed 11/16/2023, 2:00 PM

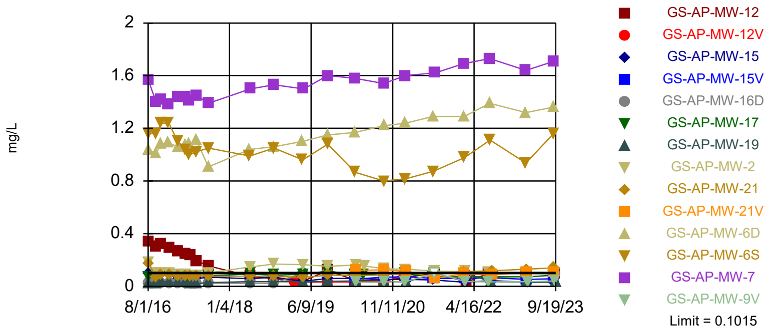
Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
pH (SU)	GS-AP-MW-7	7.76	5.02	9/11/2023	7.23	No	49	n/a	n/a	0	n/a	n/a	0.001516	NP Inter (normality) 1 of 2
pH (SU)	GS-AP-MW-9V	7.76	5.02	9/13/2023	6.97	No	49	n/a	n/a	0	n/a	n/a	0.001516	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GS-AP-MW-12	27	n/a	9/13/2023	18.9	No	47	n/a	n/a	0	n/a	n/a	0.000831	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GS-AP-MW-12V	27	n/a	9/13/2023	1.61J	No	47	n/a	n/a	0	n/a	n/a	0.000831	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GS-AP-MW-15	27	n/a	9/11/2023	8.43	No	47	n/a	n/a	0	n/a	n/a	0.000831	NP Inter (normality) 1 of 2
Sulfate (mg/L)	**GS-AP-MW-15V**	**27**	**n/a**	**9/11/2023**	**140**	**Yes**	**47**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.000831**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	GS-AP-MW-16D	27	n/a	9/12/2023	15.3	No	47	n/a	n/a	0	n/a	n/a	0.000831	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GS-AP-MW-17	27	n/a	9/11/2023	23.1	No	47	n/a	n/a	0	n/a	n/a	0.000831	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GS-AP-MW-19	27	n/a	9/19/2023	13.5	No	47	n/a	n/a	0	n/a	n/a	0.000831	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GS-AP-MW-2	27	n/a	9/18/2023	2.96	No	47	n/a	n/a	0	n/a	n/a	0.000831	NP Inter (normality) 1 of 2
Sulfate (mg/L)	**GS-AP-MW-21**	**27**	**n/a**	**9/5/2023**	**214**	**Yes**	**47**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.000831**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**GS-AP-MW-21V**	**27**	**n/a**	**9/5/2023**	**430**	**Yes**	**47**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.000831**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**GS-AP-MW-6D**	**27**	**n/a**	**9/5/2023**	**58.7**	**Yes**	**47**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.000831**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**GS-AP-MW-6S**	**27**	**n/a**	**9/5/2023**	**107**	**Yes**	**47**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.000831**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**GS-AP-MW-7**	**27**	**n/a**	**9/11/2023**	**124**	**Yes**	**47**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.000831**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**GS-AP-MW-9V**	**27**	**n/a**	**9/13/2023**	**85.2**	**Yes**	**47**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.000831**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	GS-AP-MW-12	368	n/a	9/13/2023	208	No	47	n/a	n/a	0	n/a	n/a	0.000831	NP Inter (normality) 1 of 2
TDS (mg/L)	GS-AP-MW-12V	368	n/a	9/13/2023	180	No	47	n/a	n/a	0	n/a	n/a	0.000831	NP Inter (normality) 1 of 2
TDS (mg/L)	**GS-AP-MW-15**	**368**	**n/a**	**9/11/2023**	**565**	**Yes**	**47**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.000831**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	**GS-AP-MW-15V**	**368**	**n/a**	**9/11/2023**	**615**	**Yes**	**47**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.000831**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	GS-AP-MW-16D	368	n/a	9/12/2023	219	No	47	n/a	n/a	0	n/a	n/a	0.000831	NP Inter (normality) 1 of 2
TDS (mg/L)	**GS-AP-MW-17**	**368**	**n/a**	**9/11/2023**	**480**	**Yes**	**47**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.000831**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	GS-AP-MW-19	368	n/a	9/19/2023	335	No	47	n/a	n/a	0	n/a	n/a	0.000831	NP Inter (normality) 1 of 2
TDS (mg/L)	**GS-AP-MW-2**	**368**	**n/a**	**9/18/2023**	**405**	**Yes**	**47**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.000831**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	**GS-AP-MW-21**	**368**	**n/a**	**9/5/2023**	**572**	**Yes**	**47**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.000831**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	**GS-AP-MW-21V**	**368**	**n/a**	**9/5/2023**	**1550**	**Yes**	**47**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.000831**	**NP Inter (normality) 1 of 2**
TDS (mg/L)	GS-AP-MW-6D	368	n/a	9/5/2023	294	No	47	n/a	n/a	0	n/a	n/a	0.000831	NP Inter (normality) 1 of 2
TDS (mg/L)	GS-AP-MW-6S	368	n/a	9/5/2023	307	No	47	n/a	n/a	0	n/a	n/a	0.000831	NP Inter (normality) 1 of 2
TDS (mg/L)	GS-AP-MW-7	368	n/a	9/11/2023	327	No	47	n/a	n/a	0	n/a	n/a	0.000831	NP Inter (normality) 1 of 2
TDS (mg/L)	**GS-AP-MW-9V**	**368**	**n/a**	**9/13/2023**	**395**	**Yes**	**47**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.000831**	**NP Inter (normality) 1 of 2**

Sanitas™ v.10.0.13 . UG
Hollow symbols indicate censored values.

Exceeds Limit: GS-AP-MW-21, GS-AP-MW-21V, GS-AP-MW-6D, GS-AP-MW-6S, GS-AP-MW-7

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 47 background values. 76.6% NDs. Annual per-constituent alpha = 0.02301. Individual comparison alpha = 0.000831 (1 of 2). Comparing 14 points to limit.

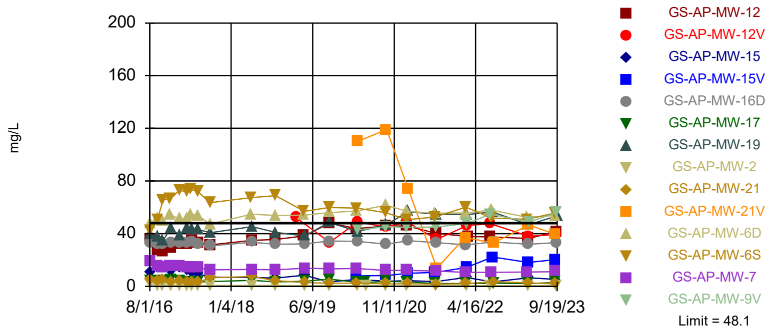
Constituent: Boron Analysis Run 11/16/2023 2:00 PM View: Appendix III
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG

Exceeds Limit: GS-AP-MW-19, GS-AP-MW-6D, GS-AP-MW-6S, GS-AP-MW-9V

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 47 background values. Annual per-constituent alpha = 0.02301. Individual comparison alpha = 0.000831 (1 of 2). Comparing 14 points to limit.

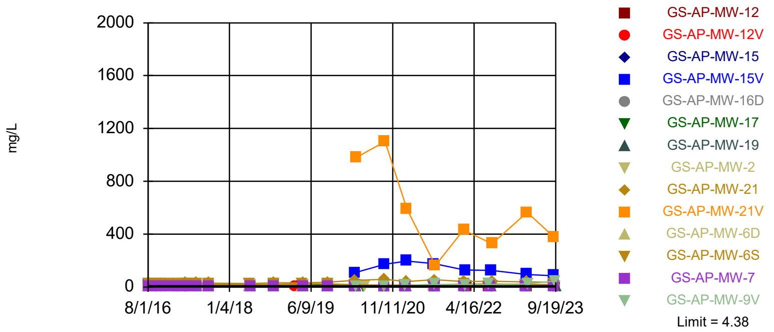
Constituent: Calcium Analysis Run 11/16/2023 2:00 PM View: Appendix III
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG

Exceeds Limit: GS-AP-MW-12V, GS-AP-MW-15, GS-AP-MW-15V, GS-AP-MW-17, GS-AP-MW-19, GS-AP-MW-2, GS-AP-MW-21...

Prediction Limit

Interwell Parametric



Background Data Summary: Mean=3.389, Std. Dev.=0.4653, n=47. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9512, critical = 0.928. Kappa = 2.13 (c=7, w=14, 1 of 2, event alpha = 0.05132). Report alpha = 0.007498. Individual comparison alpha = 0.0005374. Comparing 14 points to limit.

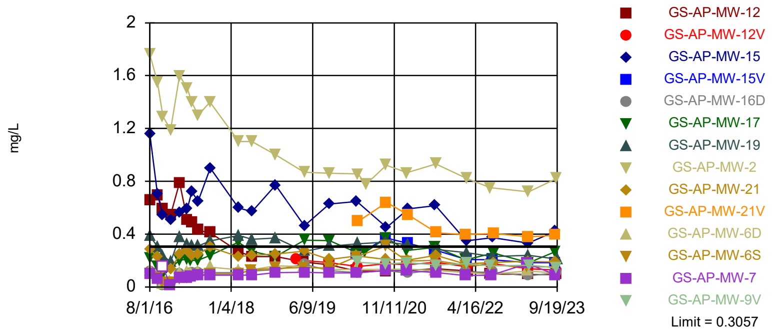
Constituent: Chloride Analysis Run 11/16/2023 2:00 PM View: Appendix III
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG
Hollow symbols indicate censored values.

Exceeds Limit: GS-AP-MW-15, GS-AP-MW-2, GS-AP-MW-21V

Prediction Limit

Interwell Parametric



Background Data Summary (based on square root transformation): Mean=0.3655, Std. Dev.=0.08825, n=49. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9596, critical = 0.929. Kappa = 2.123 (c=7, w=14, 1 of 2, event alpha = 0.05132). Report alpha = 0.007498. Individual comparison alpha = 0.0005374. Comparing 14 points to limit.

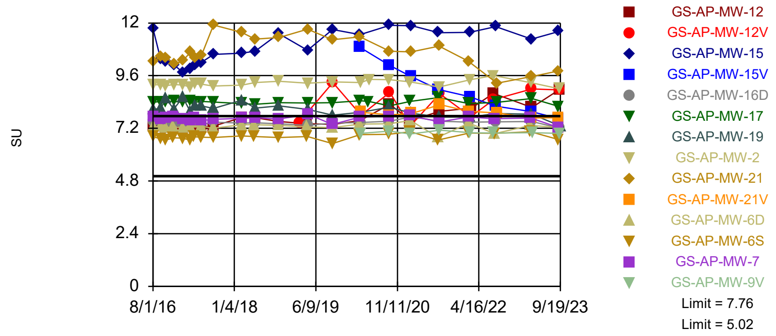
Constituent: Fluoride Analysis Run 11/16/2023 2:00 PM View: Appendix III
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG

Exceeds Limits: GS-AP-MW-12, GS-AP-MW-12V, GS-AP-MW-15, GS-AP-MW-17, GS-AP-MW-2, GS-AP-MW-21

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limits are highest and lowest of 49 background values. Annual per-constituent alpha = 0.04201. Individual comparison alpha = 0.001516 (1 of 2). Comparing 14 points to limit.

Constituent: pH Analysis Run 11/16/2023 2:00 PM View: Appendix III

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

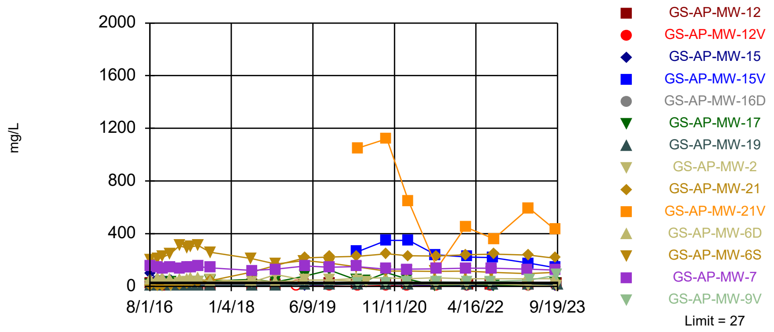
Sanitas™ v.10.0.13 . UG

Hollow symbols indicate censored values.

Exceeds Limit: GS-AP-MW-15V, GS-AP-MW-21, GS-AP-MW-21V, GS-AP-MW-6D, GS-AP-MW-6S, GS-AP-MW-7, GS-AP-MW-9V

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 47 background values. Annual per-constituent alpha = 0.02301. Individual comparison alpha = 0.000831 (1 of 2). Comparing 14 points to limit.

Constituent: Sulfate Analysis Run 11/16/2023 2:00 PM View: Appendix III

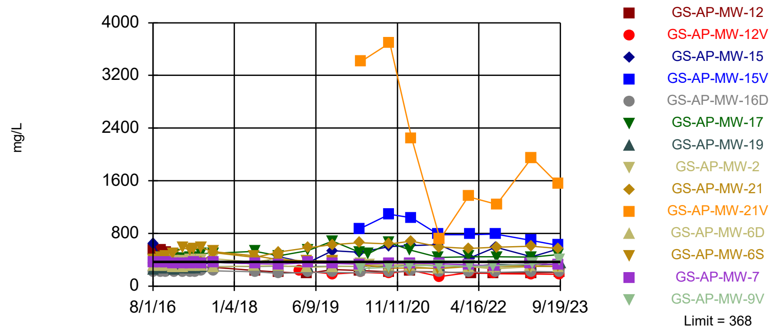
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG

Exceeds Limit: GS-AP-MW-15, GS-AP-MW-15V, GS-AP-MW-17, GS-AP-MW-2, GS-AP-MW-21, GS-AP-MW-21V, GS-AP-MW-9V

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 47 background values. Annual per-constituent alpha = 0.02301. Individual comparison alpha = 0.000831 (1 of 2). Comparing 14 points to limit.

Constituent: TDS Analysis Run 11/16/2023 2:00 PM View: Appendix III

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 11/16/2023 2:00 PM View: Appendix III

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-19	GS-AP-MW-17	GS-AP-MW-16D	GS-AP-MW-15	GS-AP-MW-2	GS-AP-MW-7	GS-AP-MW-21	GS-AP-MW-13 (bg)	GS-AP-MW-8 (bg)
8/1/2016	0.0279 (J)	0.0712 (J)	0.0266 (J)	0.0955 (J)					
8/2/2016					0.178	1.57	0.176	<0.1015	
8/3/2016									0.0239 (J)
9/19/2016		0.0716 (J)	0.0262 (J)		0.0937 (J)				
9/20/2016				0.0706 (J)				<0.1015	
9/21/2016	0.0235 (J)					1.4	0.0723 (J)		<0.1015
10/24/2016	0.0444 (J)	0.0858 (J)			0.0986 (J)	1.42			
10/25/2016			0.0273 (J)	0.0849 (J)			0.0867 (J)	<0.1015	<0.1015
10/26/2016									
12/12/2016						1.38			
12/13/2016	0.0285 (J)	0.0875 (J)	0.0258 (J)		0.0965 (J)			<0.1015	<0.1015
12/14/2016				0.0914 (J)			0.092 (J)		
2/6/2017		0.0729 (J)				1.44			<0.1015
2/7/2017	0.03 (J)								
2/8/2017			0.0249 (J)	0.0524 (J)	0.0896 (J)		0.0803 (J)	<0.1015	
3/27/2017		0.0706 (J)							
3/28/2017	0.0309 (J)			0.0532 (J)		1.44	0.0804 (J)		<0.1015
3/29/2017			0.0247 (J)					<0.1015	
3/30/2017					0.0871 (J)				
4/24/2017		0.0737 (J)				1.41			<0.1015
4/26/2017	0.0273 (J)		0.0264 (J)	0.0598 (J)	0.0818 (J)		0.0801 (J)	<0.1015	
6/5/2017		0.0767 (J)							
6/6/2017	0.0212 (J)		0.0247 (J)	0.0576 (J)	0.0805 (J)		0.0795 (J)		
6/7/2017						1.45		<0.1015	<0.1015
8/21/2017					0.102	1.39			<0.1015
8/22/2017	0.0294 (J)	0.0786 (J)	0.0246 (J)	0.0702 (J)				<0.1015	
8/23/2017							0.0764 (J)		
5/14/2018									
5/15/2018		0.0953 (J)		0.0567 (J)		1.5	0.0769 (J)	<0.1015	<0.1015
5/16/2018	0.0356 (J)		0.0247 (J)		0.147				
10/15/2018		0.0842 (J)		0.07 (J)		1.53			
10/16/2018	0.0363 (J)				0.169		0.0764 (J)		<0.1015
10/17/2018			0.0251 (J)					<0.1015	
2/20/2019									
2/21/2019									
4/16/2019								<0.1015	<0.1015
4/17/2019	0.0336 (J)	0.0916 (J)	<0.1015	0.0388 (J)	0.165		0.0675 (J)		
4/23/2019						1.5			
9/23/2019		0.116							
9/24/2019	0.0375 (J)		<0.1015	0.0607 (J)		1.6	0.0843 (J)		<0.1015
9/25/2019					0.153				
3/16/2020		0.0894 (J)							
3/17/2020						1.58			
3/18/2020				0.0596 (J)			0.0824 (J)		<0.1015
3/23/2020									
3/24/2020	0.0398 (J)		<0.1015						
3/25/2020					0.163				
5/12/2020		0.0862 (J)							
5/13/2020					0.154				
9/16/2020						1.54			
9/17/2020									
9/21/2020		0.102							<0.1015

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 11/16/2023 2:00 PM View: Appendix III

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-19	GS-AP-MW-17	GS-AP-MW-16D	GS-AP-MW-15	GS-AP-MW-2	GS-AP-MW-7	GS-AP-MW-21	GS-AP-MW-13 (bg)	GS-AP-MW-8 (bg)
9/22/2020	0.037 (J)		<0.1015		0.133				
9/23/2020				0.0537 (J)			0.0871 (J)		
2/1/2021					0.13				
2/2/2021		0.0946 (J)				1.6			<0.1015
2/3/2021									
2/8/2021	0.0336 (J)						0.0991 (J)		
2/9/2021				0.0521 (J)					
2/10/2021			<0.1015						
7/27/2021									
8/2/2021									
8/3/2021		0.0729 (J)		0.0491 (J)					
8/4/2021					0.117		0.0993 (J)		
8/9/2021			<0.1015			1.62			
8/10/2021	<0.1015								<0.1015
8/11/2021									
2/8/2022						1.69	0.111		
2/14/2022		0.073 (J)							
2/15/2022			<0.1015						
2/16/2022				0.0323 (J)					<0.1015
2/21/2022									
2/22/2022	<0.1015				0.112				
2/23/2022									
2/28/2022									
7/19/2022					0.106				
7/20/2022									
7/25/2022						1.73			
7/26/2022									
8/2/2022			<0.1015	0.0426 (J)					<0.1015
8/3/2022	0.0329 (J)								
8/8/2022		0.0717 (J)							
8/9/2022									
8/10/2022							0.119		
3/14/2023						1.64			
3/20/2023				0.0308 (J)					
3/21/2023	0.0334 (J)		<0.1015				0.13		
3/22/2023		0.0727 (J)			0.0989 (J)				
3/27/2023									<0.1015
3/28/2023									
9/5/2023							0.14		
9/11/2023		0.0835 (J)		0.0337 (J)		1.71			
9/12/2023			<0.1015						
9/13/2023									
9/18/2023					0.0952 (J)				<0.1015
9/19/2023	0.0314 (J)								

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 11/16/2023 2:00 PM View: Appendix III

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-6S	GS-AP-MW-6D	GS-AP-MW-12	GS-AP-MW-17V ...	GS-AP-MW-12V	GS-AP-MW-15V	GS-AP-MW-21V	GS-AP-MW-9V	GS-AP-MW-18R ...
8/1/2016									
8/2/2016									
8/3/2016	1.16	1.04	0.34						
9/19/2016									
9/20/2016	1.16	1.01	0.299						
9/21/2016									
10/24/2016		1.08							
10/25/2016			0.323						
10/26/2016	1.24								
12/12/2016	1.24	1.09							
12/13/2016			0.294						
12/14/2016									
2/6/2017	1.1	1.06							
2/7/2017									
2/8/2017			0.264						
3/27/2017	1.04	1.07							
3/28/2017									
3/29/2017			0.246						
3/30/2017									
4/24/2017	1	1.08							
4/26/2017			0.234						
6/5/2017									
6/6/2017	1.02	1.11							
6/7/2017			0.194						
8/21/2017	1.05	0.906							
8/22/2017			0.156						
8/23/2017									
5/14/2018	0.99	1.04							
5/15/2018			0.0781 (J)						
5/16/2018									
10/15/2018	1.05	1.06							
10/16/2018			0.057 (J)						
10/17/2018									
2/20/2019				0.0337 (J)					
2/21/2019					0.0303 (J)				
4/16/2019	0.961	1.1	0.0385 (J)						
4/17/2019									
4/23/2019									
9/23/2019	1.08	1.15							
9/24/2019				0.0532 (J)					
9/25/2019			0.122		0.0347 (J)				
3/16/2020									
3/17/2020	0.867	1.17							
3/18/2020			0.0449 (J)			0.0565 (J)			
3/23/2020							0.122	0.0316 (J)	
3/24/2020					0.0343 (J)				
3/25/2020				0.0482 (J)					
5/12/2020									
5/13/2020									
9/16/2020	0.8								
9/17/2020		1.22							
9/21/2020						0.0712 (J)			

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 11/16/2023 2:00 PM View: Appendix III

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-6S	GS-AP-MW-6D	GS-AP-MW-12	GS-AP-MW-17V ...	GS-AP-MW-12V	GS-AP-MW-15V	GS-AP-MW-21V	GS-AP-MW-9V	GS-AP-MW-18R ...
9/22/2020								0.0348 (J)	
9/23/2020			0.0446 (J)	0.0478 (J)	0.0322 (J)		0.126		
2/1/2021			0.0672 (J)		<0.1015				
2/2/2021				0.0396 (J)				0.0358 (J)	
2/3/2021	0.817	1.24							
2/8/2021									
2/9/2021						0.0722 (J)	0.114		
2/10/2021									
7/27/2021	0.873	1.29							
8/2/2021				0.0368 (J)					
8/3/2021						0.0601 (J)			
8/4/2021									
8/9/2021			<0.1015		<0.1015				
8/10/2021								<0.1015	
8/11/2021							0.0631 (J)		
2/8/2022							0.0938 (J)		
2/14/2022	0.978	1.29		0.0386 (J)					
2/15/2022									
2/16/2022						0.0594 (J)			
2/21/2022								0.0349 (J)	
2/22/2022									<0.1015
2/23/2022					<0.1015				
2/28/2022			0.0305 (J)						
7/19/2022			<0.1015					0.0327 (J)	
7/20/2022					<0.1015				
7/25/2022		1.39							
7/26/2022	1.11								
8/2/2022						0.0649 (J)			
8/3/2022									<0.1015
8/8/2022									
8/9/2022				0.0418 (J)			0.0869 (J)		
8/10/2022									
3/14/2023	0.935	1.32							
3/20/2023						0.0536 (J)			
3/21/2023							0.106		
3/22/2023			<0.1015	0.0379 (J)	<0.1015				
3/27/2023								0.0359 (J)	
3/28/2023									<0.1015
9/5/2023	1.16	1.36					0.103		
9/11/2023				0.0388 (J)		0.0573 (J)			
9/12/2023									
9/13/2023			<0.1015		<0.1015			0.0414 (J)	
9/18/2023									
9/19/2023									<0.1015

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 11/16/2023 2:00 PM View: Appendix III

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-19	GS-AP-MW-17	GS-AP-MW-16D	GS-AP-MW-15	GS-AP-MW-2	GS-AP-MW-7	GS-AP-MW-21	GS-AP-MW-13 (bg)	GS-AP-MW-8 (bg)
8/1/2016	39.6	4.52	33	10.5					
8/2/2016					2.25	19.4	5.29	47.2	
8/3/2016									6.85
9/19/2016		4.3	31.7		0.724				
9/20/2016				14.7				46.3	
9/21/2016	38.1					15.4	4.51		11.7
10/24/2016	34.7	4.02			0.635	14.8			
10/25/2016			32.2	14.7			4.92	46.6	10.8
10/26/2016									
12/12/2016						15			
12/13/2016	44	5.5	33.1		0.714			43.1	5.86
12/14/2016				11.9			3.5		
2/6/2017		3.79				14.9			9.76
2/7/2017	39								
2/8/2017			32.7	14.4	0.722		3.75	47.5	
3/27/2017		3.13							
3/28/2017	43.9			12.9		14.3	3.63		5.28
3/29/2017			32.7					46.8	
3/30/2017					0.686				
4/24/2017		3.41				14.5			6.89
4/26/2017	42.8		33.8	10.4	0.646		3.3	48.1	
6/5/2017		3.32							
6/6/2017	43.1		32.2	9.41	0.569		3.24		
6/7/2017						14.1		44.4	3.58
8/21/2017					0.634	12.6			3.38
8/22/2017	40.7	3.52	30.9	6.89				42.9	
8/23/2017							6.6		
5/14/2018									
5/15/2018		4.53		6.86		12.9	7.57	44.3	4.25
5/16/2018	45.3		33.5		0.588				
10/15/2018		3.38		6.28		12.5			
10/16/2018	40.9				0.714		4.4		3.21
10/17/2018			32					41.8	
2/20/2019									
2/21/2019									
4/16/2019								38.6	4.43
4/17/2019	38.4	3.86	32.3	8.53	0.511		2.88		
4/23/2019						13.8			
9/23/2019		5.43							
9/24/2019	48.4		34.3	3.26		13.4	2.47		7.24
9/25/2019					0.581				
3/16/2020		3							
3/17/2020						13.5			
3/18/2020				5.25			2.35		4.51
3/23/2020									
3/24/2020	41.7		34.1						
3/25/2020					0.518				
5/12/2020		2.95							
5/13/2020					0.493 (J)				
9/16/2020						12.2			
9/17/2020									
9/21/2020		3.73							5.19

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 11/16/2023 2:00 PM View: Appendix III
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-19	GS-AP-MW-17	GS-AP-MW-16D	GS-AP-MW-15	GS-AP-MW-2	GS-AP-MW-7	GS-AP-MW-21	GS-AP-MW-13 (bg)	GS-AP-MW-8 (bg)
9/22/2020	46.9		32		0.503				
9/23/2020				3.83			1.96		
2/1/2021					0.517				
2/2/2021		3.3				12.2			4.35
2/3/2021									
2/8/2021	56.8						1.95		
2/9/2021				4.38					
2/10/2021			34.6						
7/27/2021									
8/2/2021									
8/3/2021		2.17		3.55					
8/4/2021					0.564		1.76		
8/9/2021			33.2			11.6			
8/10/2021	54.8								4.47
8/11/2021									
2/8/2022						10.7	1.98		
2/14/2022		2.17							
2/15/2022			31.5						
2/16/2022				6.76					4.42
2/21/2022									
2/22/2022	54.6				0.413				
2/23/2022									
2/28/2022									
7/19/2022					0.359 (J)				
7/20/2022									
7/25/2022						10.6			
7/26/2022									
8/2/2022			33.799999	3.31					5.28
8/3/2022	56.400002								
8/8/2022		2.44							
8/9/2022									
8/10/2022							3.49		
3/14/2023						11			
3/20/2023				6.6					
3/21/2023	46.9		32				2.74		
3/22/2023		2.07			0.4 (J)				
3/27/2023									4.77
3/28/2023									
9/5/2023							2		
9/11/2023		2.93		5.21		11.2			
9/12/2023			33.099998						
9/13/2023									
9/18/2023					0.668				6.08
9/19/2023	53.5								

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 11/16/2023 2:00 PM View: Appendix III

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-6S	GS-AP-MW-6D	GS-AP-MW-12	GS-AP-MW-17V ...	GS-AP-MW-12V	GS-AP-MW-15V	GS-AP-MW-21V	GS-AP-MW-9V	GS-AP-MW-18R ...
8/1/2016									
8/2/2016									
8/3/2016	42.5	48.1	36.1						
9/19/2016									
9/20/2016	51.1	51.2	27						
9/21/2016									
10/24/2016		49.5							
10/25/2016			26.1						
10/26/2016	65.6								
12/12/2016	66.5	54.3							
12/13/2016			29.4						
12/14/2016									
2/6/2017	73.1	51.2							
2/7/2017									
2/8/2017			31.9						
3/27/2017	71.9	51.4							
3/28/2017									
3/29/2017			31.8						
3/30/2017									
4/24/2017	73.5	54.7							
4/26/2017			34.6						
6/5/2017									
6/6/2017	71.8	53.9							
6/7/2017			33.4						
8/21/2017	63.5	47.3							
8/22/2017			31.5						
8/23/2017									
5/14/2018	67.5	54.8							
5/15/2018			34.8						
5/16/2018									
10/15/2018	68.9	53.9							
10/16/2018			35.6						
10/17/2018									
2/20/2019				30.6					
2/21/2019					52.3				
4/16/2019	57.1	54	38.3						
4/17/2019									
4/23/2019									
9/23/2019	60	56.1							
9/24/2019				29.7					
9/25/2019			48.1		33.4				
3/16/2020									
3/17/2020	59.3	57.2							
3/18/2020			44			8.01			
3/23/2020							110	42.9	
3/24/2020					48.9				
3/25/2020				31.1					
5/12/2020									
5/13/2020									
9/16/2020	55.9								
9/17/2020		61.5							
9/21/2020						8.2			

Prediction Limit

Constituent: Calcium (mg/L)   Analysis Run 11/16/2023 2:00 PM   View: Appendix III

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

	GS-AP-MW-6S	GS-AP-MW-6D	GS-AP-MW-12	GS-AP-MW-17V ...	GS-AP-MW-12V	GS-AP-MW-15V	GS-AP-MW-21V	GS-AP-MW-9V	GS-AP-MW-18R ...
9/22/2020								45.3	
9/23/2020			45.9	29.3	44.8		119		
2/1/2021			45.8		48.9				
2/2/2021				31.8				44.8	
2/3/2021	50.7	56.9							
2/8/2021									
2/9/2021						10	73.8		
2/10/2021									
7/27/2021	52.6	55.5							
8/2/2021				33					
8/3/2021						10.6			
8/4/2021									
8/9/2021			40.2		35.7				
8/10/2021								45.1	
8/11/2021							13.8		
2/8/2022							37.2		
2/14/2022	60.1	55.7		30.1					
2/15/2022									
2/16/2022						14.3			
2/21/2022								47.7	
2/22/2022									20.3
2/23/2022					46.3				
2/28/2022			37.9						
7/19/2022			37.599998					54.700001	
7/20/2022					47.5				
7/25/2022		57.900002							
7/26/2022	51.799999								
8/2/2022						22.200001			
8/3/2022									30.799999
8/8/2022									
8/9/2022				31.4			33		
8/10/2022									
3/14/2023	50.900002	52.4							
3/20/2023						18.2			
3/21/2023							46.6		
3/22/2023			36.4	29.6	38				
3/27/2023								49	
3/28/2023									25.799999
9/5/2023	55.700001	53.900002					39.799999		
9/11/2023				31.1		20.299999			
9/12/2023									
9/13/2023			41.799999		39.200001			56	
9/18/2023									
9/19/2023									33.099998

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 11/16/2023 2:00 PM View: Appendix III

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-19	GS-AP-MW-17	GS-AP-MW-16D	GS-AP-MW-15	GS-AP-MW-2	GS-AP-MW-7	GS-AP-MW-21	GS-AP-MW-13 (bg)	GS-AP-MW-8 (bg)
8/1/2016	6.67	6.47	2.6	15.6					
8/2/2016					6.15	3.7	28.1	2.91	
8/3/2016									3.21
9/19/2016		7.78	2.51		5.98				
9/20/2016				8.6				2.94	
9/21/2016	6.54					3.74	26.8		2.95
10/24/2016	8.77	7.29			5.93	3.75			
10/25/2016			2.53	7.96			26	2.94	3.03
10/26/2016									
12/12/2016						4.06			
12/13/2016	6.16	12.2	2.53		5.7			2.93	3.21
12/14/2016				6.94			25.3		
2/6/2017		7.68				3.92			3
2/7/2017	7.57								
2/8/2017			2.5	4.96	8.44		23.8	2.85	
3/27/2017		9							
3/28/2017	5.9			5.2		4.3	28		3.3
3/29/2017			2.9					3.4	
3/30/2017					11				
4/24/2017		10				4.6			3.8
4/26/2017	6.5		3.2	6	10		27	3.7	
6/5/2017		10							
6/6/2017	5.5		2.6	4.9	9.6		28		
6/7/2017						4.3		3.3	3.5
8/21/2017					12	4.7			3.6
8/22/2017	6.5	12	2.9	5.3				3.4	
8/23/2017							29		
5/14/2018									
5/15/2018		13		3.8		4.3	27	3.2	3.3
5/16/2018	6.6		3		12				
10/15/2018		10		6.6		5.1			
10/16/2018	6.2				20		31		3.3
10/17/2018			2.2					2.3	
2/20/2019									
2/21/2019									
4/16/2019								3.23	3.69
4/17/2019	7.27	12.7	2.82	5.2	9.5		32.3		
4/23/2019						5.16			
9/23/2019		16.2							
9/24/2019	5.83		2.9	5.96		5.76	36		3.21
9/25/2019					12				
3/16/2020		9.95							
3/17/2020						6.65			
3/18/2020				8			49.5		4.35
3/23/2020									
3/24/2020	6.29		2.88						
3/25/2020					9.7				
5/12/2020		9.16							
5/13/2020					8.25				
9/16/2020						6.17			
9/17/2020									
9/21/2020		13.8							3.22

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 11/16/2023 2:00 PM View: Appendix III

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-19	GS-AP-MW-17	GS-AP-MW-16D	GS-AP-MW-15	GS-AP-MW-2	GS-AP-MW-7	GS-AP-MW-21	GS-AP-MW-13 (bg)	GS-AP-MW-8 (bg)
9/22/2020	6.6		2.94		6.33				
9/23/2020				6			56.9		
2/1/2021					8.42				
2/2/2021		10.2				6.76			3.85
2/3/2021									
2/8/2021	6						39.8		
2/9/2021				6.12					
2/10/2021			3.19						
7/27/2021									
8/2/2021									
8/3/2021		5.88		6.22					
8/4/2021					7.25		54.8		
8/9/2021			3.08			7.03			
8/10/2021	4.83								4.04
8/11/2021									
2/8/2022						7.475 (D)	41.4		
2/14/2022		7.15							
2/15/2022			3.58						
2/16/2022				5.86					4.42
2/21/2022									
2/22/2022	4.59				6.05				
2/23/2022									
2/28/2022									
7/19/2022					4.42				
7/20/2022									
7/25/2022						7.9725 (D)			
7/26/2022									
8/2/2022			3.65	4.36					4.35
8/3/2022	5.35								
8/8/2022		6.21							
8/9/2022									
8/10/2022							44		
3/14/2023						7.98			
3/20/2023				5.41					
3/21/2023	5.22		3.72				38.5		
3/22/2023		5.96			4.23				
3/27/2023									4.17
3/28/2023									
9/5/2023							36.599998		
9/11/2023		7.59		5.04		8.17			
9/12/2023			4.14						
9/13/2023									
9/18/2023					6.28				3.07
9/19/2023	4.82								

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 11/16/2023 2:00 PM View: Appendix III
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-6S	GS-AP-MW-6D	GS-AP-MW-12	GS-AP-MW-17V ...	GS-AP-MW-12V	GS-AP-MW-15V	GS-AP-MW-21V	GS-AP-MW-9V	GS-AP-MW-18R ...
8/1/2016									
8/2/2016									
8/3/2016	21.9	5.2	14.5						
9/19/2016									
9/20/2016	20.9	5.31	12.9						
9/21/2016									
10/24/2016		5.4							
10/25/2016			12.2						
10/26/2016	20.7								
12/12/2016	21.1	5.46							
12/13/2016			10.4						
12/14/2016									
2/6/2017	23.3	5.28							
2/7/2017									
2/8/2017			8.77						
3/27/2017	25	6.4							
3/28/2017									
3/29/2017			10						
3/30/2017									
4/24/2017	24	6.5							
4/26/2017			9.8						
6/5/2017									
6/6/2017	22	4.7							
6/7/2017			8						
8/21/2017	21	6.1							
8/22/2017			6.5						
8/23/2017									
5/14/2018	20	6							
5/15/2018			4.4						
5/16/2018									
10/15/2018	20	7							
10/16/2018			3.1						
10/17/2018									
2/20/2019				3.56					
2/21/2019					3.77				
4/16/2019	23.1	8.36	3.22						
4/17/2019									
4/23/2019									
9/23/2019	23.4	8.72							
9/24/2019				3.69					
9/25/2019			6.68		3.84				
3/16/2020									
3/17/2020	17.4	10.1							
3/18/2020			4.22			108			
3/23/2020							981	5.13	
3/24/2020					4.46				
3/25/2020				3.72					
5/12/2020									
5/13/2020									
9/16/2020	14.6								
9/17/2020		10.5							
9/21/2020						171			

Prediction Limit

Constituent: Chloride (mg/L)   Analysis Run 11/16/2023 2:00 PM   View: Appendix III

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

	GS-AP-MW-6S	GS-AP-MW-6D	GS-AP-MW-12	GS-AP-MW-17V ...	GS-AP-MW-12V	GS-AP-MW-15V	GS-AP-MW-21V	GS-AP-MW-9V	GS-AP-MW-18R ...
9/22/2020								7.57	
9/23/2020			3.15	3.74	4.63		1100		
2/1/2021			3.32		3.86				
2/2/2021				3.49				10.8	
2/3/2021	14.9	12.2							
2/8/2021									
2/9/2021						197	592		
2/10/2021									
7/27/2021	17	11.1							
8/2/2021				3.12					
8/3/2021						176			
8/4/2021									
8/9/2021			2.75		4.44				
8/10/2021								18.8	
8/11/2021							162		
2/8/2022							432		
2/14/2022	20.6	11.7		3.26					
2/15/2022									
2/16/2022						129			
2/21/2022								18.4	
2/22/2022									3.52
2/23/2022					3.83				
2/28/2022			3.34						
7/19/2022			2.99					18.799999	
7/20/2022					3.85				
7/25/2022		9.533 (D)							
7/26/2022	22.9								
8/2/2022						126			
8/3/2022									4.34
8/8/2022									
8/9/2022				3.09			327		
8/10/2022									
3/14/2023	18.5	9.66							
3/20/2023						93.5			
3/21/2023							564		
3/22/2023			2.73	2.8	3.77				
3/27/2023								23.2	
3/28/2023									3
9/5/2023	19.200001	9.14					380		
9/11/2023				2.83		83.900002			
9/12/2023									
9/13/2023			3.19		4.38			45.799999	
9/18/2023									
9/19/2023									3.44

Prediction Limit

Constituent: Fluoride (mg/L)   Analysis Run 11/16/2023 2:00 PM   View: Appendix III

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

	GS-AP-MW-19	GS-AP-MW-17	GS-AP-MW-16D	GS-AP-MW-15	GS-AP-MW-2	GS-AP-MW-7	GS-AP-MW-21	GS-AP-MW-13 (bg)	GS-AP-MW-8 (bg)
8/1/2016	0.385	0.214 (J)	0.117 (J)	1.16					
8/2/2016					1.76	0.098 (J)	0.282 (J)	0.161 (J)	
8/3/2016									0.125 (J)
9/19/2016		0.151 (J)	0.078 (J)		1.55				
9/20/2016				0.7				0.122 (J)	
9/21/2016	0.303					0.061 (J)	0.231 (J)		0.098 (J)
10/24/2016	0.24 (J)	0.086 (J)			1.29	<0.3			
10/25/2016			0.018 (J)	0.544			0.137 (J)	0.058 (J)	0.025 (J)
10/26/2016									
12/12/2016						0.01 (J)			
12/13/2016	0.188 (J)	0.14 (J)	0.035 (J)		1.19			0.072 (J)	0.045 (J)
12/14/2016				0.51			0.131 (J)		
2/6/2017		0.2				0.07 (J)			0.1
2/7/2017	0.38								
2/8/2017			0.1	0.56	1.6		0.25	0.16	
3/27/2017		0.21							
3/28/2017	0.32			0.59		0.07 (J)	0.27		0.08 (J)
3/29/2017			0.08 (J)					0.14	
3/30/2017					1.5				
4/24/2017		0.2				0.08 (J)			0.09 (J)
4/26/2017	0.31		0.11	0.72	1.4		0.24	0.16	
6/5/2017		0.2							
6/6/2017	0.31		0.11	0.65	1.3		0.25		
6/7/2017						0.09 (J)		0.15	0.08 (J)
8/21/2017					1.4	0.09 (J)			0.08 (J)
8/22/2017	0.35	0.24	0.11	0.9				0.18	
8/23/2017							0.3		
2/19/2018		0.34				0.09 (J)			0.08 (J)
2/20/2018				0.6			0.23	0.17	
2/21/2018	0.39		0.11		1.1				
5/14/2018									
5/15/2018		0.27		0.57		0.09 (J)	0.24	0.17	0.1
5/16/2018	0.36		0.12		1.1				
10/15/2018		0.23		0.77		0.11			
10/16/2018	0.37				1		0.25		0.09 (J)
10/17/2018			0.13					0.19	
2/20/2019									
2/21/2019									
4/16/2019								0.197	0.143
4/17/2019	0.27	0.354	0.171	0.463	0.868		0.272		
4/23/2019						0.111			
9/23/2019		0.351							
9/24/2019	0.307		0.124	0.628		0.106	0.209		0.128
9/25/2019					0.86				
3/16/2020		0.261							
3/17/2020						0.107			
3/18/2020				0.647			0.234		0.108
3/23/2020									
3/24/2020	0.327		0.109						
3/25/2020					0.855				
5/12/2020		0.263							
5/13/2020					0.777				

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 11/16/2023 2:00 PM View: Appendix III
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-19	GS-AP-MW-17	GS-AP-MW-16D	GS-AP-MW-15	GS-AP-MW-2	GS-AP-MW-7	GS-AP-MW-21	GS-AP-MW-13 (bg)	GS-AP-MW-8 (bg)
9/16/2020						0.126			
9/17/2020									
9/21/2020		0.371							0.125
9/22/2020	0.339		0.123		0.921				
9/23/2020				0.452			0.208		
2/1/2021					0.865				
2/2/2021		0.276				0.124			0.114
2/3/2021									
2/8/2021	0.319						0.203		
2/9/2021				0.591					
2/10/2021			0.103						
7/27/2021									
8/2/2021									
8/3/2021		0.3		0.615					
8/4/2021					0.932		0.24		
8/9/2021			0.131			0.11			
8/10/2021	0.283								0.0924 (J)
8/11/2021									
2/8/2022						0.0872 (JD)	0.175		
2/14/2022		0.206							
2/15/2022			0.114						
2/16/2022				0.349					0.0616 (J)
2/21/2022									
2/22/2022	0.259				0.819				
2/23/2022									
2/28/2022									
7/19/2022					0.752				
7/20/2022									
7/25/2022						0.0896 (JD)			
7/26/2022									
8/2/2022			0.112 (J)	0.373					0.0815 (J)
8/3/2022	0.231								
8/8/2022		0.257							
8/9/2022									
8/10/2022							0.186		
3/14/2023						0.177			
3/20/2023				0.333					
3/21/2023	0.24		0.0849 (J)				0.194		
3/22/2023		0.183			0.72				
3/27/2023									0.112 (J)
3/28/2023									
9/5/2023							0.188		
9/11/2023		0.269		0.425		0.0913 (J)			
9/12/2023			0.106 (J)						
9/13/2023									
9/18/2023					0.822				0.106 (J)
9/19/2023	0.211								

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 11/16/2023 2:00 PM View: Appendix III

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-6S	GS-AP-MW-6D	GS-AP-MW-12	GS-AP-MW-17V ...	GS-AP-MW-12V	GS-AP-MW-15V	GS-AP-MW-21V	GS-AP-MW-9V	GS-AP-MW-18R ...
8/1/2016									
8/2/2016									
8/3/2016	0.099 (J)	0.127 (J)	0.656						
9/19/2016									
9/20/2016	0.074 (J)	0.087 (J)	0.691						
9/21/2016									
10/24/2016		0.019 (J)							
10/25/2016			0.588						
10/26/2016	0.032 (J)								
12/12/2016	0.034 (J)	0.043 (J)							
12/13/2016			0.545						
12/14/2016									
2/6/2017	0.06 (J)	0.11							
2/7/2017									
2/8/2017			0.79						
3/27/2017	0.07 (J)	0.12							
3/28/2017									
3/29/2017			0.51						
3/30/2017									
4/24/2017	0.08 (J)	0.11							
4/26/2017			0.49						
6/5/2017									
6/6/2017	0.09 (J)	0.12							
6/7/2017			0.43						
8/21/2017	0.1	0.15							
8/22/2017			0.41						
8/23/2017									
2/19/2018	0.1	0.13							
2/20/2018			0.27						
2/21/2018									
5/14/2018	0.13	0.13							
5/15/2018			0.23						
5/16/2018									
10/15/2018	0.14	0.16							
10/16/2018			0.23						
10/17/2018									
2/20/2019				0.239					
2/21/2019					0.205				
4/16/2019	0.147	0.156	0.188						
4/17/2019									
4/23/2019									
9/23/2019	0.142	0.132							
9/24/2019				0.245					
9/25/2019			0.168		0.185				
3/16/2020									
3/17/2020	0.231	0.132							
3/18/2020			0.122			0.243			
3/23/2020							0.494	0.187	
3/24/2020					0.155				
3/25/2020				0.243					
5/12/2020									
5/13/2020									

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 11/16/2023 2:00 PM View: Appendix III

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-6S	GS-AP-MW-6D	GS-AP-MW-12	GS-AP-MW-17V ...	GS-AP-MW-12V	GS-AP-MW-15V	GS-AP-MW-21V	GS-AP-MW-9V	GS-AP-MW-18R ...
9/16/2020	0.308								
9/17/2020		0.133							
9/21/2020						0.372			
9/22/2020								0.174	
9/23/2020			0.12	0.278	0.176		0.641		
2/1/2021			0.126		0.169				
2/2/2021				0.244				0.183	
2/3/2021	0.195	0.135							
2/8/2021									
2/9/2021						0.329	0.546		
2/10/2021									
7/27/2021	0.2	0.127							
8/2/2021				0.276					
8/3/2021						0.278			
8/4/2021									
8/9/2021			0.139		0.187				
8/10/2021								0.166	
8/11/2021							0.41		
2/8/2022							0.398		
2/14/2022	0.164	0.108		0.237					
2/15/2022									
2/16/2022						0.208			
2/21/2022								0.177	
2/22/2022									0.124
2/23/2022					0.153				
2/28/2022			0.12						
7/19/2022			0.0983 (J)					0.159	
7/20/2022					0.18				
7/25/2022		0.0978 (JD)							
7/26/2022	0.164								
8/2/2022						0.206			
8/3/2022									0.0924 (J)
8/8/2022									
8/9/2022				0.245			0.406		
8/10/2022									
3/14/2023	0.153	0.122 (J)							
3/20/2023						0.183			
3/21/2023							0.381		
3/22/2023			0.0941 (J)	0.198	0.138				
3/27/2023								0.164	
3/28/2023									0.115 (J)
9/5/2023	0.152	0.107 (J)					0.391		
9/11/2023				0.278		0.183			
9/12/2023									
9/13/2023			0.0944 (J)		0.129			0.145	
9/18/2023									
9/19/2023									0.11 (J)

Prediction Limit

Constituent: pH (SU) Analysis Run 11/16/2023 2:00 PM View: Appendix III

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-19	GS-AP-MW-17	GS-AP-MW-16D	GS-AP-MW-15	GS-AP-MW-2	GS-AP-MW-7	GS-AP-MW-21	GS-AP-MW-13 (bg)	GS-AP-MW-8 (bg)
8/1/2016	8.05	8.39	7.53	11.74					
8/2/2016					9.18	7.72	10.26	6.8	
8/3/2016									5.84
9/19/2016		8.42	7.5		9.18				
9/20/2016				10.33				6.8	
9/21/2016	8.14					7.6	10.45		5.99
10/24/2016	8.55	8.42			9.14	7.68			
10/25/2016			7.44	10.24			10.42	6.85	5.94
10/26/2016									
12/12/2016						7.72			
12/13/2016	8.08	8.43	7.45		9.2			6.8	5.84
12/14/2016				10.09			10.12		
2/6/2017		8.38				7.64			5.9
2/7/2017	8.61								
2/8/2017			7.41	9.75	9.17		10.28	6.76	
3/27/2017		8.43							
3/28/2017	7.94			9.9		7.58	10.67		5.67
3/29/2017			7.44					6.76	
3/30/2017					9.08				
4/24/2017		8.39				7.68			5.79
4/26/2017	8.26		7.47	10.08	9.22		10.42	6.71	
6/5/2017		8.42							
6/6/2017	8.23		7.37	10.2	9.22		10.51		
6/7/2017						7.56		6.71	5.71
8/21/2017					9.12	7.61			5.7
8/22/2017	8.1	8.4	7.48	10.57				6.84	
8/23/2017							11.91		
2/19/2018		8.33				7.65			5.78
2/20/2018				10.63			11.57	6.77	
2/21/2018	8.48		7.44		9.17				
5/14/2018									
5/15/2018		8.3		10.71		7.69	11.26	6.8	5.84
5/16/2018	8.12		7.45		9.28				
10/15/2018		8.37		11.51		7.62			
10/16/2018	8.22				9.35		11.34		5.75
10/17/2018			7.41					6.67	
2/20/2019									
2/21/2019									
4/16/2019								6.64	5.76
4/17/2019	8.06	8.36	7.33	10.76	9.26		11.71		
4/23/2019						7.83			
9/23/2019		8.37							
9/24/2019	7.8		7.43	11.7		7.38	11.24		5.27
9/25/2019					9.31				
3/16/2020		8.45							
3/17/2020						7.72			
3/18/2020				11.47			11.37		5.81
3/23/2020									
3/24/2020	7.93		7.46						
3/25/2020					9.29				
5/12/2020		8.42							
5/13/2020					9.43				

Prediction Limit

Constituent: pH (SU)   Analysis Run 11/16/2023 2:00 PM   View: Appendix III

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

	GS-AP-MW-19	GS-AP-MW-17	GS-AP-MW-16D	GS-AP-MW-15	GS-AP-MW-2	GS-AP-MW-7	GS-AP-MW-21	GS-AP-MW-13 (bg)	GS-AP-MW-8 (bg)
9/16/2020						7.74			
9/17/2020									
9/21/2020		8.22							5.75
9/22/2020	8.17		7.52		9.41				
9/23/2020				11.89			10.71		
2/1/2021					9.31				
2/2/2021		8.43				7.77			5.69
2/3/2021									
2/8/2021	7.89						10.69		
2/9/2021				11.88					
2/10/2021			7.73						
7/27/2021									
8/2/2021									
8/3/2021		8.6		11.56					
8/4/2021					9.08		10.95		
8/9/2021			7.53			7.49			
8/10/2021	7.72								5.02
8/11/2021									
2/8/2022						7.71	10.26		
2/14/2022		8.32							
2/15/2022			7.48						
2/16/2022				11.57					5.8
2/21/2022									
2/22/2022	7.71				9.42				
2/23/2022									
2/28/2022									
7/19/2022					9.6				
7/20/2022									
7/25/2022						7.64 (D)			
7/26/2022									
8/2/2022			7.49	11.84					5.78
8/3/2022	7.87								
8/8/2022		8.38							
8/9/2022									
8/10/2022							9.26		
3/14/2023						7.67			
3/20/2023				11.26					
3/21/2023	7.85		7.51				9.56		
3/22/2023		8.56			9.27				
3/27/2023									5.82
3/28/2023									
9/5/2023							9.81		
9/11/2023		8.19		11.61		7.23			
9/12/2023			7.22						
9/13/2023									
9/18/2023					9				5.42
9/19/2023	7.3								

Prediction Limit

Constituent: pH (SU) Analysis Run 11/16/2023 2:00 PM View: Appendix III

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-6S	GS-AP-MW-6D	GS-AP-MW-12	GS-AP-MW-17V ...	GS-AP-MW-12V	GS-AP-MW-15V	GS-AP-MW-21V	GS-AP-MW-9V	GS-AP-MW-18R ...
8/1/2016									
8/2/2016									
8/3/2016	6.81	7.27	7.36						
9/19/2016									
9/20/2016	6.72	7.27	7.28						
9/21/2016									
10/24/2016		7.25							
10/25/2016			7.23						
10/26/2016	6.68								
12/12/2016	6.76	7.26							
12/13/2016			7.27						
12/14/2016									
2/6/2017	6.75	7.24							
2/7/2017									
2/8/2017			7.25						
3/27/2017	6.67	7.29							
3/28/2017									
3/29/2017			7.34						
3/30/2017									
4/24/2017	6.81	7.46							
4/26/2017			7.19						
6/5/2017									
6/6/2017	6.8	7.29							
6/7/2017			7.24						
8/21/2017	6.78	7.21							
8/22/2017			7.31						
8/23/2017									
2/19/2018	6.85	7.36							
2/20/2018			7.69						
2/21/2018									
5/14/2018	6.82	7.36							
5/15/2018			7.69						
5/16/2018									
10/15/2018	6.78	7.33							
10/16/2018			7.51						
10/17/2018									
2/20/2019				7.76					
2/21/2019					7.46				
4/16/2019	6.82	7.26	7.41						
4/17/2019									
4/23/2019									
9/23/2019	6.51	7.23							
9/24/2019				7.65					
9/25/2019			7.38		9.29				
3/16/2020									
3/17/2020	6.92	7.39							
3/18/2020			7.56			10.89			
3/23/2020							7.93	6.97	
3/24/2020					7.8				
3/25/2020				7.63					
5/12/2020									
5/13/2020									

Prediction Limit

Constituent: pH (SU)   Analysis Run 11/16/2023 2:00 PM   View: Appendix III

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

	GS-AP-MW-6S	GS-AP-MW-6D	GS-AP-MW-12	GS-AP-MW-17V ...	GS-AP-MW-12V	GS-AP-MW-15V	GS-AP-MW-21V	GS-AP-MW-9V	GS-AP-MW-18R ...
9/16/2020	6.93								
9/17/2020		7.41							
9/21/2020						10.07			
9/22/2020								7.08	
9/23/2020			8.3	7.53	8.84		7.81		
2/1/2021			7.55		7.3				
2/2/2021				7.58				6.94	
2/3/2021	7.05	7.55							
2/8/2021									
2/9/2021						9.55	7.87		
2/10/2021									
7/27/2021	6.67	6.79							
8/2/2021				7.65					
8/3/2021						8.97			
8/4/2021									
8/9/2021			7.98		8.77				
8/10/2021								7.12	
8/11/2021							8.28		
2/8/2022							7.98		
2/14/2022	6.99	7.43		7.43					
2/15/2022									
2/16/2022						8.65			
2/21/2022								7	
2/22/2022									6.29
2/23/2022					7.73				
2/28/2022			8.12						
7/19/2022			8.79					6.99	
7/20/2022					8.52				
7/25/2022		6.95 (D)							
7/26/2022	6.97								
8/2/2022						8.21			
8/3/2022									6.46
8/8/2022									
8/9/2022				7.55			7.9		
8/10/2022									
3/14/2023	7.04	7.33							
3/20/2023						7.96			
3/21/2023							7.67		
3/22/2023			8.15	7.61	9				
3/27/2023								7	
3/28/2023									6.48
9/5/2023	6.69	7.23					7.68		
9/11/2023				7.61		7.64			
9/12/2023									
9/13/2023			8.96		8.95			6.97	
9/18/2023									
9/19/2023									6.39

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 11/16/2023 2:01 PM View: Appendix III
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-19	GS-AP-MW-17	GS-AP-MW-16D	GS-AP-MW-15	GS-AP-MW-2	GS-AP-MW-7	GS-AP-MW-21	GS-AP-MW-13 (bg)	GS-AP-MW-8 (bg)
8/1/2016	9.02	9.56	13.4	102					
8/2/2016					2.87	154	9.14	12	
8/3/2016									4.2
9/19/2016		12.7	12.9		1.22				
9/20/2016				53.3				11.2	
9/21/2016	8.38					146	8.71		4.27
10/24/2016	18.5	8.58			<1	131			
10/25/2016			11.6	49.8			8.54	10.1	2.78
10/26/2016									
12/12/2016						141			
12/13/2016	7.4	31	12.7		<1			11.4	3.18
12/14/2016				40.9			11.5		
2/6/2017		14.7				135			3.74
2/7/2017	8.16								
2/8/2017			12.2	25	19.4		17	10.9	
3/27/2017		14							
3/28/2017	6.4			27		140	25		3.4 (J)
3/29/2017			12					11	
3/30/2017					31				
4/24/2017		22				140			2.7 (J)
4/26/2017	4.6 (J)		13	29	29		28	11	
6/5/2017		30							
6/6/2017	5.2		12	23	37		33		
6/7/2017						150		11	2.7 (J)
8/21/2017					55	140			3.9 (J)
8/22/2017	5.3	42	12	22				11	
8/23/2017							43		
5/14/2018									
5/15/2018		54		13		120	110	11	2.5 (J)
5/16/2018	6		13		34				
10/15/2018		34		14		130			
10/16/2018	5.6				90		160		2.4 (J)
10/17/2018			13					12	
2/20/2019									
2/21/2019									
4/16/2019								12.1	4.53
4/17/2019	14.3	76.6	14.1	9.02	48.6		215		
4/23/2019						156			
9/23/2019		124							
9/24/2019	13.8		14.1	12.4		145	224		6.61
9/25/2019					47.7				
3/16/2020		48.6							
3/17/2020						149			
3/18/2020				15.9			228		4.86
3/23/2020									
3/24/2020	15.2		14.1						
3/25/2020					38.5				
5/12/2020		44.4							
5/13/2020					33.6				
9/16/2020						131			
9/17/2020									
9/21/2020		104							4.69

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Sulfate (mg/L)   Analysis Run 11/16/2023 2:01 PM   View: Appendix III

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

	GS-AP-MW-19	GS-AP-MW-17	GS-AP-MW-16D	GS-AP-MW-15	GS-AP-MW-2	GS-AP-MW-7	GS-AP-MW-21	GS-AP-MW-13 (bg)	GS-AP-MW-8 (bg)
9/22/2020	16.9		13.6		21.5				
9/23/2020				13.2			248		
2/1/2021					21.3				
2/2/2021		55.1				130			4.83
2/3/2021									
2/8/2021	16.2						232		
2/9/2021				10.6					
2/10/2021			15.8						
7/27/2021									
8/2/2021									
8/3/2021		7.58		9.77					
8/4/2021					16.8		231		
8/9/2021			14.4			133			
8/10/2021	15.2								3.77
8/11/2021									
2/8/2022						137 (D)	241		
2/14/2022		14.4							
2/15/2022			14.7						
2/16/2022				7.37					4.68
2/21/2022									
2/22/2022	13.7				17.1				
2/23/2022									
2/28/2022									
7/19/2022					19.4				
7/20/2022									
7/25/2022						137.75 (D)			
7/26/2022									
8/2/2022			15.6	9.11					4.18
8/3/2022	17.1								
8/8/2022		8.35							
8/9/2022									
8/10/2022							245		
3/14/2023						130			
3/20/2023				6.57					
3/21/2023	16.4		14.7				238		
3/22/2023		7			8.17				
3/27/2023									4.41
3/28/2023									
9/5/2023							214		
9/11/2023		23.1		8.43		124			
9/12/2023			15.3						
9/13/2023									
9/18/2023					2.96				10.1
9/19/2023	13.5								

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 11/16/2023 2:01 PM View: Appendix III

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-6S	GS-AP-MW-6D	GS-AP-MW-12	GS-AP-MW-17V ...	GS-AP-MW-12V	GS-AP-MW-15V	GS-AP-MW-21V	GS-AP-MW-9V	GS-AP-MW-18R ...
8/1/2016									
8/2/2016									
8/3/2016	203	52	19.2						
9/19/2016									
9/20/2016	209	56	1.42						
9/21/2016									
10/24/2016		57.5							
10/25/2016			<1						
10/26/2016	224								
12/12/2016	249	50							
12/13/2016			3.21						
12/14/2016									
2/6/2017	309	54.9							
2/7/2017									
2/8/2017			3.3						
3/27/2017	290	50							
3/28/2017									
3/29/2017			3.8 (J)						
3/30/2017									
4/24/2017	300	56							
4/26/2017			1.4 (J)						
6/5/2017									
6/6/2017	310	63							
6/7/2017			1.7 (J)						
8/21/2017	260	35							
8/22/2017			4.2 (J)						
8/23/2017									
5/14/2018	210	46							
5/15/2018			14						
5/16/2018									
10/15/2018	170	37							
10/16/2018			13						
10/17/2018									
2/20/2019				15.2					
2/21/2019					<1				
4/16/2019	195	46.8	13.3						
4/17/2019									
4/23/2019									
9/23/2019	176	47.9							
9/24/2019				11.8					
9/25/2019			25.5		1.61				
3/16/2020									
3/17/2020	148	59.5							
3/18/2020			20.8			261			
3/23/2020							1050	18.7	
3/24/2020					<1				
3/25/2020				9.69					
5/12/2020									
5/13/2020									
9/16/2020	115								
9/17/2020		65.1							
9/21/2020						348			

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 11/16/2023 2:01 PM View: Appendix III

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-6S	GS-AP-MW-6D	GS-AP-MW-12	GS-AP-MW-17V ...	GS-AP-MW-12V	GS-AP-MW-15V	GS-AP-MW-21V	GS-AP-MW-9V	GS-AP-MW-18R ...
9/22/2020								21.2	
9/23/2020			19.1	11.1	6.56		1120		
2/1/2021			18.7		<1				
2/2/2021				8.81				31.2	
2/3/2021	116	58.9							
2/8/2021									
2/9/2021						350	645		
2/10/2021									
7/27/2021	114	64.4							
8/2/2021				10.2					
8/3/2021						241			
8/4/2021									
8/9/2021			17.3		1.85				
8/10/2021								32.7	
8/11/2021							137		
2/8/2022							451		
2/14/2022	115	58.3		9.09					
2/15/2022									
2/16/2022						224			
2/21/2022								32.4	
2/22/2022									27
2/23/2022					0.741 (J)				
2/28/2022			17.9						
7/19/2022			18.5					37.099998	
7/20/2022					1.08 (J)				
7/25/2022		57.6 (D)							
7/26/2022	106								
8/2/2022						218			
8/3/2022									21.200001
8/8/2022									
8/9/2022				8.13			360		
8/10/2022									
3/14/2023	96.099998	57.5							
3/20/2023						176			
3/21/2023							595		
3/22/2023			18.3	10.6	1.52 (J)				
3/27/2023								47.9	
3/28/2023									26.299999
9/5/2023	107	58.700001					430		
9/11/2023				10.7		140			
9/12/2023									
9/13/2023			18.9		1.61 (J)			85.199997	
9/18/2023									
9/19/2023									23.5

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: TDS (mg/L) Analysis Run 11/16/2023 2:01 PM View: Appendix III

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-19	GS-AP-MW-17	GS-AP-MW-16D	GS-AP-MW-15	GS-AP-MW-2	GS-AP-MW-7	GS-AP-MW-21	GS-AP-MW-13 (bg)	GS-AP-MW-8 (bg)
8/1/2016	245	408	222	640					
8/2/2016					390	358	348	221	
8/3/2016									113
9/19/2016		441	220		398				
9/20/2016				434				221	
9/21/2016	267					370	368		128
10/24/2016	275	424			395	370			
10/25/2016			223	394			348	226	121
10/26/2016									
12/12/2016						353			
12/13/2016	255	466	211		381			211	101
12/14/2016				387			352		
2/6/2017		414				338			108
2/7/2017	272								
2/8/2017			206	303	376		352	212	
3/27/2017		444							
3/28/2017	271			305		352	370		91
3/29/2017			215					217	
3/30/2017					391				
4/24/2017		446				362			89.3
4/26/2017	265		212	329	384		342	202	
6/5/2017		493							
6/6/2017	287		227	331	404		367		
6/7/2017						348		218	84
8/21/2017					416	362			91.3
8/22/2017	293	500	230	364				224	
8/23/2017							508		
5/14/2018									
5/15/2018		528		340		338	438	209	94.7
5/16/2018	301		216		365				
10/15/2018		462		448		333			
10/16/2018	303				430		520		76.7
10/17/2018			191					208	
2/20/2019									
2/21/2019									
4/16/2019								185	92
4/17/2019	296	540	207	354	341		582		
4/23/2019						354			
9/23/2019		684							
9/24/2019	302		208	536		344	630		109
9/25/2019					358				
3/16/2020		516							
3/17/2020						334			
3/18/2020				515			661		90.7
3/23/2020									
3/24/2020	302		205						
3/25/2020					337				
5/12/2020		493							
5/13/2020					328				
9/16/2020						351			
9/17/2020									
9/21/2020		658							94

Prediction Limit

Constituent: TDS (mg/L) Analysis Run 11/16/2023 2:01 PM View: Appendix III

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-19	GS-AP-MW-17	GS-AP-MW-16D	GS-AP-MW-15	GS-AP-MW-2	GS-AP-MW-7	GS-AP-MW-21	GS-AP-MW-13 (bg)	GS-AP-MW-8 (bg)
9/22/2020	300		218		318				
9/23/2020				600			642		
2/1/2021					333				
2/2/2021		548				349			98.7
2/3/2021									
2/8/2021	324						684		
2/9/2021				616					
2/10/2021			224						
7/27/2021									
8/2/2021									
8/3/2021		435		632					
8/4/2021					316		594		
8/9/2021			207			340			
8/10/2021	307								101
8/11/2021									
2/8/2022						325 (D)	570		
2/14/2022		448							
2/15/2022			214						
2/16/2022				426					90.7
2/21/2022									
2/22/2022	304				295				
2/23/2022									
2/28/2022									
7/19/2022					262				
7/20/2022									
7/25/2022						308.25 (D)			
7/26/2022									
8/2/2022			210	592					97.300003
8/3/2022	327								
8/8/2022		446							
8/9/2022									
8/10/2022							592		
3/14/2023						340			
3/20/2023				444					
3/21/2023	320		221				606		
3/22/2023		441			297				
3/27/2023									100
3/28/2023									
9/5/2023							572		
9/11/2023		480		565		327			
9/12/2023			219						
9/13/2023									
9/18/2023					405				91.300003
9/19/2023	335								

Prediction Limit

Constituent: TDS (mg/L)   Analysis Run 11/16/2023 2:01 PM   View: Appendix III
Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

	GS-AP-MW-6S	GS-AP-MW-6D	GS-AP-MW-12	GS-AP-MW-17V ...	GS-AP-MW-12V	GS-AP-MW-15V	GS-AP-MW-21V	GS-AP-MW-9V	GS-AP-MW-18R ...
8/1/2016									
8/2/2016									
8/3/2016	394	302	546						
9/19/2016									
9/20/2016	444	298	542						
9/21/2016									
10/24/2016		306							
10/25/2016			518						
10/26/2016	456								
12/12/2016	491	291							
12/13/2016			424						
12/14/2016									
2/6/2017	580	285							
2/7/2017									
2/8/2017			379						
3/27/2017	554	305							
3/28/2017									
3/29/2017			334						
3/30/2017									
4/24/2017	566	301							
4/26/2017			332						
6/5/2017									
6/6/2017	580	311							
6/7/2017			308						
8/21/2017	524	289							
8/22/2017			286						
8/23/2017									
5/14/2018	458	303							
5/15/2018			235						
5/16/2018									
10/15/2018	404	309							
10/16/2018			211						
10/17/2018									
2/20/2019				346					
2/21/2019					237				
4/16/2019	382	285	193						
4/17/2019									
4/23/2019									
9/23/2019	381	296							
9/24/2019				365					
9/25/2019			253		183				
3/16/2020									
3/17/2020	328	303							
3/18/2020			236			873			
3/23/2020							3410	268	
3/24/2020					206				
3/25/2020				364					
5/12/2020									
5/13/2020									
9/16/2020	269								
9/17/2020		314							
9/21/2020						1090			

Prediction Limit

Constituent: TDS (mg/L) Analysis Run 11/16/2023 2:01 PM View: Appendix III

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-6S	GS-AP-MW-6D	GS-AP-MW-12	GS-AP-MW-17V ...	GS-AP-MW-12V	GS-AP-MW-15V	GS-AP-MW-21V	GS-AP-MW-9V	GS-AP-MW-18R ...
9/22/2020								285	
9/23/2020			216	368	195		3690		
2/1/2021			224		240				
2/2/2021				356				314	
2/3/2021	274	301							
2/8/2021									
2/9/2021						1040	2250		
2/10/2021									
7/27/2021	273	262							
8/2/2021				333					
8/3/2021						782			
8/4/2021									
8/9/2021			219		145				
8/10/2021								309	
8/11/2021							712		
2/8/2022							1360		
2/14/2022	299	297		365					
2/15/2022									
2/16/2022						782			
2/21/2022								299	
2/22/2022									136
2/23/2022					209				
2/28/2022			195						
7/19/2022			199					310	
7/20/2022					189				
7/25/2022		286 (D)							
7/26/2022	311								
8/2/2022						788			
8/3/2022									167
8/8/2022									
8/9/2022				344			1240		
8/10/2022									
3/14/2023	298	300							
3/20/2023						694			
3/21/2023							1950		
3/22/2023			203	344	182				
3/27/2023								335	
3/28/2023									154
9/5/2023	307	294					1550		
9/11/2023				338		615			
9/12/2023									
9/13/2023			208		180			395	
9/18/2023									
9/19/2023									185

FIGURE F.

Appendix III Trend Tests - Significant Results

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond Printed 11/16/2023, 1:59 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	**GS-AP-MW-6D**	**0.0464**	**150**	**87**	**Yes**	**21**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**GS-AP-MW-7**	**0.04469**	**147**	**87**	**Yes**	**21**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**GS-AP-MW-19**	**2.31**	**113**	**87**	**Yes**	**21**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**GS-AP-MW-6D**	**0.8922**	**98**	**87**	**Yes**	**21**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**GS-AP-MW-9V**	**2.63**	**22**	**21**	**Yes**	**8**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**GS-AP-MW-19**	**-0.2495**	**-106**	**-87**	**Yes**	**21**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**GS-AP-MW-21**	**2.788**	**128**	**87**	**Yes**	**21**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**GS-AP-MW-6D**	**0.9474**	**142**	**87**	**Yes**	**21**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**GS-AP-MW-7**	**0.6618**	**197**	**87**	**Yes**	**21**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**GS-AP-MW-8 (bg)**	**0.1651**	**99**	**87**	**Yes**	**21**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**GS-AP-MW-9V**	**6.734**	**25**	**21**	**Yes**	**8**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Fluoride (mg/L)	**GS-AP-MW-13 (bg)**	**0.02914**	**48**	**43**	**Yes**	**13**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Fluoride (mg/L)	**GS-AP-MW-2**	**-0.1272**	**-191**	**-98**	**Yes**	**23**	**0**	**n/a**	**n/a**	**0.01**	**NP**
pH (SU)	**GS-AP-MW-12**	**0.1524**	**148**	**92**	**Yes**	**22**	**0**	**n/a**	**n/a**	**0.01**	**NP**
pH (SU)	**GS-AP-MW-15**	**0.2607**	**119**	**92**	**Yes**	**22**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**GS-AP-MW-15V**	**-50.77**	**-22**	**-21**	**Yes**	**8**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**GS-AP-MW-21**	**41.54**	**170**	**87**	**Yes**	**21**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**GS-AP-MW-6S**	**-24**	**-133**	**-87**	**Yes**	**21**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**GS-AP-MW-9V**	**10.38**	**26**	**21**	**Yes**	**8**	**0**	**n/a**	**n/a**	**0.01**	**NP**
TDS (mg/L)	**GS-AP-MW-2**	**-16.07**	**-119**	**-92**	**Yes**	**22**	**0**	**n/a**	**n/a**	**0.01**	**NP**
TDS (mg/L)	**GS-AP-MW-21**	**43.41**	**128**	**87**	**Yes**	**21**	**0**	**n/a**	**n/a**	**0.01**	**NP**

Appendix III Trend Tests - All Results

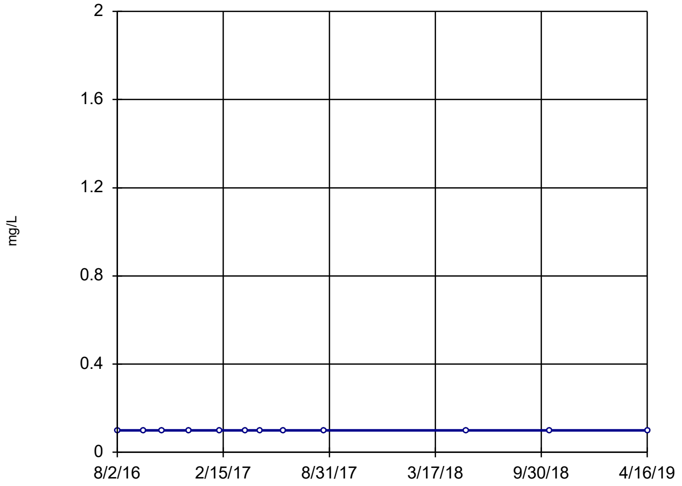
Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond   Printed 11/16/2023, 1:59 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	GS-AP-MW-13 (bg)	0	0	38	No	12	100	n/a	n/a	0.01	NP
Boron (mg/L)	GS-AP-MW-17V (bg)	-0.002694	-11	-30	No	10	0	n/a	n/a	0.01	NP
Boron (mg/L)	GS-AP-MW-21	0.004472	73	87	No	21	0	n/a	n/a	0.01	NP
Boron (mg/L)	GS-AP-MW-21V	-0.007156	-10	-21	No	8	0	n/a	n/a	0.01	NP
Boron (mg/L)	**GS-AP-MW-6D**	**0.0464**	**150**	**87**	**Yes**	**21**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	GS-AP-MW-6S	-0.03848	-81	-87	No	21	0	n/a	n/a	0.01	NP
Boron (mg/L)	**GS-AP-MW-7**	**0.04469**	**147**	**87**	**Yes**	**21**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	GS-AP-MW-8 (bg)	0	20	87	No	21	95.24	n/a	n/a	0.01	NP
Calcium (mg/L)	GS-AP-MW-13 (bg)	-2.607	-32	-38	No	12	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GS-AP-MW-17V (bg)	0.1203	4	30	No	10	0	n/a	n/a	0.01	NP
Calcium (mg/L)	**GS-AP-MW-19**	**2.31**	**113**	**87**	**Yes**	**21**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**GS-AP-MW-6D**	**0.8922**	**98**	**87**	**Yes**	**21**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	GS-AP-MW-6S	-2.355	-70	-87	No	21	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GS-AP-MW-8 (bg)	-0.2946	-47	-87	No	21	0	n/a	n/a	0.01	NP
Calcium (mg/L)	**GS-AP-MW-9V**	**2.63**	**22**	**21**	**Yes**	**8**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	GS-AP-MW-12V	-0.004138	-2	-30	No	10	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GS-AP-MW-13 (bg)	0.1178	10	38	No	12	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GS-AP-MW-15	-0.2465	-56	-87	No	21	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GS-AP-MW-15V	-29.59	-14	-21	No	8	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GS-AP-MW-17	-0.02722	-12	-92	No	22	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GS-AP-MW-17V (bg)	-0.2384	-29	-30	No	10	0	n/a	n/a	0.01	NP
Chloride (mg/L)	**GS-AP-MW-19**	**-0.2495**	**-106**	**-87**	**Yes**	**21**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	GS-AP-MW-2	-0.2901	-38	-92	No	22	0	n/a	n/a	0.01	NP
Chloride (mg/L)	**GS-AP-MW-21**	**2.788**	**128**	**87**	**Yes**	**21**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	GS-AP-MW-21V	-175.6	-12	-21	No	8	0	n/a	n/a	0.01	NP
Chloride (mg/L)	**GS-AP-MW-6D**	**0.9474**	**142**	**87**	**Yes**	**21**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	GS-AP-MW-6S	-0.4845	-67	-87	No	21	0	n/a	n/a	0.01	NP
Chloride (mg/L)	**GS-AP-MW-7**	**0.6618**	**197**	**87**	**Yes**	**21**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**GS-AP-MW-8 (bg)**	**0.1651**	**99**	**87**	**Yes**	**21**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**GS-AP-MW-9V**	**6.734**	**25**	**21**	**Yes**	**8**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Fluoride (mg/L)	**GS-AP-MW-13 (bg)**	**0.02914**	**48**	**43**	**Yes**	**13**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Fluoride (mg/L)	GS-AP-MW-15	-0.03941	-87	-92	No	22	0	n/a	n/a	0.01	NP
Fluoride (mg/L)	GS-AP-MW-17V (bg)	0.00066	3	30	No	10	0	n/a	n/a	0.01	NP
Fluoride (mg/L)	**GS-AP-MW-2**	**-0.1272**	**-191**	**-98**	**Yes**	**23**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Fluoride (mg/L)	GS-AP-MW-21V	-0.03924	-20	-21	No	8	0	n/a	n/a	0.01	NP
Fluoride (mg/L)	GS-AP-MW-8 (bg)	0.002865	46	92	No	22	0	n/a	n/a	0.01	NP
pH (SU)	**GS-AP-MW-12**	**0.1524**	**148**	**92**	**Yes**	**22**	**0**	**n/a**	**n/a**	**0.01**	**NP**
pH (SU)	GS-AP-MW-12V	0.1423	9	30	No	10	0	n/a	n/a	0.01	NP
pH (SU)	GS-AP-MW-13 (bg)	-0.05825	-34	-43	No	13	0	n/a	n/a	0.01	NP
pH (SU)	**GS-AP-MW-15**	**0.2607**	**119**	**92**	**Yes**	**22**	**0**	**n/a**	**n/a**	**0.01**	**NP**
pH (SU)	GS-AP-MW-17	-0.005925	-27	-98	No	23	0	n/a	n/a	0.01	NP
pH (SU)	GS-AP-MW-17V (bg)	-0.02446	-15	-30	No	10	0	n/a	n/a	0.01	NP
pH (SU)	GS-AP-MW-2	0.03952	88	98	No	23	0	n/a	n/a	0.01	NP
pH (SU)	GS-AP-MW-21	-0.03023	-7	-92	No	22	0	n/a	n/a	0.01	NP
pH (SU)	GS-AP-MW-8 (bg)	-0.0333	-82	-92	No	22	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GS-AP-MW-13 (bg)	0.01849	11	38	No	12	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	**GS-AP-MW-15V**	**-50.77**	**-22**	**-21**	**Yes**	**8**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	GS-AP-MW-17V (bg)	-0.7	-15	-30	No	10	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	**GS-AP-MW-21**	**41.54**	**170**	**87**	**Yes**	**21**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	GS-AP-MW-21V	-186.5	-12	-21	No	8	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GS-AP-MW-6D	0.849	49	87	No	21	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	**GS-AP-MW-6S**	**-24**	**-133**	**-87**	**Yes**	**21**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	GS-AP-MW-7	-1.707	-65	-87	No	21	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GS-AP-MW-8 (bg)	0.2514	63	87	No	21	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	**GS-AP-MW-9V**	**10.38**	**26**	**21**	**Yes**	**8**	**0**	**n/a**	**n/a**	**0.01**	**NP**
TDS (mg/L)	GS-AP-MW-13 (bg)	-7.182	-29	-38	No	12	0	n/a	n/a	0.01	NP
TDS (mg/L)	GS-AP-MW-15	25.11	72	87	No	21	0	n/a	n/a	0.01	NP
TDS (mg/L)	GS-AP-MW-15V	-118	-19	-21	No	8	0	n/a	n/a	0.01	NP
TDS (mg/L)	GS-AP-MW-17	8.41	64	92	No	22	0	n/a	n/a	0.01	NP
TDS (mg/L)	GS-AP-MW-17V (bg)	-5.63	-17	-30	No	10	0	n/a	n/a	0.01	NP
TDS (mg/L)	**GS-AP-MW-2**	**-16.07**	**-119**	**-92**	**Yes**	**22**	**0**	**n/a**	**n/a**	**0.01**	**NP**
TDS (mg/L)	**GS-AP-MW-21**	**43.41**	**128**	**87**	**Yes**	**21**	**0**	**n/a**	**n/a**	**0.01**	**NP**
TDS (mg/L)	GS-AP-MW-21V	-606.8	-10	-21	No	8	0	n/a	n/a	0.01	NP
TDS (mg/L)	GS-AP-MW-8 (bg)	-1.421	-39	-87	No	21	0	n/a	n/a	0.01	NP
TDS (mg/L)	GS-AP-MW-9V	27.17	20	21	No	8	0	n/a	n/a	0.01	NP

Sanitas™ v.10.0.13 . UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

GS-AP-MW-13 (bg)



n = 12

Slope = 0
units per year.

Mann-Kendall
statistic = 0
critical = 38

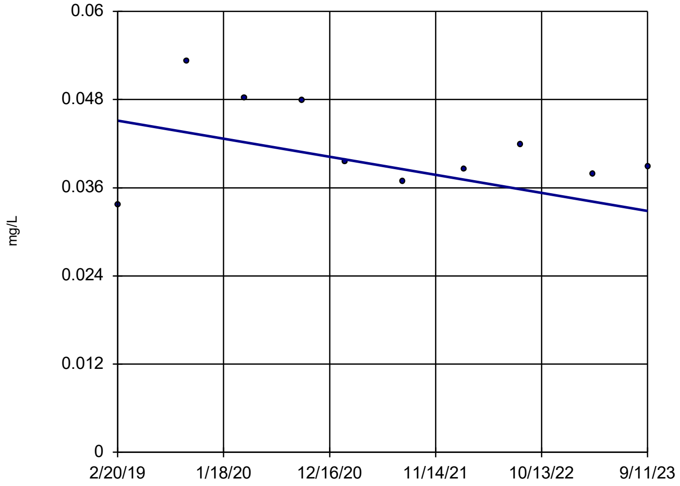
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 11/16/2023 1:58 PM View: Appendix III - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG

Sen's Slope Estimator

GS-AP-MW-17V (bg)



n = 10

Slope = -0.002694
units per year.

Mann-Kendall
statistic = -11
critical = -30

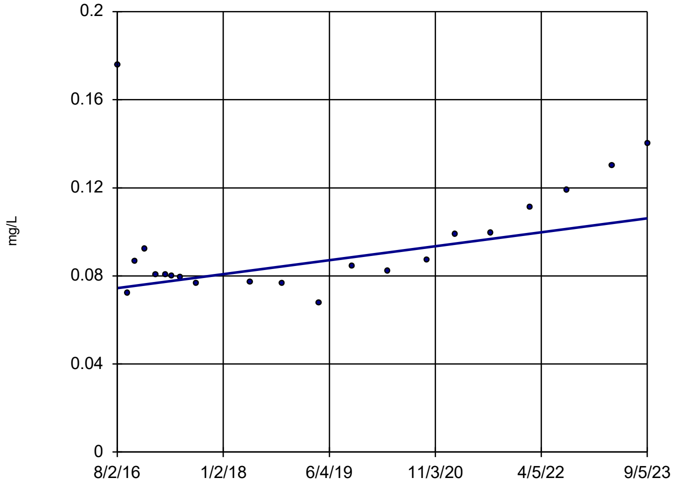
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 11/16/2023 1:58 PM View: Appendix III - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG

Sen's Slope Estimator

GS-AP-MW-21



n = 21

Slope = 0.004472
units per year.

Mann-Kendall
statistic = 73
critical = 87

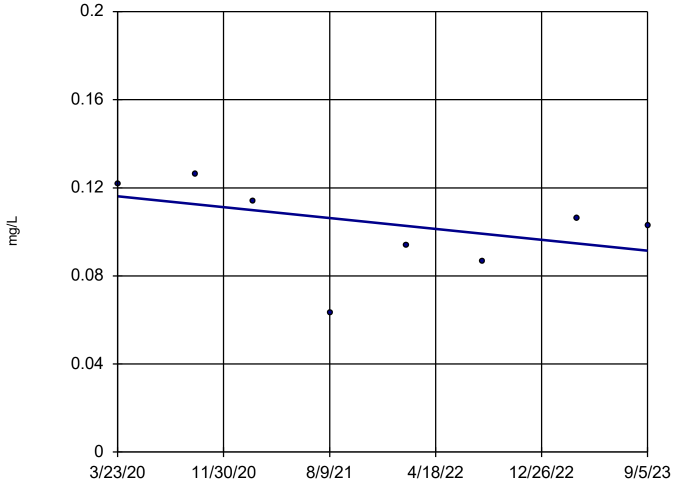
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 11/16/2023 1:58 PM View: Appendix III - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG

Sen's Slope Estimator

GS-AP-MW-21V



n = 8

Slope = -0.007156
units per year.

Mann-Kendall
statistic = -10
critical = -21

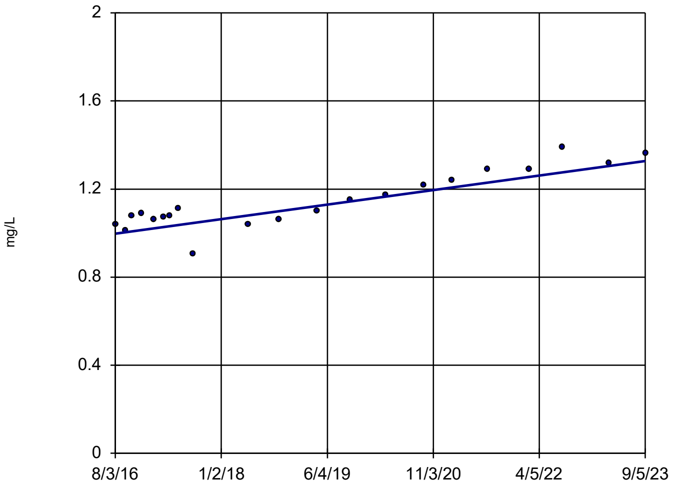
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 11/16/2023 1:58 PM View: Appendix III - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG

Sen's Slope Estimator

GS-AP-MW-6D



n = 21

Slope = 0.0464
units per year.

Mann-Kendall
statistic = 150
critical = 87

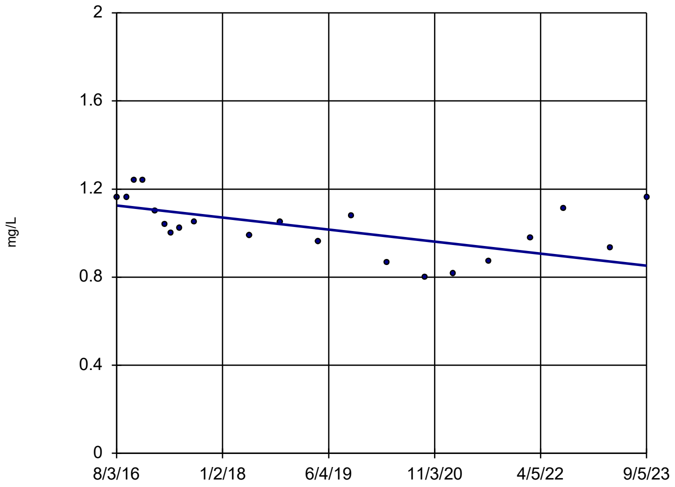
Increasing trend
significant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Boron Analysis Run 11/16/2023 1:58 PM View: Appendix III - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG

Sen's Slope Estimator

GS-AP-MW-6S



n = 21

Slope = -0.03848
units per year.

Mann-Kendall
statistic = -81
critical = -87

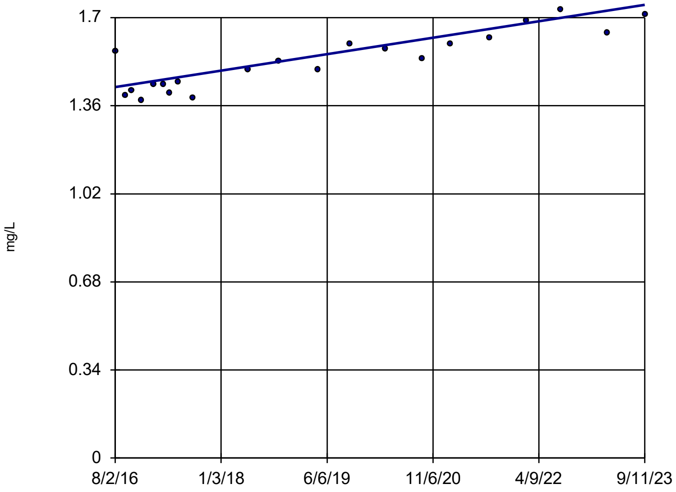
Trend not significant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Boron Analysis Run 11/16/2023 1:58 PM View: Appendix III - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG

Sen's Slope Estimator

GS-AP-MW-7



n = 21

Slope = 0.04469
units per year.

Mann-Kendall
statistic = 147
critical = 87

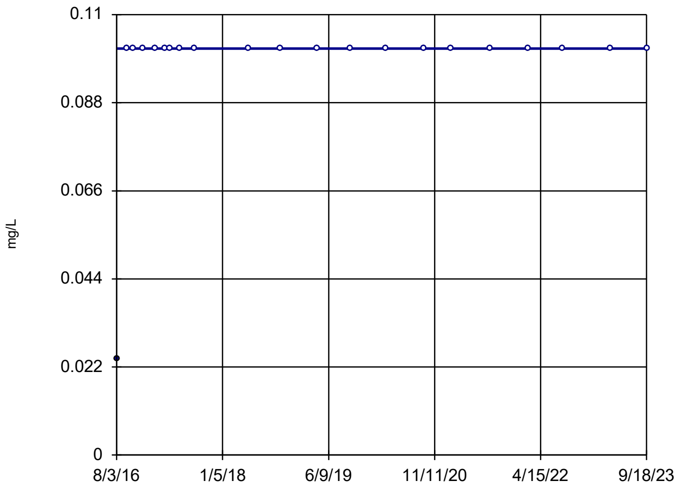
Increasing trend
significant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Boron Analysis Run 11/16/2023 1:58 PM View: Appendix III - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

GS-AP-MW-8 (bg)



n = 21

Slope = 0
units per year.

Mann-Kendall
statistic = 20
critical = 87

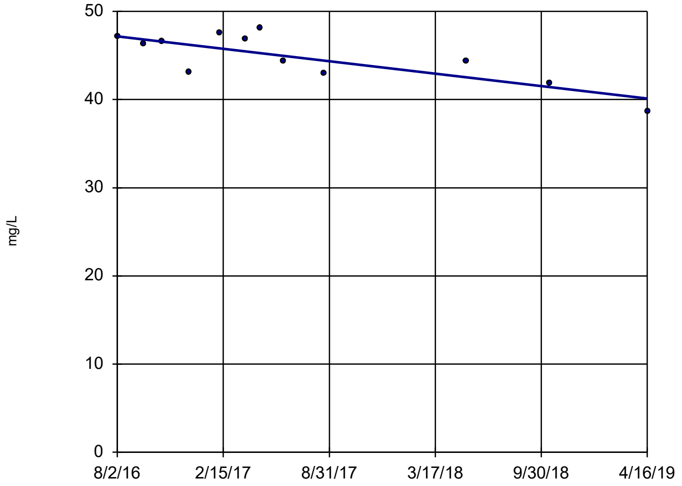
Trend not significant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Boron Analysis Run 11/16/2023 1:58 PM View: Appendix III - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG

Sen's Slope Estimator

GS-AP-MW-13 (bg)



n = 12

Slope = -2.607
units per year.

Mann-Kendall
statistic = -32
critical = -38

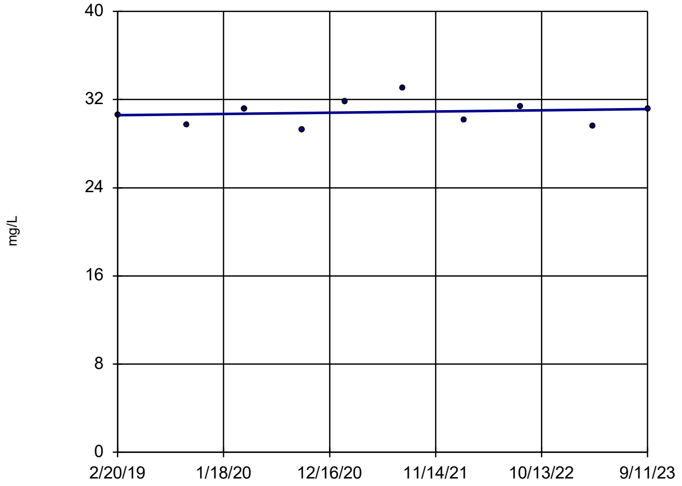
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 11/16/2023 1:58 PM View: Appendix III - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG

Sen's Slope Estimator

GS-AP-MW-17V (bg)



n = 10

Slope = 0.1203
units per year.

Mann-Kendall
statistic = 4
critical = 30

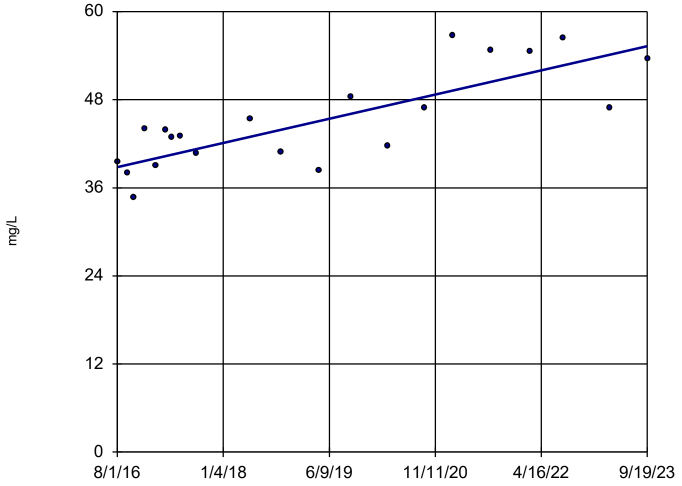
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 11/16/2023 1:58 PM View: Appendix III - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG

Sen's Slope Estimator

GS-AP-MW-19



n = 21

Slope = 2.31
units per year.

Mann-Kendall
statistic = 113
critical = 87

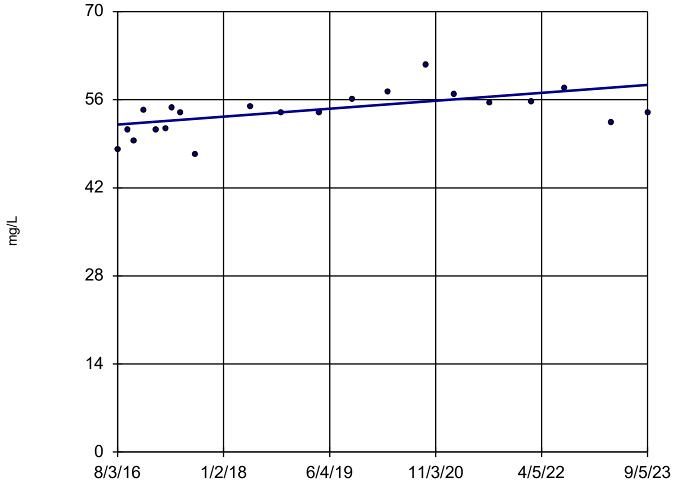
Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 11/16/2023 1:58 PM View: Appendix III - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG

Sen's Slope Estimator

GS-AP-MW-6D



n = 21

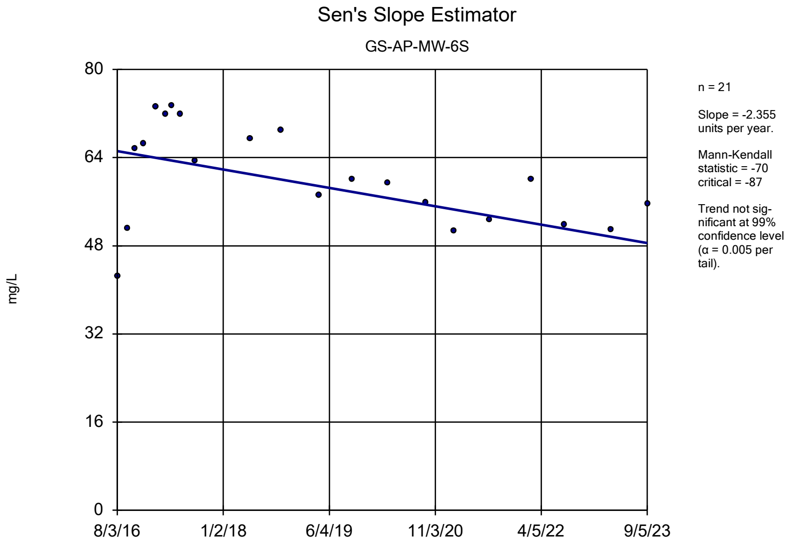
Slope = 0.8922
units per year.

Mann-Kendall
statistic = 98
critical = 87

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 11/16/2023 1:58 PM View: Appendix III - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG


Sen's Slope Estimator

GS-AP-MW-6S

n = 21

Slope = -2.355 units per year.

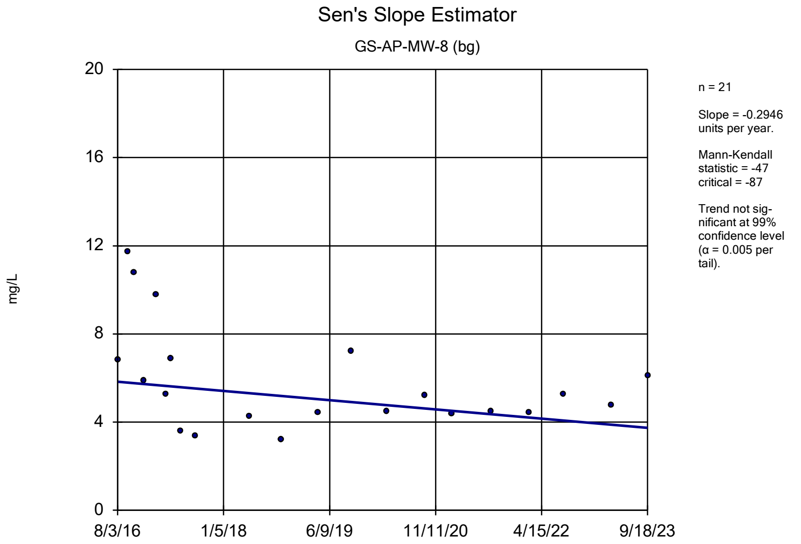
Mann-Kendall statistic = -70 critical = -87

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 11/16/2023 1:58 PM View: Appendix III - Trend Tests

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG


Sen's Slope Estimator

GS-AP-MW-8 (bg)

n = 21

Slope = -0.2946 units per year.

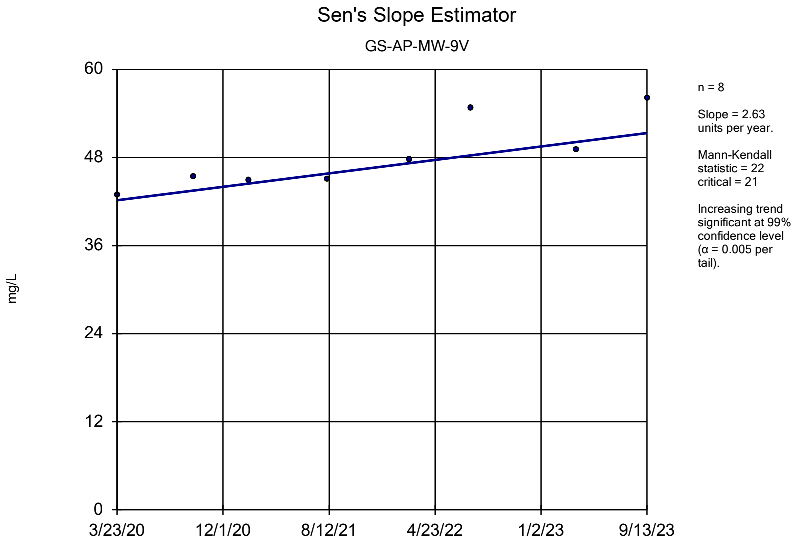
Mann-Kendall statistic = -47 critical = -87

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 11/16/2023 1:58 PM View: Appendix III - Trend Tests

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG


Sen's Slope Estimator

GS-AP-MW-9V

n = 8

Slope = 2.63 units per year.

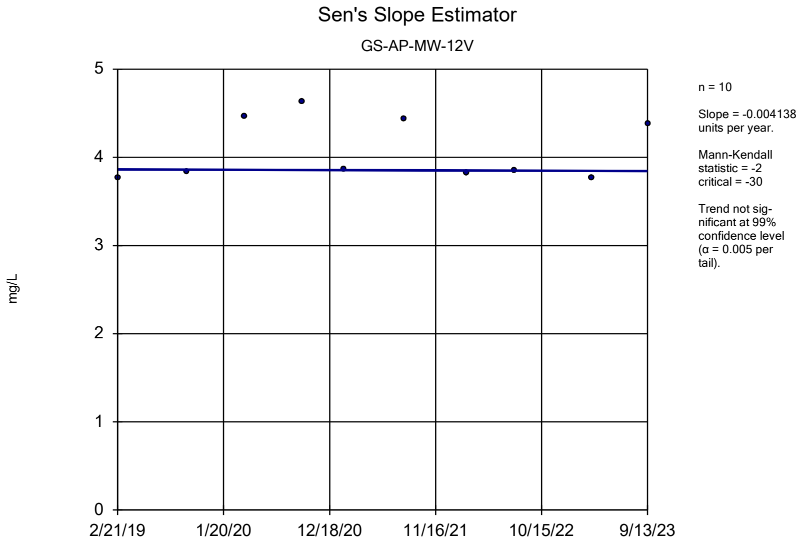
Mann-Kendall statistic = 22 critical = 21

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 11/16/2023 1:58 PM View: Appendix III - Trend Tests

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG


Sen's Slope Estimator

GS-AP-MW-12V

n = 10

Slope = -0.004138 units per year.

Mann-Kendall statistic = -2 critical = -30

Trend not significant at 99% confidence level (α = 0.005 per tail).

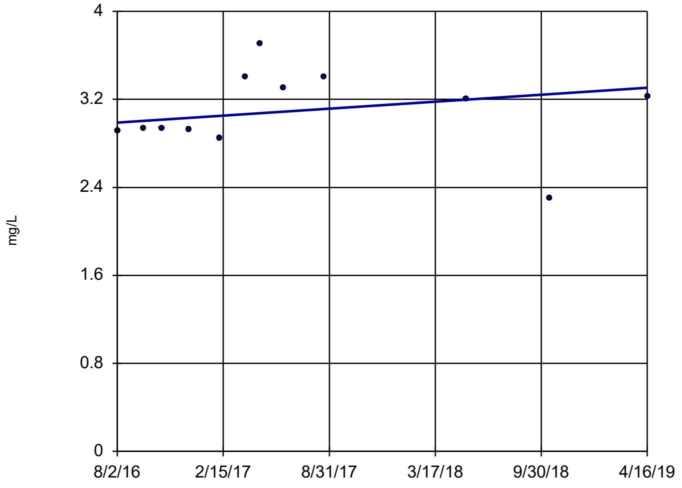
Constituent: Chloride Analysis Run 11/16/2023 1:58 PM View: Appendix III - Trend Tests

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG

Sen's Slope Estimator

GS-AP-MW-13 (bg)



n = 12

Slope = 0.1178 units per year.

Mann-Kendall statistic = 10 critical = 38

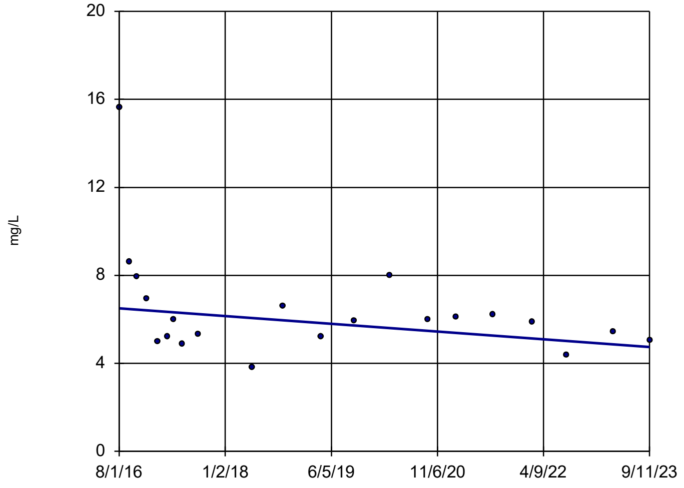
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride   Analysis Run 11/16/2023 1:58 PM   View: Appendix III - Trend Tests
Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG

Sen's Slope Estimator

GS-AP-MW-15



n = 21

Slope = -0.2465 units per year.

Mann-Kendall statistic = -56 critical = -87

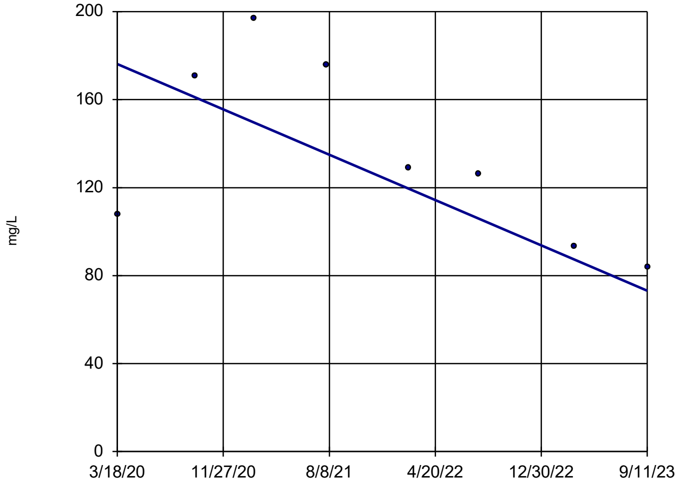
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride   Analysis Run 11/16/2023 1:58 PM   View: Appendix III - Trend Tests
Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG

Sen's Slope Estimator

GS-AP-MW-15V



n = 8

Slope = -29.59 units per year.

Mann-Kendall statistic = -14 critical = -21

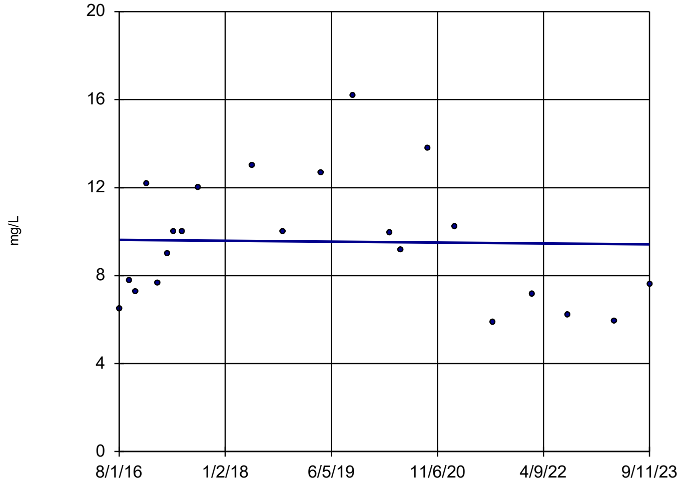
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride   Analysis Run 11/16/2023 1:58 PM   View: Appendix III - Trend Tests
Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG

Sen's Slope Estimator

GS-AP-MW-17



n = 22

Slope = -0.02722 units per year.

Mann-Kendall statistic = -12 critical = -92

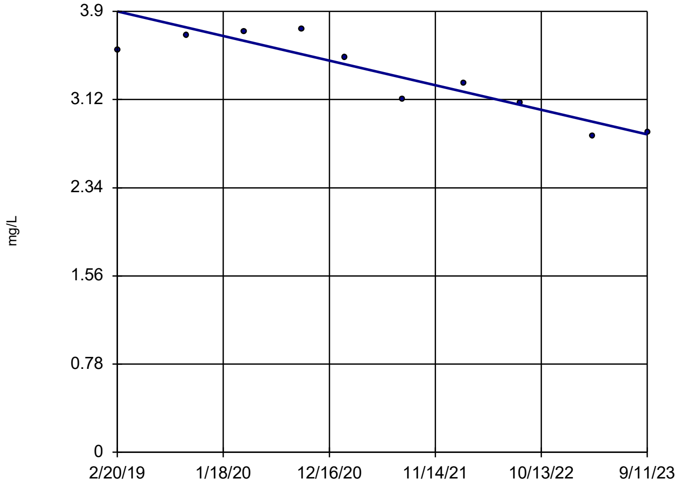
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride   Analysis Run 11/16/2023 1:58 PM   View: Appendix III - Trend Tests
Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG

Sen's Slope Estimator

GS-AP-MW-17V (bg)



n = 10

Slope = -0.2384 units per year.

Mann-Kendall statistic = -29 critical = -30

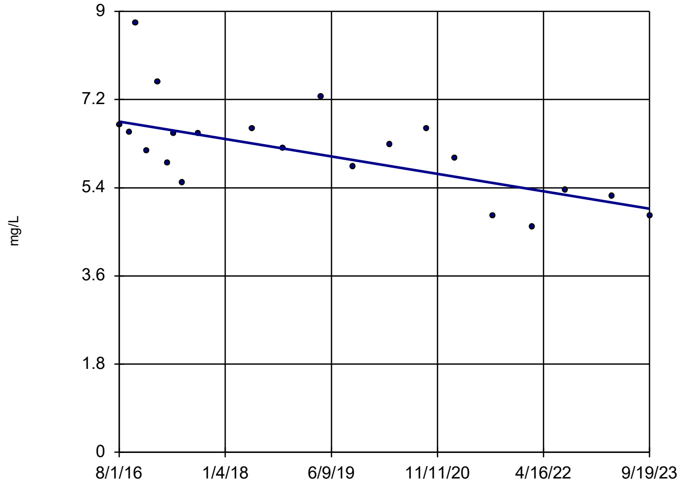
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 11/16/2023 1:58 PM View: Appendix III - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG

Sen's Slope Estimator

GS-AP-MW-19



n = 21

Slope = -0.2495 units per year.

Mann-Kendall statistic = -106 critical = -87

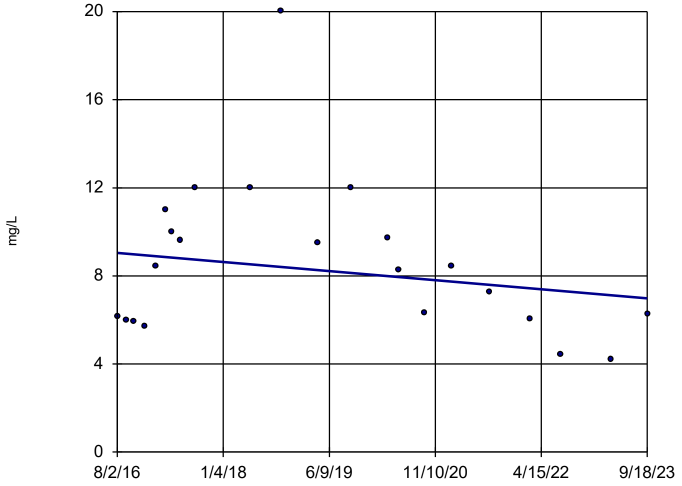
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 11/16/2023 1:58 PM View: Appendix III - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG

Sen's Slope Estimator

GS-AP-MW-2



n = 22

Slope = -0.2901 units per year.

Mann-Kendall statistic = -38 critical = -92

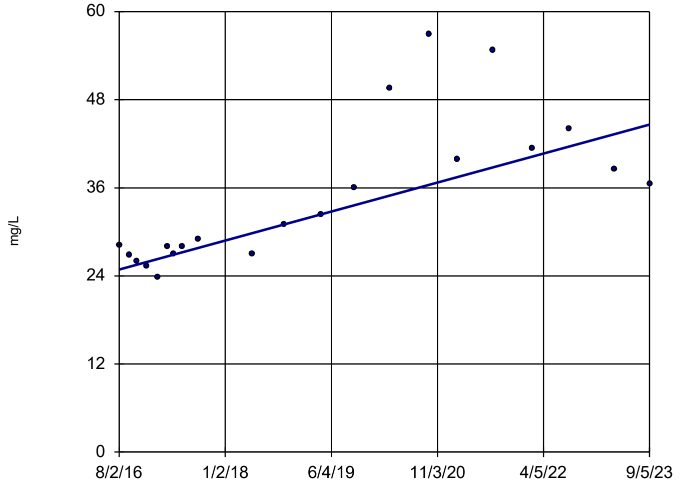
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 11/16/2023 1:58 PM View: Appendix III - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG

Sen's Slope Estimator

GS-AP-MW-21



n = 21

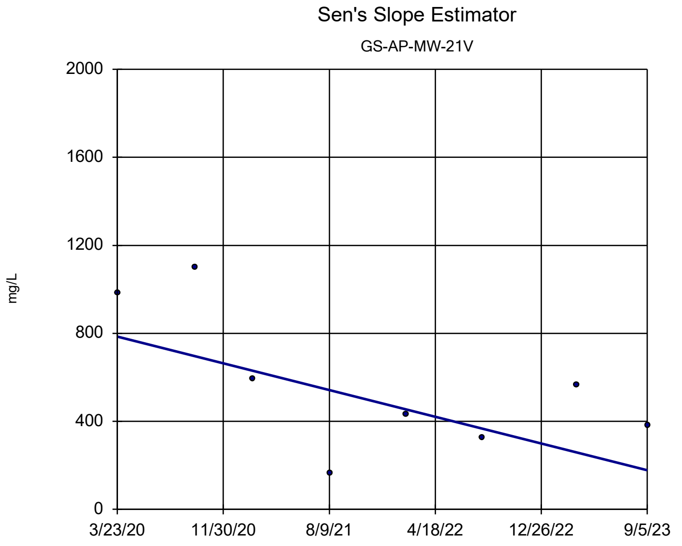
Slope = 2.788 units per year.

Mann-Kendall statistic = 128 critical = 87

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 11/16/2023 1:58 PM View: Appendix III - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG



n = 8

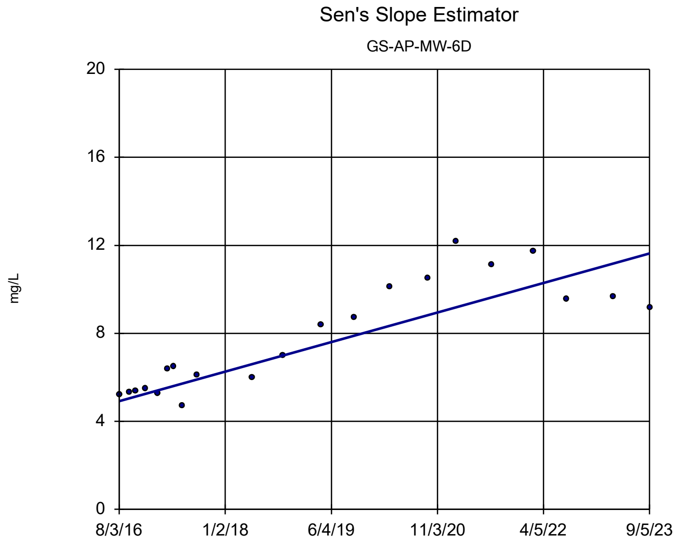
Slope = -175.6
units per year.

Mann-Kendall
statistic = -12
critical = -21

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 11/16/2023 1:58 PM View: Appendix III - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG



n = 21

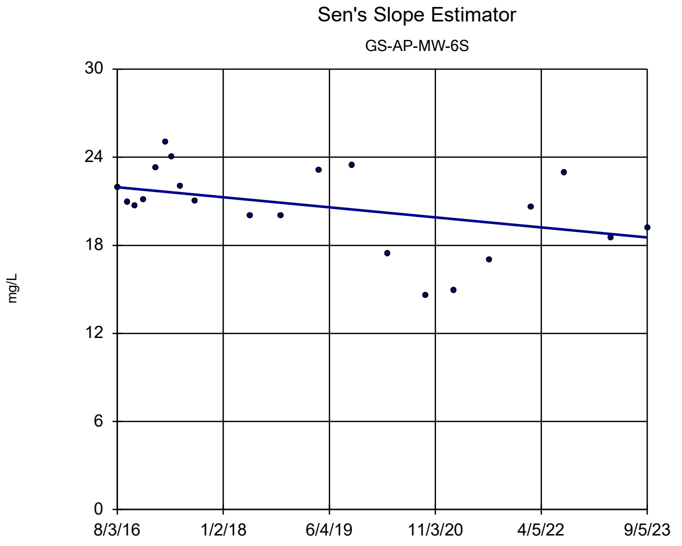
Slope = 0.9474
units per year.

Mann-Kendall
statistic = 142
critical = 87

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 11/16/2023 1:58 PM View: Appendix III - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG



n = 21

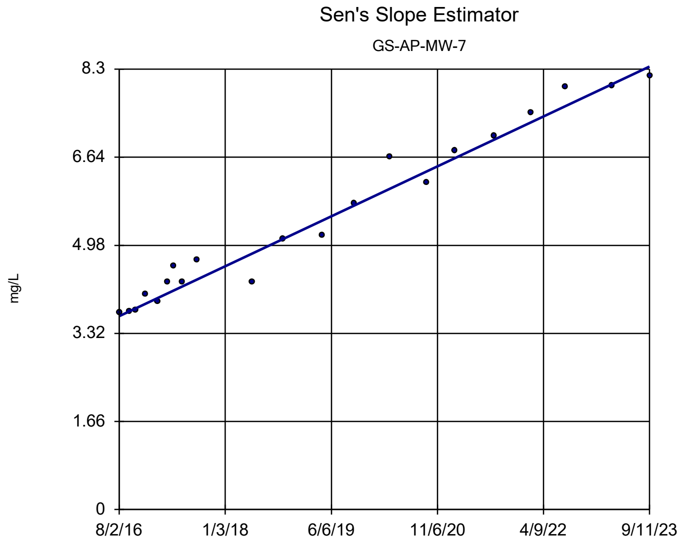
Slope = -0.4845
units per year.

Mann-Kendall
statistic = -67
critical = -87

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 11/16/2023 1:58 PM View: Appendix III - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG



n = 21

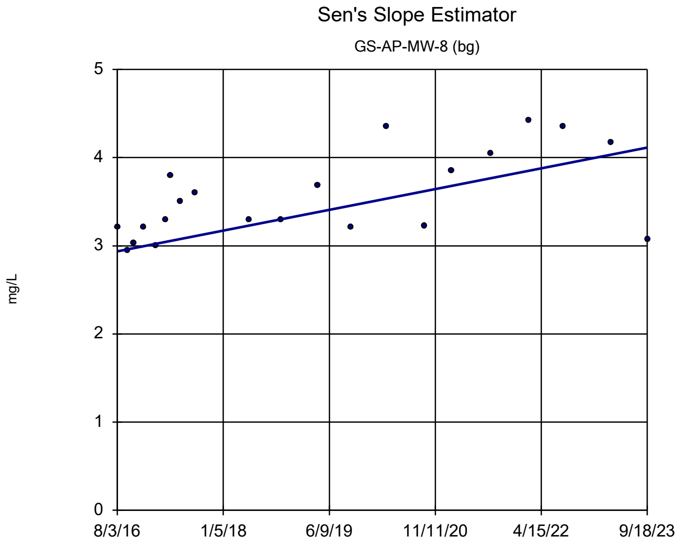
Slope = 0.6618
units per year.

Mann-Kendall
statistic = 197
critical = 87

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 11/16/2023 1:58 PM View: Appendix III - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG



n = 21

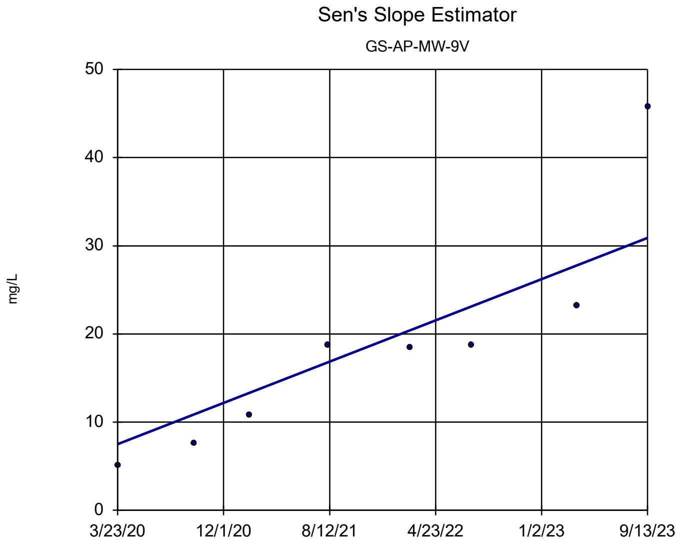
Slope = 0.1651
units per year.

Mann-Kendall
statistic = 99
critical = 87

Increasing trend
significant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Chloride Analysis Run 11/16/2023 1:58 PM View: Appendix III - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG



n = 8

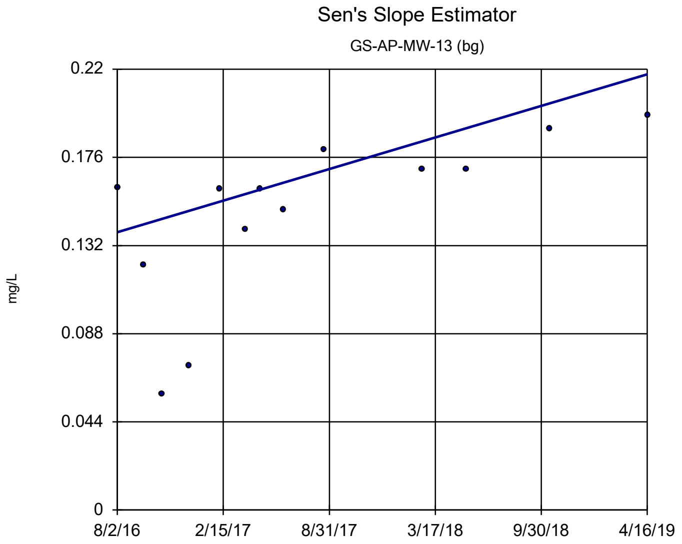
Slope = 6.734
units per year.

Mann-Kendall
statistic = 25
critical = 21

Increasing trend
significant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Chloride Analysis Run 11/16/2023 1:58 PM View: Appendix III - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG



n = 13

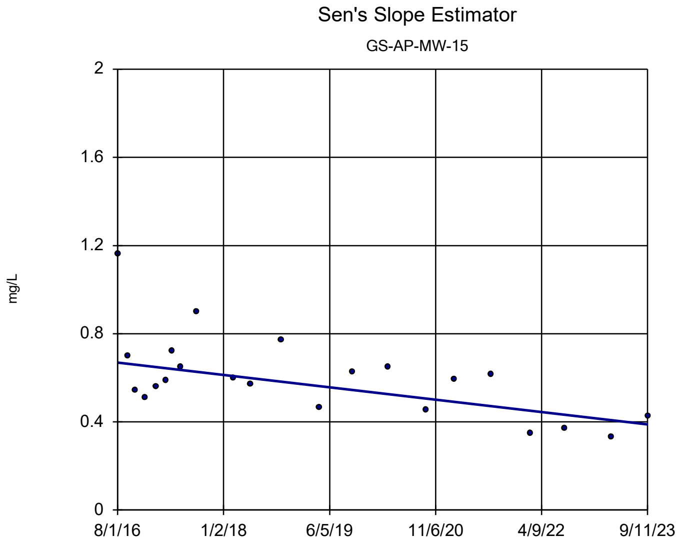
Slope = 0.02914
units per year.

Mann-Kendall
statistic = 48
critical = 43

Increasing trend
significant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Fluoride Analysis Run 11/16/2023 1:58 PM View: Appendix III - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG



n = 22

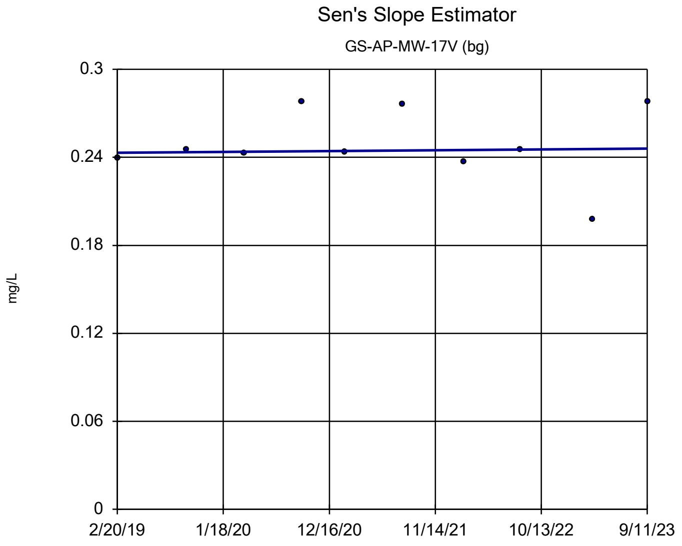
Slope = -0.03941
units per year.

Mann-Kendall
statistic = -87
critical = -92

Trend not significant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Fluoride Analysis Run 11/16/2023 1:58 PM View: Appendix III - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG



n = 10

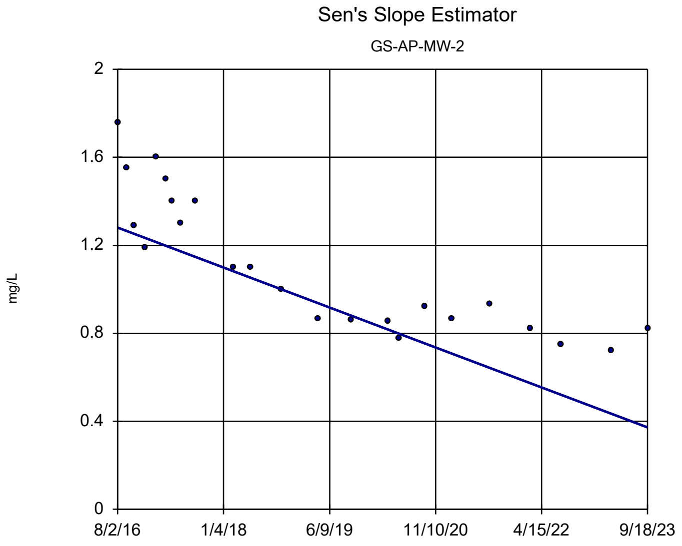
Slope = 0.00066
units per year.

Mann-Kendall
statistic = 3
critical = 30

Trend not significant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Fluoride Analysis Run 11/16/2023 1:58 PM View: Appendix III - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG



n = 23

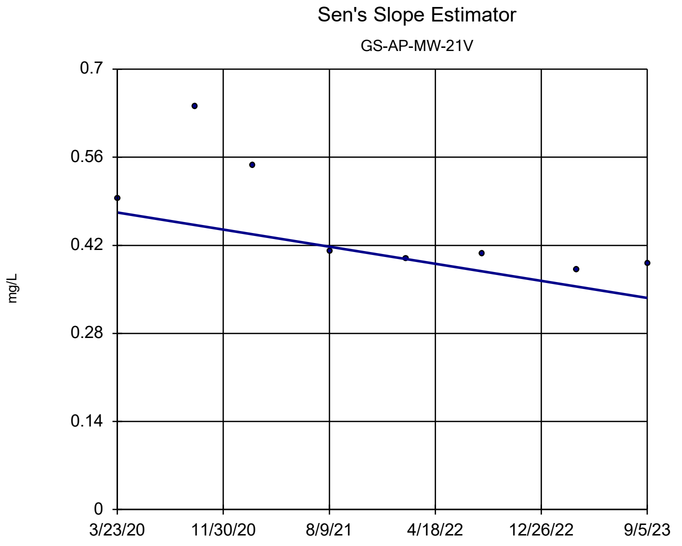
Slope = -0.1272
units per year.

Mann-Kendall
statistic = -191
critical = -98

Decreasing trend
significant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Fluoride Analysis Run 11/16/2023 1:58 PM View: Appendix III - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG



n = 8

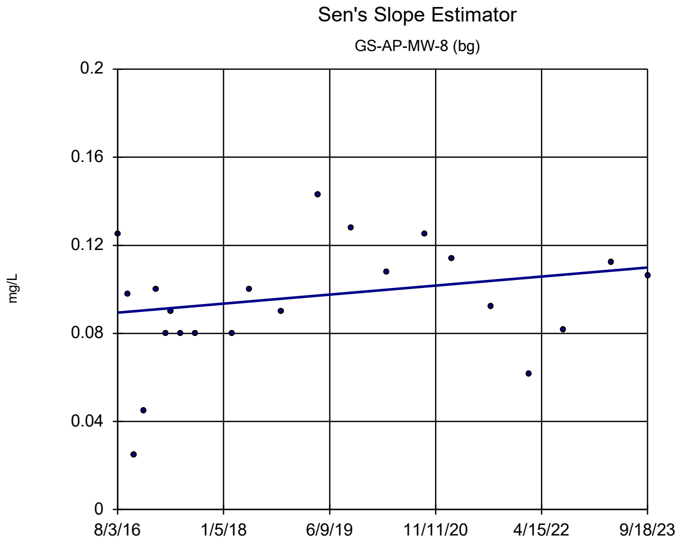
Slope = -0.03924
units per year.

Mann-Kendall
statistic = -20
critical = -21

Trend not significant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Fluoride Analysis Run 11/16/2023 1:58 PM View: Appendix III - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG



n = 22

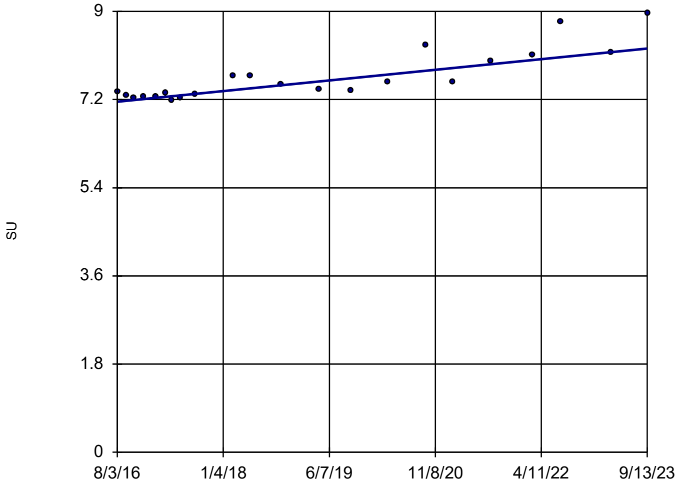
Slope = 0.002865
units per year.

Mann-Kendall
statistic = 46
critical = 92

Trend not significant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Fluoride Analysis Run 11/16/2023 1:58 PM View: Appendix III - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG


Sen's Slope Estimator

GS-AP-MW-12

n = 22

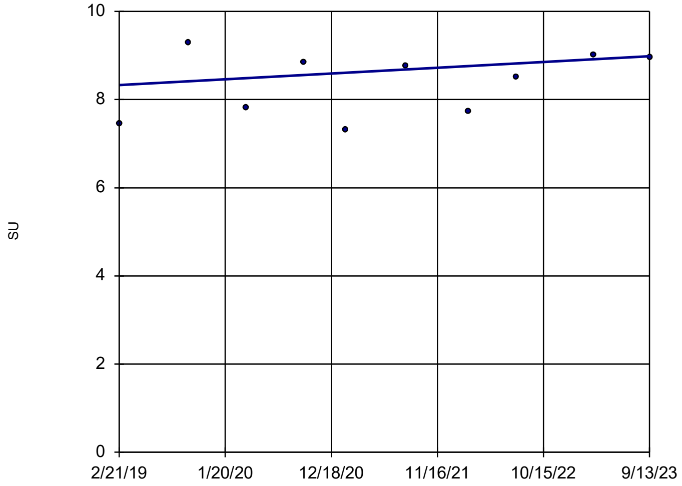
Slope = 0.1524
units per year.

Mann-Kendall
statistic = 148
critical = 92

Increasing trend
significant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: pH Analysis Run 11/16/2023 1:58 PM View: Appendix III - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG


Sen's Slope Estimator

GS-AP-MW-12V

n = 10

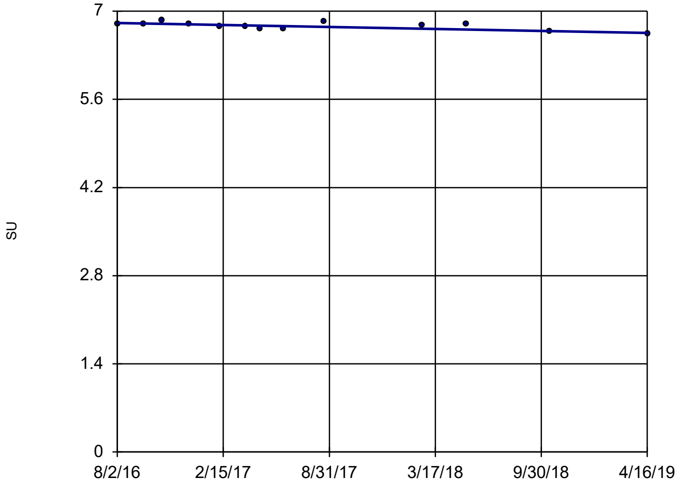
Slope = 0.1423
units per year.

Mann-Kendall
statistic = 9
critical = 30

Trend not sig-
nificant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: pH Analysis Run 11/16/2023 1:58 PM View: Appendix III - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG


Sen's Slope Estimator

GS-AP-MW-13 (bg)

n = 13

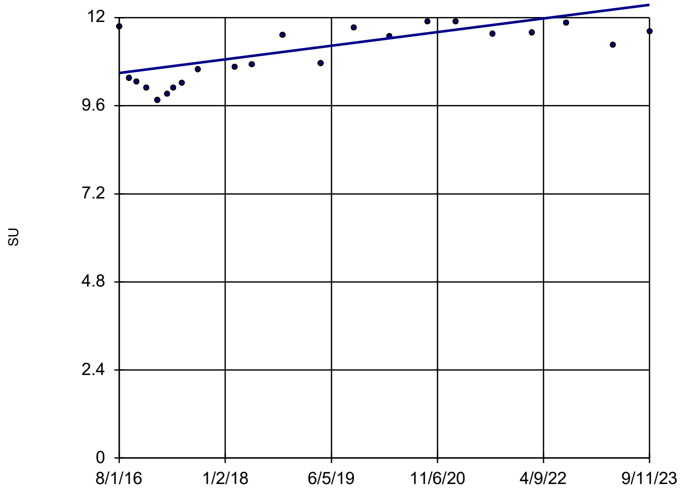
Slope = -0.05825
units per year.

Mann-Kendall
statistic = -34
critical = -43

Trend not sig-
nificant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: pH Analysis Run 11/16/2023 1:58 PM View: Appendix III - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG


Sen's Slope Estimator

GS-AP-MW-15

n = 22

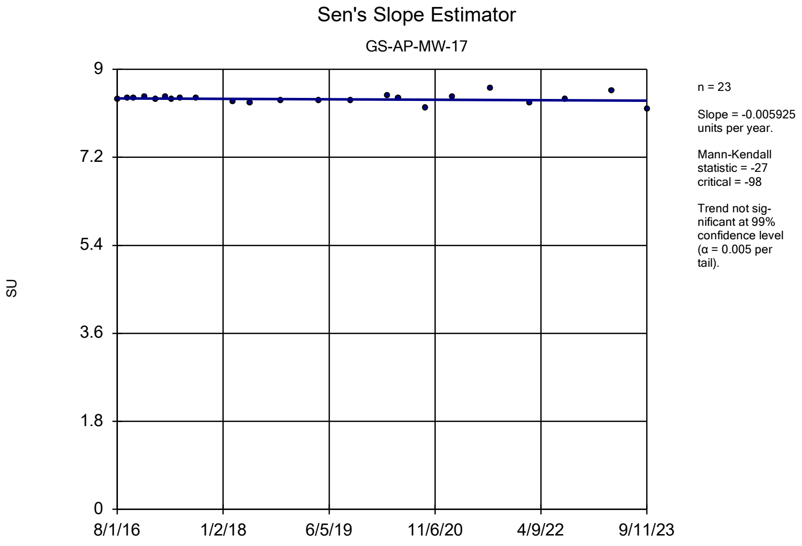
Slope = 0.2607
units per year.

Mann-Kendall
statistic = 119
critical = 92

Increasing trend
significant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: pH Analysis Run 11/16/2023 1:58 PM View: Appendix III - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG


Sen's Slope Estimator

GS-AP-MW-17

n = 23

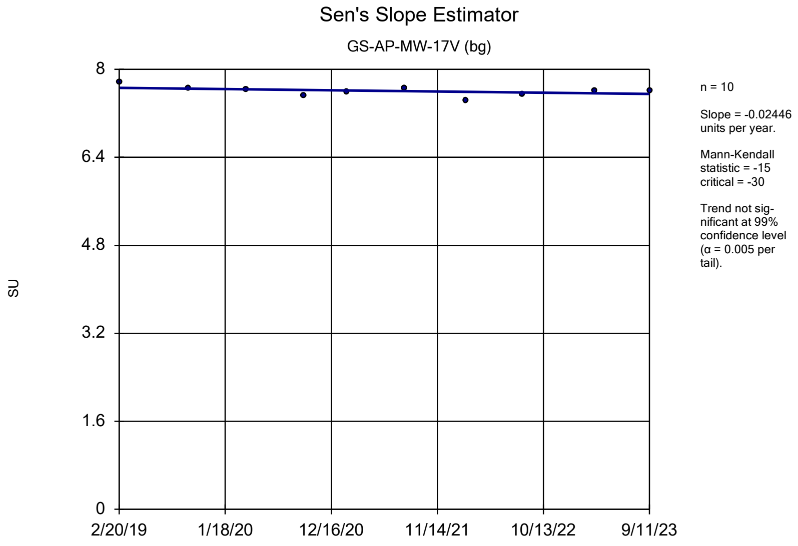
Slope = -0.005925 units per year.

Mann-Kendall statistic = -27 critical = -98

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: pH Analysis Run 11/16/2023 1:58 PM View: Appendix III - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG


Sen's Slope Estimator

GS-AP-MW-17V (bg)

n = 10

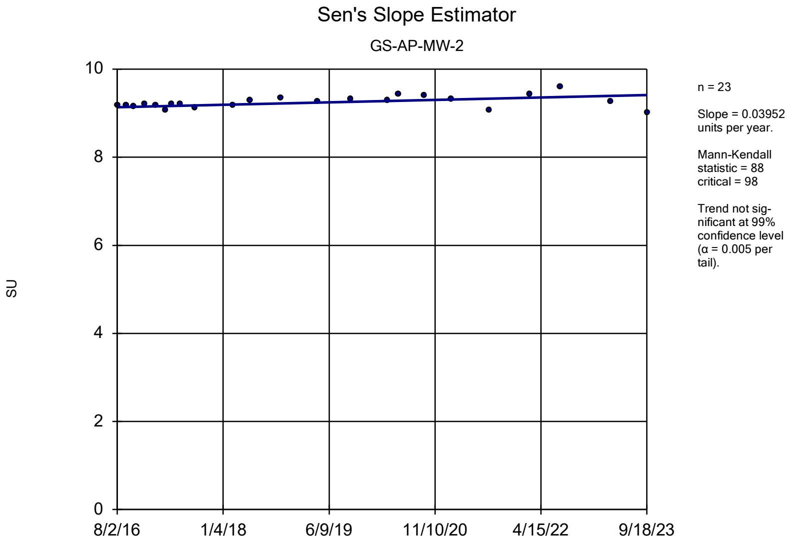
Slope = -0.02446 units per year.

Mann-Kendall statistic = -15 critical = -30

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: pH Analysis Run 11/16/2023 1:58 PM View: Appendix III - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG


Sen's Slope Estimator

GS-AP-MW-2

n = 23

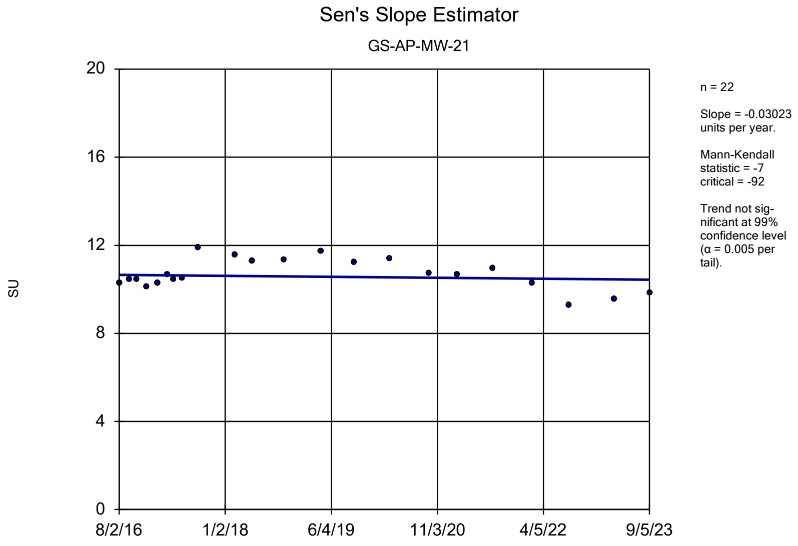
Slope = 0.03952 units per year.

Mann-Kendall statistic = 88 critical = 98

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: pH Analysis Run 11/16/2023 1:58 PM View: Appendix III - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG


Sen's Slope Estimator

GS-AP-MW-21

n = 22

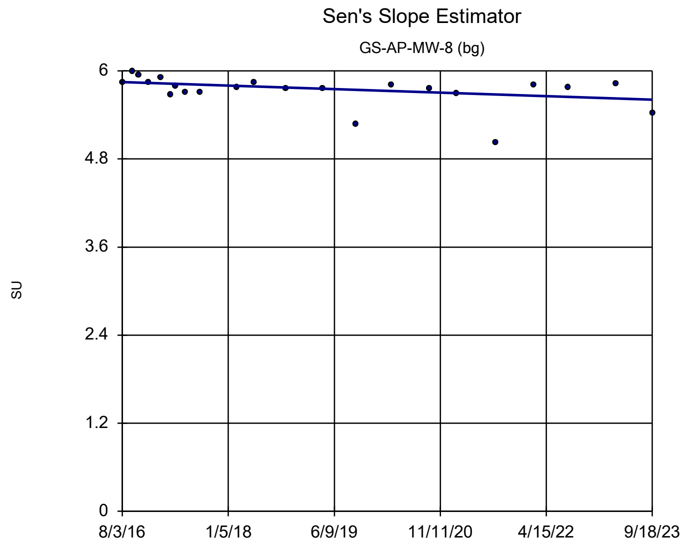
Slope = -0.03023 units per year.

Mann-Kendall statistic = -7 critical = -92

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: pH Analysis Run 11/16/2023 1:58 PM View: Appendix III - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG



n = 22

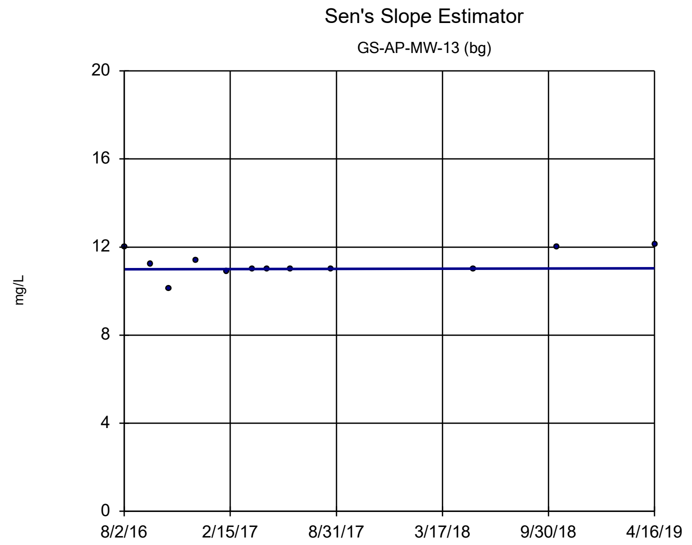
Slope = -0.0333
units per year.

Mann-Kendall
statistic = -82
critical = -92

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: pH   Analysis Run 11/16/2023 1:58 PM   View: Appendix III - Trend Tests
Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG



n = 12

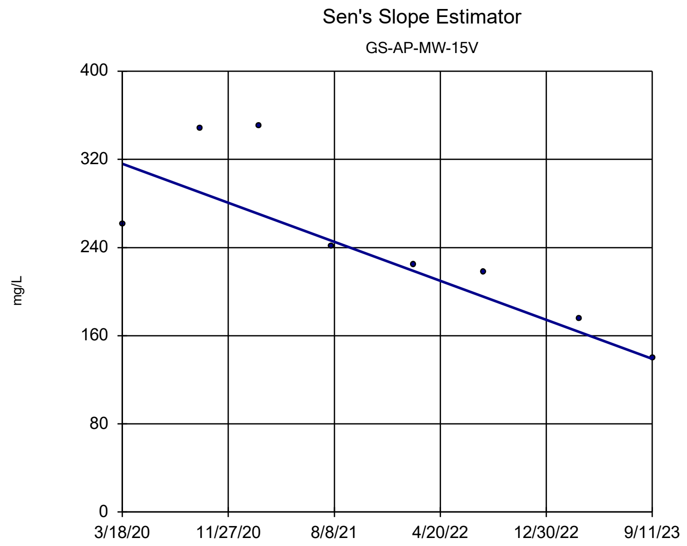
Slope = 0.01849
units per year.

Mann-Kendall
statistic = 11
critical = 38

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate   Analysis Run 11/16/2023 1:58 PM   View: Appendix III - Trend Tests
Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG



n = 8

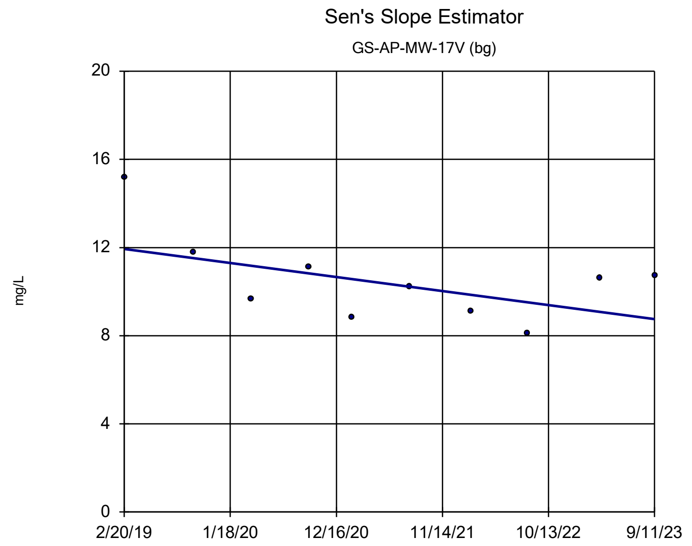
Slope = -50.77
units per year.

Mann-Kendall
statistic = -22
critical = -21

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate   Analysis Run 11/16/2023 1:58 PM   View: Appendix III - Trend Tests
Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG



n = 10

Slope = -0.7
units per year.

Mann-Kendall
statistic = -15
critical = -30

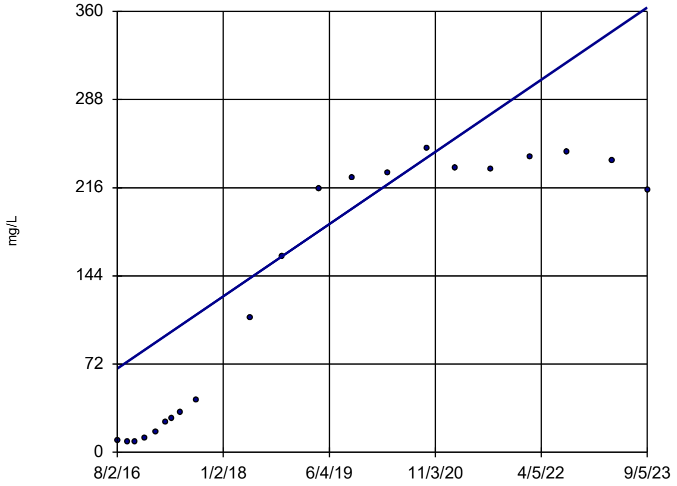
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate   Analysis Run 11/16/2023 1:58 PM   View: Appendix III - Trend Tests
Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG

Sen's Slope Estimator

GS-AP-MW-21



n = 21

Slope = 41.54 units per year.

Mann-Kendall statistic = 170 critical = 87

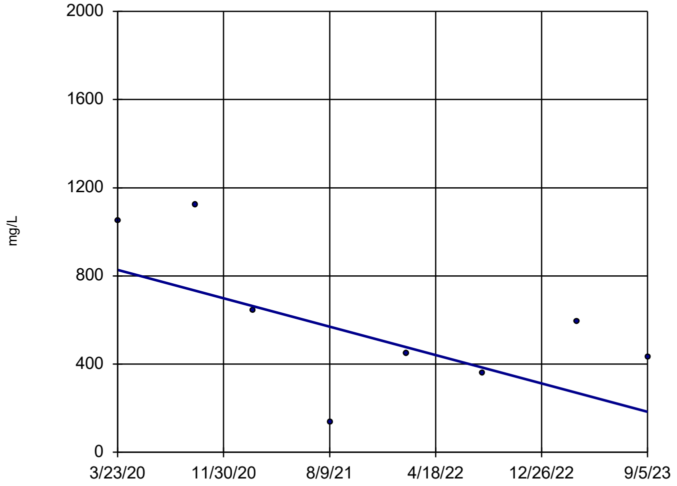
Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 11/16/2023 1:58 PM View: Appendix III - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG

Sen's Slope Estimator

GS-AP-MW-21V



n = 8

Slope = -186.5 units per year.

Mann-Kendall statistic = -12 critical = -21

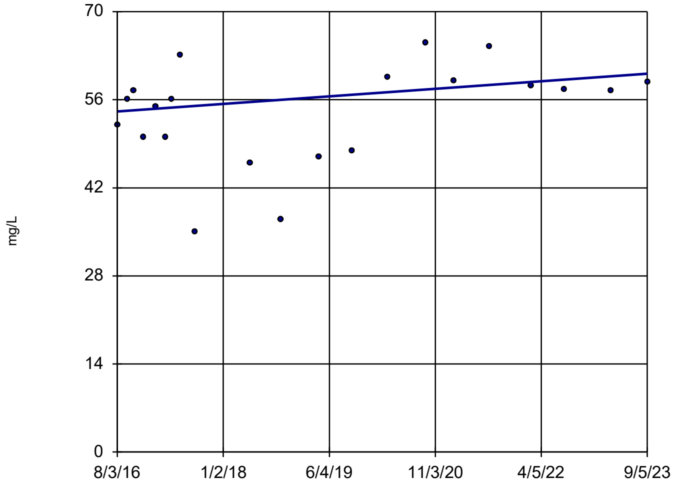
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 11/16/2023 1:58 PM View: Appendix III - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG

Sen's Slope Estimator

GS-AP-MW-6D



n = 21

Slope = 0.849 units per year.

Mann-Kendall statistic = 49 critical = 87

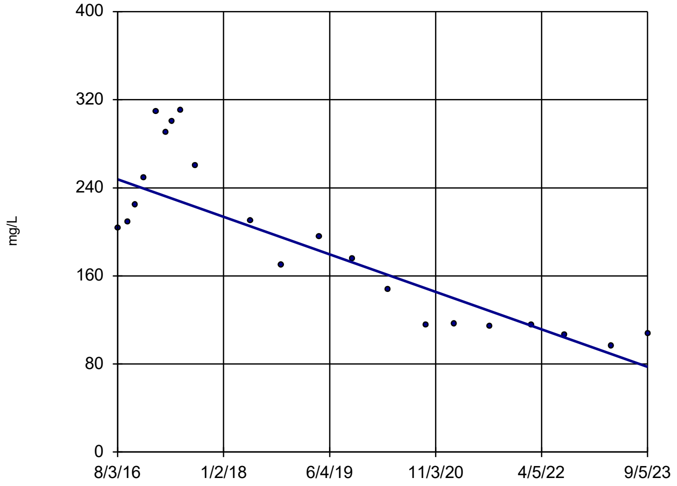
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 11/16/2023 1:58 PM View: Appendix III - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG

Sen's Slope Estimator

GS-AP-MW-6S



n = 21

Slope = -24 units per year.

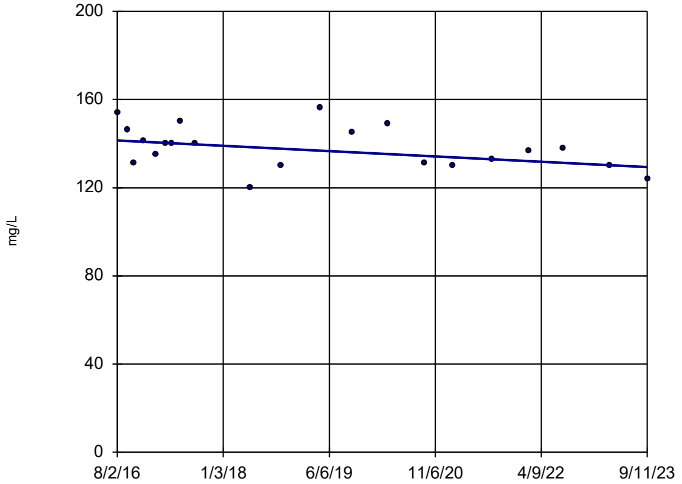
Mann-Kendall statistic = -133 critical = -87

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 11/16/2023 1:58 PM View: Appendix III - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sen's Slope Estimator

GS-AP-MW-7



n = 21

Slope = -1.707 units per year.

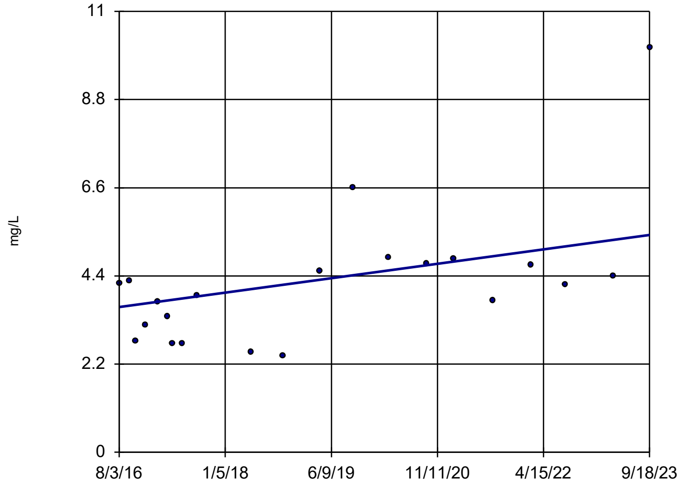
Mann-Kendall statistic = -65 critical = -87

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 11/16/2023 1:58 PM View: Appendix III - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sen's Slope Estimator

GS-AP-MW-8 (bg)



n = 21

Slope = 0.2514 units per year.

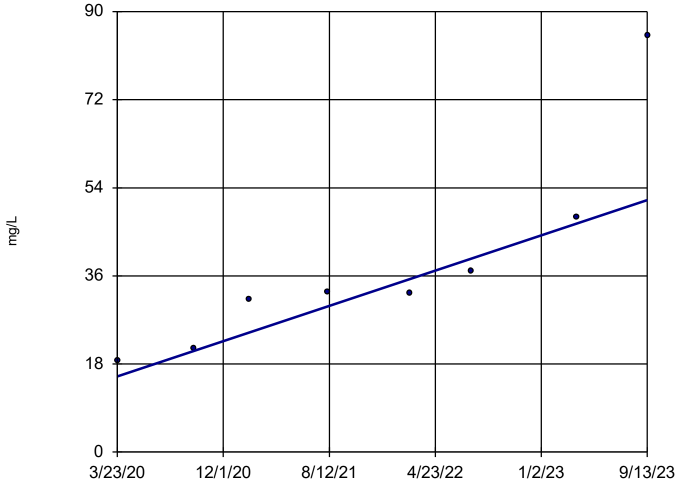
Mann-Kendall statistic = 63 critical = 87

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 11/16/2023 1:58 PM View: Appendix III - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sen's Slope Estimator

GS-AP-MW-9V



n = 8

Slope = 10.38 units per year.

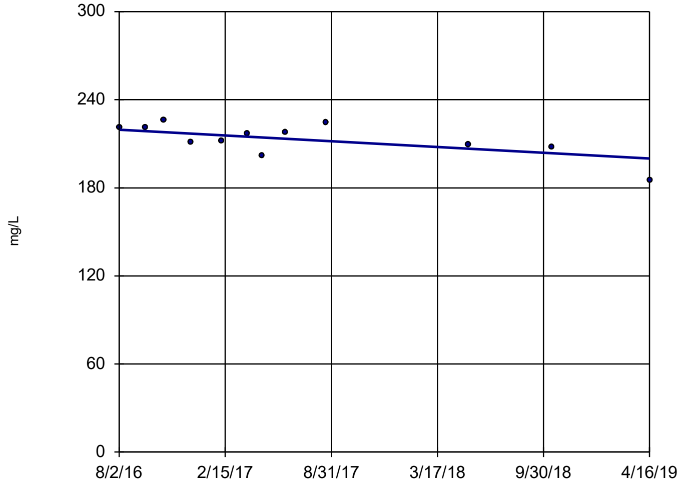
Mann-Kendall statistic = 26 critical = 21

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 11/16/2023 1:58 PM View: Appendix III - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sen's Slope Estimator

GS-AP-MW-13 (bg)



n = 12

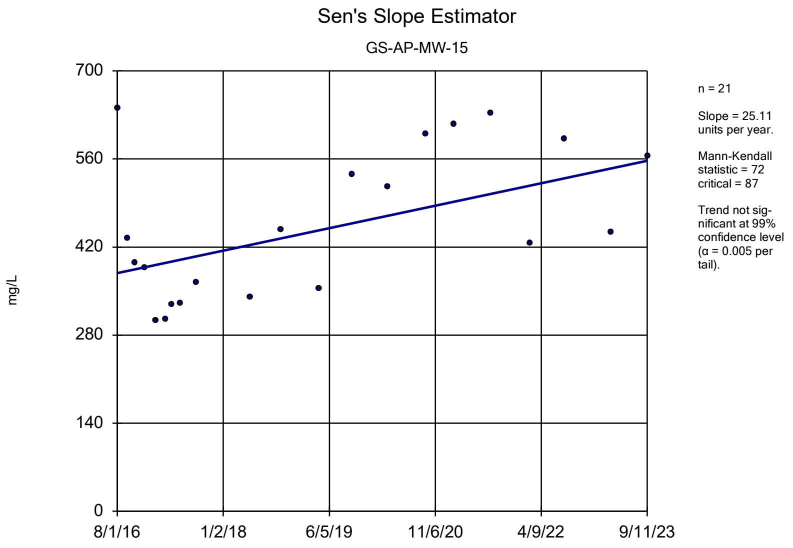
Slope = -7.182 units per year.

Mann-Kendall statistic = -29 critical = -38

Trend not significant at 99% confidence level (α = 0.005 per tail).

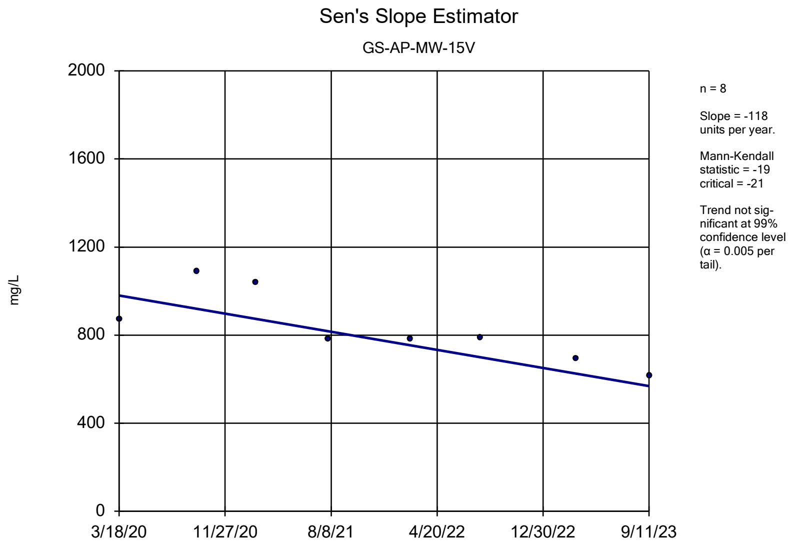
Constituent: TDS Analysis Run 11/16/2023 1:58 PM View: Appendix III - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG



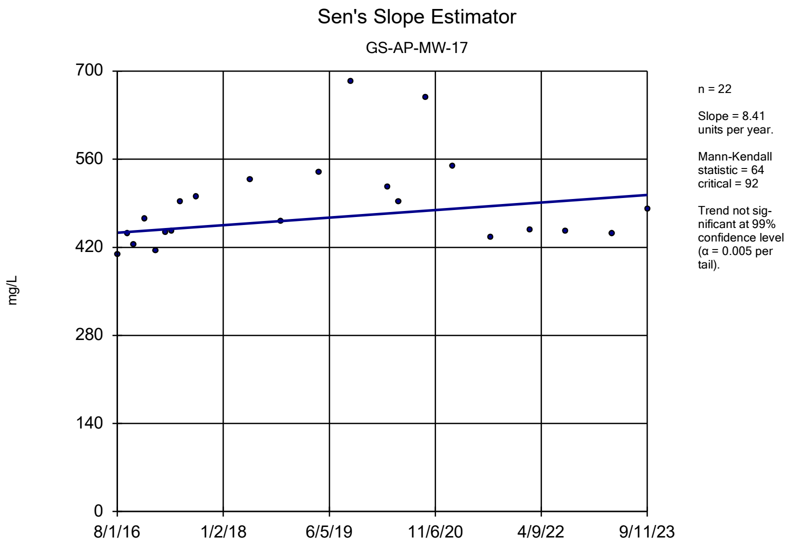
Constituent: TDS Analysis Run 11/16/2023 1:58 PM View: Appendix III - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG



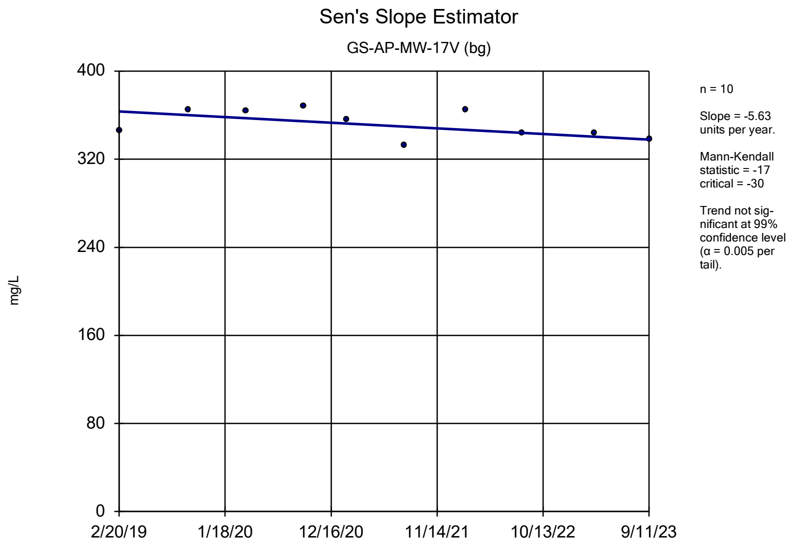
Constituent: TDS Analysis Run 11/16/2023 1:58 PM View: Appendix III - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG



Constituent: TDS Analysis Run 11/16/2023 1:58 PM View: Appendix III - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG

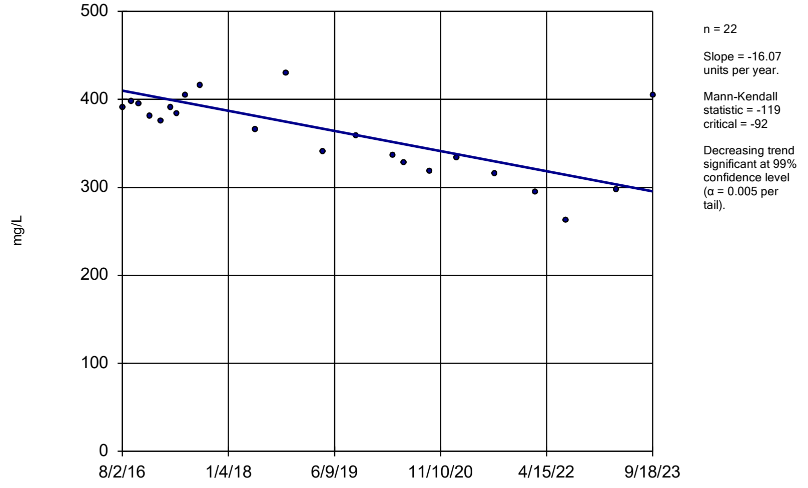


Constituent: TDS Analysis Run 11/16/2023 1:58 PM View: Appendix III - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG

Sen's Slope Estimator

GS-AP-MW-2

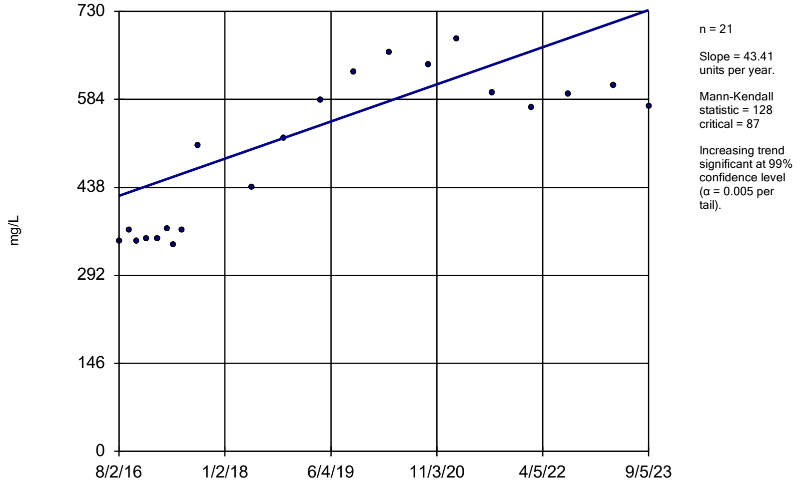


Constituent: TDS Analysis Run 11/16/2023 1:58 PM View: Appendix III - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG

Sen's Slope Estimator

GS-AP-MW-21

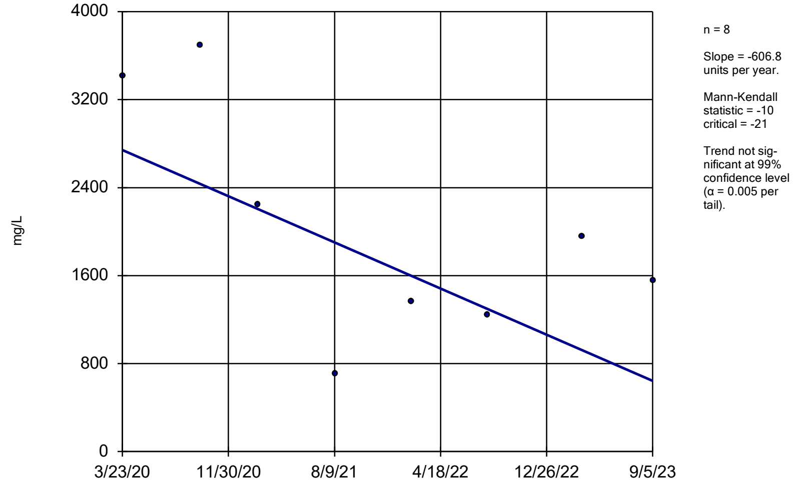


Constituent: TDS Analysis Run 11/16/2023 1:58 PM View: Appendix III - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG

Sen's Slope Estimator

GS-AP-MW-21V

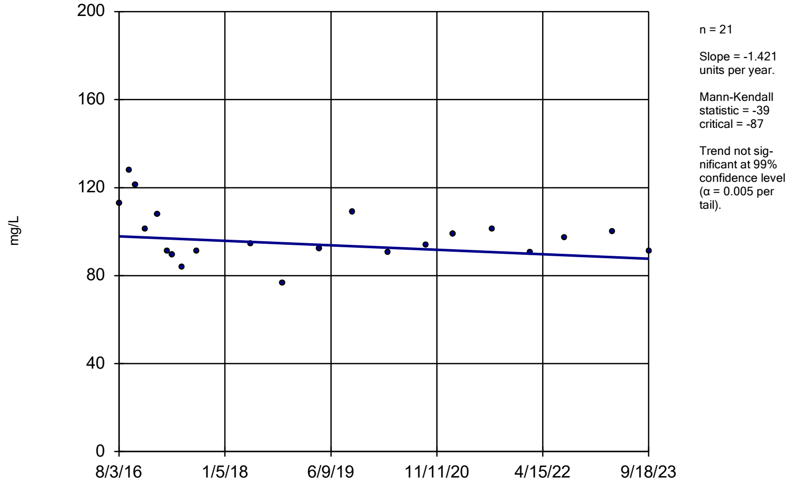


Constituent: TDS Analysis Run 11/16/2023 1:58 PM View: Appendix III - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

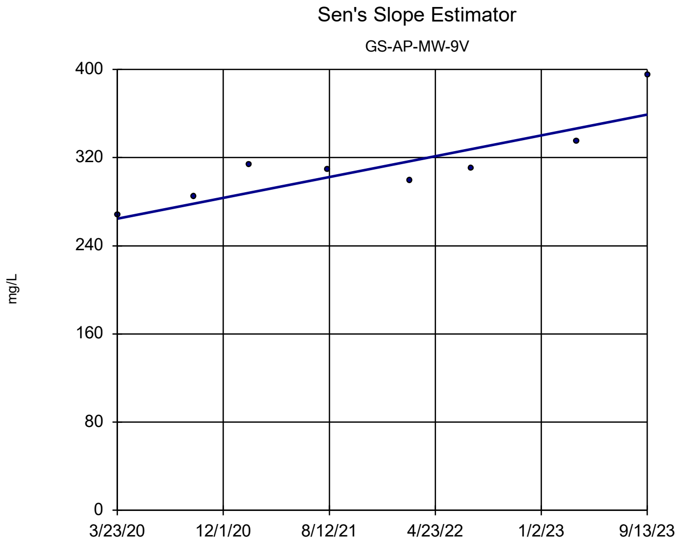
Sanitas™ v.10.0.13 . UG

Sen's Slope Estimator

GS-AP-MW-8 (bg)



Constituent: TDS Analysis Run 11/16/2023 1:59 PM View: Appendix III - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond



n = 8

Slope = 27.17
units per year.

Mann-Kendall
statistic = 20
critical = 21

Trend not significant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: TDS   Analysis Run 11/16/2023 1:59 PM   View: Appendix III - Trend Tests
Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

FIGURE G.

Upper Tolerance Limits Summary Table

Plant Gorgas   Data: Gorgas Ash Pond   Printed 11/17/2023, 9:26 AM

Constituent	Upper Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	0.00115	n/a	n/a	n/a	47	n/a	n/a	95.74	n/a	n/a	0.08974	NP Inter
Arsenic (mg/L)	0.005	n/a	n/a	n/a	47	n/a	n/a	53.19	n/a	n/a	0.08974	NP Inter
Barium (mg/L)	0.353	n/a	n/a	n/a	47	n/a	n/a	0	n/a	n/a	0.08974	NP Inter
Beryllium (mg/L)	0.001015	n/a	n/a	n/a	47	n/a	n/a	100	n/a	n/a	0.08974	NP Inter
Cadmium (mg/L)	0.000203	n/a	n/a	n/a	47	n/a	n/a	100	n/a	n/a	0.08974	NP Inter
Chromium (mg/L)	0.00405	n/a	n/a	n/a	47	n/a	n/a	63.83	n/a	n/a	0.08974	NP Inter
Cobalt (mg/L)	0.00362	n/a	n/a	n/a	47	n/a	n/a	68.09	n/a	n/a	0.08974	NP Inter
Combined Radium 226 + 228 (pCi/L)	1.25	n/a	n/a	n/a	46	n/a	n/a	0	n/a	n/a	0.09447	NP Inter
Fluoride (mg/L)	0.278	n/a	n/a	n/a	49	n/a	n/a	0	n/a	n/a	0.08099	NP Inter
Lead (mg/L)	0.00189	n/a	n/a	n/a	47	n/a	n/a	89.36	n/a	n/a	0.08974	NP Inter
Lithium (mg/L)	0.0809	n/a	n/a	n/a	47	n/a	n/a	44.68	n/a	n/a	0.08974	NP Inter
Mercury (mg/L)	0.0005	n/a	n/a	n/a	47	n/a	n/a	100	n/a	n/a	0.08974	NP Inter
Molybdenum (mg/L)	0.01015	n/a	n/a	n/a	47	n/a	n/a	76.6	n/a	n/a	0.08974	NP Inter
Selenium (mg/L)	0.001015	n/a	n/a	n/a	47	n/a	n/a	100	n/a	n/a	0.08974	NP Inter
Thallium (mg/L)	0.000203	n/a	n/a	n/a	47	n/a	n/a	100	n/a	n/a	0.08974	NP Inter

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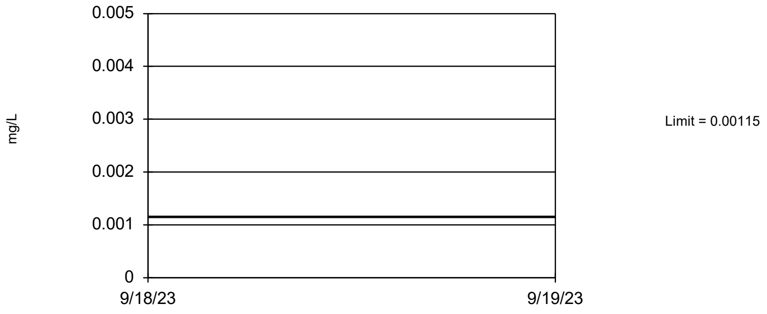
Tolerance Limit

Interwell Non-parametric



NP test selected by user. Limit is highest of 47 background values. 95.74% NDs. 90.82% coverage at alpha=0.01; 93.95% coverage at alpha=0.05; 98.63% coverage at alpha=0.5. Report alpha = 0.08974.

Constituent: Antimony Analysis Run 11/17/2023 9:25 AM View: UTLs
Plant Gorgas Data: Gorgas Ash Pond

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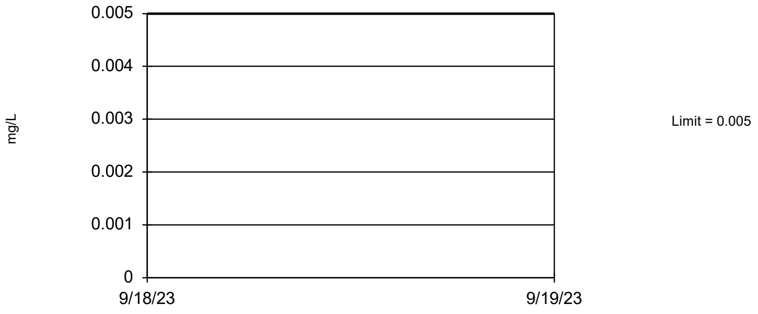
Tolerance Limit

Interwell Non-parametric



NP test selected by user. Limit is highest of 47 background values. 53.19% NDs. 90.82% coverage at alpha=0.01; 93.95% coverage at alpha=0.05; 98.63% coverage at alpha=0.5. Report alpha = 0.08974.

Constituent: Arsenic Analysis Run 11/17/2023 9:25 AM View: UTLs
Plant Gorgas Data: Gorgas Ash Pond

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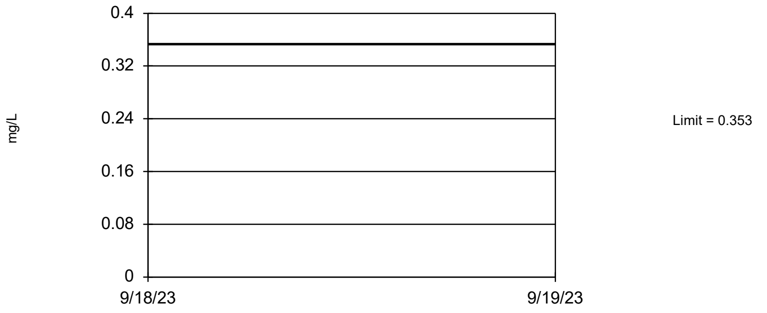
Tolerance Limit

Interwell Non-parametric



NP test selected by user. Limit is highest of 47 background values. 90.82% coverage at alpha=0.01; 93.95% coverage at alpha=0.05; 98.63% coverage at alpha=0.5. Report alpha = 0.08974.

Constituent: Barium Analysis Run 11/17/2023 9:25 AM View: UTLs
Plant Gorgas Data: Gorgas Ash Pond

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Tolerance Limit

Interwell Non-parametric

NP test selected by user. All background values were censored; limit is most recent reporting limit. 90.82% coverage at alpha=0.01; 93.95% coverage at alpha=0.05; 98.63% coverage at alpha=0.5. Report alpha = 0.08974.

Constituent: Beryllium Analysis Run 11/17/2023 9:25 AM View: UTLs
Plant Gorgas Data: Gorgas Ash Pond

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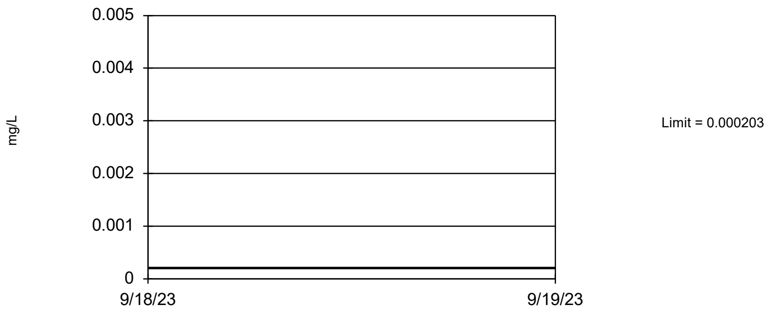
Tolerance Limit

Interwell Non-parametric



NP test selected by user. All background values were censored; limit is most recent reporting limit. 90.82% coverage at alpha=0.01; 93.95% coverage at alpha=0.05; 98.63% coverage at alpha=0.5. Report alpha = 0.08974.

Constituent: Cadmium   Analysis Run 11/17/2023 9:25 AM   View: UTLs
Plant Gorgas   Data: Gorgas Ash Pond

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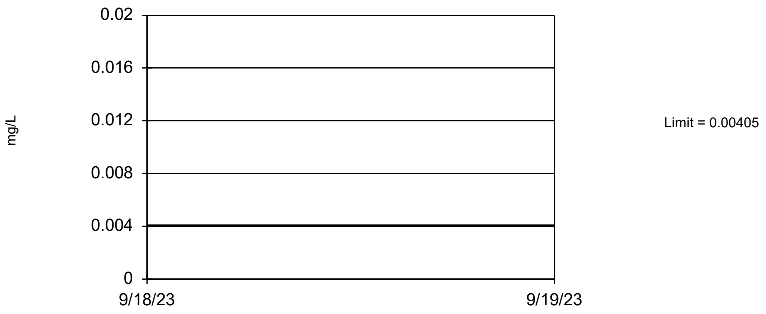
Tolerance Limit

Interwell Non-parametric



NP test selected by user. Limit is highest of 47 background values. 63.83% NDs. 90.82% coverage at alpha=0.01; 93.95% coverage at alpha=0.05; 98.63% coverage at alpha=0.5. Report alpha = 0.08974.

Constituent: Chromium   Analysis Run 11/17/2023 9:25 AM   View: UTLs
Plant Gorgas   Data: Gorgas Ash Pond

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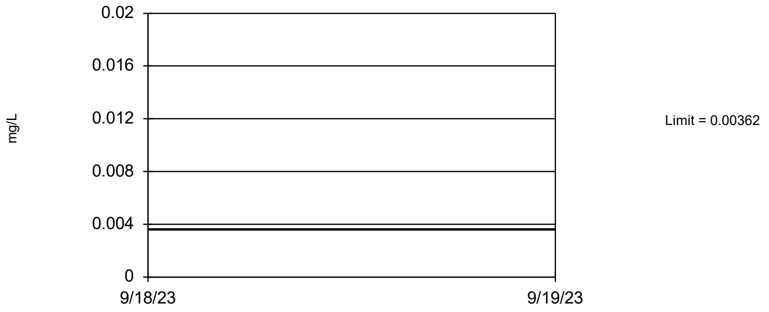
Tolerance Limit

Interwell Non-parametric



NP test selected by user. Limit is highest of 47 background values. 68.09% NDs. 90.82% coverage at alpha=0.01; 93.95% coverage at alpha=0.05; 98.63% coverage at alpha=0.5. Report alpha = 0.08974.

Constituent: Cobalt   Analysis Run 11/17/2023 9:25 AM   View: UTLs
Plant Gorgas   Data: Gorgas Ash Pond

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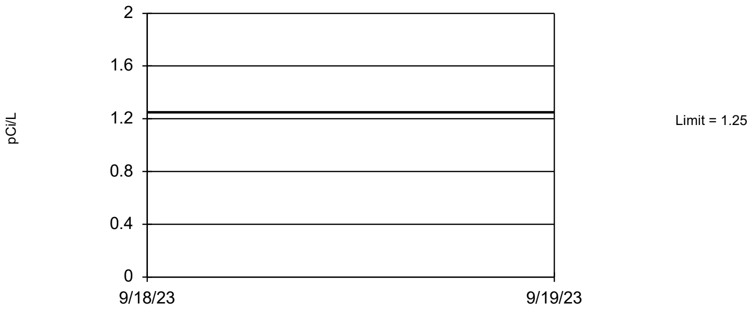
Tolerance Limit

Interwell Non-parametric



NP test selected by user. Limit is highest of 46 background values. 90.43% coverage at alpha=0.01; 93.55% coverage at alpha=0.05; 98.63% coverage at alpha=0.5. Report alpha = 0.09447.

Constituent: Combined Radium 226 + 228   Analysis Run 11/17/2023 9:26 AM   View: UTLs
Plant Gorgas   Data: Gorgas Ash Pond

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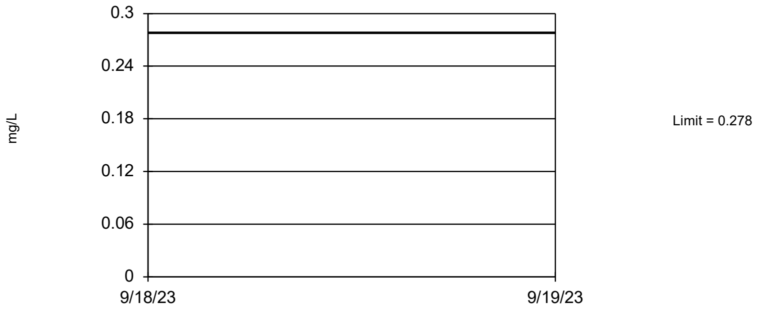
Tolerance Limit

Interwell Non-parametric



NP test selected by user. Limit is highest of 49 background values. 91.21% coverage at alpha=0.01; 93.95% coverage at alpha=0.05; 98.63% coverage at alpha=0.5. Report alpha = 0.08099.

Constituent: Fluoride Analysis Run 11/17/2023 9:26 AM View: UTLs
Plant Gorgas Data: Gorgas Ash Pond

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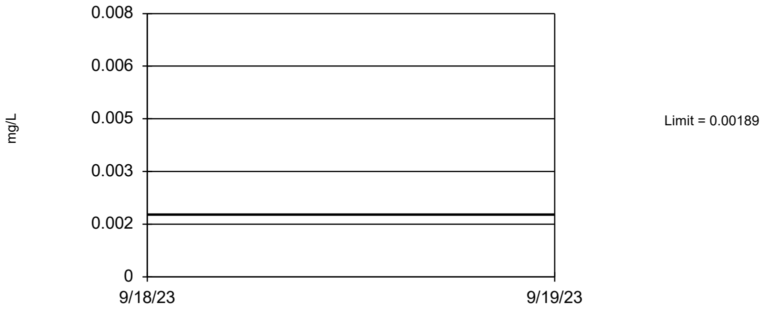
Tolerance Limit

Interwell Non-parametric



NP test selected by user. Limit is highest of 47 background values. 89.36% NDs. 90.82% coverage at alpha=0.01; 93.95% coverage at alpha=0.05; 98.63% coverage at alpha=0.5. Report alpha = 0.08974.

Constituent: Lead Analysis Run 11/17/2023 9:26 AM View: UTLs
Plant Gorgas Data: Gorgas Ash Pond

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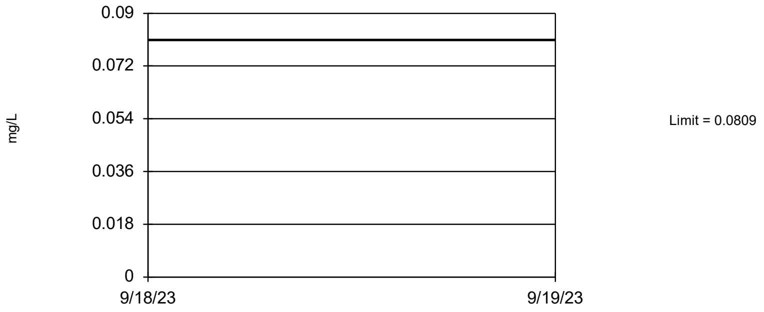
Tolerance Limit

Interwell Non-parametric



NP test selected by user. Limit is highest of 47 background values. 44.68% NDs. 90.82% coverage at alpha=0.01; 93.95% coverage at alpha=0.05; 98.63% coverage at alpha=0.5. Report alpha = 0.08974.

Constituent: Lithium Analysis Run 11/17/2023 9:26 AM View: UTLs
Plant Gorgas Data: Gorgas Ash Pond

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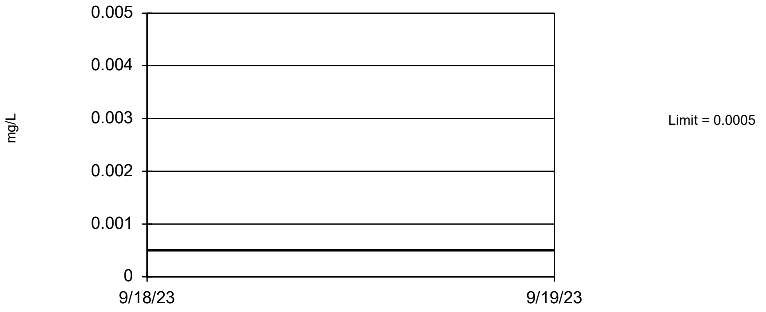
Tolerance Limit

Interwell Non-parametric



NP test selected by user. All background values were censored; limit is most recent reporting limit. 90.82% coverage at alpha=0.01; 93.95% coverage at alpha=0.05; 98.63% coverage at alpha=0.5. Report alpha = 0.08974.

Constituent: Mercury Analysis Run 11/17/2023 9:26 AM View: UTLs
Plant Gorgas Data: Gorgas Ash Pond

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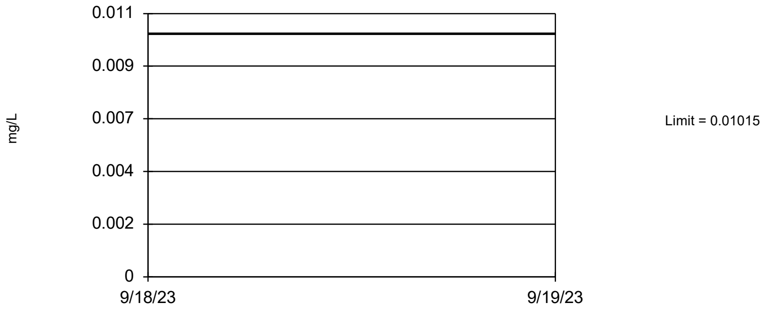
Tolerance Limit

Interwell Non-parametric



NP test selected by user. Limit is highest of 47 background values. 76.6% NDs. 90.82% coverage at alpha=0.01; 93.95% coverage at alpha=0.05; 98.63% coverage at alpha=0.5. Report alpha = 0.08974.

Constituent: Molybdenum Analysis Run 11/17/2023 9:26 AM View: UTLs
Plant Gorgas Data: Gorgas Ash Pond

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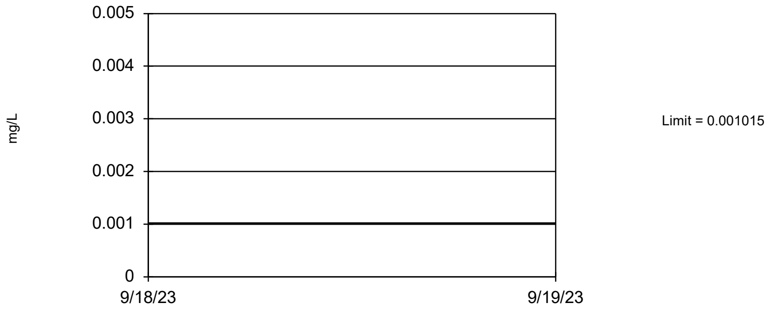
Tolerance Limit

Interwell Non-parametric



NP test selected by user. All background values were censored; limit is most recent reporting limit. 90.82% coverage at alpha=0.01; 93.95% coverage at alpha=0.05; 98.63% coverage at alpha=0.5. Report alpha = 0.08974.

Constituent: Selenium Analysis Run 11/17/2023 9:26 AM View: UTLs
Plant Gorgas Data: Gorgas Ash Pond

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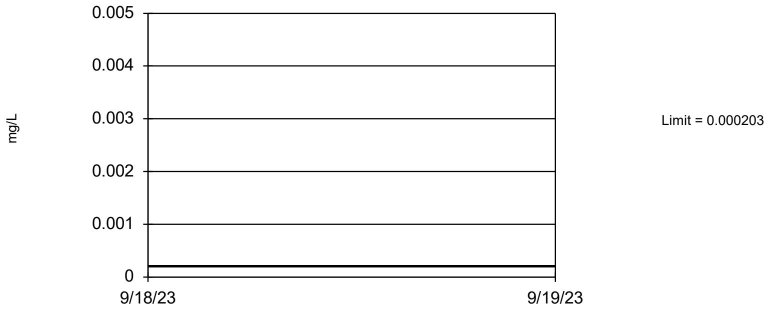
Tolerance Limit

Interwell Non-parametric



NP test selected by user. All background values were censored; limit is most recent reporting limit. 90.82% coverage at alpha=0.01; 93.95% coverage at alpha=0.05; 98.63% coverage at alpha=0.5. Report alpha = 0.08974.

Constituent: Thallium Analysis Run 11/17/2023 9:26 AM View: UTLs
Plant Gorgas Data: Gorgas Ash Pond

FIGURE H.

GORGAS ASH POND GWPS

Analyte	Units	Background	GWPS
Antimony	mg/L	0.00115	0.006
Arsenic	mg/L	0.005	0.01
Barium	mg/L	0.353	2
Beryllium	mg/L	0.001015	0.004
Cadmium	mg/L	0.000203	0.005
Chromium	mg/L	0.00405	0.1
Cobalt	mg/L	0.00362	0.006
Combined Radium-226/228	pCi/L	1.25	5
Fluoride	mg/L	0.278	4
Lead	mg/L	0.00189	0.015
Lithium	mg/L	0.0809	0.0809
Mercury	mg/L	0.0005	0.002
Molybdenum	mg/L	0.01015	0.1
Selenium	mg/L	0.001015	0.05
Thallium	mg/L	0.000203	0.002

Notes:

1. mg/L - Milligrams per liter

2. pCi/L - Picocuries per liter

3. The background limits were used as the groundwater protection standard (GWPS) when appropriate under 40 CFR §257.95(h), ADEM Rule 335-13-15-.06(h), and the ADEM Variance.

4. GWPS established during second semi-annual sampling event in 2023.

FIGURE I.

Confidence Intervals Summary Table - Significant Results

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond Printed 11/16/2023, 3:44 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Arsenic (mg/L)	**GS-AP-MW-13R**	**0.034**	**0.011**	**0.01**	**Yes**	**4**	**0.009889**	**0**	**None**	**No**	**0.0625**	**NP (selected)**
Arsenic (mg/L)	**GS-AP-MW-46**	**0.2098**	**0.03946**	**0.01**	**Yes**	**4**	**0.03751**	**0**	**None**	**No**	**0.01**	**Param.**
Arsenic (mg/L)	**GS-AP-MW-6D**	**0.1151**	**0.09769**	**0.01**	**Yes**	**8**	**0.008205**	**0**	**None**	**No**	**0.01**	**Param.**
Arsenic (mg/L)	**GS-AP-MW-7**	**0.285**	**0.244**	**0.01**	**Yes**	**8**	**0.01589**	**0**	**None**	**No**	**0.004**	**NP (normality)**
Lithium (mg/L)	**GS-AP-MW-15**	**0.517**	**0.2892**	**0.0809**	**Yes**	**8**	**0.1075**	**0**	**None**	**No**	**0.01**	**Param.**
Lithium (mg/L)	**GS-AP-MW-6D**	**0.3307**	**0.2933**	**0.0809**	**Yes**	**8**	**0.01767**	**0**	**None**	**No**	**0.01**	**Param.**
Lithium (mg/L)	**GS-AP-MW-7**	**0.2208**	**0.169**	**0.0809**	**Yes**	**8**	**0.02444**	**0**	**None**	**No**	**0.01**	**Param.**
Molybdenum (mg/L)	**GS-AP-MW-7**	**0.2235**	**0.2002**	**0.1**	**Yes**	**8**	**0.01099**	**0**	**None**	**No**	**0.01**	**Param.**

Confidence Intervals Summary Table - All Results

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond Printed 11/16/2023, 3:44 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	GS-AP-MW-12	0.004283	0.001009	0.006	No	8	0.001544	0	None	No	0.01	Param.
Antimony (mg/L)	GS-AP-MW-12V	0.001239	0.00054	0.006	No	8	0.0003276	25	Kaplan-Meier	No	0.01	Param.
Antimony (mg/L)	GS-AP-MW-15	0.0009487	0.0005939	0.006	No	8	0.0001674	12.5	None	No	0.01	Param.
Antimony (mg/L)	GS-AP-MW-15V	0.002555	0.001023	0.006	No	8	0.0007626	0	None	x^(1/3)	0.01	Param.
Antimony (mg/L)	GS-AP-MW-21V	0.001015	0.000661	0.006	No	8	0.0001326	75	None	No	0.004	NP (NDs)
Antimony (mg/L)	GS-AP-MW-46	0.001015	0.000764	0.006	No	4	0.0001255	75	Kaplan-Meier	No	0.0625	NP (NDs)
Antimony (mg/L)	GS-AP-MW-6S	0.001028	0.0005511	0.006	No	8	0.0002295	37.5	Kaplan-Meier	No	0.01	Param.
Arsenic (mg/L)	GS-AP-MW-10R	0.00277	0.00047	0.01	No	4	0.001024	0	None	No	0.0625	NP (selected)
Arsenic (mg/L)	GS-AP-MW-11R	0.00378	0.00137	0.01	No	4	0.001113	0	None	No	0.0625	NP (selected)
Arsenic (mg/L)	GS-AP-MW-12	0.006811	0.001489	0.01	No	8	0.002511	0	None	No	0.01	Param.
Arsenic (mg/L)	GS-AP-MW-12V	0.00266	0.000929	0.01	No	8	0.0005996	0	None	No	0.004	NP (normality)
Arsenic (mg/L)	**GS-AP-MW-13R**	**0.034**	**0.011**	**0.01**	**Yes**	**4**	**0.009889**	**0**	**None**	**No**	**0.0625**	**NP (selected)**
Arsenic (mg/L)	GS-AP-MW-14R	0.00231	0.000553	0.01	No	4	0.0007589	0	None	No	0.0625	NP (selected)
Arsenic (mg/L)	GS-AP-MW-15	0.0181	0.005059	0.01	No	8	0.006152	0	None	No	0.01	Param.
Arsenic (mg/L)	GS-AP-MW-15V	0.015	0.004562	0.01	No	8	0.004922	0	None	No	0.01	Param.
Arsenic (mg/L)	GS-AP-MW-16D	0.000491	0.0001	0.01	No	8	0.000119	50	None	No	0.004	NP (normality)
Arsenic (mg/L)	GS-AP-MW-17	0.0055	0.00086	0.01	No	8	0.0019	0	None	No	0.004	NP (normality)
Arsenic (mg/L)	GS-AP-MW-18VR	0.00164	0.000422	0.01	No	4	0.0005482	0	None	No	0.0625	NP (selected)
Arsenic (mg/L)	GS-AP-MW-19	0.002844	0.001093	0.01	No	8	0.0008261	0	None	No	0.01	Param.
Arsenic (mg/L)	GS-AP-MW-1R	0.0004372	0.0001628	0.01	No	4	0.00006043	0	None	No	0.01	Param.
Arsenic (mg/L)	GS-AP-MW-2	0.000203	0.000083	0.01	No	9	0.00004538	77.78	None	No	0.002	NP (NDs)
Arsenic (mg/L)	GS-AP-MW-21	0.005	0.00046	0.01	No	8	0.002071	25	None	No	0.004	NP (normality)
Arsenic (mg/L)	GS-AP-MW-21V	0.01123	0.001595	0.01	No	8	0.004547	0	None	No	0.01	Param.
Arsenic (mg/L)	GS-AP-MW-3	0.0001965	0.0001315	0.01	No	6	0.00002362	0	None	No	0.01	Param.
Arsenic (mg/L)	GS-AP-MW-3V	0.00249	0.000654	0.01	No	4	0.0009059	0	None	No	0.0625	NP (selected)
Arsenic (mg/L)	GS-AP-MW-45V	0.002	0.000618	0.01	No	4	0.0005775	0	None	No	0.0625	NP (selected)
Arsenic (mg/L)	**GS-AP-MW-46**	**0.2098**	**0.03946**	**0.01**	**Yes**	**4**	**0.03751**	**0**	**None**	**No**	**0.01**	**Param.**
Arsenic (mg/L)	GS-AP-MW-47	0.00102	0.00038	0.01	No	4	0.0002923	0	None	No	0.0625	NP (selected)
Arsenic (mg/L)	GS-AP-MW-5R	0.00048	0.000161	0.01	No	4	0.0001451	0	None	No	0.0625	NP (selected)
Arsenic (mg/L)	**GS-AP-MW-6D**	**0.1151**	**0.09769**	**0.01**	**Yes**	**8**	**0.008205**	**0**	**None**	**No**	**0.01**	**Param.**
Arsenic (mg/L)	GS-AP-MW-6S	0.01099	0.006249	0.01	No	8	0.002237	0	None	No	0.01	Param.
Arsenic (mg/L)	**GS-AP-MW-7**	**0.285**	**0.244**	**0.01**	**Yes**	**8**	**0.01589**	**0**	**None**	**No**	**0.004**	**NP (normality)**
Arsenic (mg/L)	GS-AP-MW-9R	0.00713	0.003725	0.01	No	4	0.0007499	0	None	No	0.01	Param.
Arsenic (mg/L)	GS-AP-MW-9V	0.005	0.000101	0.01	No	8	0.002225	25	None	No	0.004	NP (normality)
Barium (mg/L)	GS-AP-MW-10R	0.7714	0.4386	2	No	4	0.07328	0	None	No	0.01	Param.
Barium (mg/L)	GS-AP-MW-11R	0.1441	0.09086	2	No	4	0.01173	0	None	No	0.01	Param.
Barium (mg/L)	GS-AP-MW-12	0.2079	0.1786	2	No	8	0.01385	0	None	No	0.01	Param.
Barium (mg/L)	GS-AP-MW-12V	1.469	1.083	2	No	8	0.182	0	None	No	0.01	Param.
Barium (mg/L)	GS-AP-MW-13R	0.07456	0.05869	2	No	4	0.003494	0	None	No	0.01	Param.
Barium (mg/L)	GS-AP-MW-14R	0.2619	0.1506	2	No	4	0.02451	0	None	No	0.01	Param.
Barium (mg/L)	GS-AP-MW-15	0.276	0.119	2	No	8	0.06527	0	None	No	0.004	NP (normality)
Barium (mg/L)	GS-AP-MW-15V	0.2212	0.1571	2	No	8	0.03025	0	None	No	0.01	Param.
Barium (mg/L)	GS-AP-MW-16D	0.356	0.322	2	No	8	0.01437	0	None	No	0.004	NP (normality)
Barium (mg/L)	GS-AP-MW-17	0.113	0.08286	2	No	8	0.01422	0	None	No	0.01	Param.
Barium (mg/L)	GS-AP-MW-18VR	0.2206	0.06731	2	No	4	0.03563	0	None	sqrt(x)	0.01	Param.
Barium (mg/L)	GS-AP-MW-19	0.3525	0.3163	2	No	8	0.01708	0	None	No	0.01	Param.
Barium (mg/L)	GS-AP-MW-1R	0.08065	0.0496	2	No	4	0.006837	0	None	No	0.01	Param.
Barium (mg/L)	GS-AP-MW-2	0.06632	0.04781	2	No	9	0.009588	0	None	No	0.01	Param.
Barium (mg/L)	GS-AP-MW-21	0.1543	0.1177	2	No	8	0.01731	0	None	No	0.01	Param.
Barium (mg/L)	GS-AP-MW-21V	0.06179	0.03843	2	No	8	0.01102	0	None	No	0.01	Param.
Barium (mg/L)	GS-AP-MW-3	0.657	0.3856	2	No	6	0.09878	0	None	No	0.01	Param.
Barium (mg/L)	GS-AP-MW-3V	0.0815	0.0197	2	No	4	0.02775	0	None	No	0.0625	NP (selected)
Barium (mg/L)	GS-AP-MW-45V	0.0851	0.0207	2	No	4	0.03268	0	None	No	0.0625	NP (selected)
Barium (mg/L)	GS-AP-MW-46	0.07918	0.04772	2	No	4	0.00693	0	None	No	0.01	Param.
Barium (mg/L)	GS-AP-MW-47	1.08	0.1471	2	No	4	0.2055	0	None	No	0.01	Param.
Barium (mg/L)	GS-AP-MW-5R	0.08069	0.03536	2	No	4	0.009982	0	None	No	0.01	Param.
Barium (mg/L)	GS-AP-MW-6D	0.628	0.4382	2	No	8	0.08955	0	None	No	0.01	Param.
Barium (mg/L)	GS-AP-MW-6S	0.1044	0.07335	2	No	8	0.01465	0	None	No	0.01	Param.
Barium (mg/L)	GS-AP-MW-7	0.1378	0.05429	2	No	8	0.03939	0	None	No	0.01	Param.
Barium (mg/L)	GS-AP-MW-9R	0.04644	0.02471	2	No	4	0.004787	0	None	No	0.01	Param.
Barium (mg/L)	GS-AP-MW-9V	0.1971	0.1561	2	No	8	0.01934	0	None	No	0.01	Param.
Cadmium (mg/L)	GS-AP-MW-18VR	0.000203	0.00008	0.005	No	4	0.0000615	75	None	No	0.0625	NP (NDs)
Chromium (mg/L)	GS-AP-MW-10R	0.000488	0.0001095	0.1	No	4	0.00008337	0	None	No	0.01	Param.
Chromium (mg/L)	GS-AP-MW-11R	0.0005329	0.0001197	0.1	No	4	0.0003562	25	Kaplan-Meier	No	0.01	Param.
Chromium (mg/L)	GS-AP-MW-12	0.001015	0.00031	0.1	No	8	0.0003236	75	None	No	0.004	NP (NDs)
Chromium (mg/L)	GS-AP-MW-12V	0.004552	0.0001824	0.1	No	8	0.002583	0	None	sqrt(x)	0.01	Param.
Chromium (mg/L)	GS-AP-MW-13R	0.0003936	0.0001499	0.1	No	4	0.00005368	0	None	No	0.01	Param.
Chromium (mg/L)	GS-AP-MW-14R	0.0007476	0.00007111	0.1	No	4	0.0003375	25	Kaplan-Meier	No	0.01	Param.

Confidence Intervals Summary Table - All Results

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond   Printed 11/16/2023, 3:44 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Chromium (mg/L)	GS-AP-MW-15	0.01	0.000384	0.1	No	8	0.004344	25	None	No	0.004	NP (normality)
Chromium (mg/L)	GS-AP-MW-15V	0.002864	0.0002843	0.1	No	8	0.002331	12.5	None	ln(x)	0.01	Param.
Chromium (mg/L)	GS-AP-MW-16D	0.00107	0.000226	0.1	No	8	0.0003685	37.5	None	No	0.004	NP (normality)
Chromium (mg/L)	GS-AP-MW-17	0.001049	0.0001568	0.1	No	8	0.0007592	37.5	Kaplan-Meier	x^(1/3)	0.01	Param.
Chromium (mg/L)	GS-AP-MW-18VR	0.000584	0.000225	0.1	No	4	0.0001782	0	None	No	0.0625	NP (selected)
Chromium (mg/L)	GS-AP-MW-19	0.001015	0.000258	0.1	No	8	0.0003581	50	None	No	0.004	NP (normality)
Chromium (mg/L)	GS-AP-MW-1R	0.0005647	0.0001603	0.1	No	4	0.00008904	0	None	No	0.01	Param.
Chromium (mg/L)	GS-AP-MW-2	0.01	0.000254	0.1	No	9	0.004766	33.33	None	No	0.002	NP (normality)
Chromium (mg/L)	GS-AP-MW-21	0.01	0.000303	0.1	No	8	0.004392	25	None	No	0.004	NP (normality)
Chromium (mg/L)	GS-AP-MW-21V	0.01	0.000218	0.1	No	8	0.004429	25	None	No	0.004	NP (normality)
Chromium (mg/L)	GS-AP-MW-3	0.0003262	0.0002318	0.1	No	6	0.00003433	0	None	No	0.01	Param.
Chromium (mg/L)	GS-AP-MW-45V	0.000882	0.0002	0.1	No	4	0.0002896	0	None	No	0.0625	NP (selected)
Chromium (mg/L)	GS-AP-MW-46	0.0003861	0.0001704	0.1	No	4	0.0004322	50	Kaplan-Meier	sqrt(x)	0.01	Param.
Chromium (mg/L)	GS-AP-MW-47	0.001015	0.00033	0.1	No	4	0.0003287	25	None	No	0.0625	NP (normality)
Chromium (mg/L)	GS-AP-MW-5R	0.0004687	0.0001018	0.1	No	4	0.00008082	0	None	No	0.01	Param.
Chromium (mg/L)	GS-AP-MW-6D	0.001015	0.00024	0.1	No	8	0.0004033	50	None	No	0.004	NP (normality)
Chromium (mg/L)	GS-AP-MW-6S	0.001015	0.000206	0.1	No	8	0.0003897	37.5	None	No	0.004	NP (normality)
Chromium (mg/L)	GS-AP-MW-7	0.005506	0.00001178	0.1	No	8	0.002592	0	None	No	0.01	Param.
Chromium (mg/L)	GS-AP-MW-9R	0.0004628	0.0001514	0.1	No	4	0.0003692	25	Kaplan-Meier	sqrt(x)	0.01	Param.
Chromium (mg/L)	GS-AP-MW-9V	0.001015	0.000228	0.1	No	8	0.0003997	50	None	No	0.004	NP (normality)
Cobalt (mg/L)	GS-AP-MW-10R	0.000682	0.000089	0.006	No	4	0.0002879	0	None	No	0.0625	NP (normality)
Cobalt (mg/L)	GS-AP-MW-11R	0.000203	0.00011	0.006	No	4	0.0000465	75	None	No	0.0625	NP (NDs)
Cobalt (mg/L)	GS-AP-MW-12V	0.00277	0.00013	0.006	No	8	0.000927	50	None	No	0.004	NP (normality)
Cobalt (mg/L)	GS-AP-MW-14R	0.000203	0.00015	0.006	No	4	0.0000265	75	None	No	0.0625	NP (NDs)
Cobalt (mg/L)	GS-AP-MW-15	0.000203	0.00009	0.006	No	8	0.00003995	87.5	None	No	0.004	NP (NDs)
Cobalt (mg/L)	GS-AP-MW-16D	0.000252	0.00009	0.006	No	8	0.00004576	75	None	No	0.004	NP (NDs)
Cobalt (mg/L)	GS-AP-MW-17	0.000203	0.000102	0.006	No	8	0.00003571	87.5	None	No	0.004	NP (NDs)
Cobalt (mg/L)	GS-AP-MW-18VR	0.000256	0.00009	0.006	No	4	0.00006995	50	None	No	0.0625	NP (selected)
Cobalt (mg/L)	GS-AP-MW-1R	0.000203	0.00009	0.006	No	4	0.0000565	75	None	No	0.0625	NP (NDs)
Cobalt (mg/L)	GS-AP-MW-3V	0.00025	0.000088	0.006	No	4	0.00007622	25	None	No	0.0625	NP (selected)
Cobalt (mg/L)	GS-AP-MW-45V	0.000203	0.000125	0.006	No	4	0.000039	75	None	No	0.0625	NP (NDs)
Cobalt (mg/L)	GS-AP-MW-47	0.0001978	0.00007273	0.006	No	4	0.00002754	0	None	No	0.01	Param.
Cobalt (mg/L)	GS-AP-MW-6S	0.005	0.000639	0.006	No	8	0.001998	25	None	No	0.004	NP (normality)
Cobalt (mg/L)	GS-AP-MW-7	0.003233	0.000136	0.006	No	8	0.001681	0	None	sqrt(x)	0.01	Param.
Cobalt (mg/L)	GS-AP-MW-9R	0.000203	0.00009	0.006	No	4	0.0000565	75	None	No	0.0625	NP (NDs)
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-10R	1.05	0.275	5	No	4	0.3364	0	None	No	0.0625	NP (selected)
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-11R	1.315	0.2619	5	No	4	0.2319	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-12	1.054	0.5964	5	No	8	0.2161	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-12V	1.326	0.6202	5	No	8	0.3328	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-13R	0.9307	0.2018	5	No	4	0.1605	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-14R	0.801	0.145	5	No	4	0.281	0	None	No	0.0625	NP (selected)
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-15	0.9368	0.3402	5	No	8	0.2815	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-15V	1.13	0.437	5	No	8	0.2441	0	None	No	0.004	NP (normality)
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-16D	1.005	0.4359	5	No	8	0.2686	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-17	1.399	0.06575	5	No	8	0.7876	0	None	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-18VR	0.8	0.187	5	No	4	0.2738	0	None	No	0.0625	NP (selected)
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-19	1.562	0.3788	5	No	8	0.5584	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-1R	0.836	0.0804	5	No	4	0.3104	0	None	No	0.0625	NP (selected)
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-2	1.177	0.1423	5	No	9	1.225	0	None	ln(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-21	0.6498	0.2352	5	No	8	0.1956	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-21V	1.004	0.5082	5	No	8	0.2339	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-3	1.074	0.2125	5	No	6	0.3136	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-3V	0.762	0.189	5	No	4	0.24	0	None	No	0.0625	NP (selected)
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-45V	0.9002	0.2493	5	No	4	0.1434	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-46	0.314	0.0303	5	No	4	0.1239	0	None	No	0.0625	NP (selected)
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-47	0.767	0.174	5	No	4	0.277	0	None	No	0.0625	NP (selected)
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-5R	0.9582	0.2867	5	No	4	0.1464	0	None	x^2	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-6D	0.9828	0.3154	5	No	8	0.3148	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-6S	0.9066	0.1523	5	No	7	0.3175	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-7	1.342	0.331	5	No	8	0.5182	0	None	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-9R	1.1	0.06025	5	No	4	0.2289	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GS-AP-MW-9V	0.8227	0.09408	5	No	8	0.3437	0	None	No	0.01	Param.
Fluoride (mg/L)	GS-AP-MW-10R	0.2944	0.2501	4	No	4	0.009777	0	None	No	0.01	Param.
Fluoride (mg/L)	GS-AP-MW-11R	0.143	0.0949	4	No	4	0.02261	0	None	No	0.0625	NP (normality)
Fluoride (mg/L)	GS-AP-MW-12	0.1318	0.09662	4	No	8	0.01661	0	None	No	0.01	Param.
Fluoride (mg/L)	GS-AP-MW-12V	0.1827	0.139	4	No	8	0.02063	0	None	No	0.01	Param.
Fluoride (mg/L)	GS-AP-MW-13R	0.2253	0.04124	4	No	4	0.04052	0	None	No	0.01	Param.
Fluoride (mg/L)	GS-AP-MW-14R	0.2462	0.0683	4	No	4	0.03918	0	None	No	0.01	Param.

Confidence Intervals Summary Table - All Results

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond Printed 11/16/2023, 3:44 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Fluoride (mg/L)	GS-AP-MW-15	0.6072	0.339	4	No	8	0.1265	0	None	No	0.01	Param.
Fluoride (mg/L)	GS-AP-MW-15V	0.3248	0.1757	4	No	8	0.07034	0	None	No	0.01	Param.
Fluoride (mg/L)	GS-AP-MW-16D	0.1249	0.09578	4	No	8	0.01376	0	None	No	0.01	Param.
Fluoride (mg/L)	GS-AP-MW-17	0.3262	0.205	4	No	8	0.05716	0	None	No	0.01	Param.
Fluoride (mg/L)	GS-AP-MW-18VR	0.2347	0.09527	4	No	4	0.03071	0	None	No	0.01	Param.
Fluoride (mg/L)	GS-AP-MW-19	0.3273	0.225	4	No	8	0.04826	0	None	No	0.01	Param.
Fluoride (mg/L)	GS-AP-MW-1R	0.2925	0.1515	4	No	4	0.03106	0	None	No	0.01	Param.
Fluoride (mg/L)	GS-AP-MW-2	0.8989	0.7595	4	No	9	0.0722	0	None	No	0.01	Param.
Fluoride (mg/L)	GS-AP-MW-21	0.228	0.179	4	No	8	0.02309	0	None	No	0.01	Param.
Fluoride (mg/L)	GS-AP-MW-21V	0.641	0.381	4	No	8	0.09377	0	None	No	0.004	NP (normality)
Fluoride (mg/L)	GS-AP-MW-3	0.1068	0.06903	4	No	6	0.02276	33.33	Kaplan-Meier	No	0.01	Param.
Fluoride (mg/L)	GS-AP-MW-3V	0.2903	0.1197	4	No	4	0.03756	0	None	No	0.01	Param.
Fluoride (mg/L)	GS-AP-MW-45V	0.3706	0.08386	4	No	4	0.06316	0	None	No	0.01	Param.
Fluoride (mg/L)	GS-AP-MW-46	0.3755	0.1645	4	No	4	0.04645	0	None	No	0.01	Param.
Fluoride (mg/L)	GS-AP-MW-47	0.1574	0.03812	4	No	4	0.02628	0	None	No	0.01	Param.
Fluoride (mg/L)	GS-AP-MW-5R	0.1649	0.08831	4	No	4	0.01622	0	None	x^2	0.01	Param.
Fluoride (mg/L)	GS-AP-MW-6D	0.1352	0.1053	4	No	8	0.01412	0	None	No	0.01	Param.
Fluoride (mg/L)	GS-AP-MW-6S	0.2483	0.1453	4	No	8	0.05294	0	None	x^(1/3)	0.01	Param.
Fluoride (mg/L)	GS-AP-MW-7	0.1439	0.08495	4	No	8	0.02954	0	None	sqrt(x)	0.01	Param.
Fluoride (mg/L)	GS-AP-MW-9R	0.2895	0.1245	4	No	4	0.03636	0	None	No	0.01	Param.
Fluoride (mg/L)	GS-AP-MW-9V	0.1839	0.1548	4	No	8	0.01372	0	None	No	0.01	Param.
Lead (mg/L)	GS-AP-MW-10R	0.000203	0.00013	0.015	No	4	0.0000365	75	None	No	0.0625	NP (NDs)
Lead (mg/L)	GS-AP-MW-11R	0.000203	0.000187	0.015	No	4	0.000008	75	None	No	0.0625	NP (NDs)
Lead (mg/L)	GS-AP-MW-12V	0.001616	0.00007196	0.015	No	8	0.0009452	25	Kaplan-Meier	sqrt(x)	0.01	Param.
Lead (mg/L)	GS-AP-MW-13R	0.000203	0.00013	0.015	No	4	0.0000365	75	None	No	0.0625	NP (NDs)
Lead (mg/L)	GS-AP-MW-14R	0.00045	0.000084	0.015	No	4	0.0001539	50	None	No	0.0625	NP (selected)
Lead (mg/L)	GS-AP-MW-15	0.000203	0.00008	0.015	No	8	0.00005526	75	Kaplan-Meier	No	0.004	NP (NDs)
Lead (mg/L)	GS-AP-MW-16D	0.000873	0.00009	0.015	No	8	0.000248	62.5	Kaplan-Meier	No	0.004	NP (NDs)
Lead (mg/L)	GS-AP-MW-17	0.000203	0.000175	0.015	No	8	0.000009899	87.5	Kaplan-Meier	No	0.004	NP (NDs)
Lead (mg/L)	GS-AP-MW-18VR	0.000634	0.000069	0.015	No	4	0.0002633	25	None	No	0.0625	NP (selected)
Lead (mg/L)	GS-AP-MW-1R	0.0002399	0.00007181	0.015	No	4	0.000045	25	Kaplan-Meier	No	0.01	Param.
Lead (mg/L)	GS-AP-MW-3	0.000203	0.000073	0.015	No	6	0.00005307	83.33	Kaplan-Meier	No	0.0155	NP (NDs)
Lead (mg/L)	GS-AP-MW-3V	0.0001832	0.00002881	0.015	No	4	0.00006251	50	Kaplan-Meier	No	0.01	Param.
Lead (mg/L)	GS-AP-MW-45V	0.000203	0.00007	0.015	No	4	0.0000665	75	Kaplan-Meier	No	0.0625	NP (NDs)
Lead (mg/L)	GS-AP-MW-6D	0.000203	0.000171	0.015	No	8	0.00001131	87.5	Kaplan-Meier	No	0.004	NP (NDs)
Lead (mg/L)	GS-AP-MW-6S	0.000203	0.00008	0.015	No	8	0.00005299	75	Kaplan-Meier	No	0.004	NP (NDs)
Lead (mg/L)	GS-AP-MW-7	0.002986	0.00005721	0.015	No	8	0.001382	0	None	No	0.01	Param.
Lithium (mg/L)	GS-AP-MW-10R	0.04231	0.03244	0.0809	No	4	0.002175	0	None	No	0.01	Param.
Lithium (mg/L)	GS-AP-MW-11R	0.03503	0.02552	0.0809	No	4	0.002095	0	None	No	0.01	Param.
Lithium (mg/L)	GS-AP-MW-12	0.05541	0.02664	0.0809	No	8	0.01358	0	None	No	0.01	Param.
Lithium (mg/L)	GS-AP-MW-12V	0.04257	0.02871	0.0809	No	8	0.006539	0	None	No	0.01	Param.
Lithium (mg/L)	GS-AP-MW-13R	0.02873	0.02537	0.0809	No	4	0.0007416	0	None	No	0.01	Param.
Lithium (mg/L)	GS-AP-MW-14R	0.02906	0.02119	0.0809	No	4	0.001735	0	None	No	0.01	Param.
Lithium (mg/L)	**GS-AP-MW-15**	**0.517**	**0.2892**	**0.0809**	**Yes**	**8**	**0.1075**	**0**	**None**	**No**	**0.01**	**Param.**
Lithium (mg/L)	GS-AP-MW-15V	0.208	0.0787	0.0809	No	8	0.04258	0	None	No	0.004	NP (normality)
Lithium (mg/L)	GS-AP-MW-16D	0.03606	0.03284	0.0809	No	8	0.001518	0	None	No	0.01	Param.
Lithium (mg/L)	GS-AP-MW-17	0.06514	0.05656	0.0809	No	8	0.00405	0	None	No	0.01	Param.
Lithium (mg/L)	GS-AP-MW-18VR	0.06637	0.03918	0.0809	No	4	0.005987	0	None	No	0.01	Param.
Lithium (mg/L)	GS-AP-MW-19	0.04324	0.03038	0.0809	No	8	0.006065	0	None	No	0.01	Param.
Lithium (mg/L)	GS-AP-MW-1R	0.04128	0.02587	0.0809	No	4	0.003393	0	None	No	0.01	Param.
Lithium (mg/L)	GS-AP-MW-2	0.04462	0.03585	0.0809	No	9	0.00454	0	None	No	0.01	Param.
Lithium (mg/L)	GS-AP-MW-21	0.2754	0.07796	0.0809	No	8	0.1024	0	None	sqrt(x)	0.01	Param.
Lithium (mg/L)	GS-AP-MW-21V	0.1374	0.06764	0.0809	No	8	0.03291	0	None	No	0.01	Param.
Lithium (mg/L)	GS-AP-MW-3	0.09576	0.06234	0.0809	No	6	0.01217	0	None	No	0.01	Param.
Lithium (mg/L)	GS-AP-MW-3V	0.1276	0.02508	0.0809	No	4	0.02258	0	None	No	0.01	Param.
Lithium (mg/L)	GS-AP-MW-45V	0.1132	0.002923	0.0809	No	4	0.02428	0	None	No	0.01	Param.
Lithium (mg/L)	GS-AP-MW-46	0.08324	0.04526	0.0809	No	4	0.008365	0	None	No	0.01	Param.
Lithium (mg/L)	GS-AP-MW-47	0.04536	0.03714	0.0809	No	4	0.001808	0	None	No	0.01	Param.
Lithium (mg/L)	GS-AP-MW-5R	0.08968	0.05527	0.0809	No	4	0.007577	0	None	No	0.01	Param.
Lithium (mg/L)	**GS-AP-MW-6D**	**0.3307**	**0.2933**	**0.0809**	**Yes**	**8**	**0.01767**	**0**	**None**	**No**	**0.01**	**Param.**
Lithium (mg/L)	GS-AP-MW-6S	0.0743	0.04945	0.0809	No	8	0.01172	0	None	No	0.01	Param.
Lithium (mg/L)	**GS-AP-MW-7**	**0.2208**	**0.169**	**0.0809**	**Yes**	**8**	**0.02444**	**0**	**None**	**No**	**0.01**	**Param.**
Lithium (mg/L)	GS-AP-MW-9R	0.03653	0.03447	0.0809	No	4	0.0004546	0	None	No	0.01	Param.
Lithium (mg/L)	GS-AP-MW-9V	0.0315	0.02895	0.0809	No	8	0.001207	0	None	No	0.01	Param.
Molybdenum (mg/L)	GS-AP-MW-10R	0.003674	0.000836	0.1	No	4	0.004587	50	Kaplan-Meier	No	0.01	Param.
Molybdenum (mg/L)	GS-AP-MW-11R	0.01015	0.00014	0.1	No	4	0.005005	75	Kaplan-Meier	No	0.0625	NP (NDs)
Molybdenum (mg/L)	GS-AP-MW-12	0.009281	0.004106	0.1	No	8	0.002441	0	None	No	0.01	Param.
Molybdenum (mg/L)	GS-AP-MW-12V	0.004245	0.001561	0.1	No	8	0.003572	25	Kaplan-Meier	sqrt(x)	0.01	Param.

Confidence Intervals Summary Table - All Results

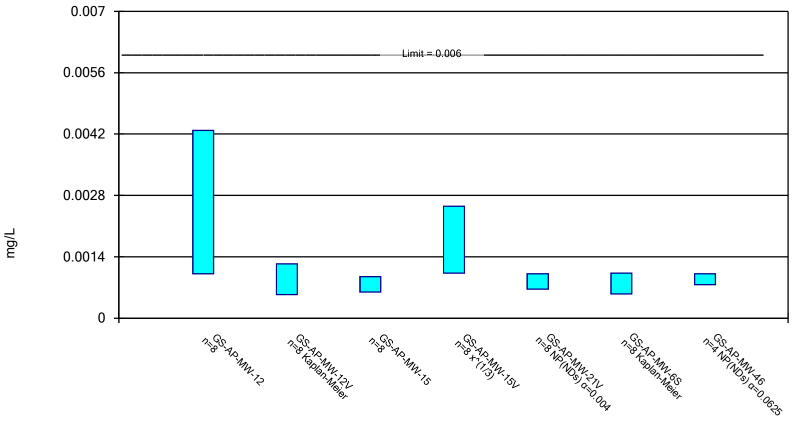
Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond   Printed 11/16/2023, 3:44 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Molybdenum (mg/L)	GS-AP-MW-13R	0.001143	0.00003919	0.1	No	4	0.005642	50	Kaplan-Meier	x^(1/3)	0.01	Param.
Molybdenum (mg/L)	GS-AP-MW-14R	0.001411	0.0002755	0.1	No	4	0.005446	50	Kaplan-Meier	x^(1/3)	0.01	Param.
Molybdenum (mg/L)	GS-AP-MW-15	0.07131	0.03728	0.1	No	8	0.01789	0	None	x^3	0.01	Param.
Molybdenum (mg/L)	GS-AP-MW-15V	0.04712	0.0195	0.1	No	8	0.01303	0	None	No	0.01	Param.
Molybdenum (mg/L)	GS-AP-MW-16D	0.01015	0.00014	0.1	No	8	0.005146	50	None	No	0.004	NP (normality)
Molybdenum (mg/L)	GS-AP-MW-17	0.006233	0.001477	0.1	No	8	0.003578	25	Kaplan-Meier	No	0.01	Param.
Molybdenum (mg/L)	GS-AP-MW-18VR	0.06334	0.02681	0.1	No	4	0.008044	0	None	No	0.01	Param.
Molybdenum (mg/L)	GS-AP-MW-19	0.005679	0.002659	0.1	No	8	0.003096	25	Kaplan-Meier	sqrt(x)	0.01	Param.
Molybdenum (mg/L)	GS-AP-MW-1R	0.001772	0.000823	0.1	No	4	0.005156	50	Kaplan-Meier	ln(x)	0.01	Param.
Molybdenum (mg/L)	GS-AP-MW-2	0.004618	0.001983	0.1	No	9	0.001365	11.11	None	No	0.01	Param.
Molybdenum (mg/L)	GS-AP-MW-21	0.06182	0.007613	0.1	No	8	0.03091	0	None	sqrt(x)	0.01	Param.
Molybdenum (mg/L)	GS-AP-MW-21V	0.1111	0.03249	0.1	No	8	0.03707	0	None	No	0.01	Param.
Molybdenum (mg/L)	GS-AP-MW-3	0.01083	0.006292	0.1	No	6	0.00181	16.67	Kaplan-Meier	No	0.01	Param.
Molybdenum (mg/L)	GS-AP-MW-3V	0.0489	0.0191	0.1	No	4	0.01588	0	None	No	0.0625	NP (selected)
Molybdenum (mg/L)	GS-AP-MW-45V	0.0326	0.00454	0.1	No	4	0.01322	0	None	No	0.0625	NP (selected)
Molybdenum (mg/L)	GS-AP-MW-46	0.02073	0.001532	0.1	No	4	0.004229	0	None	No	0.01	Param.
Molybdenum (mg/L)	GS-AP-MW-47	0.0112	0.00165	0.1	No	4	0.005094	25	None	No	0.0625	NP (selected)
Molybdenum (mg/L)	GS-AP-MW-5R	0.01015	0.00212	0.1	No	4	0.004565	50	None	No	0.0625	NP (normality)
Molybdenum (mg/L)	GS-AP-MW-6D	0.01116	0.009419	0.1	No	8	0.0008226	0	None	No	0.01	Param.
Molybdenum (mg/L)	GS-AP-MW-6S	0.04473	0.02684	0.1	No	8	0.00844	0	None	No	0.01	Param.
Molybdenum (mg/L)	**GS-AP-MW-7**	**0.2235**	**0.2002**	**0.1**	**Yes**	**8**	**0.01099**	**0**	**None**	**No**	**0.01**	**Param.**
Molybdenum (mg/L)	GS-AP-MW-9R	0.01015	0.00308	0.1	No	4	0.004067	50	None	No	0.0625	NP (normality)
Molybdenum (mg/L)	GS-AP-MW-9V	0.01015	0.000538	0.1	No	8	0.004547	50	None	No	0.004	NP (normality)
Selenium (mg/L)	GS-AP-MW-6S	0.001071	0.0007545	0.05	No	8	0.0001427	37.5	Kaplan-Meier	No	0.01	Param.
Thallium (mg/L)	GS-AP-MW-18VR	0.000203	0.000077	0.002	No	4	0.000063	75	None	No	0.0625	NP (NDs)

Sanitas™ v.10.0.13 . UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.

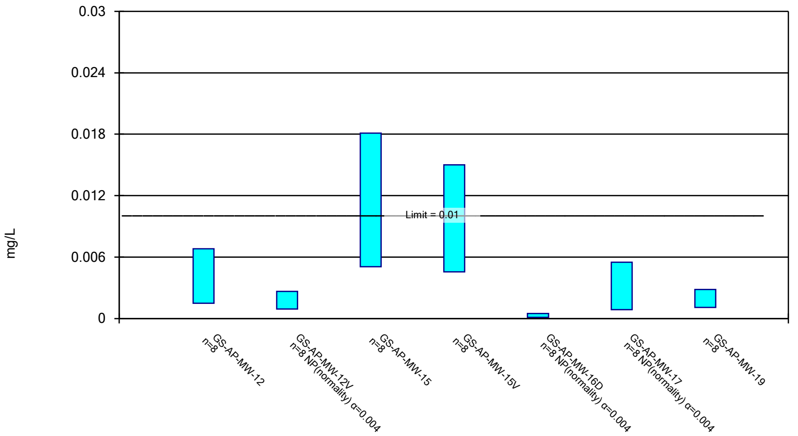


Constituent: Antimony Analysis Run 11/16/2023 3:41 PM View: Appendix IV
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.

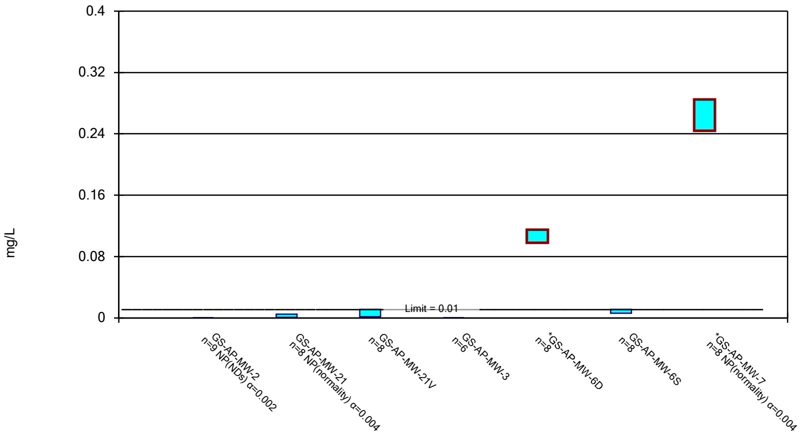


Constituent: Arsenic Analysis Run 11/16/2023 3:41 PM View: Appendix IV
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance limit is exceeded.* Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.

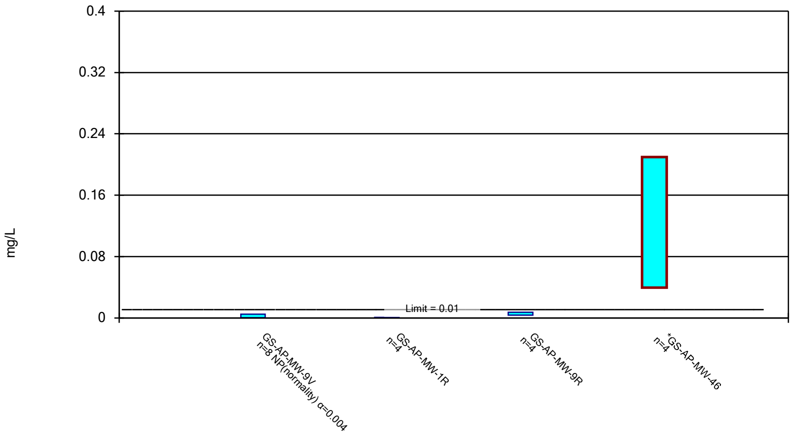


Constituent: Arsenic Analysis Run 11/16/2023 3:41 PM View: Appendix IV
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance limit is exceeded.* Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.

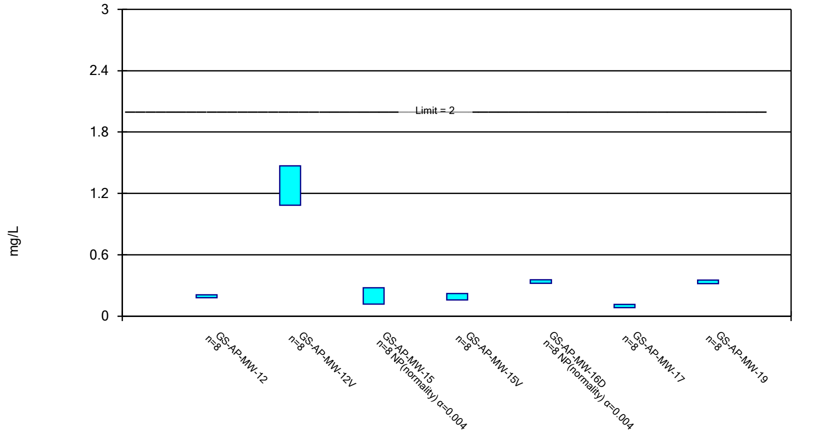


Constituent: Arsenic Analysis Run 11/16/2023 3:41 PM View: Appendix IV
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.

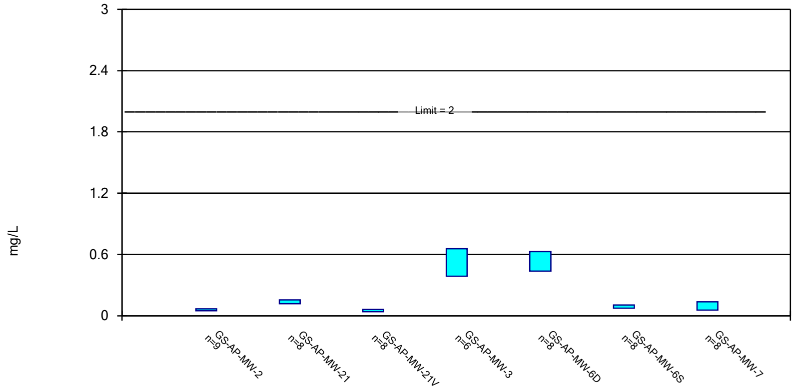


Constituent: Barium Analysis Run 11/16/2023 3:41 PM View: Appendix IV
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG

Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.

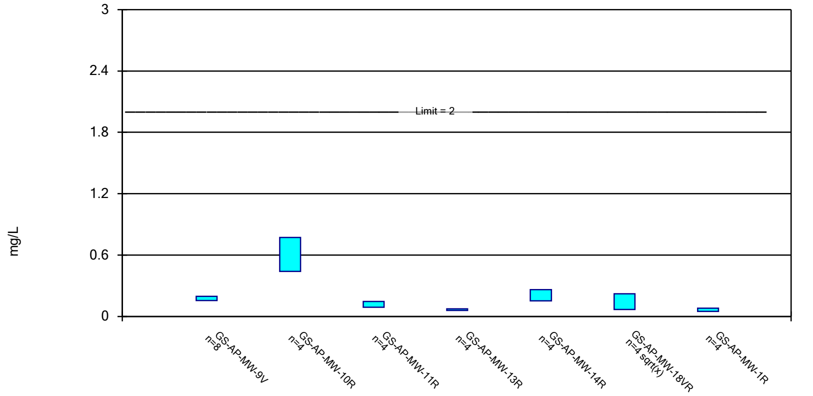


Constituent: Barium Analysis Run 11/16/2023 3:41 PM View: Appendix IV
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG

Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.

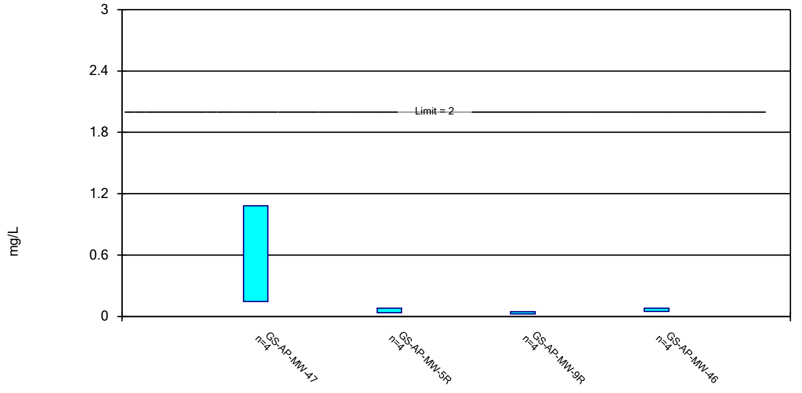


Constituent: Barium Analysis Run 11/16/2023 3:41 PM View: Appendix IV
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG

Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.

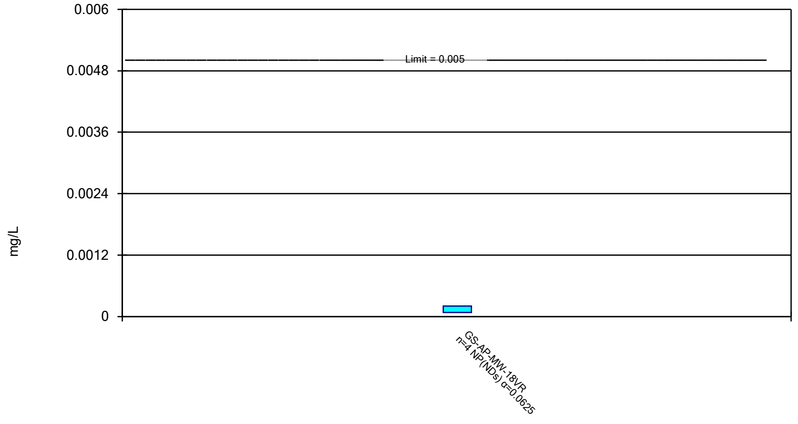


Constituent: Barium Analysis Run 11/16/2023 3:41 PM View: Appendix IV
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG

Non-Parametric Confidence Interval

Compliance Limit is not exceeded.



Constituent: Cadmium   Analysis Run 11/16/2023 3:41 PM   View: Appendix IV

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

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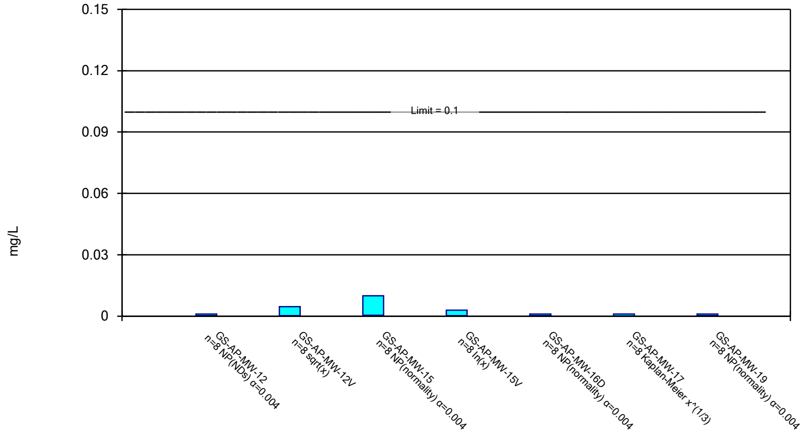
Sanitas™ v.10.0.13 . UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Chromium   Analysis Run 11/16/2023 3:41 PM   View: Appendix IV

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

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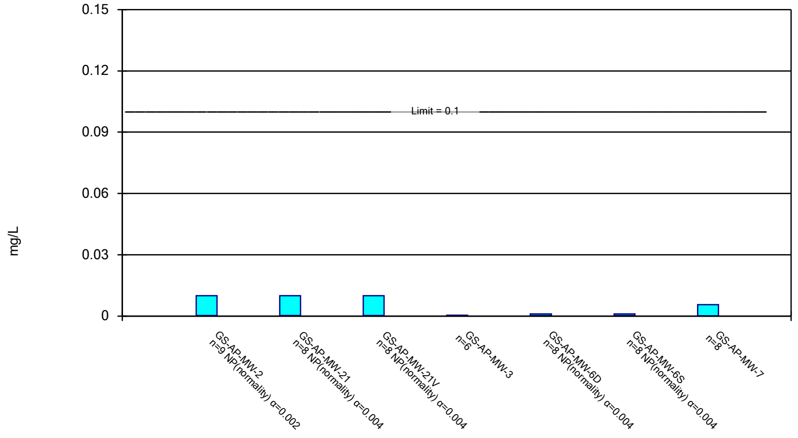
Sanitas™ v.10.0.13 . UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Chromium   Analysis Run 11/16/2023 3:41 PM   View: Appendix IV

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

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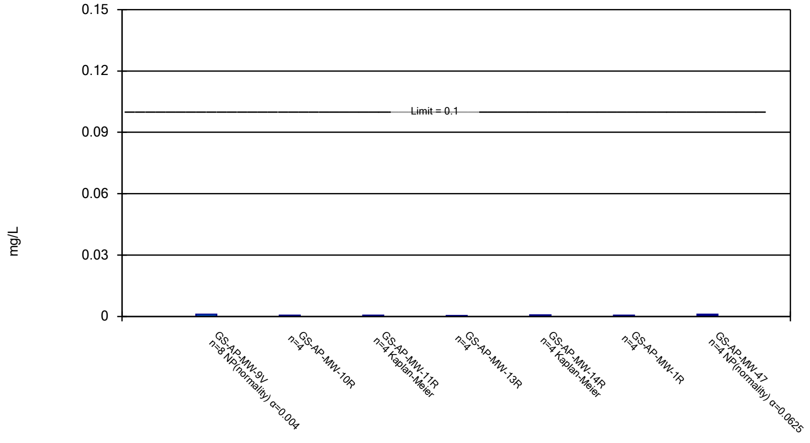
Sanitas™ v.10.0.13 . UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



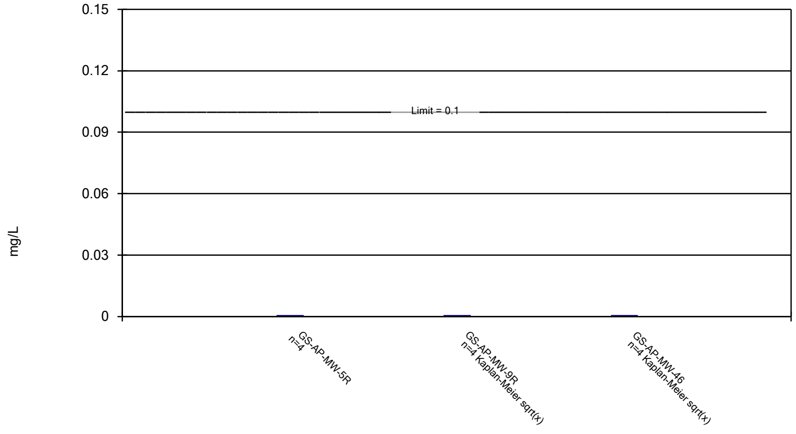
Constituent: Chromium   Analysis Run 11/16/2023 3:41 PM   View: Appendix IV

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG

Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.

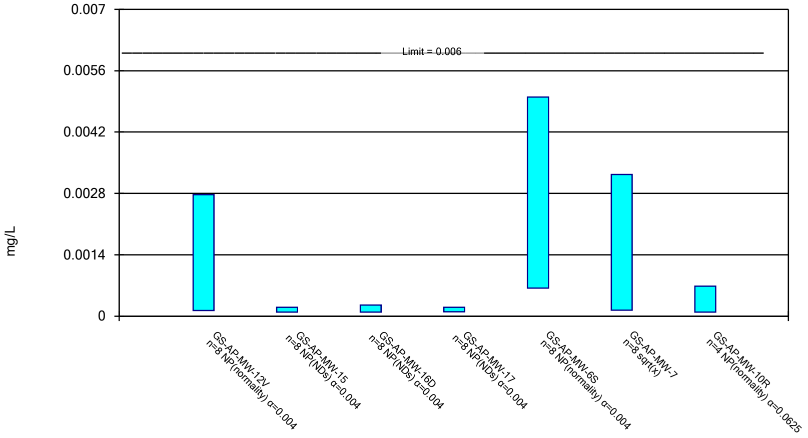


Constituent: Chromium   Analysis Run 11/16/2023 3:41 PM   View: Appendix IV
Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.

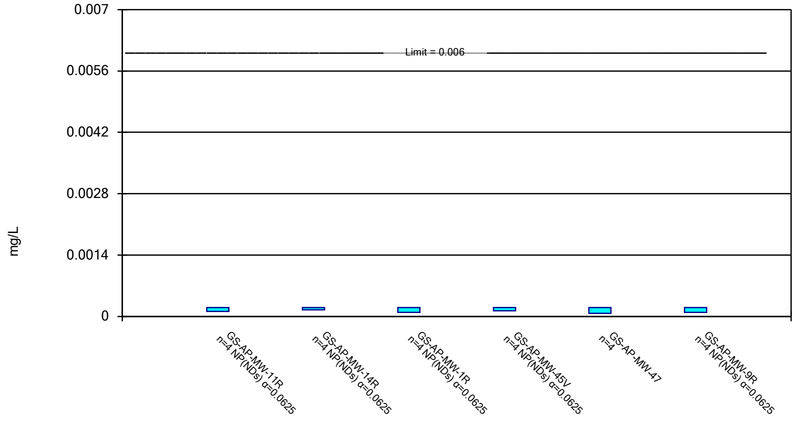


Constituent: Cobalt   Analysis Run 11/16/2023 3:41 PM   View: Appendix IV
Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.

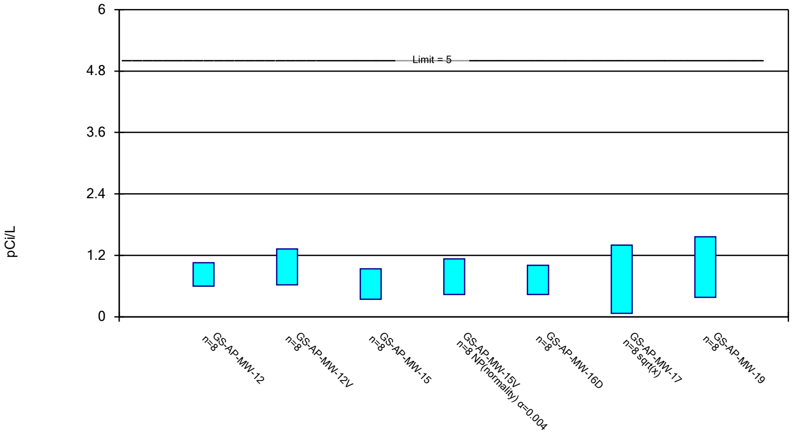


Constituent: Cobalt   Analysis Run 11/16/2023 3:41 PM   View: Appendix IV
Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.

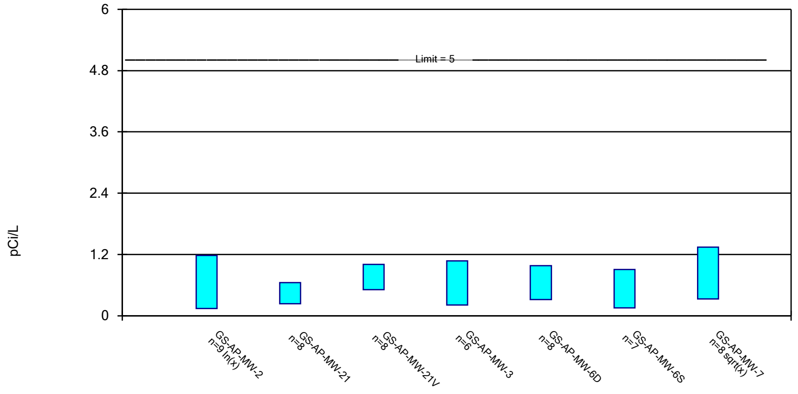


Constituent: Combined Radium 226 + 228   Analysis Run 11/16/2023 3:41 PM   View: Appendix IV
Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG

Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.

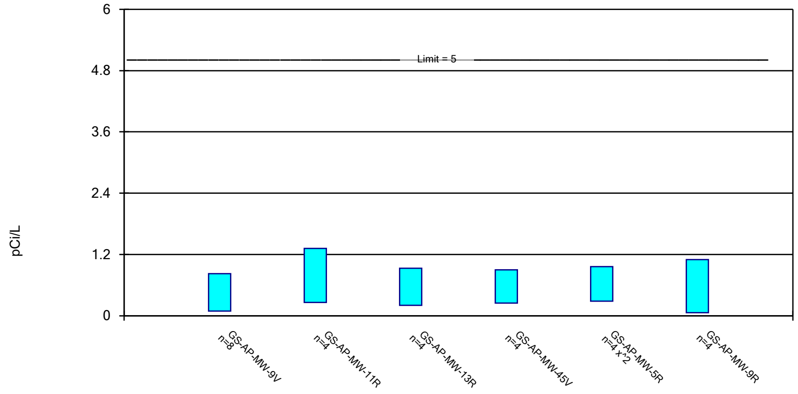


Constituent: Combined Radium 226 + 228   Analysis Run 11/16/2023 3:41 PM   View: Appendix IV
Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG

Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.

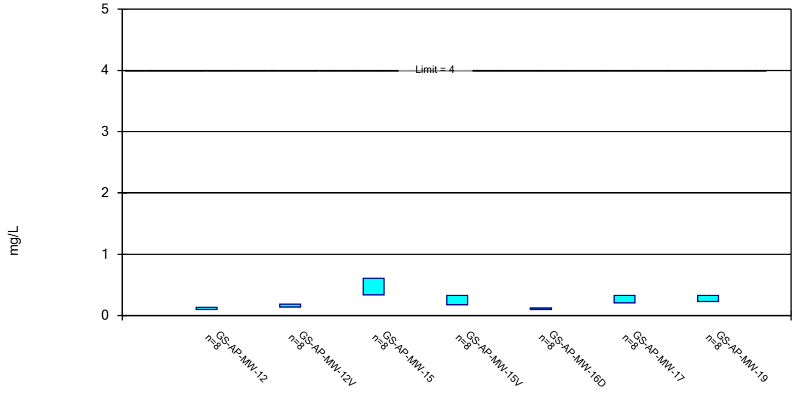


Constituent: Combined Radium 226 + 228   Analysis Run 11/16/2023 3:41 PM   View: Appendix IV
Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG

Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.

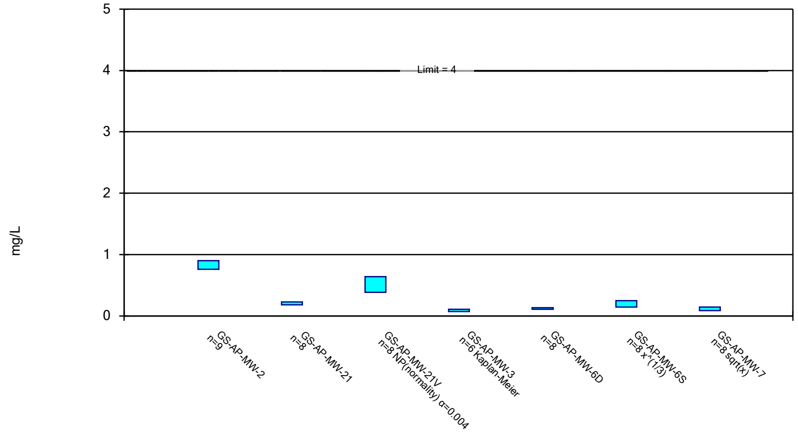


Constituent: Fluoride   Analysis Run 11/16/2023 3:41 PM   View: Appendix IV
Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.

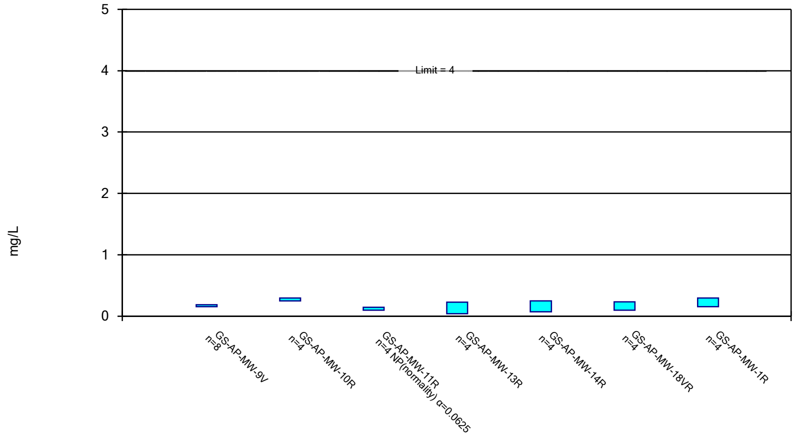


Constituent: Fluoride   Analysis Run 11/16/2023 3:41 PM   View: Appendix IV
Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Fluoride   Analysis Run 11/16/2023 3:42 PM   View: Appendix IV
Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

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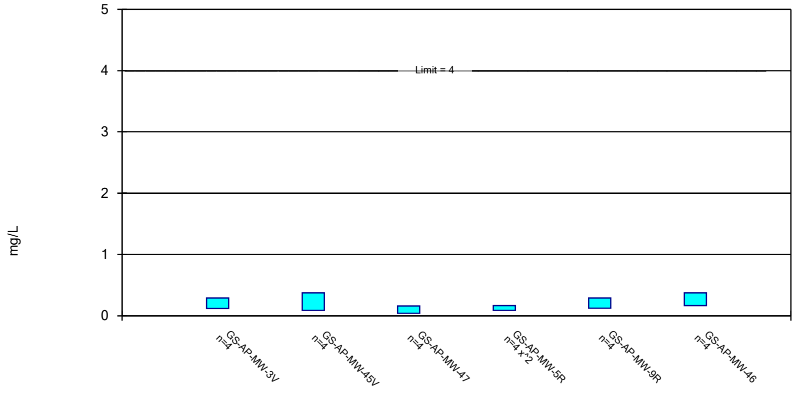
Sanitas™ v.10.0.13 . UG

Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Fluoride   Analysis Run 11/16/2023 3:42 PM   View: Appendix IV
Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

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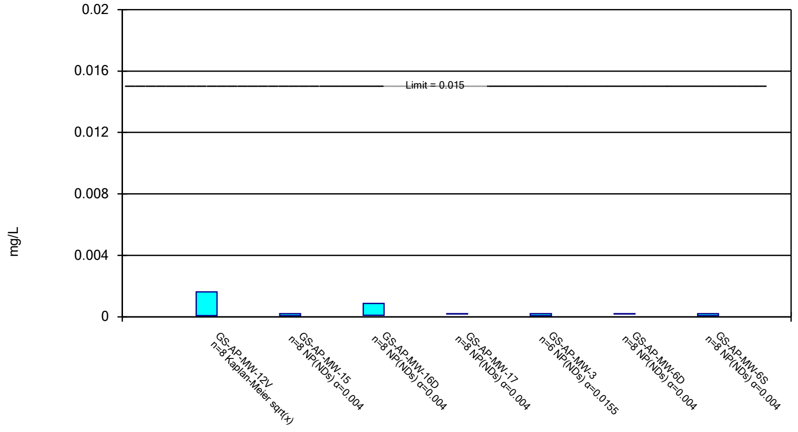
Sanitas™ v.10.0.13 . UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Lead   Analysis Run 11/16/2023 3:42 PM   View: Appendix IV
Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

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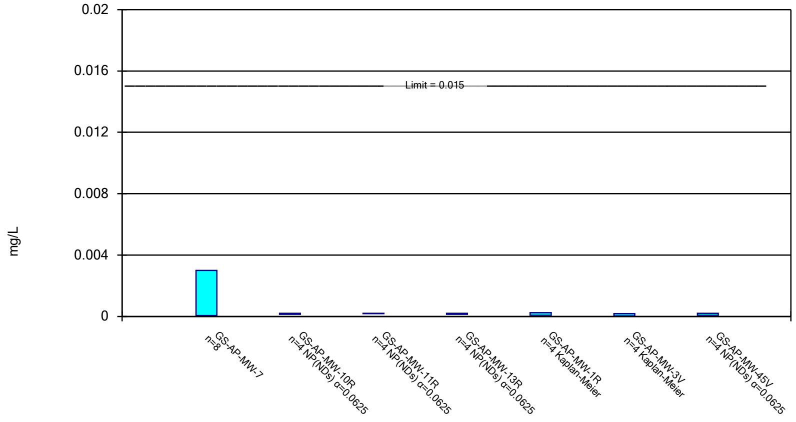
Sanitas™ v.10.0.13 . UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.

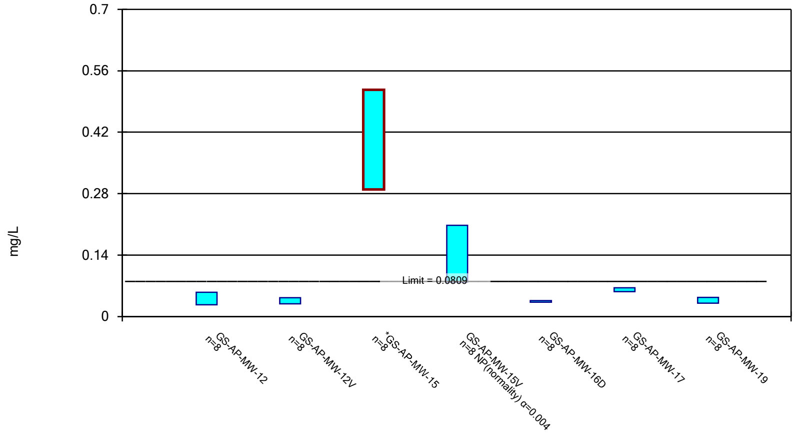


Constituent: Lead   Analysis Run 11/16/2023 3:42 PM   View: Appendix IV
Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance limit is exceeded.* Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.

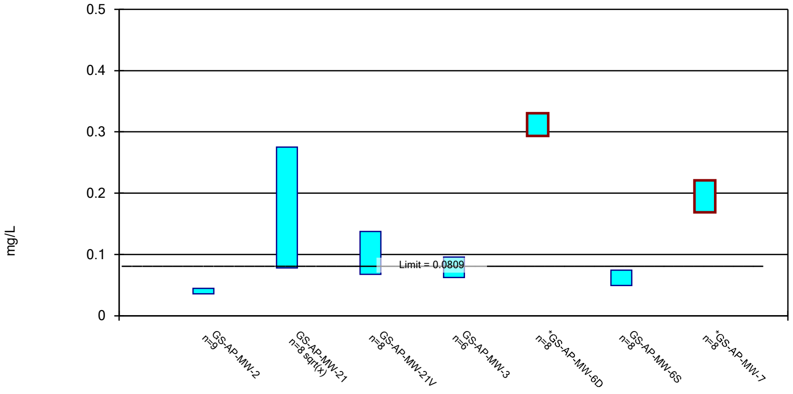


Constituent: Lithium Analysis Run 11/16/2023 3:42 PM View: Appendix IV
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG

Parametric Confidence Interval

Compliance limit is exceeded.* Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.

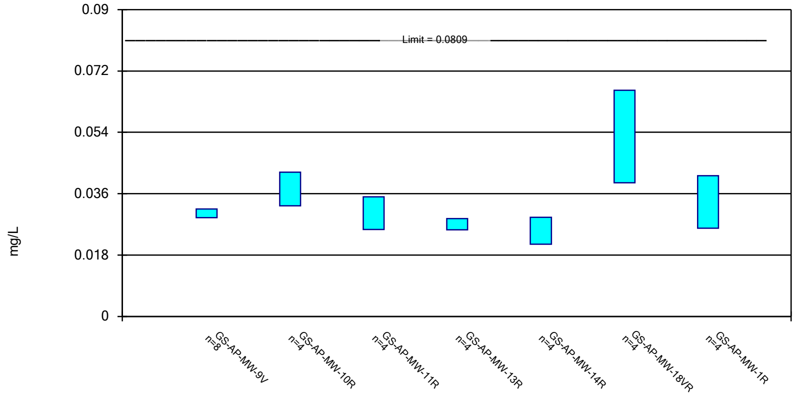


Constituent: Lithium Analysis Run 11/16/2023 3:42 PM View: Appendix IV
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG

Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.

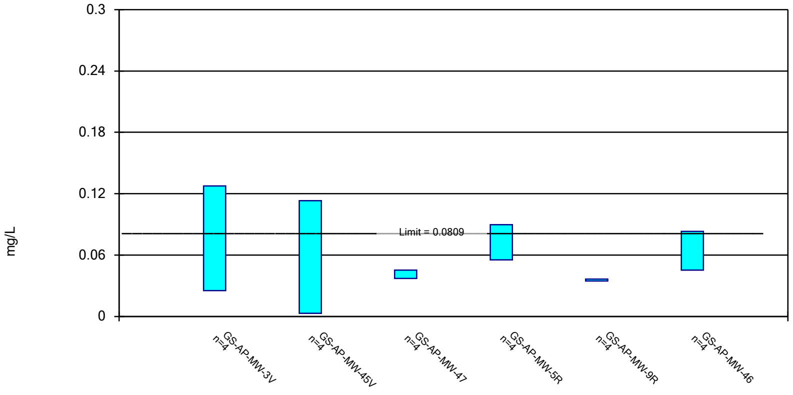


Constituent: Lithium Analysis Run 11/16/2023 3:42 PM View: Appendix IV
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG

Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.

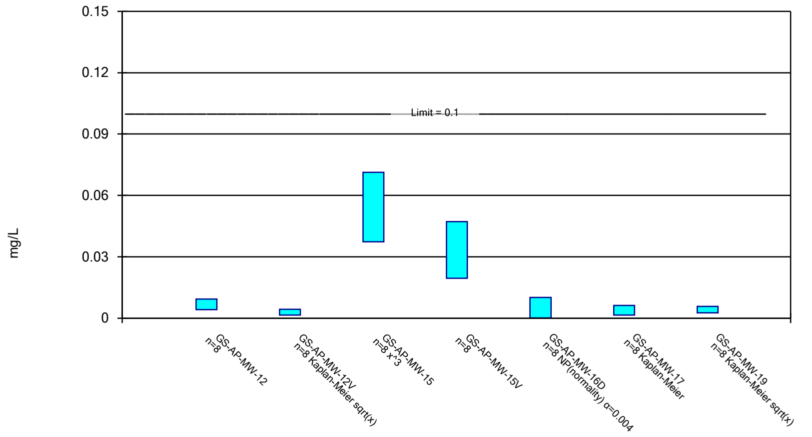


Constituent: Lithium Analysis Run 11/16/2023 3:42 PM View: Appendix IV
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.

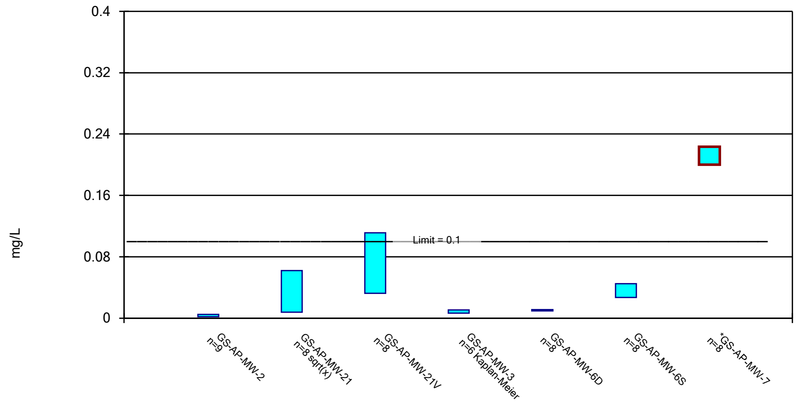


Constituent: Molybdenum Analysis Run 11/16/2023 3:42 PM View: Appendix IV
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG

Parametric Confidence Interval

Compliance limit is exceeded.* Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.

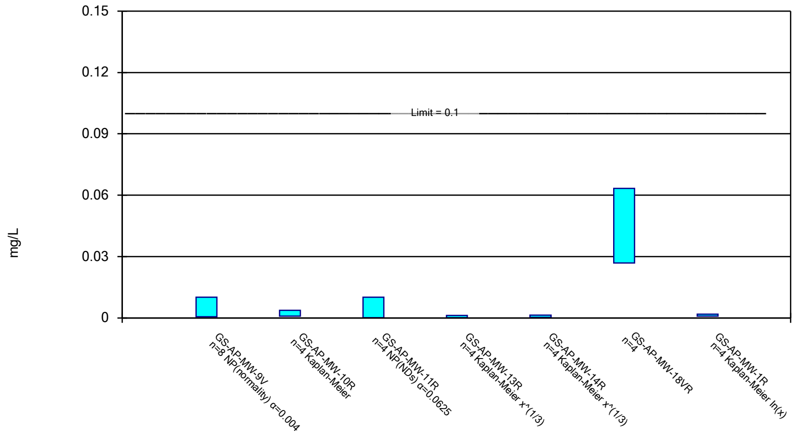


Constituent: Molybdenum Analysis Run 11/16/2023 3:42 PM View: Appendix IV
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.

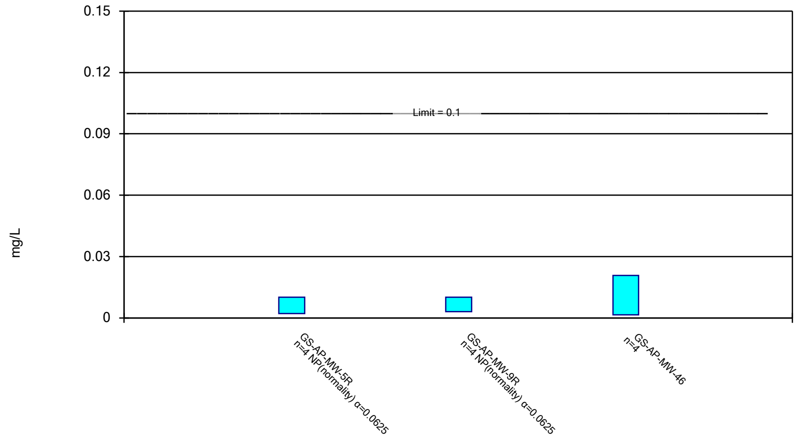


Constituent: Molybdenum Analysis Run 11/16/2023 3:42 PM View: Appendix IV
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.

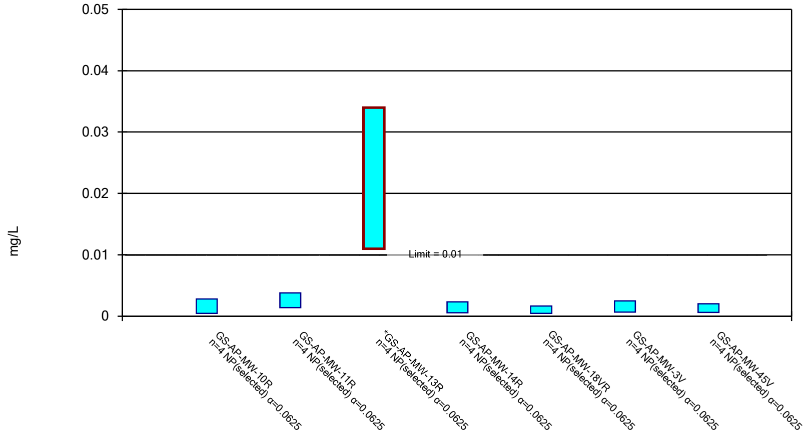


Constituent: Molybdenum Analysis Run 11/16/2023 3:42 PM View: Appendix IV
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG

Non-Parametric Confidence Interval

Compliance limit is exceeded.*



Normality testing disabled.

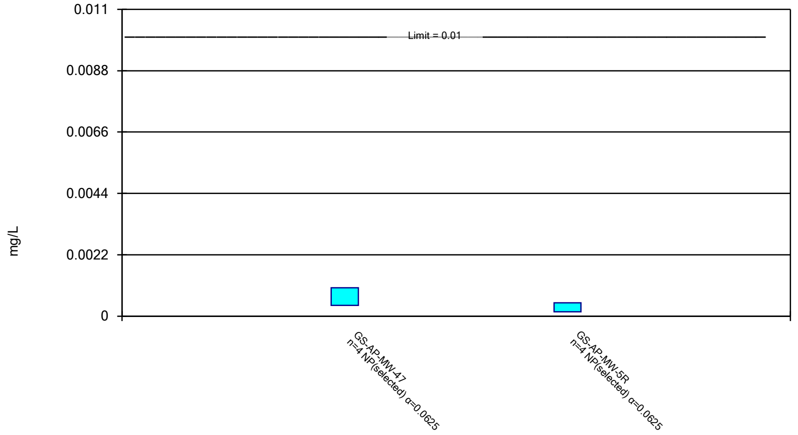
Constituent: Arsenic   Analysis Run 11/16/2023 3:42 PM   View: Appendix IV - Non-Parametric

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG

Non-Parametric Confidence Interval

Compliance Limit is not exceeded.



Normality testing disabled.

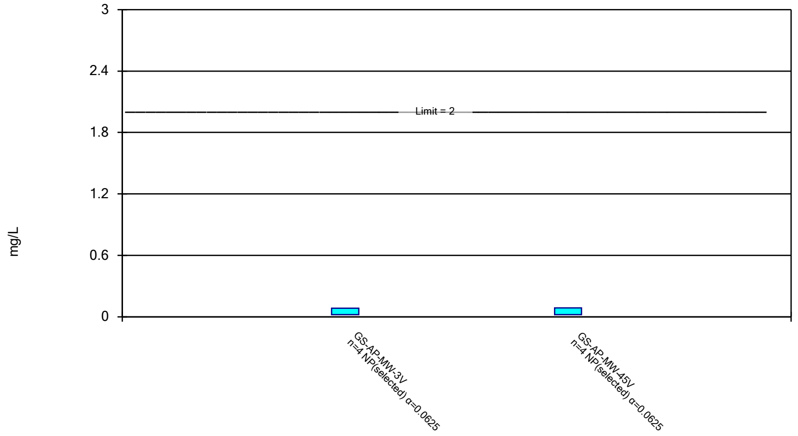
Constituent: Arsenic   Analysis Run 11/16/2023 3:42 PM   View: Appendix IV - Non-Parametric

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG

Non-Parametric Confidence Interval

Compliance Limit is not exceeded.



Normality testing disabled.

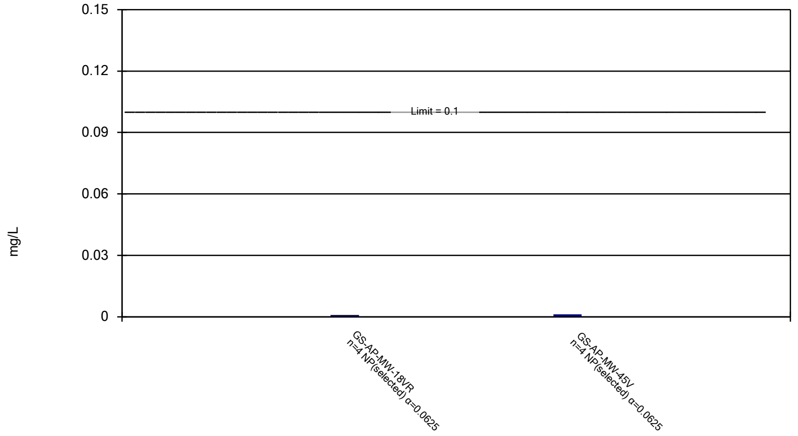
Constituent: Barium   Analysis Run 11/16/2023 3:42 PM   View: Appendix IV - Non-Parametric

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG

Non-Parametric Confidence Interval

Compliance Limit is not exceeded.



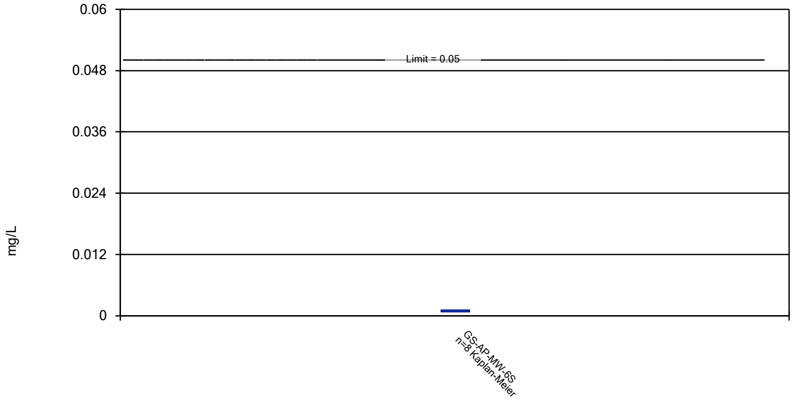
Normality testing disabled.

Constituent: Chromium   Analysis Run 11/16/2023 3:42 PM   View: Appendix IV - Non-Parametric

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Selenium Analysis Run 11/16/2023 3:42 PM View: Appendix IV
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Non-Parametric Confidence Interval

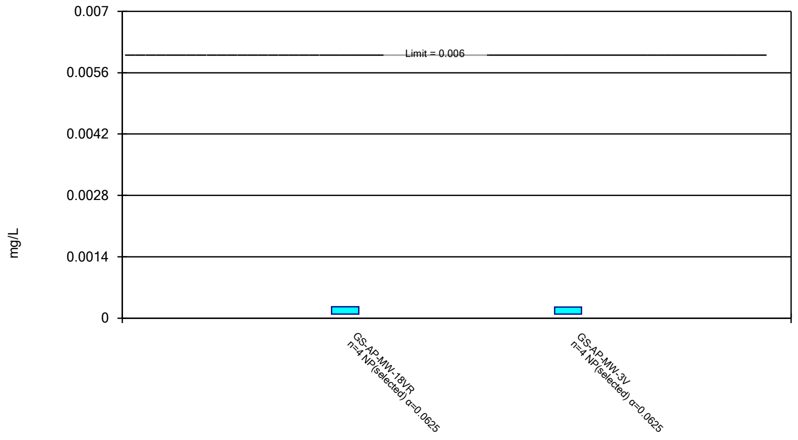
Compliance Limit is not exceeded.

Constituent: Thallium Analysis Run 11/16/2023 3:42 PM View: Appendix IV
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG

Non-Parametric Confidence Interval

Compliance Limit is not exceeded.



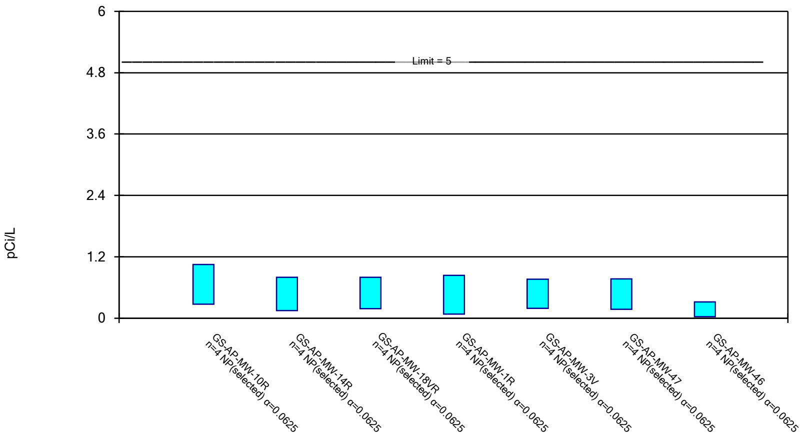
Normality testing disabled.

Constituent: Cobalt Analysis Run 11/16/2023 3:43 PM View: Appendix IV - Non-Parametric
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG

Non-Parametric Confidence Interval

Compliance Limit is not exceeded.



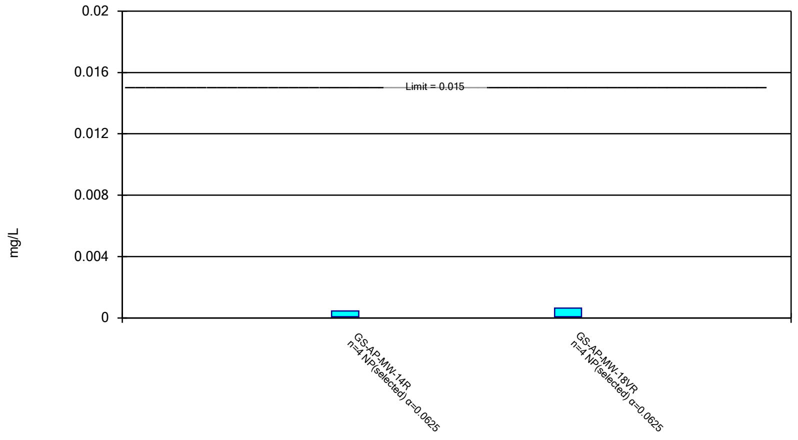
Normality testing disabled.

Constituent: Combined Radium 226 + 228 Analysis Run 11/16/2023 3:43 PM View: Appendix IV - Non-Par
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG

Non-Parametric Confidence Interval

Compliance Limit is not exceeded.



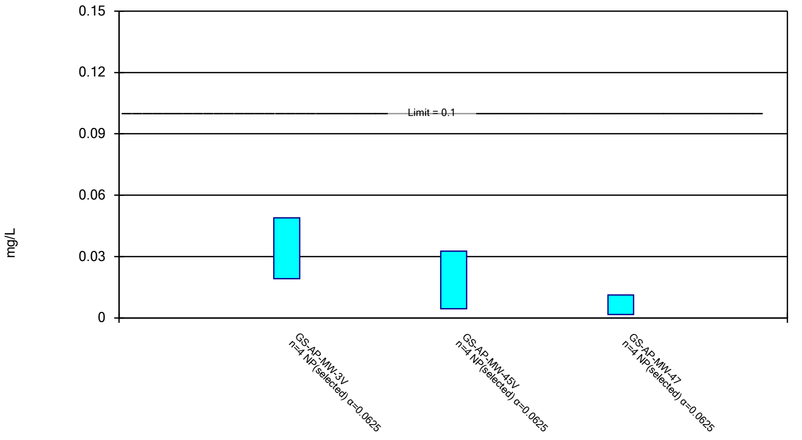
Normality testing disabled.

Constituent: Lead Analysis Run 11/16/2023 3:43 PM View: Appendix IV - Non-Parametric
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG

Non-Parametric Confidence Interval

Compliance Limit is not exceeded.



Normality testing disabled.

Constituent: Molybdenum Analysis Run 11/16/2023 3:43 PM View: Appendix IV - Non-Parametric
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Confidence Interval

Constituent: Antimony (mg/L) Analysis Run 11/16/2023 3:44 PM View: Appendix IV
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-12	GS-AP-MW-12V	GS-AP-MW-15	GS-AP-MW-15V	GS-AP-MW-21V	GS-AP-MW-6S	GS-AP-MW-46
3/17/2020						<0.001015	
3/18/2020	0.0022 (J)		0.000976 (J)	0.0028 (J)			
3/23/2020					0.000831 (J)		
3/24/2020		0.00128 (J)					
9/16/2020						0.000948 (J)	
9/21/2020				0.0028 (J)			
9/23/2020	0.00202 (J)	0.00152 (J)	0.000844 (J)		<0.001015		
2/1/2021	0.000518 (J)	0.000861 (J)					
2/3/2021						0.00055 (J)	
2/9/2021			0.00075 (J)	0.00237	0.000661 (J)		
7/27/2021						0.00123	
8/3/2021			0.00065 (J)	0.00097 (J)			
8/9/2021	0.00179	0.00089 (J)					
8/11/2021					<0.001015		
2/8/2022					<0.001015		
2/14/2022						0.00071 (J)	
2/16/2022			0.00078 (J)	0.00113			
2/23/2022		0.00055 (J)					<0.001015
2/28/2022	0.00415						
7/19/2022	0.00556						
7/20/2022		0.000577 (J)					
7/26/2022						0.000656 (J)	
8/2/2022			0.000663 (J)	0.00143			<0.001015
8/9/2022					<0.001015		
3/14/2023						<0.001015	
3/20/2023			<0.001015	0.00133			
3/21/2023					<0.001015		
3/22/2023	0.00257	<0.001015					
3/27/2023							<0.001015
9/5/2023					<0.001015	<0.001015	
9/11/2023			0.001 (J)	0.00129			
9/13/2023	0.00236	<0.001015					
9/18/2023							0.000764 (J)
Mean	0.002646	0.0009635	0.0007713	0.001765	0.0009478	0.0008924	0.0009523
Std. Dev.	0.001544	0.0003276	0.0001674	0.0007626	0.0001326	0.0002295	0.0001255
Upper Lim.	0.004283	0.001239	0.0009487	0.002555	0.001015	0.001028	0.001015
Lower Lim.	0.001009	0.00054	0.0005939	0.001023	0.000661	0.0005511	0.000764

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Arsenic (mg/L) Analysis Run 11/16/2023 3:44 PM View: Appendix IV

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-12	GS-AP-MW-12V	GS-AP-MW-15	GS-AP-MW-15V	GS-AP-MW-16D	GS-AP-MW-17	GS-AP-MW-19
3/18/2020	0.00693		0.0217	0.011			
3/24/2020		0.00266 (J)			<0.000203		0.00313 (J)
5/12/2020						0.00326 (J)	
9/21/2020				0.0167		0.0055	
9/22/2020					<0.000203		0.00313 (J)
9/23/2020	0.00616	0.00176 (J)	0.0165				
2/1/2021	0.00747	0.00154					
2/2/2021						0.00478	
2/8/2021							0.00178
2/9/2021			0.0145	0.0165			
2/10/2021					0.000491		
8/3/2021			0.0139	0.0105		0.00086	
8/9/2021	0.00308	0.00112			0.0001 (J)		
8/10/2021							0.00133
2/14/2022						0.00112	
2/15/2022					0.00012 (J)		
2/16/2022			0.00592	0.0081			
2/22/2022							0.00098
2/23/2022		0.00102					
2/28/2022	0.00343						
7/19/2022	0.00407						
7/20/2022		0.00102					
8/2/2022			0.0104	0.00733	<0.000203		
8/3/2022							0.00223
8/8/2022						0.000878	
3/20/2023			0.00427	0.00375			
3/21/2023					<0.000203		0.00197
3/22/2023	0.00135	0.000929				0.000896	
9/11/2023			0.00545	0.00436		0.00337	
9/12/2023					0.000205		
9/13/2023	0.00071	0.000958					
9/19/2023							0.0012
Mean	0.00415	0.001376	0.01158	0.00978	0.000216	0.002583	0.001969
Std. Dev.	0.002511	0.0005996	0.006152	0.004922	0.000119	0.0019	0.0008261
Upper Lim.	0.006811	0.00266	0.0181	0.015	0.000491	0.0055	0.002844
Lower Lim.	0.001489	0.000929	0.005059	0.004562	0.0001	0.00086	0.001093

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Arsenic (mg/L) Analysis Run 11/16/2023 3:44 PM View: Appendix IV

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-2	GS-AP-MW-21	GS-AP-MW-21V	GS-AP-MW-3	GS-AP-MW-6D	GS-AP-MW-6S	GS-AP-MW-7
3/17/2020					0.105	0.00778	0.285
3/18/2020		<0.005					
3/23/2020			0.0159				
3/25/2020	<0.000203						
5/13/2020	<0.000203						
9/16/2020						0.00611	0.282
9/17/2020					0.0931		
9/22/2020	<0.000203						
9/23/2020		<0.005	0.01				
2/1/2021	<0.000203						
2/2/2021							0.275
2/3/2021					0.104	0.0071	
2/8/2021		0.000624					
2/9/2021			0.0063				
2/17/2021				0.000168 (J)			
7/27/2021					0.107	0.00634	
8/3/2021				0.00014 (J)			
8/4/2021	<0.000203	0.00054					
8/9/2021							0.282
8/11/2021			0.00161				
2/8/2022		0.00046	0.00551				0.281
2/14/2022					0.12	0.0106	
2/16/2022				0.0002 (J)			
2/22/2022	<0.000203						
7/19/2022	8.3E-05 (J)						
7/20/2022				0.000137 (J)			
7/25/2022					0.114		0.272
7/26/2022						0.00935	
8/9/2022			0.00345				
8/10/2022		0.000495					
3/14/2023					0.108	0.00908	0.249
3/21/2023		0.000472	0.00444	0.000162 (J)			
3/22/2023	<0.000203						
9/5/2023		0.000578	0.00411		0.1	0.0126	
9/11/2023							0.244
9/12/2023				0.000177 (J)			
9/18/2023	0.000122 (J)						
Mean	0.0001807	0.001646	0.006415	0.000164	0.1064	0.00862	0.2713
Std. Dev.	4.538E-05	0.002071	0.004547	2.362E-05	0.008205	0.002237	0.01589
Upper Lim.	0.000203	0.005	0.01123	0.0001965	0.1151	0.01099	0.285
Lower Lim.	8.3E-05	0.00046	0.001595	0.0001315	0.09769	0.006249	0.244

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Arsenic (mg/L) Analysis Run 11/16/2023 3:44 PM View: Appendix IV

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-9V	GS-AP-MW-1R	GS-AP-MW-9R	GS-AP-MW-46
3/23/2020	<0.005			
9/22/2020	<0.005			
2/2/2021	0.000101 (J)			
8/10/2021	0.00032			
2/21/2022	0.00021			
2/23/2022				0.105
3/1/2022		0.00038	0.00529	
7/19/2022	0.000252		0.00629	
8/2/2022		0.000259		0.119
3/27/2023	0.000153 (J)	0.000248	0.00564	0.0955
9/13/2023	0.000133 (J)	0.000313	0.00449	
9/18/2023				0.179
Mean	0.001396	0.0003	0.005428	0.1246
Std. Dev.	0.002225	6.043E-05	0.0007499	0.03751
Upper Lim.	0.005	0.0004372	0.00713	0.2098
Lower Lim.	0.000101	0.0001628	0.003725	0.03946

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Barium (mg/L) Analysis Run 11/16/2023 3:44 PM View: Appendix IV

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-12	GS-AP-MW-12V	GS-AP-MW-15	GS-AP-MW-15V	GS-AP-MW-16D	GS-AP-MW-17	GS-AP-MW-19
3/18/2020	0.195		0.14	0.155			
3/24/2020		1.43			0.323		0.324
5/12/2020						0.0941	
9/21/2020				0.18		0.128	
9/22/2020					0.342		0.337
9/23/2020	0.193	1.27	0.119				
2/1/2021	0.201	1.6					
2/2/2021						0.107	
2/8/2021							0.36
2/9/2021			0.132	0.2			
2/10/2021					0.356		
8/3/2021			0.129	0.164		0.0889	
8/9/2021	0.194	1.07			0.334		
8/10/2021							0.343
2/14/2022						0.0945	
2/15/2022					0.322		
2/16/2022			0.271	0.2			
2/22/2022							0.334
2/23/2022		1.34					
2/28/2022	0.173						
7/19/2022	0.188						
7/20/2022		1.21					
8/2/2022			0.131	0.253	0.355		
8/3/2022							0.348
8/8/2022						0.0875	
3/20/2023			0.276	0.175			
3/21/2023					0.324		0.304
3/22/2023	0.22	1.24				0.0835	
9/11/2023			0.188	0.186		0.1	
9/12/2023					0.324		
9/13/2023	0.182	1.05					
9/19/2023							0.325
Mean	0.1933	1.276	0.1733	0.1891	0.335	0.09794	0.3344
Std. Dev.	0.01385	0.182	0.06527	0.03025	0.01437	0.01422	0.01708
Upper Lim.	0.2079	1.469	0.276	0.2212	0.356	0.113	0.3525
Lower Lim.	0.1786	1.083	0.119	0.1571	0.322	0.08286	0.3163

Confidence Interval

Constituent: Barium (mg/L) Analysis Run 11/16/2023 3:44 PM View: Appendix IV

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-2	GS-AP-MW-21	GS-AP-MW-21V	GS-AP-MW-3	GS-AP-MW-6D	GS-AP-MW-6S	GS-AP-MW-7
3/17/2020					0.638	0.0725	0.174
3/18/2020		0.105					
3/23/2020			0.0574				
3/25/2020	0.0602						
5/13/2020	0.0528						
9/16/2020						0.0682	0.124
9/17/2020					0.378		
9/22/2020	0.0563						
9/23/2020		0.157	0.0438				
2/1/2021	0.0578						
2/2/2021							0.115
2/3/2021					0.443	0.0779	
2/8/2021		0.151					
2/9/2021			0.028				
2/17/2021				0.59			
7/27/2021					0.488	0.0876	
8/3/2021				0.589			
8/4/2021	0.0702	0.148					
8/9/2021							0.0891
8/11/2021			0.0535				
2/8/2022		0.143	0.0631				0.0747
2/14/2022					0.599	0.097	
2/16/2022				0.498			
2/22/2022	0.0501						
7/19/2022	0.0474						
7/20/2022				0.492			
7/25/2022					0.544		0.0677
7/26/2022						0.0978	
8/9/2022			0.0477				
8/10/2022		0.135					
3/14/2023					0.604	0.108	0.0631
3/21/2023		0.127	0.059	0.611			
3/22/2023	0.0456						
9/5/2023		0.122	0.0484		0.571	0.102	
9/11/2023							0.0607
9/12/2023				0.348			
9/18/2023	0.0732						
Mean	0.05707	0.136	0.05011	0.5213	0.5331	0.08888	0.09604
Std. Dev.	0.009588	0.01731	0.01102	0.09878	0.08955	0.01465	0.03939
Upper Lim.	0.06632	0.1543	0.06179	0.657	0.628	0.1044	0.1378
Lower Lim.	0.04781	0.1177	0.03843	0.3856	0.4382	0.07335	0.05429

Confidence Interval

Constituent: Barium (mg/L) Analysis Run 11/16/2023 3:44 PM View: Appendix IV

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-9V	GS-AP-MW-10R	GS-AP-MW-11R	GS-AP-MW-13R	GS-AP-MW-14R	GS-AP-MW-18VR	GS-AP-MW-1R
3/23/2020	0.215						
9/22/2020	0.187						
2/2/2021	0.17						
8/10/2021	0.165						
2/21/2022	0.161						
2/22/2022						0.187	
2/28/2022					0.174		
3/1/2022		0.701	0.107	0.0617			0.072
7/19/2022	0.178		0.11				
7/20/2022				0.0667			
8/2/2022							0.0679
8/3/2022		0.524			0.221		
8/9/2022						0.126	
3/15/2023					0.229		
3/22/2023			0.12				
3/27/2023	0.184	0.587		0.0685		0.115	0.0647
9/12/2023					0.201		
9/13/2023	0.153						0.0559
9/19/2023		0.608	0.133	0.0696		0.11	
Mean	0.1766	0.605	0.1175	0.06663	0.2063	0.1345	0.06513
Std. Dev.	0.01934	0.07328	0.01173	0.003494	0.02451	0.03563	0.006837
Upper Lim.	0.1971	0.7714	0.1441	0.07456	0.2619	0.2206	0.08065
Lower Lim.	0.1561	0.4386	0.09086	0.05869	0.1506	0.06731	0.0496

Confidence Interval

Constituent: Barium (mg/L) Analysis Run 11/16/2023 3:44 PM View: Appendix IV

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-47	GS-AP-MW-5R	GS-AP-MW-9R	GS-AP-MW-46
2/23/2022				0.0652
2/28/2022	0.772			
3/1/2022		0.0695	0.0425	
7/19/2022			0.0339	
7/26/2022	0.728			
8/2/2022		0.0605		0.0696
3/15/2023	0.638			
3/20/2023		0.0567		
3/27/2023			0.0344	0.0655
9/12/2023	0.317	0.0454		
9/13/2023			0.0315	
9/18/2023				0.0535
Mean	0.6138	0.05803	0.03558	0.06345
Std. Dev.	0.2055	0.009982	0.004787	0.00693
Upper Lim.	1.08	0.08069	0.04644	0.07918
Lower Lim.	0.1471	0.03536	0.02471	0.04772

Confidence Interval

Constituent: Cadmium (mg/L) Analysis Run 11/16/2023 3:44 PM View: Appendix IV

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-18VR
2/22/2022	<0.000203
8/9/2022	8E-05 (J)
3/27/2023	<0.000203
9/19/2023	<0.000203
Mean	0.0001723
Std. Dev.	6.15E-05
Upper Lim.	0.000203
Lower Lim.	8E-05

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Chromium (mg/L) Analysis Run 11/16/2023 3:44 PM View: Appendix IV
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-12	GS-AP-MW-12V	GS-AP-MW-15	GS-AP-MW-15V	GS-AP-MW-16D	GS-AP-MW-17	GS-AP-MW-19
3/18/2020	<0.001015		<0.01	0.00716 (J)			
3/24/2020		0.00774 (J)			<0.001015		<0.001015
5/12/2020						<0.001015	
9/21/2020				0.00239 (J)		<0.001015	
9/22/2020					<0.001015		<0.001015
9/23/2020	<0.001015	0.00362 (J)	<0.01				
2/1/2021	<0.001015	0.00311					
2/2/2021						0.00255	
2/8/2021							0.000258 (J)
2/9/2021			0.00072 (J)	0.00142			
2/10/2021					0.00107		
8/3/2021			0.0008 (J)	0.00051 (J)		0.00041 (J)	
8/9/2021	0.00031 (J)	0.00146			0.00068 (J)		
8/10/2021							0.00032 (J)
2/14/2022						0.00034 (J)	
2/15/2022					0.00025 (J)		
2/16/2022			0.00048 (J)	0.00062 (J)			
2/22/2022							<0.001015
2/23/2022		0.00061 (J)					
2/28/2022	<0.001015						
7/19/2022	0.000322 (J)						
7/20/2022		0.000485 (J)					
8/2/2022			0.000913 (J)	0.000427 (J)	0.000402 (J)		
8/3/2022							0.000412 (J)
8/8/2022						0.000334 (J)	
3/20/2023			0.000384 (J)	<0.001015			
3/21/2023					<0.001015		<0.001015
3/22/2023	<0.001015	0.000396 (J)				<0.001015	
9/11/2023			0.000451 (J)	0.000264 (J)		0.000262 (J)	
9/12/2023					0.000226 (J)		
9/13/2023	<0.001015	0.00023 (J)					
9/19/2023							0.000417 (J)
Mean	0.0008403	0.002206	0.002968	0.001662	0.0007091	0.0008676	0.0006834
Std. Dev.	0.0003236	0.002583	0.004344	0.002331	0.0003685	0.0007592	0.0003581
Upper Lim.	0.001015	0.004552	0.01	0.002864	0.00107	0.001049	0.001015
Lower Lim.	0.00031	0.0001824	0.000384	0.0002843	0.000226	0.0001568	0.000258

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Chromium (mg/L) Analysis Run 11/16/2023 3:44 PM View: Appendix IV
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-2	GS-AP-MW-21	GS-AP-MW-21V	GS-AP-MW-3	GS-AP-MW-6D	GS-AP-MW-6S	GS-AP-MW-7
3/17/2020					<0.001015	<0.001015	0.0076 (J)
3/18/2020		<0.01					
3/23/2020			<0.01				
3/25/2020	<0.01						
5/13/2020	<0.01						
9/16/2020						<0.001015	0.00482 (J)
9/17/2020					<0.001015		
9/22/2020	<0.01						
9/23/2020		<0.01	<0.01				
2/1/2021	0.000505 (J)						
2/2/2021							0.00435
2/3/2021					0.000264 (J)	0.000268 (J)	
2/8/2021		0.000705 (J)					
2/9/2021			0.000218 (J)				
2/17/2021				0.000326 (J)			
7/27/2021					0.00024 (J)	0.00024 (J)	
8/3/2021				0.00027 (J)			
8/4/2021	0.00085 (J)	0.00042 (J)					
8/9/2021							0.00234
8/11/2021			0.00134				
2/8/2022		0.0004 (J)	0.00041 (J)				0.00103
2/14/2022					0.00024 (J)	0.00026 (J)	
2/16/2022				0.00027 (J)			
2/22/2022	0.00044 (J)						
7/19/2022	0.000469 (J)						
7/20/2022				0.000315 (J)			
7/25/2022					0.000301 (J)		0.00103
7/26/2022						0.000359 (J)	
8/9/2022			0.000378 (J)				
8/10/2022		0.000827 (J)					
3/14/2023					<0.001015	0.000206 (J)	0.000482 (J)
3/21/2023		0.000459 (J)	0.000223 (J)	0.000239 (J)			
3/22/2023	0.000254 (J)						
9/5/2023		0.000303 (J)	0.000227 (J)		<0.001015	<0.001015	
9/11/2023							0.00042 (J)
9/12/2023				0.000254 (J)			
9/18/2023	0.000325 (J)						
Mean	0.003649	0.002889	0.002849	0.000279	0.0006381	0.0005473	0.002759
Std. Dev.	0.004766	0.004392	0.004429	3.433E-05	0.0004033	0.0003897	0.002592
Upper Lim.	0.01	0.01	0.01	0.0003262	0.001015	0.001015	0.005506
Lower Lim.	0.000254	0.000303	0.000218	0.0002318	0.00024	0.000206	1.178E-05

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Chromium (mg/L) Analysis Run 11/16/2023 3:44 PM View: Appendix IV
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-9V	GS-AP-MW-10R	GS-AP-MW-11R	GS-AP-MW-13R	GS-AP-MW-14R	GS-AP-MW-1R	GS-AP-MW-47
3/23/2020	<0.001015						
9/22/2020	<0.001015						
2/2/2021	0.000228 (J)						
8/10/2021	0.00029 (J)						
2/21/2022	<0.001015						
2/28/2022					0.00062 (J)		0.00033 (J)
3/1/2022		0.00024 (J)	0.00026 (J)	0.00023 (J)		0.00044 (J)	
7/19/2022	0.000323 (J)		0.000455 (J)				
7/20/2022				0.000261 (J)			
7/26/2022							0.000389 (J)
8/2/2022						0.00037 (J)	
8/3/2022		0.000414 (J)			0.000306 (J)		
3/15/2023					0.000302 (J)		0.000359 (J)
3/22/2023			<0.001015				
3/27/2023	0.000236 (J)	0.000235 (J)		0.000246 (J)		0.000404 (J)	
9/12/2023					<0.001015		<0.001015
9/13/2023	<0.001015					0.000236 (J)	
9/19/2023		0.000306 (J)	0.000264 (J)	0.00035 (J)			
Mean	0.0006421	0.0002988	0.0004985	0.0002718	0.0005608	0.0003625	0.0005233
Std. Dev.	0.0003997	8.337E-05	0.0003562	5.368E-05	0.0003375	8.904E-05	0.0003287
Upper Lim.	0.001015	0.000488	0.0005329	0.0003936	0.0007476	0.0005647	0.001015
Lower Lim.	0.000228	0.0001095	0.0001197	0.0001499	7.111E-05	0.0001603	0.00033

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Chromium (mg/L)   Analysis Run 11/16/2023 3:44 PM   View: Appendix IV
Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

	GS-AP-MW-5R	GS-AP-MW-9R	GS-AP-MW-46
2/23/2022			<0.001015
3/1/2022	0.00035 (J)	0.00027 (J)	
7/19/2022		0.000384 (J)	
8/2/2022	0.00036 (J)		0.000317 (J)
3/20/2023	0.000222 (J)		
3/27/2023		0.000216 (J)	0.000222 (J)
9/12/2023	0.000209 (J)		
9/13/2023		<0.001015	
9/18/2023			<0.001015
Mean	0.0002853	0.0004713	0.0006423
Std. Dev.	8.082E-05	0.0003692	0.0004322
Upper Lim.	0.0004687	0.0004628	0.0003861
Lower Lim.	0.0001018	0.0001514	0.0001704

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Cobalt (mg/L) Analysis Run 11/16/2023 3:44 PM View: Appendix IV
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-12V	GS-AP-MW-15	GS-AP-MW-16D	GS-AP-MW-17	GS-AP-MW-6S	GS-AP-MW-7	GS-AP-MW-10R
3/17/2020					<0.005	0.00476 (J)	
3/18/2020		<0.000203					
3/24/2020	0.00277 (J)		<0.000203				
5/12/2020				<0.000203			
9/16/2020					<0.005	0.00301 (J)	
9/21/2020				<0.000203			
9/22/2020			<0.000203				
9/23/2020	<0.000203	<0.000203					
2/1/2021	0.00129						
2/2/2021				0.000102 (J)		0.00248	
2/3/2021					0.000663		
2/9/2021		<0.000203					
2/10/2021			0.000252				
7/27/2021					0.00064		
8/3/2021		9E-05 (J)		<0.000203			
8/9/2021	0.00043		9E-05 (J)			0.0011	
2/8/2022						0.00051	
2/14/2022				<0.000203	0.00065		
2/15/2022			<0.000203				
2/16/2022		<0.000203					
2/23/2022	0.00013 (J)						
3/1/2022							0.00014 (J)
7/20/2022	<0.000203						
7/25/2022						0.000372	
7/26/2022					0.000768		
8/2/2022		<0.000203	<0.000203				
8/3/2022							8.9E-05 (J)
8/8/2022				<0.000203			
3/14/2023					0.000746	9.22E-05 (J)	
3/20/2023		<0.000203					
3/21/2023			<0.000203				
3/22/2023	<0.000203			<0.000203			
3/27/2023							0.000682
9/5/2023					0.000639		
9/11/2023		<0.000203		<0.000203		0.00025	
9/12/2023			<0.000203				
9/13/2023	<0.000203						
9/19/2023							9.5E-05 (J)
Mean	0.000679	0.0001889	0.000195	0.0001904	0.001763	0.001572	0.0002515
Std. Dev.	0.000927	3.995E-05	4.576E-05	3.571E-05	0.001998	0.001681	0.0002879
Upper Lim.	0.00277	0.000203	0.000252	0.000203	0.005	0.003233	0.000682
Lower Lim.	0.00013	9E-05	9E-05	0.000102	0.000639	0.000136	8.9E-05

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Cobalt (mg/L)   Analysis Run 11/16/2023 3:44 PM   View: Appendix IV

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

	GS-AP-MW-11R	GS-AP-MW-14R	GS-AP-MW-1R	GS-AP-MW-45V	GS-AP-MW-47	GS-AP-MW-9R
2/23/2022				<0.000203		
2/28/2022		0.00015 (J)			0.00012 (J)	
3/1/2022	0.00011 (J)		9E-05 (J)			9E-05 (J)
7/19/2022	<0.000203					<0.000203
7/26/2022					0.000112 (J)	
8/2/2022			<0.000203			
8/3/2022		<0.000203				
8/8/2022				<0.000203		
3/15/2023		<0.000203			0.000135 (J)	
3/22/2023	<0.000203					
3/27/2023			<0.000203			<0.000203
3/28/2023				<0.000203		
9/12/2023		<0.000203			0.000174 (J)	
9/13/2023			<0.000203			<0.000203
9/18/2023				0.000125 (J)		
9/19/2023	<0.000203					
Mean	0.0001798	0.0001898	0.0001748	0.0001835	0.0001353	0.0001748
Std. Dev.	4.65E-05	2.65E-05	5.65E-05	3.9E-05	2.754E-05	5.65E-05
Upper Lim.	0.000203	0.000203	0.000203	0.000203	0.0001978	0.000203
Lower Lim.	0.00011	0.00015	9E-05	0.000125	7.273E-05	9E-05

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 11/16/2023 3:44 PM View: Appendix IV

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-12	GS-AP-MW-12V	GS-AP-MW-15	GS-AP-MW-15V	GS-AP-MW-16D	GS-AP-MW-17	GS-AP-MW-19
3/18/2020	0.605		0.939	0.566 (U)			
3/24/2020		0.877 (U)			0.636		1.07
5/12/2020						0.0339 (U)	
9/21/2020				0.494 (U)		0.651 (U)	
9/22/2020					0.59 (U)		2.09
9/23/2020	0.811 (U)	1.38	0.547 (U)				
2/1/2021	0.946 (U)	0.944 (U)					
2/2/2021						2.53	
2/8/2021							0.947 (U)
2/9/2021			0.442 (U)	0.55 (U)			
2/10/2021					0.285 (U)		
8/3/2021			0.65 (U)	1.13 (U)		0.667 (U)	
8/9/2021	0.907 (U)	1.0895 (UD)			1.07 (U)		
8/10/2021							1.42 (U)
2/14/2022						0.523 (U)	
2/15/2022					0.557 (U)		
2/16/2022			0.234 (U)	0.841 (U)			
2/22/2022							0.639 (U)
2/23/2022		1.3					
2/28/2022	0.725 (U)						
7/19/2022	0.934 (U)						
7/20/2022		0.596 (U)					
8/2/2022			1.12	0.437 (U)	0.696 (U)		
8/3/2022							0.53 (U)
8/8/2022						0.0413 (U)	
3/20/2023			0.679 (U)	0.484 (U)			
3/21/2023					0.861 (U)		0.407 (U)
3/22/2023	1.18	1.17				0.602 (U)	
9/11/2023			0.497 (U)	0.44 (U)		0.43 (U)	
9/12/2023					1.07 (U)		
9/13/2023	0.495 (U)	0.427 (U)					
9/19/2023							0.662 (U)
Mean	0.8254	0.9729	0.6385	0.6178	0.7206	0.6848	0.9706
Std. Dev.	0.2161	0.3328	0.2815	0.2441	0.2686	0.7876	0.5584
Upper Lim.	1.054	1.326	0.9368	1.13	1.005	1.399	1.562
Lower Lim.	0.5964	0.6202	0.3402	0.437	0.4359	0.06575	0.3788

Confidence Interval

Constituent: Combined Radium 226 + 228 (pCi/L)   Analysis Run 11/16/2023 3:44 PM   View: Appendix IV

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

	GS-AP-MW-2	GS-AP-MW-21	GS-AP-MW-21V	GS-AP-MW-3	GS-AP-MW-6D	GS-AP-MW-6S	GS-AP-MW-7
3/17/2020					0.629	0.351 (U)	1.2
3/18/2020		0.732					
3/23/2020			0.982				
3/25/2020	4						
5/13/2020	0.289 (U)						
9/16/2020						1.05	1.74
9/17/2020					0.32 (U)		
9/22/2020	0.712						
9/23/2020		0.468 (U)	0.563 (U)				
2/1/2021	0.518 (U)						
2/2/2021							0.373 (U)
2/3/2021					0.647 (U)	0.489 (U)	
2/8/2021		0.667 (U)					
2/9/2021			0.867 (U)				
2/17/2021				0.331 (U)			
7/27/2021					0.919 (U)	0.87 (U)	
8/3/2021				0.978 (U)			
8/4/2021	0.502 (U)	0.337 (U)					
8/9/2021							1.28 (UD)
8/11/2021			0.782 (U)				
2/8/2022		0.529 (U)	0.467 (U)				0.587 (UD)
2/14/2022					1.24	0.14 (U)	
2/16/2022				0.601 (U)			
2/22/2022	0.21 (U)						
7/19/2022	0.306 (U)						
7/20/2022				0.473 (U)			
7/25/2022					0.513 (U)		0.455 (U)
8/9/2022			0.458 (U)				
8/10/2022		0.395 (U)					
3/14/2023					0.656 (U)	0.424 (U)	0.351 (U)
3/21/2023		0.213 (U)	1.07 (U)	1.08			
3/22/2023	0.0664 (U)						
9/5/2023		0.199 (U)	0.86 (U)		0.269 (U)	0.382 (U)	
9/11/2023							0.555 (U)
9/12/2023				0.397 (U)			
9/18/2023	0.353 (U)						
Mean	0.7729	0.4425	0.7561	0.6433	0.6491	0.5294	0.8176
Std. Dev.	1.225	0.1956	0.2339	0.3136	0.3148	0.3175	0.5182
Upper Lim.	1.177	0.6498	1.004	1.074	0.9828	0.9066	1.342
Lower Lim.	0.1423	0.2352	0.5082	0.2125	0.3154	0.1523	0.331

Confidence Interval

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 11/16/2023 3:44 PM View: Appendix IV

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-9V	GS-AP-MW-11R	GS-AP-MW-13R	GS-AP-MW-45V	GS-AP-MW-5R	GS-AP-MW-9R
3/23/2020	0.156 (U)					
9/22/2020	0.536 (U)					
2/2/2021	0.154 (U)					
8/10/2021	0.895 (U)					
2/21/2022	0.134 (U)					
2/23/2022				0.442 (U)		
3/1/2022		0.757 (U)	0.656 (U)		0.799 (U)	0.663 (U)
7/19/2022	1.03	0.586 (U)				0.803 (U)
7/20/2022			0.551 (U)			
8/2/2022					0.479 (U)	
8/8/2022				0.469 (U)		
3/20/2023					0.742 (U)	
3/22/2023		0.691 (U)				
3/27/2023	0.414 (U)		0.347 (U)			0.263 (U)
3/28/2023				0.647 (U)		
9/12/2023					0.763 (U)	
9/13/2023	0.348 (U)					0.591 (U)
9/18/2023				0.741 (U)		
9/19/2023		1.12 (U)	0.711 (U)			
Mean	0.4584	0.7885	0.5663	0.5748	0.6958	0.58
Std. Dev.	0.3437	0.2319	0.1605	0.1434	0.1464	0.2289
Upper Lim.	0.8227	1.315	0.9307	0.9002	0.9582	1.1
Lower Lim.	0.09408	0.2619	0.2018	0.2493	0.2867	0.06025

Confidence Interval

Constituent: Fluoride (mg/L) Analysis Run 11/16/2023 3:44 PM View: Appendix IV

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-12	GS-AP-MW-12V	GS-AP-MW-15	GS-AP-MW-15V	GS-AP-MW-16D	GS-AP-MW-17	GS-AP-MW-19
3/18/2020	0.122		0.647	0.243			
3/24/2020		0.155			0.109		0.327
5/12/2020						0.263	
9/21/2020				0.372		0.371	
9/22/2020					0.123		0.339
9/23/2020	0.12	0.176	0.452				
2/1/2021	0.126	0.169					
2/2/2021						0.276	
2/8/2021							0.319
2/9/2021			0.591	0.329			
2/10/2021					0.103		
8/3/2021			0.615	0.278		0.3	
8/9/2021	0.139	0.187			0.131		
8/10/2021							0.283
2/14/2022						0.206	
2/15/2022					0.114		
2/16/2022			0.349	0.208			
2/22/2022							0.259
2/23/2022		0.153					
2/28/2022	0.12						
7/19/2022	0.0983 (J)						
7/20/2022		0.18					
8/2/2022			0.373	0.206	0.112 (J)		
8/3/2022							0.231
8/8/2022						0.257	
3/20/2023			0.333	0.183			
3/21/2023					0.0849 (J)		0.24
3/22/2023	0.0941 (J)	0.138				0.183	
9/11/2023			0.425	0.183		0.269	
9/12/2023					0.106 (J)		
9/13/2023	0.0944 (J)	0.129					
9/19/2023							0.211
Mean	0.1142	0.1609	0.4731	0.2503	0.1104	0.2656	0.2761
Std. Dev.	0.01661	0.02063	0.1265	0.07034	0.01376	0.05716	0.04826
Upper Lim.	0.1318	0.1827	0.6072	0.3248	0.1249	0.3262	0.3273
Lower Lim.	0.09662	0.139	0.339	0.1757	0.09578	0.205	0.225

Confidence Interval

Constituent: Fluoride (mg/L)   Analysis Run 11/16/2023 3:44 PM   View: Appendix IV

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

	GS-AP-MW-2	GS-AP-MW-21	GS-AP-MW-21V	GS-AP-MW-3	GS-AP-MW-6D	GS-AP-MW-6S	GS-AP-MW-7
3/17/2020					0.132	0.231	0.107
3/18/2020		0.234					
3/23/2020			0.494				
3/25/2020	0.855						
5/13/2020	0.777						
9/16/2020						0.308	0.126
9/17/2020					0.133		
9/22/2020	0.921						
9/23/2020		0.208	0.641				
2/1/2021	0.865						
2/2/2021							0.124
2/3/2021					0.135	0.195	
2/8/2021		0.203					
2/9/2021			0.546				
2/17/2021				0.1			
7/27/2021					0.127	0.2	
8/3/2021				0.102			
8/4/2021	0.932	0.24					
8/9/2021							0.11
8/11/2021			0.41				
2/8/2022		0.175	0.398				0.0872 (JD)
2/14/2022					0.108	0.164	
2/16/2022				<0.125			
2/22/2022	0.819						
7/19/2022	0.752						
7/20/2022				<0.125			
7/25/2022					0.0978 (JD)		0.0896 (JD)
7/26/2022						0.164	
8/9/2022			0.406				
8/10/2022		0.186					
3/14/2023					0.122 (J)	0.153	0.177
3/21/2023		0.194	0.381	0.0689 (J)			
3/22/2023	0.72						
9/5/2023		0.188	0.391		0.107 (J)	0.152	
9/11/2023							0.0913 (J)
9/12/2023				0.0808 (J)			
9/18/2023	0.822						
Mean	0.8292	0.2035	0.4584	0.1003	0.1202	0.1959	0.114
Std. Dev.	0.0722	0.02309	0.09377	0.02276	0.01412	0.05294	0.02954
Upper Lim.	0.8989	0.228	0.641	0.1068	0.1352	0.2483	0.1439
Lower Lim.	0.7595	0.179	0.381	0.06903	0.1053	0.1453	0.08495

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Fluoride (mg/L) Analysis Run 11/16/2023 3:44 PM View: Appendix IV

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-9V	GS-AP-MW-10R	GS-AP-MW-11R	GS-AP-MW-13R	GS-AP-MW-14R	GS-AP-MW-18VR	GS-AP-MW-1R
3/23/2020	0.187						
9/22/2020	0.174						
2/2/2021	0.183						
8/10/2021	0.166						
2/21/2022	0.177						
2/22/2022						0.199	
2/28/2022					0.215		
3/1/2022		0.278	0.143	0.122			0.248
7/19/2022	0.159		0.0992 (J)				
7/20/2022				0.084 (J)			
8/2/2022							0.177
8/3/2022		0.265			0.145		
8/9/2022						0.133	
3/15/2023					0.141		
3/22/2023			0.0999 (J)				
3/27/2023	0.164	0.283		0.18		0.182	0.234
9/12/2023					0.128		
9/13/2023	0.145						0.229
9/19/2023		0.263	0.0949 (J)	0.147		0.146	
Mean	0.1694	0.2723	0.1093	0.1333	0.1573	0.165	0.222
Std. Dev.	0.01372	0.009777	0.02261	0.04052	0.03918	0.03071	0.03106
Upper Lim.	0.1839	0.2944	0.143	0.2253	0.2462	0.2347	0.2925
Lower Lim.	0.1548	0.2501	0.0949	0.04124	0.0683	0.09527	0.1515

Confidence Interval

Constituent: Fluoride (mg/L) Analysis Run 11/16/2023 3:44 PM View: Appendix IV
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-3V	GS-AP-MW-45V	GS-AP-MW-47	GS-AP-MW-5R	GS-AP-MW-9R	GS-AP-MW-46
2/23/2022	0.241	0.204				0.226
2/28/2022			0.121			
3/1/2022				0.147	0.218	
7/19/2022					0.245	
7/20/2022	0.231					
7/26/2022			0.0601 (J)			
8/2/2022				0.144		0.249
8/8/2022		0.154				
3/15/2023			0.107 (J)			
3/20/2023				0.117 (J)		
3/21/2023	0.161					
3/27/2023					0.207	0.271
3/28/2023		0.249				
9/12/2023	0.187		0.103 (J)	0.118 (J)		
9/13/2023					0.158	
9/18/2023		0.302				0.334
Mean	0.205	0.2273	0.09778	0.1315	0.207	0.27
Std. Dev.	0.03756	0.06316	0.02628	0.01622	0.03636	0.04645
Upper Lim.	0.2903	0.3706	0.1574	0.1649	0.2895	0.3755
Lower Lim.	0.1197	0.08386	0.03812	0.08831	0.1245	0.1645

Confidence Interval

Constituent: Lead (mg/L) Analysis Run 11/16/2023 3:44 PM View: Appendix IV

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-12V	GS-AP-MW-15	GS-AP-MW-16D	GS-AP-MW-17	GS-AP-MW-3	GS-AP-MW-6D	GS-AP-MW-6S
3/17/2020						<0.000203	<0.000203
3/18/2020		<0.000203					
3/24/2020	0.00279 (J)		<0.000203				
5/12/2020				<0.000203			
9/16/2020							<0.000203
9/17/2020						<0.000203	
9/21/2020				<0.000203			
9/22/2020			<0.000203				
9/23/2020	0.0014 (J)	<0.000203					
2/1/2021	0.0013						
2/2/2021				0.000175 (J)			
2/3/2021						<0.000203	<0.000203
2/9/2021		8.74E-05 (J)					
2/10/2021			0.000873				
2/17/2021					<0.000203		
7/27/2021						<0.000203	8E-05 (J)
8/3/2021		8E-05 (J)		<0.000203	<0.000203		
8/9/2021	0.00048		0.00016 (J)				
2/14/2022				<0.000203		<0.000203	<0.000203
2/15/2022			<0.000203				
2/16/2022		<0.000203			<0.000203		
2/23/2022	0.00019 (J)						
7/20/2022	<0.000203				<0.000203		
7/25/2022						0.000171 (J)	
7/26/2022							9.8E-05 (J)
8/2/2022		<0.000203	<0.000203				
8/8/2022				<0.000203			
3/14/2023						<0.000203	<0.000203
3/20/2023		<0.000203					
3/21/2023			<0.000203		<0.000203		
3/22/2023	8.97E-05 (J)			<0.000203			
9/5/2023						<0.000203	<0.000203
9/11/2023		<0.000203		<0.000203			
9/12/2023			9E-05 (J)		7.3E-05 (J)		
9/13/2023	<0.000203						
Mean	0.000832	0.0001732	0.0002673	0.0001995	0.0001813	0.000199	0.0001745
Std. Dev.	0.0009452	5.526E-05	0.000248	9.899E-06	5.307E-05	1.131E-05	5.299E-05
Upper Lim.	0.001616	0.000203	0.000873	0.000203	0.000203	0.000203	0.000203
Lower Lim.	7.196E-05	8E-05	9E-05	0.000175	7.3E-05	0.000171	8E-05

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Lead (mg/L)   Analysis Run 11/16/2023 3:44 PM   View: Appendix IV
Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

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	GS-AP-MW-7	GS-AP-MW-10R	GS-AP-MW-11R	GS-AP-MW-13R	GS-AP-MW-1R	GS-AP-MW-3V	GS-AP-MW-45V
3/17/2020	0.00386 (J)						
9/16/2020	0.00295 (J)						
2/2/2021	0.00243						
8/9/2021	0.00119						
2/8/2022	0.0008						
2/23/2022						0.00014 (J)	7E-05 (J)
3/1/2022		0.00013 (J)	<0.000203	0.00013 (J)	0.00022		
7/19/2022			<0.000203				
7/20/2022				<0.000203		7.2E-05 (J)	
7/25/2022	0.000431						
8/2/2022					0.000135 (J)		
8/3/2022		<0.000203					
8/8/2022							<0.000203
3/14/2023	0.000188 (J)						
3/21/2023						<0.000203	
3/22/2023			<0.000203				
3/27/2023		<0.000203		<0.000203	0.000134 (J)		
3/28/2023							<0.000203
9/11/2023	0.000325						
9/12/2023						<0.000203	
9/13/2023					<0.000203		
9/18/2023							<0.000203
9/19/2023		<0.000203	0.000187 (J)	<0.000203			
Mean	0.001522	0.0001848	0.000199	0.0001848	0.000173	0.0001545	0.0001698
Std. Dev.	0.001382	3.65E-05	8E-06	3.65E-05	4.5E-05	6.251E-05	6.65E-05
Upper Lim.	0.002986	0.000203	0.000203	0.000203	0.0002399	0.0001832	0.000203
Lower Lim.	5.721E-05	0.00013	0.000187	0.00013	7.181E-05	2.881E-05	7E-05

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Lithium (mg/L) Analysis Run 11/16/2023 3:44 PM View: Appendix IV

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-12	GS-AP-MW-12V	GS-AP-MW-15	GS-AP-MW-15V	GS-AP-MW-16D	GS-AP-MW-17	GS-AP-MW-19
3/18/2020	0.0297		0.378	0.208			
3/24/2020		0.0462			0.035		0.0417
5/12/2020						0.0602	
9/21/2020				0.116		0.0579	
9/22/2020					0.0343		0.0435
9/23/2020	0.0279	0.0409	0.414				
2/1/2021	0.0249	0.0384					
2/2/2021						0.0634	
2/8/2021							0.0368
2/9/2021			0.493	0.122			
2/10/2021					0.0376		
8/3/2021			0.536	0.0986		0.068	
8/9/2021	0.0354	0.0398			0.0326		
8/10/2021							0.0305
2/14/2022						0.0572	
2/15/2022					0.033		
2/16/2022			0.263	0.0788			
2/22/2022							0.0266
2/23/2022		0.0279					
2/28/2022	0.0523						
7/19/2022	0.0631						
7/20/2022		0.0309					
8/2/2022			0.529	0.096	0.0343		
8/3/2022							0.0416
8/8/2022						0.0646	
3/20/2023			0.305	0.0787			
3/21/2023					0.034		0.0402
3/22/2023	0.0468	0.0304				0.0586	
9/11/2023			0.307	0.0849		0.0569	
9/12/2023					0.0348		
9/13/2023	0.0481	0.0306					
9/19/2023							0.0336
Mean	0.04103	0.03564	0.4031	0.1104	0.03445	0.06085	0.03681
Std. Dev.	0.01358	0.006539	0.1075	0.04258	0.001518	0.00405	0.006065
Upper Lim.	0.05541	0.04257	0.517	0.208	0.03606	0.06514	0.04324
Lower Lim.	0.02664	0.02871	0.2892	0.0787	0.03284	0.05656	0.03038

Confidence Interval

Constituent: Lithium (mg/L)   Analysis Run 11/16/2023 3:44 PM   View: Appendix IV

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

	GS-AP-MW-2	GS-AP-MW-21	GS-AP-MW-21V	GS-AP-MW-3	GS-AP-MW-6D	GS-AP-MW-6S	GS-AP-MW-7
3/17/2020					0.292	0.0695	0.161
3/18/2020		0.379					
3/23/2020			0.146				
3/25/2020	0.0434						
5/13/2020	0.0409						
9/16/2020						0.066	0.16
9/17/2020					0.299		
9/22/2020	0.0395						
9/23/2020		0.179	0.137				
2/1/2021	0.0445						
2/2/2021							0.183
2/3/2021					0.312	0.0455	
2/8/2021		0.239					
2/9/2021			0.124				
2/17/2021				0.0995			
7/27/2021					0.326	0.0576	
8/3/2021				0.088			
8/4/2021	0.0443	0.213					
8/9/2021							0.205
8/11/2021			0.048				
2/8/2022		0.0996	0.0835				0.203
2/14/2022					0.302	0.0625	
2/16/2022				0.0732			
2/22/2022	0.0354						
7/19/2022	0.033						
7/20/2022				0.07			
7/25/2022					0.348		0.227
7/26/2022						0.0665	
8/9/2022			0.0789				
8/10/2022		0.0868					
3/14/2023					0.308	0.0468	0.207
3/21/2023		0.0884	0.11	0.075			
3/22/2023	0.0359						
9/5/2023		0.102	0.0928		0.309	0.0806	
9/11/2023							0.213
9/12/2023				0.0686			
9/18/2023	0.0452						
Mean	0.04023	0.1734	0.1025	0.07905	0.312	0.06188	0.1949
Std. Dev.	0.00454	0.1024	0.03291	0.01217	0.01767	0.01172	0.02444
Upper Lim.	0.04462	0.2754	0.1374	0.09576	0.3307	0.0743	0.2208
Lower Lim.	0.03585	0.07796	0.06764	0.06234	0.2933	0.04945	0.169

Confidence Interval

Constituent: Lithium (mg/L) Analysis Run 11/16/2023 3:44 PM View: Appendix IV
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-9V	GS-AP-MW-10R	GS-AP-MW-11R	GS-AP-MW-13R	GS-AP-MW-14R	GS-AP-MW-18VR	GS-AP-MW-1R
3/23/2020	0.0309						
9/22/2020	0.0293						
2/2/2021	0.0299						
8/10/2021	0.031						
2/21/2022	0.0293						
2/22/2022						0.0446	
2/28/2022					0.0228		
3/1/2022		0.0349	0.0281	0.0272			0.0309
7/19/2022	0.029		0.0289				
7/20/2022				0.027			
8/2/2022							0.0385
8/3/2022		0.0391			0.0265		
8/9/2022						0.059	
3/15/2023					0.0248		
3/22/2023			0.0317				
3/27/2023	0.0298	0.0362		0.0261		0.0536	0.0319
9/12/2023					0.0264		
9/13/2023	0.0326						0.033
9/19/2023		0.0393	0.0324	0.0279		0.0539	
Mean	0.03023	0.03738	0.03028	0.02705	0.02513	0.05278	0.03358
Std. Dev.	0.001207	0.002175	0.002095	0.0007416	0.001735	0.005987	0.003393
Upper Lim.	0.0315	0.04231	0.03503	0.02873	0.02906	0.06637	0.04128
Lower Lim.	0.02895	0.03244	0.02552	0.02537	0.02119	0.03918	0.02587

Confidence Interval

Constituent: Lithium (mg/L) Analysis Run 11/16/2023 3:44 PM View: Appendix IV

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-3V	GS-AP-MW-45V	GS-AP-MW-47	GS-AP-MW-5R	GS-AP-MW-9R	GS-AP-MW-46
2/23/2022	0.0489	0.0374				0.0653
2/28/2022			0.04			
3/1/2022				0.0644	0.0361	
7/19/2022					0.0356	
7/20/2022	0.071					
7/26/2022			0.0429			
8/2/2022				0.0827		0.0756
8/8/2022		0.0486				
3/15/2023			0.0394			
3/20/2023				0.0711		
3/21/2023	0.0825					
3/27/2023					0.0351	0.0593
3/28/2023		0.0531				
9/12/2023	0.103		0.0427	0.0717		
9/13/2023					0.0352	
9/18/2023		0.0931				0.0568
Mean	0.07635	0.05805	0.04125	0.07248	0.0355	0.06425
Std. Dev.	0.02258	0.02428	0.001808	0.007577	0.0004546	0.008365
Upper Lim.	0.1276	0.1132	0.04536	0.08968	0.03653	0.08324
Lower Lim.	0.02508	0.002923	0.03714	0.05527	0.03447	0.04526

Confidence Interval

Constituent: Molybdenum (mg/L) Analysis Run 11/16/2023 3:44 PM View: Appendix IV

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-12	GS-AP-MW-12V	GS-AP-MW-15	GS-AP-MW-15V	GS-AP-MW-16D	GS-AP-MW-17	GS-AP-MW-19
3/18/2020	0.00444 (J)		0.0673	0.0327			
3/24/2020		0.00454 (J)			<0.01015		0.00605 (J)
5/12/2020						0.00436 (J)	
9/21/2020				0.0538		0.00776 (J)	
9/22/2020					<0.01015		0.0063 (J)
9/23/2020	0.00577 (J)	0.00463 (J)	0.0744				
2/1/2021	0.00792	0.00164					
2/2/2021						0.00538	
2/8/2021							0.00366
2/9/2021			0.0644	0.0522			
2/10/2021					0.00014 (J)		
8/3/2021			0.0663	0.0311		0.00157	
8/9/2021	0.00452	0.00302			0.00069		
8/10/2021							0.00269
2/14/2022						0.00252	
2/15/2022					0.00032		
2/16/2022			0.0306	0.0272			
2/22/2022							0.00267
2/23/2022		0.00144					
2/28/2022	0.00903						
7/19/2022	0.0112						
7/20/2022		0.00204					
8/2/2022			0.0642	0.0295	0.000984		
8/3/2022							0.00355
8/8/2022						0.00154	
3/20/2023			0.0315	0.0195			
3/21/2023					<0.01015		<0.01015
3/22/2023	0.00512 (J)	<0.01015				<0.01015	
9/11/2023			0.0387	0.0205		<0.01015	
9/12/2023					<0.01015		
9/13/2023	0.00555 (J)	<0.01015					
9/19/2023							<0.01015
Mean	0.006694	0.004701	0.05468	0.03331	0.005342	0.005429	0.005653
Std. Dev.	0.002441	0.003572	0.01789	0.01303	0.005146	0.003578	0.003096
Upper Lim.	0.009281	0.004245	0.07131	0.04712	0.01015	0.006233	0.005679
Lower Lim.	0.004106	0.001561	0.03728	0.0195	0.00014	0.001477	0.002659

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Molybdenum (mg/L) Analysis Run 11/16/2023 3:44 PM View: Appendix IV

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-2	GS-AP-MW-21	GS-AP-MW-21V	GS-AP-MW-3	GS-AP-MW-6D	GS-AP-MW-6S	GS-AP-MW-7
3/17/2020					0.00959 (J)	0.0272	0.193
3/18/2020		0.102					
3/23/2020			0.117				
3/25/2020	0.00343 (J)						
5/13/2020	0.00224 (J)						
9/16/2020						0.0427	0.215
9/17/2020					0.00924 (J)		
9/22/2020	0.00308 (J)						
9/23/2020		0.0404	0.12				
2/1/2021	0.00427						
2/2/2021							0.202
2/3/2021					0.0095	0.0218	
2/8/2021		0.0396					
2/9/2021			0.0983				
2/17/2021				0.0113			
7/27/2021					0.0101	0.0452	
8/3/2021				0.00977			
8/4/2021	0.00168	0.0367					
8/9/2021							0.207
8/11/2021			0.0394				
2/8/2022		0.0153	0.0819				0.221
2/14/2022					0.0115	0.0411	
2/16/2022				0.00722			
2/22/2022	0.00327						
7/19/2022	0.00146						
7/20/2022				0.0066			
7/25/2022					0.011		0.214
7/26/2022						0.0377	
8/9/2022			0.0509				
8/10/2022		0.00802					
3/14/2023					0.0104	0.0298	0.215
3/21/2023		0.0103	0.0361	0.00847 (J)			
3/22/2023	<0.01015						
9/5/2023		0.0139	0.0307		0.011	0.0408	
9/11/2023							0.228
9/12/2023				<0.01015			
9/18/2023	0.0052 (J)						
Mean	0.003301	0.03328	0.07179	0.008918	0.01029	0.03579	0.2119
Std. Dev.	0.001365	0.03091	0.03707	0.00181	0.0008226	0.00844	0.01099
Upper Lim.	0.004618	0.06182	0.1111	0.01083	0.01116	0.04473	0.2235
Lower Lim.	0.001983	0.007613	0.03249	0.006292	0.009419	0.02684	0.2002

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Molybdenum (mg/L) Analysis Run 11/16/2023 3:44 PM View: Appendix IV

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-9V	GS-AP-MW-10R	GS-AP-MW-11R	GS-AP-MW-13R	GS-AP-MW-14R	GS-AP-MW-18VR	GS-AP-MW-1R
3/23/2020	<0.01015						
9/22/2020	<0.01015						
2/2/2021	0.000538						
8/10/2021	0.00269						
2/21/2022	0.0022						
2/22/2022						0.0336	
2/28/2022					0.00097		
3/1/2022		0.00288	0.00014 (J)	0.00061			0.00143
7/19/2022	0.00146		<0.01015				
7/20/2022				0.000155 (J)			
8/2/2022							0.00102
8/3/2022		0.00163			0.000479		
8/9/2022						0.0456	
3/15/2023					<0.01015		
3/22/2023			<0.01015				
3/27/2023	<0.01015	<0.01015		<0.01015		0.0495	<0.01015
9/12/2023					<0.01015		
9/13/2023	<0.01015						<0.01015
9/19/2023		<0.01015	<0.01015	<0.01015		0.0516	
Mean	0.005936	0.006203	0.007648	0.005266	0.005437	0.04508	0.005688
Std. Dev.	0.004547	0.004587	0.005005	0.005642	0.005446	0.008044	0.005156
Upper Lim.	0.01015	0.003674	0.01015	0.001143	0.001411	0.06334	0.001772
Lower Lim.	0.000538	0.000836	0.00014	3.919E-05	0.0002755	0.02681	0.000823

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Molybdenum (mg/L)   Analysis Run 11/16/2023 3:44 PM   View: Appendix IV
Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

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	GS-AP-MW-5R	GS-AP-MW-9R	GS-AP-MW-46
2/23/2022			0.00678
3/1/2022	0.00212	0.00313	
7/19/2022		0.00308	
8/2/2022	0.00237		0.00955
3/20/2023	<0.01015		
3/27/2023		<0.01015	0.0114
9/12/2023	<0.01015		
9/13/2023		<0.01015	
9/18/2023			0.0168
Mean	0.006198	0.006628	0.01113
Std. Dev.	0.004565	0.004067	0.004229
Upper Lim.	0.01015	0.01015	0.02073
Lower Lim.	0.00212	0.00308	0.001532

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Selenium (mg/L) Analysis Run 11/16/2023 3:44 PM View: Appendix IV

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-6S
3/17/2020	<0.001015
9/16/2020	<0.001015
2/3/2021	0.000794 (J)
7/27/2021	0.00124
2/14/2022	0.00085 (J)
7/26/2022	0.00086 (J)
3/14/2023	0.000886 (J)
9/5/2023	<0.001015
Mean	0.0009594
Std. Dev.	0.0001427
Upper Lim.	0.001071
Lower Lim.	0.0007545

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Thallium (mg/L)   Analysis Run 11/16/2023 3:44 PM   View: Appendix IV

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

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	GS-AP-MW-18VR
2/22/2022	<0.000203
8/9/2022	7.7E-05 (J)
3/27/2023	<0.000203
9/19/2023	<0.000203
Mean	0.0001715
Std. Dev.	6.3E-05
Upper Lim.	0.000203
Lower Lim.	7.7E-05

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Arsenic (mg/L)   Analysis Run 11/16/2023 3:44 PM   View: Appendix IV - Non-Parametric

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

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	GS-AP-MW-10R	GS-AP-MW-11R	GS-AP-MW-13R	GS-AP-MW-14R	GS-AP-MW-18VR	GS-AP-MW-3V	GS-AP-MW-45V
2/22/2022					0.00164		
2/23/2022						0.00249	0.00106
2/28/2022				0.00231			
3/1/2022	0.00209	0.00235	0.011				
7/19/2022		0.00137					
7/20/2022			0.016			0.00228	
8/3/2022	0.00109			0.00142			
8/8/2022							0.000618
8/9/2022					0.00121		
3/15/2023				0.000553			
3/21/2023						0.000654	
3/22/2023		0.00148					
3/27/2023	0.00277		0.034		0.000422		
3/28/2023							0.0013
9/12/2023				0.000932		0.00104	
9/18/2023							0.002
9/19/2023	0.00047	0.00378	0.0213		0.000661		
Mean	0.001605	0.002245	0.02058	0.001304	0.0009833	0.001616	0.001245
Std. Dev.	0.001024	0.001113	0.009889	0.0007589	0.0005482	0.0009059	0.0005775
Upper Lim.	0.00277	0.00378	0.034	0.00231	0.00164	0.00249	0.002
Lower Lim.	0.00047	0.00137	0.011	0.000553	0.000422	0.000654	0.000618

Confidence Interval

Constituent: Arsenic (mg/L)   Analysis Run 11/16/2023 3:44 PM   View: Appendix IV - Non-Parametric

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

	GS-AP-MW-47	GS-AP-MW-5R
2/28/2022	0.00038	
3/1/2022		0.00048
7/26/2022	0.000423	
8/2/2022		0.000325
3/15/2023	0.00102	
3/20/2023		0.000194 (J)
9/12/2023	0.000627	0.000161 (J)
Mean	0.0006125	0.00029
Std. Dev.	0.0002923	0.0001451
Upper Lim.	0.00102	0.00048
Lower Lim.	0.00038	0.000161

Confidence Interval

Constituent: Barium (mg/L)   Analysis Run 11/16/2023 3:44 PM   View: Appendix IV - Non-Parametric

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

	GS-AP-MW-3V	GS-AP-MW-45V
2/23/2022	0.0486	0.0207
7/20/2022	0.0815	
8/8/2022		0.0257
3/21/2023	0.0197	
3/28/2023		0.073
9/12/2023	0.0269	
9/18/2023		0.0851
Mean	0.04418	0.05113
Std. Dev.	0.02775	0.03268
Upper Lim.	0.0815	0.0851
Lower Lim.	0.0197	0.0207

Confidence Interval

Constituent: Chromium (mg/L) Analysis Run 11/16/2023 3:44 PM View: Appendix IV - Non-Parametric
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-18VR	GS-AP-MW-45V
2/22/2022	0.00052 (J)	
2/23/2022		0.0002 (J)
8/8/2022		0.000882 (J)
8/9/2022	0.000584 (J)	
3/27/2023	0.000272 (J)	
3/28/2023		0.000479 (J)
9/18/2023		0.000372 (J)
9/19/2023	0.000225 (J)	
Mean	0.0004003	0.0004833
Std. Dev.	0.0001782	0.0002896
Upper Lim.	0.000584	0.000882
Lower Lim.	0.000225	0.0002

Confidence Interval

Constituent: Cobalt (mg/L)   Analysis Run 11/16/2023 3:44 PM   View: Appendix IV - Non-Parametric

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

	GS-AP-MW-18VR	GS-AP-MW-3V
2/22/2022	9E-05 (J)	
2/23/2022		0.00025
7/20/2022		0.000249
8/9/2022	0.000256	
3/21/2023		<0.000203
3/27/2023	<0.000203	
9/12/2023		8.8E-05 (J)
9/19/2023	<0.000203	
Mean	0.000188	0.0001975
Std. Dev.	6.995E-05	7.622E-05
Upper Lim.	0.000256	0.00025
Lower Lim.	9E-05	8.8E-05

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Combined Radium 226 + 228 (pCi/L)   Analysis Run 11/16/2023 3:44 PM   View: Appendix IV - Non-Parametric

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond

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	GS-AP-MW-10R	GS-AP-MW-14R	GS-AP-MW-18VR	GS-AP-MW-1R	GS-AP-MW-3V	GS-AP-MW-47	GS-AP-MW-46
2/22/2022			0.187 (U)				
2/23/2022					0.57 (U)		0.0974 (U)
2/28/2022		0.801 (U)				0.174 (U)	
3/1/2022	1.05 (U)			0.836 (U)			
7/20/2022					0.762 (U)		
7/26/2022						0.441 (U)	
8/2/2022				0.53 (U)			0.314 (U)
8/3/2022	0.552 (U)	0.55 (U)					
8/9/2022			0.473 (U)				
3/14/2023						0.767 (U)	
3/15/2023		0.145 (U)					
3/21/2023					0.189 (U)		
3/27/2023	0.422 (U)		0.708 (U)	0.498 (U)			0.0303 (U)
9/12/2023		0.345 (U)			0.567 (U)	0.193 (U)	
9/13/2023				0.0804 (U)			
9/18/2023							0.2 (U)
9/19/2023	0.275 (U)		0.8 (U)				
Mean	0.5748	0.4603	0.542	0.4861	0.522	0.3938	0.1604
Std. Dev.	0.3364	0.281	0.2738	0.3104	0.24	0.277	0.1239
Upper Lim.	1.05	0.801	0.8	0.836	0.762	0.767	0.314
Lower Lim.	0.275	0.145	0.187	0.0804	0.189	0.174	0.0303

Confidence Interval

Constituent: Lead (mg/L) Analysis Run 11/16/2023 3:44 PM View: Appendix IV - Non-Parametric

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-14R	GS-AP-MW-18VR
2/22/2022		9E-05 (J)
2/28/2022	0.00045	
8/3/2022	<0.000203	
8/9/2022		0.000634
3/15/2023	<0.000203	
3/27/2023		<0.000203
9/12/2023	8.4E-05 (J)	
9/19/2023		6.9E-05 (J)
Mean	0.000235	0.000249
Std. Dev.	0.0001539	0.0002633
Upper Lim.	0.00045	0.000634
Lower Lim.	8.4E-05	6.9E-05

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Molybdenum (mg/L) Analysis Run 11/16/2023 3:44 PM View: Appendix IV - Non-Parametric

Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

	GS-AP-MW-3V	GS-AP-MW-45V	GS-AP-MW-47
2/23/2022	0.0191	0.0047	
2/28/2022			0.00165
7/20/2022	0.0489		
7/26/2022			0.00213
8/8/2022		0.00454	
3/15/2023			<0.01015
3/21/2023	0.02		
3/28/2023		0.0123	
9/12/2023	0.0449		0.0112
9/18/2023		0.0326	
Mean	0.03323	0.01354	0.006283
Std. Dev.	0.01588	0.01322	0.005094
Upper Lim.	0.0489	0.0326	0.0112
Lower Lim.	0.0191	0.00454	0.00165

ND substitution: RL or RL/2 if <15% NDs.

FIGURE J.

Appendix IV Trend Tests - Significant Results

Plant Gorgas   Client: Southern Company   Data: Gorgas Ash Pond   Printed 11/16/2023, 3:49 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Arsenic (mg/L)	**GS-AP-MW-6D**	**0.008335**	**156**	**66**	**Yes**	**21**	**0**	**n/a**	**n/a**	**0.05**	**NP**
Arsenic (mg/L)	**GS-AP-MW-7**	**0.01618**	**129**	**66**	**Yes**	**21**	**0**	**n/a**	**n/a**	**0.05**	**NP**
Lithium (mg/L)	**GS-AP-MW-15**	**0.02896**	**99**	**66**	**Yes**	**21**	**0**	**n/a**	**n/a**	**0.05**	**NP**
Lithium (mg/L)	**GS-AP-MW-17V (bg)**	**-0.004015**	**-33**	**-23**	**Yes**	**10**	**0**	**n/a**	**n/a**	**0.05**	**NP**
Lithium (mg/L)	**GS-AP-MW-6D**	**0.0159**	**146**	**66**	**Yes**	**21**	**0**	**n/a**	**n/a**	**0.05**	**NP**
Lithium (mg/L)	**GS-AP-MW-7**	**0.009718**	**136**	**66**	**Yes**	**21**	**0**	**n/a**	**n/a**	**0.05**	**NP**
Lithium (mg/L)	**GS-AP-MW-8 (bg)**	**0**	**-83**	**-66**	**Yes**	**21**	**71.43**	**n/a**	**n/a**	**0.05**	**NP**
Molybdenum (mg/L)	**GS-AP-MW-7**	**0.01246**	**179**	**66**	**Yes**	**21**	**0**	**n/a**	**n/a**	**0.05**	**NP**

Appendix IV Trend Tests - All Results

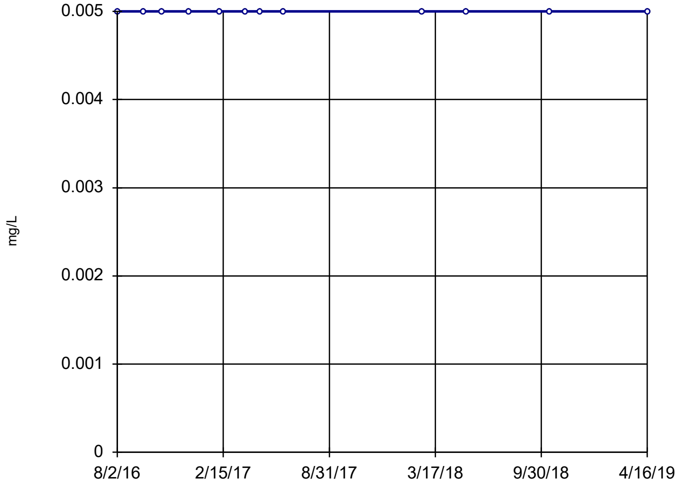
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond Printed 11/16/2023, 3:49 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Arsenic (mg/L)	GS-AP-MW-13 (bg)	0	0	30	No	12	100	n/a	n/a	0.05	NP
Arsenic (mg/L)	GS-AP-MW-17V (bg)	-0.0002279	-12	-23	No	10	20	n/a	n/a	0.05	NP
Arsenic (mg/L)	**GS-AP-MW-6D**	**0.008335**	**156**	**66**	**Yes**	**21**	**0**	**n/a**	**n/a**	**0.05**	**NP**
Arsenic (mg/L)	**GS-AP-MW-7**	**0.01618**	**129**	**66**	**Yes**	**21**	**0**	**n/a**	**n/a**	**0.05**	**NP**
Arsenic (mg/L)	GS-AP-MW-8 (bg)	-0.00005185	-63	-66	No	21	52.38	n/a	n/a	0.05	NP
Arsenic (mg/L)	GS-AP-MW-13R	0.009787	4	8	No	4	0	n/a	n/a	0.05	NP
Arsenic (mg/L)	GS-AP-MW-46	0.03958	2	8	No	4	0	n/a	n/a	0.05	NP
Lithium (mg/L)	GS-AP-MW-13 (bg)	0	7	30	No	12	33.33	n/a	n/a	0.05	NP
Lithium (mg/L)	**GS-AP-MW-15**	**0.02896**	**99**	**66**	**Yes**	**21**	**0**	**n/a**	**n/a**	**0.05**	**NP**
Lithium (mg/L)	**GS-AP-MW-17V (bg)**	**-0.004015**	**-33**	**-23**	**Yes**	**10**	**0**	**n/a**	**n/a**	**0.05**	**NP**
Lithium (mg/L)	**GS-AP-MW-6D**	**0.0159**	**146**	**66**	**Yes**	**21**	**0**	**n/a**	**n/a**	**0.05**	**NP**
Lithium (mg/L)	**GS-AP-MW-7**	**0.009718**	**136**	**66**	**Yes**	**21**	**0**	**n/a**	**n/a**	**0.05**	**NP**
Lithium (mg/L)	**GS-AP-MW-8 (bg)**	**0**	**-83**	**-66**	**Yes**	**21**	**71.43**	**n/a**	**n/a**	**0.05**	**NP**
Molybdenum (mg/L)	GS-AP-MW-13 (bg)	0	0	30	No	12	100	n/a	n/a	0.05	NP
Molybdenum (mg/L)	GS-AP-MW-17V (bg)	0.0002748	4	23	No	10	20	n/a	n/a	0.05	NP
Molybdenum (mg/L)	**GS-AP-MW-7**	**0.01246**	**179**	**66**	**Yes**	**21**	**0**	**n/a**	**n/a**	**0.05**	**NP**
Molybdenum (mg/L)	GS-AP-MW-8 (bg)	0	-14	-66	No	21	95.24	n/a	n/a	0.05	NP

Sanitas™ v.10.0.13 . UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

GS-AP-MW-13 (bg)



n = 12

Slope = 0
units per year.

Mann-Kendall
statistic = 0
critical = 30

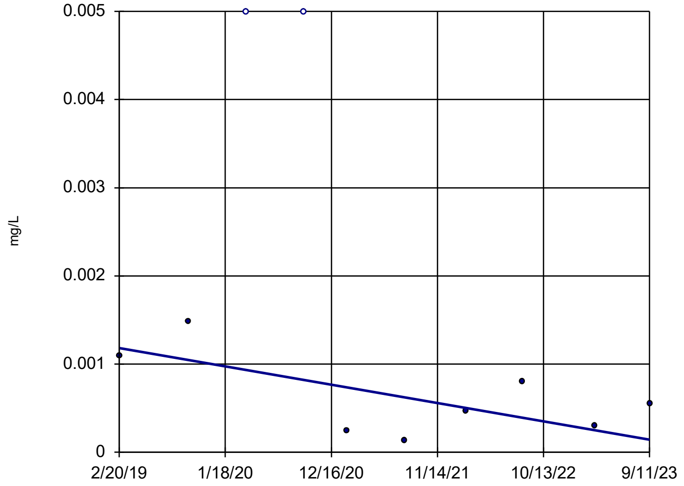
Trend not significant at 95% confidence level (α = 0.025 per tail).

Constituent: Arsenic Analysis Run 11/16/2023 3:48 PM View: Appendix IV - Trend Test
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

GS-AP-MW-17V (bg)



n = 10

Slope = -0.0002279
units per year.

Mann-Kendall
statistic = -12
critical = -23

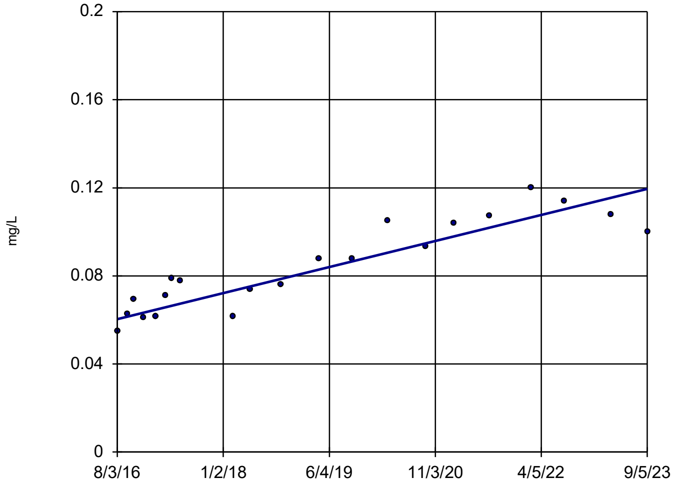
Trend not significant at 95% confidence level (α = 0.025 per tail).

Constituent: Arsenic Analysis Run 11/16/2023 3:48 PM View: Appendix IV - Trend Test
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG

Sen's Slope Estimator

GS-AP-MW-6D



n = 21

Slope = 0.008335
units per year.

Mann-Kendall
statistic = 156
critical = 66

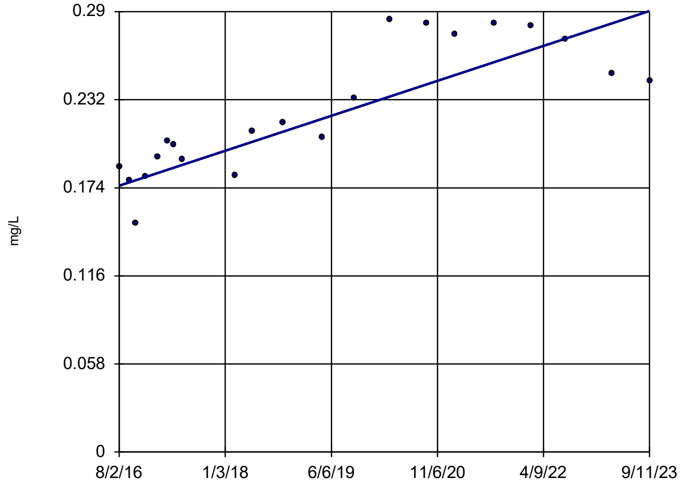
Increasing trend significant at 95% confidence level (α = 0.025 per tail).

Constituent: Arsenic Analysis Run 11/16/2023 3:48 PM View: Appendix IV - Trend Test
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG

Sen's Slope Estimator

GS-AP-MW-7



n = 21

Slope = 0.01618
units per year.

Mann-Kendall
statistic = 129
critical = 66

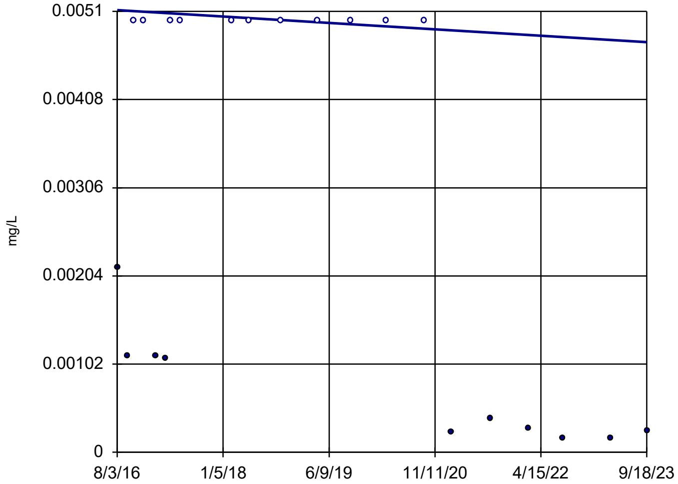
Increasing trend significant at 95% confidence level (α = 0.025 per tail).

Constituent: Arsenic Analysis Run 11/16/2023 3:48 PM View: Appendix IV - Trend Test
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

GS-AP-MW-8 (bg)



n = 21

Slope = -0.00005185 units per year.

Mann-Kendall statistic = -63
critical = -66

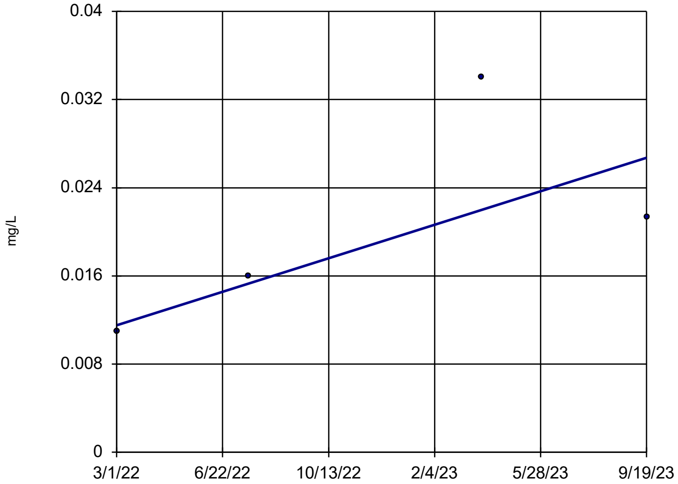
Trend not significant at 95% confidence level (α = 0.025 per tail).

Constituent: Arsenic Analysis Run 11/16/2023 3:48 PM View: Appendix IV - Trend Test
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG

Sen's Slope Estimator

GS-AP-MW-13R



n = 4

Slope = 0.009787 units per year.

Mann-Kendall statistic = 4
critical = 8

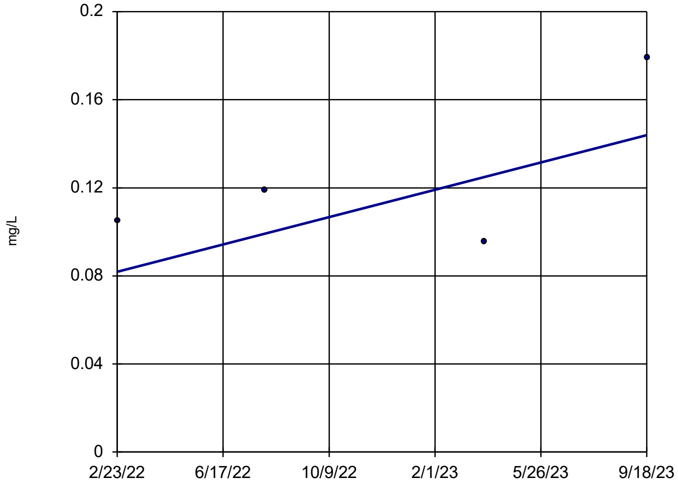
Trend not significant at 95% confidence level (α = 0.025 per tail).
With n = 4, no data set will result in a significant Mann-Kendall statistic.

Constituent: Arsenic Analysis Run 11/16/2023 3:48 PM View: Appendix IV - Trend Test
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG

Sen's Slope Estimator

GS-AP-MW-46



n = 4

Slope = 0.03958 units per year.

Mann-Kendall statistic = 2
critical = 8

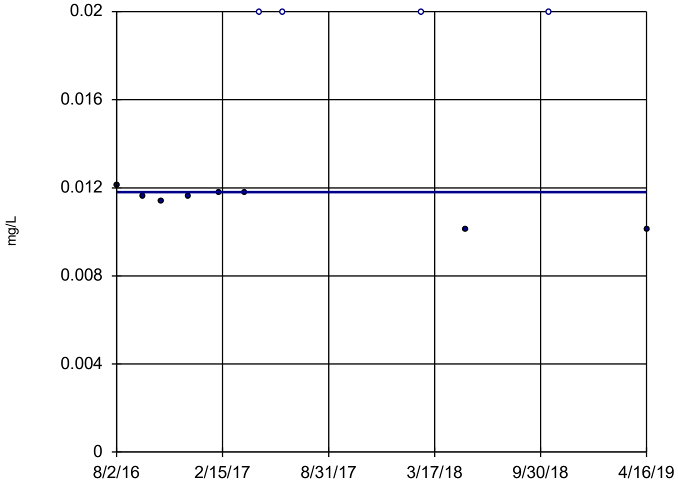
Trend not significant at 95% confidence level (α = 0.025 per tail).
With n = 4, no data set will result in a significant Mann-Kendall statistic.

Constituent: Arsenic Analysis Run 11/16/2023 3:48 PM View: Appendix IV - Trend Test
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

GS-AP-MW-13 (bg)



n = 12

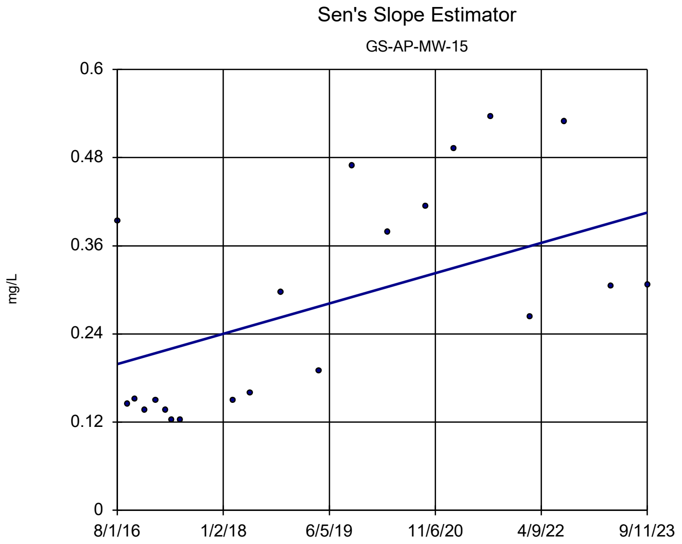
Slope = 0 units per year.

Mann-Kendall statistic = 7
critical = 30

Trend not significant at 95% confidence level (α = 0.025 per tail).

Constituent: Lithium Analysis Run 11/16/2023 3:48 PM View: Appendix IV - Trend Test
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG



n = 21

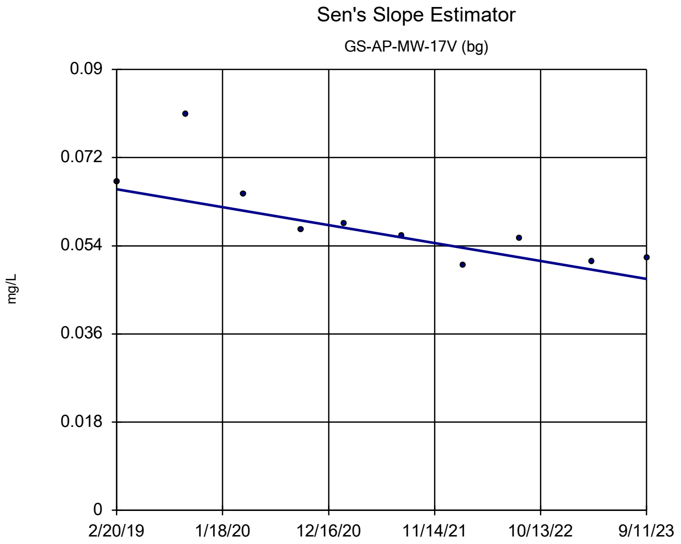
Slope = 0.02896 units per year.

Mann-Kendall statistic = 99 critical = 66

Increasing trend significant at 95% confidence level (α = 0.025 per tail).

Constituent: Lithium Analysis Run 11/16/2023 3:48 PM View: Appendix IV - Trend Test
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG



n = 10

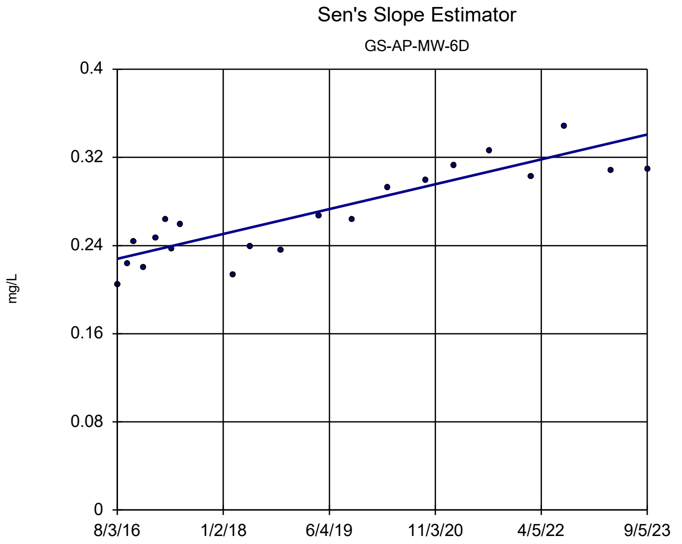
Slope = -0.004015 units per year.

Mann-Kendall statistic = -33 critical = -23

Decreasing trend significant at 95% confidence level (α = 0.025 per tail).

Constituent: Lithium Analysis Run 11/16/2023 3:48 PM View: Appendix IV - Trend Test
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG



n = 21

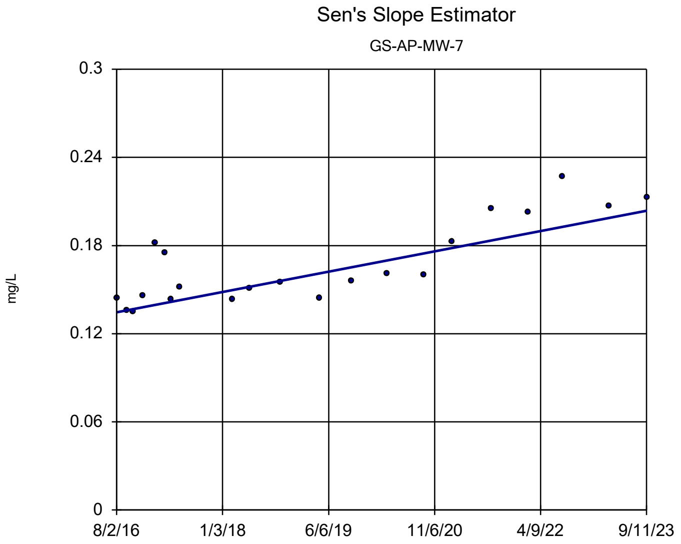
Slope = 0.0159 units per year.

Mann-Kendall statistic = 146 critical = 66

Increasing trend significant at 95% confidence level (α = 0.025 per tail).

Constituent: Lithium Analysis Run 11/16/2023 3:48 PM View: Appendix IV - Trend Test
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG



n = 21

Slope = 0.009718 units per year.

Mann-Kendall statistic = 136 critical = 66

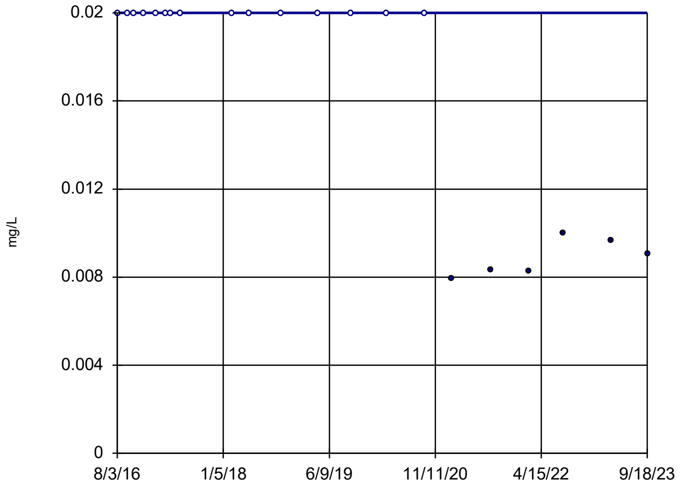
Increasing trend significant at 95% confidence level (α = 0.025 per tail).

Constituent: Lithium Analysis Run 11/16/2023 3:48 PM View: Appendix IV - Trend Test
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

GS-AP-MW-8 (bg)



n = 21

Slope = 0
units per year.

Mann-Kendall
statistic = -83
critical = -66

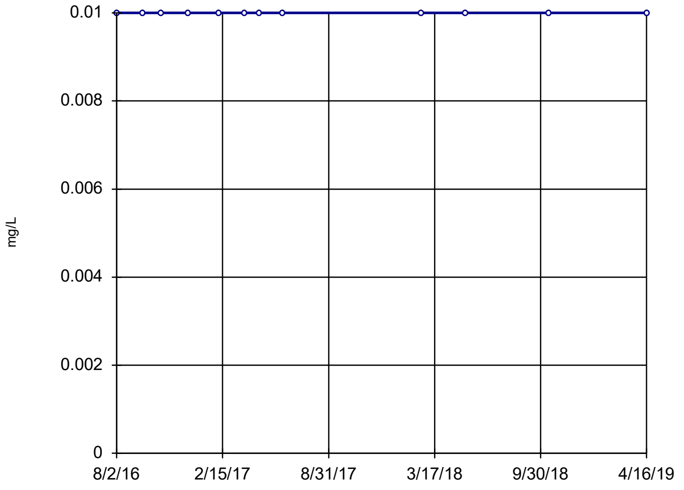
Decreasing trend
significant at 95%
confidence level
(α = 0.025 per
tail).

Constituent: Lithium Analysis Run 11/16/2023 3:48 PM View: Appendix IV - Trend Test
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

GS-AP-MW-13 (bg)



n = 12

Slope = 0
units per year.

Mann-Kendall
statistic = 0
critical = 30

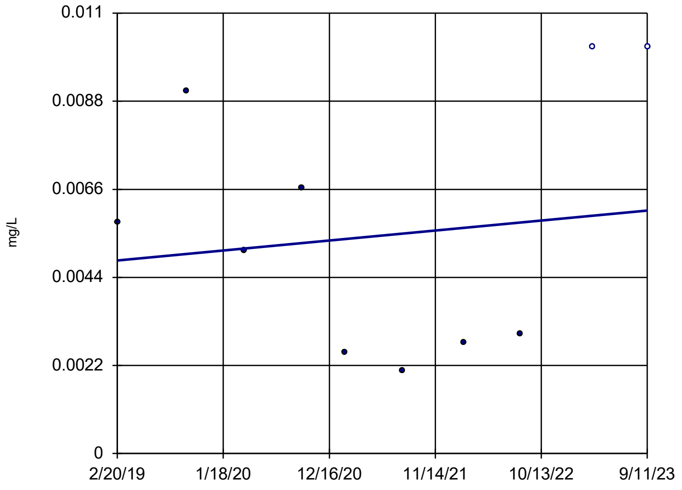
Trend not significant at 95%
confidence level
(α = 0.025 per
tail).

Constituent: Molybdenum Analysis Run 11/16/2023 3:48 PM View: Appendix IV - Trend Test
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

GS-AP-MW-17V (bg)



n = 10

Slope = 0.0002748
units per year.

Mann-Kendall
statistic = 4
critical = 23

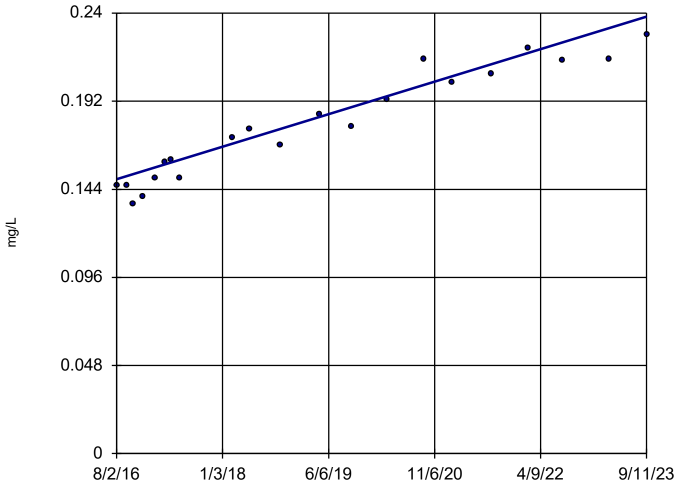
Trend not significant at 95%
confidence level
(α = 0.025 per
tail).

Constituent: Molybdenum Analysis Run 11/16/2023 3:48 PM View: Appendix IV - Trend Test
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG

Sen's Slope Estimator

GS-AP-MW-7



n = 21

Slope = 0.01246
units per year.

Mann-Kendall
statistic = 179
critical = 66

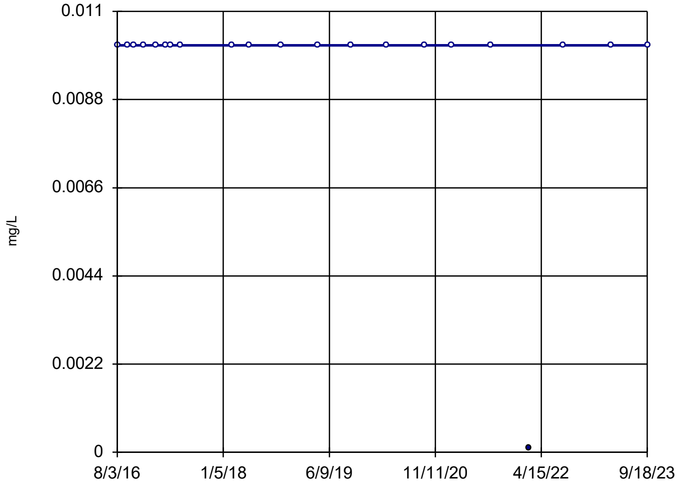
Increasing trend
significant at 95%
confidence level
(α = 0.025 per
tail).

Constituent: Molybdenum Analysis Run 11/16/2023 3:48 PM View: Appendix IV - Trend Test
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Sanitas™ v.10.0.13 . UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

GS-AP-MW-8 (bg)



n = 21

Slope = 0
units per year.

Mann-Kendall
statistic = -14
critical = -66

Trend not significant at 95% confidence level (α = 0.025 per tail).

Constituent: Molybdenum Analysis Run 11/16/2023 3:48 PM View: Appendix IV - Trend Test
Plant Gorgas Client: Southern Company Data: Gorgas Ash Pond

Appendix E

January 2024
Plant Gorgas

ANCHOR QEA

Laboratory Treatability Study Results

Prepared for Alabama Power Company

January 2024
Plant Gorgas

Laboratory Treatability Study Results

Prepared for
Alabama Power Company
600 18th Street North
Birmingham, Alabama 35203

Prepared by
Anchor QEA
6720 South Macadam Avenue, Suite 125
Portland, Oregon 97219

Project Number: 221114-10.02
\\wcl-fs1\Mobile\Projects\Southern Company\Alabama Power ACMs - PRIVILEGED & CONFIDENTIAL\Treatability Studies\Reports\Gorgas\Text\Gorgas Treatability Study Results.docx

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ABBREVIATIONS

µg/L	microgram per liter
APCEL	Alabama Power Company Environmental Laboratory
$BaCl_2$	barium chloride
CleanER-10	CleanER
COI	constituent of interest
DH	Helena Quarry dolomite
DL	Lakeshore Quarry dolomite
DO	dissolved oxygen
DQ	Dolomitic quicklime (carmeuse)
EGL	Anchor QEA Environmental Geochemistry Laboratory
FerroBlack	FerroBlack-Fe+
$FeCl_3$	ferric chloride
$Fe(OH)_3$	ferrihydrite
$FeSO_4$	ferrous sulfate
FC	ferric chloride
FS	ferrous sulfate
GWPS	groundwater protection standard
HT-4U	granular hydrotalcite
$KMnO_4$	potassium permanganate
LDH	layered double hydroxide
M	molar
$MgCl_2$	magnesium chloride
mL	milliliter
$MnCl_2$	manganese chloride
$NaAlO_2$	sodium aluminate
NaOH	sodium hydroxide
Na_2CO_3	sodium carbonate
$Na_2HAsO_4 \cdot 7H_2O$	sodium arsenate heptahydrate
ORP	oxidation reduction potential
Plant Gorgas	William Crawford Gorgas Electric Generating Plant
PM	potassium permanganate
SC	specific conductivity
Site	Plant Gorgas Ash Pond
SSE	selective sequential extraction
USEPA	U.S. Environmental Protection Agency

Executive Summary

As described in the *Groundwater Remedy Selection Report* (Anchor QEA 2021a), geochemical manipulation via injections was not selected as one corrective measure for arsenic, lithium, and molybdenum in groundwater at the William Crawford Gorgas Electric Generating Plant (Plant Gorgas) Ash Pond (Site) located in Walker County, Alabama. Geochemical manipulation was not selected because it had not been proven in field applications for effective treatment of inorganic constituents in fractured rock settings at the time of remedy selection. However, to enable the evaluation of geochemical manipulation should injection treatment become necessary at the Site, treatability studies were performed to determine the optimum reagents and their doses and to provide information for the required underground injection control permit and design of the injection treatment at the Site.

Treatability studies for injection treatment (geochemical manipulation) at the Site consisted of the following steps:

- Sampling and characterization of groundwater
- Batch tests, both screening and optimization
- Selective sequential extraction (SSE) on post-treatment solids

Groundwater samples were collected from two areas, based on number and concentrations of constituents of interest (COIs), to help select areas for field pilot testing. Groundwater samples were analyzed for major cations, anions, COIs and other Appendix III/IV parameters, and water quality parameters influencing the chemical behavior of the COIs. Prior to beginning treatability testing, confirmatory analysis of the COIs and dissolved aluminum, iron, and manganese concentrations was performed.

Based on previous successful treatability studies at other sites and geochemical studies performed as part of remedy selection (Anchor QEA 2021a), a series of batch tests was performed to determine the effectiveness and to rank the performance of the selected reagents in reducing the COI concentrations in Site groundwater. Reagents were added to test bottles filled with Site groundwater. The groundwater collected at GS-AP-MW-6D contained arsenic and lithium as COIs. The groundwater collected at GS-AP-MW-7 contained arsenic, lithium, and molybdenum as COIs.

In the screening batch tests, 17 reagents (or reagent mixes) and aeration were initially tested. More than one reagent (or reagent mix) effectively removed arsenic, lithium, and molybdenum from Site groundwater. Ferrous sulfate ($FeSO_4$) and ferric chloride ($FeCl_3$) were two of the most promising reagents for removing arsenic and molybdenum in the screening batch tests. Low dissolved iron concentrations in groundwater resulted in poor performance of both aeration and potassium permanganate ($KMnO_4$) in removing arsenic and molybdenum from Site groundwater. Two treatments, granular hydrotalcite (HT-4U, a layered double hydroxide [LDH]) and the reagent mix

$FeCl_3$ + manganese chloride ($MnCl_2$) + magnesium chloride ($MgCl_2$), followed by sodium aluminate ($NaAlO_2$) + $KMnO_4$ (Fe-Mn-Mg-Al-Cl LDH), were successful at decreasing all three COIs, arsenic, molybdenum, and lithium concentrations to less than the groundwater protection standard (GWPS) in the screening batch tests. The reagent mix is designed to produce LDH precipitates in situ.

Optimization batch tests were conducted to refine the best reagent mixes and dosing to achieve the most effective simultaneous arsenic, lithium, and molybdenum removal. Five reagents (or reagent mixes) aimed at producing different LDH phases were tested, and sodium hydroxide was replaced with sodium carbonate (Na_2CO_3) for pH adjustment, as Na_2CO_3 is safer to handle in the field. In round one, the best removal of arsenic, lithium, and molybdenum was achieved using $FeSO_4$, followed by $NaAlO_2$ with Na_2CO_3 to buffer pH (Fe-Al-SO_4-CO_3). The other reagent mixes tested effectively removed arsenic and lithium, but not molybdenum (due to pH). A second round of optimization batch tests was performed to target a circumneutral final pH to improve molybdenum removal and maintain arsenic and lithium removal. The four reagent mixes tested achieved the GWPS for all three COIs. The four successful reagent mixes include $MnCl_2$, followed by $NaAlO_2$ + $KMnO_4$ with Na_2CO_3 (Mn-Al-Cl-CO_3 LDH2); $MnCl_2$, followed by $NaAlO_2$ + $KMnO_4$ (Mn-Al-Cl LDH); $FeSO_4$ + $MnCl_2$, followed by $NaAlO_2$ + $KMnO_4$ with Na_2CO_3 (Fe-Mn-Al-Cl-SO_4-CO_3 LDH); and $FeSO_4$ + $MnCl_2$, followed by $NaAlO_2$ + $KMnO_4$ (Fe-Mn-Al-Cl-SO_4 LDH).

Following completion of the batch tests, the post-treatment solids formed during the optimization batch test round 2 were tested to help evaluate the long-term stability of sequestered COIs using a five-step SSE procedure. In SSE, the post-treatment solids are extracted by a series of increasingly chemically aggressive solutions that target different binding forms, and the COIs released by each extraction step are quantified. The results are used to determine the mechanisms and strength of binding and inform long-term stability (or reversibility) of the treatment.

SSE results indicate arsenic, lithium, and molybdenum are bound almost exclusively (near 100%) in stable solid phases (F2 through F5)—specifically, through chemical bonding to, or incorporation into, metal oxides and hydroxides, such as iron and manganese oxides, and residual phases (dissolved only by concentrated strong acids). The associations with metal oxides and hydroxides were expected and indicate successful treatment, as iron, manganese, and aluminum were major components of the treatment solutions.

Overall, the Fe-Mn-Al-Cl-SO_4-CO_3 LDH reagent mix effectively treated arsenic, lithium, and molybdenum in Site groundwater and is the recommended two-solution treatment for pilot-scale testing (should geochemical manipulation pilot-scale testing be implemented). As part of the pre-design investigation, concentrations and proportions of treatment constituents may need to be adjusted to achieve acceptable residual levels of dissolved manganese in treated groundwater.

1 Introduction

As discussed in the *Groundwater Remedy Selection Report* (Anchor QEA 2021a), geochemical manipulation via injections was not selected as one corrective measure for constituents of interest (COIs) at the William Crawford Gorgas Electric Generating Plant (Plant Gorgas) Ash Pond (Site) located in Walker County, Alabama. COIs at the Site are arsenic, lithium, and molybdenum. However, to enable the evaluation of geochemical manipulation should injection treatment become necessary at the Site, laboratory treatability studies needed to be performed using the Site-impacted groundwater.

Geochemical manipulation removes COIs from groundwater and immobilizes them in situ through the creation of solid precipitates (e.g., layered double hydroxide [LDH] precipitates) formed from injection of treatment solutions (reagents). COIs adsorb to the solid surfaces of precipitates and are incorporated into the solid structures.

The site-specific treatability studies discussed herein were conducted to evaluate reagent selection, dosing, and injection sequencing for in situ groundwater remediation. The treatability study approach includes the following:

- Sampling and characterization (analysis) of groundwater
- Batch testing (screening batch tests, followed by optimization batch tests) to identify, rank, and refine reagents and reagent mixes for removal of COIs from Site groundwater
- Determining the stability of each treatment by selective sequential extraction (SSE) of post-treatment solids to provide information on the mechanisms and stability of COI sequestration

2 Selection of Reagents

Selection and formulation of reagents that can be injected to treat site-specific COIs were based on site-specific groundwater geochemistry, previous Site work, and prior experience from successful treatability studies performed by Anchor QEA, for the same COIs at other sites for confidential clients. The *Monitored Natural Attenuation Demonstration* (Anchor QEA 2021b) documented key geochemical attenuation mechanisms occurring at the Site, including the following:

- Sorption on and/or coprecipitation with iron, manganese, and aluminum oxides and hydroxides for arsenic, lithium, and molybdenum
- Cation exchange on oxides and clay minerals for lithium
- Potential precipitation of barium arsenate phases for arsenic (predicted by geochemical modeling)

Iron, manganese, and aluminum oxides are strong sorbents for many metals and metalloids, including arsenic (Dixit and Hering 2003; Manning et al. 2003; Mohan and Pittman 2007; Ouvard et al. 2002) and molybdenum (Das et al. 2023; Xu et al. 2013). Subsurface geochemical conditions at the Site are generally favorable for formation of iron oxides. Lithium has an affinity for manganese and other metal oxides (Ooi et al. 1988; Yu et al. 2022). Therefore, the treatability studies were initially focused on reagents (or mixtures of reagents) with the potential to increase the abundance and stability of iron, manganese, and/or aluminum oxides and hydroxides in the subsurface. Based on Site conditions and treatability studies previously completed for other sites, the following reagents and reagent mixes were initially selected for screening tests:

- Aeration
- Ferrous sulfate ($FeSO_4$; FS)
- Ferric chloride ($FeCl_3$; FC)
- FC with pH adjusted to 5 (sodium hydroxide [NaOH])
- CleanER-10 (injectable zero-valent iron); CleanER
- FerroBlack-Fe+ (FerroBlack; injectable iron sulfide)
- Potassium permanganate ($KMnO_4$; PM)
- $FeSO_4$ + manganese chloride ($MnCl_2$), followed by $KMnO_4$; Fe-Mn-Cl-SO_4 LDH
- Fe-Mn-Cl-SO_4 LDH with pH adjusted to 9.5 (NaOH)
- $FeCl_3$ + $MnCl_2$, followed by $KmnO_4$; Fe-Mn-Cl LDH
- Fe-Mn-Cl LDH with pH adjusted to 9.5 (NaOH)
- Barium chloride ($BaCl_2$)
- Magnesium chloride ($MgCl_2$), followed by sodium aluminate ($NaAlO_2$) with pH adjusted to 9.5 (NaOH); Mg-Al-Cl LDH
- Granular hydrotalcite (HT-4U) (Kisuma Chemicals B.V.; injectable magnesium-aluminum LDH)

- $FeCl_3$ + $MnCl_2$ + $MgCl_2$, followed by $NaAlO_2$ + $KMnO_4$ with pH adjusted to 9.5 (NaOH); Fe-Mn-Mg-Al-Cl LDH (pH 9.5)
- Helena Quarry dolomite (DH)
- Lakeshore Quarry dolomite (DL)
- Dolomitic quicklime (carmeuse) (DQ)

Soluble iron reagents such as $FeSO_4$ and $FeCl_3$ are acidic and form iron oxides/hydroxides such as ferrihydrite ($Fe(OH)_3$) when neutralized. Iron oxides/hydroxides can adsorb and/or coprecipitate arsenic and molybdenum. Zero-valent iron, specifically CleanER, was tested because it oxidizes to form iron oxides/hydroxides over time that can remove arsenic (Biterna et al. 2007), molybdenum (Zhu et al. 2020), and other heavy metals (Moraci and Calabrò 2010).

FerroBlack is a proprietary amendment from Redox Solutions. The active ingredient in FerroBlack is a reactive iron sulfide, which immobilizes arsenic through adsorption at low arsenic concentrations and precipitation/mineralization of arsenic sulfides at higher arsenic concentrations (Niazi and Burton 2016).

Permanganate has been widely used for in situ chemical oxidation. Permanganate reacts with mineral components in the aquifer matrix to produce manganese oxides, which can adsorb and incorporate COIs (Hou et al. 2017; Al Abdullah et al. 2016; Le and Phuc 2015).

Barium chloride was included in the screening tests because preliminary geochemical modeling indicated conditions were favorable for barium arsenate precipitation from groundwater. Increasing the dissolved barium concentration would, therefore, be expected to reduce arsenic concentrations.

Hydrotalcite is a magnesium/aluminum LDH mineral phase that can sequester a wide range of cations and anions from water (Douglas 2014). Previous treatability studies performed by Anchor QEA documented that commercially available hydrotalcite effectively removed lithium. Hydrotalcite can also be precipitated from solution by mixing $MgCl_2$ and $NaAlO_2$. Both commercially available granular hydrotalcite and the injectable reagents (e.g., $MgCl_2$, followed by $NaAlO_2$) were tested to assess effectiveness in reducing lithium concentrations in Site groundwater.

Dolomite from two different quarries in Central Alabama (Helena Quarry and Lakeshore Quarry) and dolomitic quicklime (Carmeuse) were added to the reagent list (based on previously completed treatability studies for another site) and tested to assess their potential for lithium removal.

The full list of treatments tested and reagent vendor sources is included in Table 1. Note that LDHs include a group of phases that can be formed from a range of metal cations (including magnesium, iron, manganese, and aluminum) and anions besides hydroxide (including carbonate, chloride, and sulfate). The different potential forms are designated by the cations and anions in the reagents used to precipitate them (e.g., Mg-Al-Cl LDH refers to the phase[s] formed by reacting $MgCl_2$ with $NaAlO_2$).

The effectiveness of these treatments on COI removal was screened and evaluated through a series of batch tests. Bulk chemical composition data (including Appendix III/ IV parameters) of technical-grade reagents were not collected before treatability testing but will be tested prior to field pilot studies.

3 Sampling and Initial Characterization

Groundwater samples were collected from the Site for treatability testing conducted at the Anchor QEA Environmental Geochemistry Laboratory (EGL) in Portland, Oregon.

3.1 Sample Collection

Groundwater samples were collected by Alabama Power Company with support from Anchor QEA from wells GS-AP-MW-6D and GS-AP-MW-7 (Figure 1). Five gallons of groundwater were collected from each well on July 25, 2022, for batch tests.

Prior to sampling, monitoring wells were purged until water quality parameters (pH, temperature, specific conductivity [SC], oxidation reduction potential [ORP], and dissolved oxygen [DO]) stabilized. Then, groundwater samples were collected in low-density polyethylene Cubitainers. Cubitainers were filled with zero headspace and packed in Mylar barrier bags containing oxygen-absorbent packets to minimize potential changes in redox conditions during transport to the EGL. Anaerobic conditions were maintained during sample handling at the EGL.

3.2 Sample Analysis and Results

Groundwater samples collected in the field were also sent directly to the Alabama Power Company Environmental Laboratory (APCEL) in Calera, Alabama, and Pace Analytical Services, LLC, and analyzed for major cations, anions, COIs, other Appendix III/IV parameters, and water quality parameters influencing the chemical behavior of the COIs (Table 2). Prior to commencing treatability testing at the EGL, groundwater samples in the received Cubitainers were subsampled and submitted to ALS Environmental in Kelso, Washington, for confirmatory analysis of COIs and dissolved iron and manganese concentrations (Table 2). Laboratory analytical reports are included in Appendix A. Water quality parameters including pH, ORP, and DO were measured at the EGL (Table 2). Although almost all parameters were similar to the initial characterization results from groundwater samples sent directly from the field to APCEL, the dissolved arsenic concentration in GS-AP-MW-6D decreased after the groundwater samples were shipped to EGL. Thus, groundwater samples from GS-AP-MW-6D used for batch testing were spiked with arsenic to ensure arsenic partitioning between groundwater and solids could be measured.

4 Batch Tests

4.1 Methodology

A series of batch tests was performed to determine and rank the performance of the selected reagents in reducing the COI concentrations in Site groundwater. Reagents (or reagent mixes) were added to test bottles filled with Site groundwater. Control samples containing untreated groundwater were included to compare efficacy of the reagents. The performance of the reagents (or reagent mixes) was evaluated in terms of the COI removal efficiency and the final COI concentrations relative to their groundwater protection standard (GWPS).

The batch tests were divided into the following two stages: 1) screening batch tests to assess and compare the effectiveness of all the reagents (or reagent mixes) to remove the COIs; and 2) optimization batch tests to improve performance of reagent mixes retained from the screening batch tests by modifying reagent dose, combining reagents, and/or adjusting pH.

Except for aeration, the batch tests were performed under a nitrogen atmosphere in an anaerobic chamber to prevent changes in redox due to exposure to air. The general procedure for the batch tests is described in the following steps:

1. Test bottles were prepared in a controlled-atmosphere glove box with 200 milliliters (mL) of groundwater. The initial arsenic concentration in Site groundwater collected from GS-AP-MW-6D as received at the EGL was generally lower than expected based on historical data. The Site groundwater sample from GS-AP-MW-6D was spiked with arsenic to provide initial arsenic concentration to enable evaluation of treatment performance for arsenic. An arsenic stock solution was prepared from sodium arsenate heptahydrate ($Na_2HAsO_4 \cdot 7H_2O$) and used to spike the Site groundwater from GS-AP-MW-6D used for the batch tests. The target spiked dissolved arsenic concentration was 200 micrograms per liter (µg/L), which is slightly higher than the average historical concentration of 120 µg/L. Spiking of lithium and molybdenum was not necessary because the initial lithium and molybdenum concentrations were consistent with historical data.
2. Reagents or reagent mixes were added to the test bottles at a predetermined dose based on groundwater chemistry and previous successful treatability studies at other sites. The treatments tested for the screening and optimization batch tests are presented in Tables 3 and 6, respectively. Controls without any reagent were also prepared for each groundwater. The test bottles were sealed in Mylar bags with oxygen-absorbent packets and placed on a shaker table for 7 days. The aeration test bottles were placed on the countertop with caps open for 7 days.
3. Supernatants were collected from the test bottles at the end of the reaction period, filtered using 0.45-micron polyethersulfone syringe filters, and preserved with nitric acid. The filtered water samples were submitted to ALS Environmental and analyzed for dissolved COIs and

treatment constituents by U.S. Environmental Protection Agency (USEPA) Method 200.8 (inductively coupled plasma mass spectrometry). Water quality parameters including pH, ORP, and SC were also measured at the time of collection.

4. The solid fractions formed during the optimization batch tests were recovered, subsamples were used for the SSE analysis, and the remaining samples were archived for possible future characterization.

4.2 Screening Batch Test Results

Tables 4 and 5 and Figures 2 and 3 show the results of the screening batch tests, specifically the following:

- Arsenic: the following nine treatments decreased arsenic concentrations to less than the GWPS (10 µg/L) in both groundwaters: 1) FS; 2) FC (pH 5); 3) HT-4U; 4) DQ; 5) Fe-Mn-Cl LDH; 6) Fe-Mn-Cl LDH (pH 9.5); 7) Fe-Mn-Cl-SO_4 LDH; 8) Fe-Mn-Cl-SO_4 LDH (pH 9.5); and 9) Fe-Mn-Mg-Al-Cl LDH (pH 9.5). CleanER, FerroBlack, DH, DL, PM, and aeration had variable results, but arsenic concentrations were not reduced below the GWPS in either GS-AP-MW-6D or GS-AP-MW-7 groundwater. FC achieved the GWPS in GS-AP-MW-7 but not GS-AP-MW-6D, and $BaCl_2$ and Mg-Al-Cl LDH (pH 9.5) achieved the GWPS in GS-AP-MW-6D but not GS-AP-MW-7.
- Lithium: two of the treatments tested, HT-4U and Fe-Mn-Mg-Al-Cl LDH (pH 9.5), were effective in reducing lithium concentrations in GS-AP-MW-6D and GS-AP-MW-7 groundwater to less than the GWPS (80.9 µg/L).
- Molybdenum: molybdenum is a COI in GS-AP-MW-7. The following 13 treatments decreased molybdenum concentrations to less than the GWPS (100 µg/L): 1) FS; 2) FC; 3) FC (pH 5); 4) $BaCl_2$; 5) HT-4U; 6) Mg-Al-Cl LDH (pH 9.5); 7) DQ; 8) PM; 9) Fe-Mn-Cl LDH; 10) Fe-Mn-Cl LDH (pH 9.5); 11) Fe-Mn-Cl-SO_4 LDH; 12) Fe-Mn-Cl-SO_4 LDH (pH 9.5); and 13) Fe-Mn-Mg-Al-Cl LDH (pH 9.5).

Laboratory analytical reports are included in Appendix A.

4.3 Optimization Batch Test Results

In the screening batch tests, iron-containing reagents (except CleanER and FerroBlack) effectively removed arsenic and molybdenum from Site groundwater (GS-AP-MW-6D and GS-AP-MW-7). Since only HT-4U and Fe-Mn-Mg-Al-Cl LDH (pH 9.5) treatments achieved sufficient lithium removal at the tested doses (Tables 4 and 5), improving lithium removal (while maintaining effective arsenic and molybdenum removal) became the primary focus of the optimization batch tests. This included increasing doses of selected reagents, adjusting solution pH with sodium carbonate (Na_2CO_3) instead of NaOH, and testing new reagent mixes with potential to remove lithium. Based on the screening batch test results and previous treatability studies performed by Anchor QEA for other coal combustion residuals sites, the following reagent mixes were selected and tested in the first round of optimization batch tests:

- $MgCl_2$, followed by $NaAlO_2$ with Na_2CO_3 (Mg-Al-Cl-CO_3 LDH)
- $MnCl_2$, followed by $NaAlO_2$ with Na_2CO_3 (Mn-Al-Cl-CO_3 LDH1)
- $FeSO_4$, followed by $NaAlO_2$ with Na2CO3 (Fe-Al-SO_4-CO_3)
- $MnCl_2$, followed by $NaAlO_2$ + $KMnO_4$ with Na_2CO_3 (Mn-Al-Cl-CO_3 LDH2)
- $FeSO_4$ + $MnCl_2$, followed by $NaAlO_2$ + $KMnO_4$ with Na_2CO_3 (Fe-Mn-Al-Cl-SO_4-CO_3 LDH)

The treatments for round 1 are summarized in Table 6.

Results from the first round of optimization batch tests are summarized in Figures 4 and 5, the data are provided in Table 7, and the laboratory analytical reports are included in Appendix A. All five treatments decreased lithium concentrations to less than the GWPS for both Site groundwaters. The Mg-Al-Cl-CO_3 LDH treatment decreased arsenic concentrations to less than the GWPS for groundwater GS-AP-MW-6D but not GS-AP-MW-7. The other four treatments decreased arsenic concentrations to less than the GWPS for both groundwaters. Only the Fe-Al-SO_4-CO_3 treatment decreased the molybdenum concentration to less than the GWPS.

Based on the first round of optimization batch test results, a second round of optimization batch testing was performed to improve molybdenum removal, while maintaining effective lithium and arsenic removal. The following list of reagent mixes were selected and tested in the second round of optimization batch tests:

- $MnCl_2$, followed by $NaAlO_2$ + $KMnO_4$ with Na_2CO_3 (Mn-Al-Cl-CO_3 LDH2)
- $MnCl_2$, followed by $NaAlO_2$ + $KMnO_4$ (Mn-Al-Cl LDH)
- $FeSO_4$ + $MnCl_2$, followed by $NaAlO_2$ + $KMnO_4$ with Na_2CO_3 (Fe-Mn-Al-Cl-SO_4-CO_3 LDH)
- $FeSO_4$ + $MnCl_2$, followed by $NaAlO_2$ + $KMnO_4$ (Fe-Mn-Al-Cl-SO_4 LDH)

The doses of the reagents were adjusted to achieve a circumneutral final pH to increase molybdenum removal. The treatments for round 2 are summarized in Table 6.

Results from the second round of optimization batch tests are summarized in Figures 6 and 7, the data are provided in Table 7, and the laboratory analytical reports are included in Appendix A. Table 8 summarizes the performance of all treatments tested in the optimization batch tests to remove COIs from Site groundwater (GS-AP-MW-6D and GS-AP-MW-7). All four treatments from round 2 decreased the concentrations of all three COIs to less than the GWPS in both groundwaters tested.

Additional criteria used to rank the treatments included potential for secondary water quality effects such as residual dissolved concentrations of treatment reagents (e.g., manganese and iron). Residual manganese concentrations, in particular, were elevated, as manganese solubility generally increases below a pH of 7 to 8. The two treatment mixes that included $FeSO_4$ resulted in lower residual dissolved manganese concentrations (Table 7) and low residual iron concentrations. These reagent mixes likely produced ferric iron-containing oxide/hydroxide phases, which are relatively insoluble over a wide pH range under oxidizing conditions (Hem 1963) and can adsorb and incorporate manganese.

5 Treatment Mechanisms and Stability

SSE determines the distribution of specific chemical constituents, including COIs, among different binding forms in the solid-phase precipitates formed as a result of treatment. SSE results provide insights into the nature of the precipitates, COI removal mechanisms and potential for remobilization, and long-term stability of the sequestered COIs. Specifically, SSE quantifies the concentrations of target constituents in five operationally defined fractions, F1 through F5, which are extracted from the solid sample by increasingly chemically aggressive solutions. The fractions, extraction solutions used, and binding forms and phases targeted by each are summarized as follows:

Fraction No.	Fraction Name	Extraction Solution	Targeted Phases/Species
F1	Soluble	1 M magnesium chloride adjusted to pH 7	Dissolved and weakly sorbed species
F2	Exchangeable	1 M monosodium phosphate at pH 5	Strongly sorbed, e.g., on oxides
F3	Reducible	0.1 M hydroxylamine/hydrochloric acid adjusted to pH 2 with nitric acid	Poorly crystalline metal oxides such as iron and manganese oxides
F4	Strong acid/oxidizable	16 M nitric acid	Crystalline oxides
F5	Residual	Digestion by USEPA Method 3050B	Recalcitrant phases in the post-treatment solids

SSE was performed on precipitates recovered from round 2 of the optimization batch tests in accordance with the EGL standard operating procedure modified after Tessier et al. (1979). Approximately 1 gram (dry weight) of the recovered post-treatment solids was weighed into a 50-mL centrifuge tube and extracted with the solutions in the sequence described above.

The SSE results are summarized in Figures 8 through 13 and Table 9; the analytical data are included in Appendix A.

The main components of the precipitates (iron, manganese, and aluminum) were consistently extracted in F4, indicating high stability of the solid phases formed (Figures 8 through 10). A portion of the manganese was also extracted in F3 (reducible fraction), consistent with the formation of oxides and LDHs containing manganese in an oxidized state (Figure 10).

SSE results indicate arsenic, lithium, and molybdenum are sequestered in relatively stable forms in the precipitates (Figures 11 through 13). Arsenic is predominantly distributed among F2, F3, and F4, indicating adsorption on and incorporation into iron, manganese, and/or aluminum oxide and hydroxide phases (Figure 11). Lithium is predominantly distributed in F3, with variable but lesser amounts in F4 and F2 (Figure 12). Molybdenum was predominantly distributed in F4 and, to a lesser extent, in F3 and <5% in F2 (Figure 13).

The precipitates recovered from treatments that included Na_2CO_3 for pH buffering generally had slightly to moderately higher COI concentrations than those from the treatments without Na_2CO_3 (Figures 11 through 13). This observation suggests pH buffering with Na_2CO_3 provides optimal simultaneous removal of arsenic, lithium, and molybdenum from the groundwaters tested and may also enhance COI uptake capacity by the precipitates.

6 Conclusions and Recommendations

Batch tests were performed to evaluate the effectiveness of select reagents and reagent mixes in removing the COIs (i.e., arsenic, lithium, and molybdenum) from Site groundwater. Performance criteria evaluated included the COI removal efficiency, treatment capacity, stability of the sequestered COIs, and potential for unintended consequences such as elevated residual concentrations of reagent constituents in groundwater. Major conclusions of the treatability studies are as follows:

- Four reagent mixes designed to form LDH precipitates achieved the GWPS for arsenic, lithium, and molybdenum in batch tests for both groundwaters tested (GS-AP-MW-6D and GS-AP-MW-7):
    - Mn-Al-Cl LDH
    - Mn-Al-Cl-CO_3 LDH2
    - Fe-Mn-Al-Cl-SO_4 LDH
    - Fe-Mn-Al-Cl-SO_4-CO_3 LDH
- The precipitates consist of highly stable aluminum, manganese, and iron oxide, hydroxide, and/or LDH solid phases.
- Arsenic, lithium, and molybdenum are strongly bound to and incorporated in these solid phases.
- Use of Na_2CO_3 for pH buffering measurably increased COI uptake capacity.
- Residual dissolved manganese concentrations in the batch test bottles following treatment were elevated. Treatments that included $FeSO_4$ had lower residual manganese concentrations.

Should geochemical manipulation pilot testing be implemented, recommendations and considerations based on the laboratory treatability studies are as follows:

- The Fe-Mn-Al-Cl-SO_4-CO_3 LDH reagent mix is recommended for field pilot testing. The four effective treatments identified in the previous list represent variations of a two-solution injection approach to simultaneously remove arsenic, lithium, and molybdenum from Site groundwater by precipitation of LDH-type phase(s) with pH buffering optimized for the specific COIs present.
- The proportions and concentrations of the reagents can be further tailored, if necessary, to account for groundwater conditions at field pilot test locations (e.g., if pilot testing is to be performed at a different location than the wells used for treatability testing).
- Residual dissolved manganese concentrations may be elevated for some time following injection. Although it is expected that manganese will be attenuated downgradient of the injection location, residual concentrations can also be controlled by reducing the concentrations in the injection solutions or recovery of residual injectate by groundwater

extraction, either at a downgradient well location or at the injection well (i.e., push-pull treatment).

- Following selection of pilot locations and prior to implementation of field pilot tests, groundwater chemistry data should be reviewed, especially if a pilot test location is at a different location than the wells tested in this laboratory treatability study. If there are substantial differences in groundwater chemistry, confirmatory batch testing is recommended to confirm treatment performance and, if necessary, adjust the proposed injection reagent mix.
- Yield and distribution of precipitates produced by the two-solution injection in the field may vary based on groundwater chemistry and method of injection. The need for further optimization of proportions and concentrations of treatment constituents should be evaluated as part of pre-design activities.

7 References

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Tables

Table 1
Treatments Tested and Reagent Vendor Sources

No.	Treatment	Abbreviation	Reagent Vendor	Notes
1	Aeration	Aeration	--	Passive aeration
2	Ferrous sulfate	FS	Acros Organics	≥99% for analysis grade
3	Ferric chloride[1]	FC	Acros Organics	99% for analysis grade
4	CleanER-10	CleanER	Höganäs Environment Solutions	Injectable zero-valent iron; D50: 7–8 µm; reagent may no longer be commercially available by the vendor.
5	FerroBlack-Fe+	FB-Fe+	Redox Solutions	Injectable iron sulfide
6	Potassium permanganate	PM	Fisher Chemical	ACS grade
7	Ferrous sulfate with manganese chloride followed by potassium permanganate[2]	Fe-Mn-Cl-SO_4 LDH	Acros Organics ($FeSO_4$), ChemProducts ($MnCl_2$), and Fisher Chemical ($KMnO_4$)	≥99% for analysis grade ($FeSO_4$); ACS grade ($KMnO_4$); ACS grade ($MnCl_2$)
8	Ferric chloride with manganese chloride followed by potassium permanganate[2]	Fe-Mn-Cl LDH	Acros Organics ($FeCl_3$), ChemProducts ($MnCl_2$),and Fisher Chemical ($KMnO_4$)	99% for analysis grade ($FeCl_3$); ACS grade ($KMnO_4$); ACS grade ($MnCl_2$)
9	Barium chloride	$BaCl_2$	Sigma Aldrich	99.9% trace metals basis
10	Magnesium chloride followed by sodium aluminate[3]	Mg-Al-Cl LDH	ChemProducts ($MgCl_2$), Spectrum Chemical ($NaAlO_2$)	ACS grade ($MgCl_2$); technical grade ($NaAlO_2$)
11	Granular hydrotalcite	HT-4U	Kisuma Chemicals	Granular magnesium aluminum hydrotalcite, crushed with a mortar and pestle
12	Ferric chloride with manganese chloride and magnesium chloride followed by sodium aluminate and potassium permanganate[3]	Fe-Mn-Mg-Al-Cl LDH (pH 9.5)	Acros Organics ($FeCl_3$) and ChemProducts ($MnCl_2$), ChemProducts ($MgCl_2$), Spectrum Chemical ($NaAlO_2$), and Fisher Chemical ($KMnO_4$)	99% for analysis grade ($FeCl_3$); ACS grade ($MnCl_2$); ACS grade ($MgCl_2$); technical grade ($NaAlO_2$); ACS grade ($KMnO_4$)
13	Dolomite fines (Helena Quarry)	DH	Vulcan Materials Company	Passed through a 75-µm seive
14	Dolomite fines (Lakeshore Quarry)	DL	Vulcan Materials Company	Passed through a 75-µm seive
15	Dolomitic quicklime	DQ	Carmeuse	Crushed with a mortar and pestle and passed through a 75-µm seive
16	Magnesium chloride followed by sodium aluminate with sodium carbonate[4]	Mg-Al-Cl-CO_3 LDH	ChemProducts ($MgCl_2$), Spectrum Chemical ($NaAlO_2$), and LabChem (Na_2CO_3)	ACS grade ($MgCl_2$); technical grade ($NaAlO_2$); ACS grade (Na_2CO_3)
17	Ferrous sulfate followed by sodium aluminate with sodium carbonate[4]	Fe-Al-SO_4-CO_3	Acros Organics ($FeSO_4$), Spectrum Chemical ($NaAlO_2$), and LabChem (Na_2CO_3)	≥99% for analysis grade ($FeSO_4$); technical grade ($NaAlO_2$); ACS grade (Na_2CO_3)
18	Manganese chloride followed by sodium aluminate with sodium carbonate[4]	Mn-Al-Cl-CO_3 LDH1	ChemProducts ($MnCl_2$), Spectrum Chemical ($NaAlO_2$), and LabChem (Na_2CO_3)	ACS grade ($MnCl_2$); technical grade ($NaAlO_2$); ACS grade (Na_2CO_3)
19	Manganese chloride followed by sodium aluminate and potassium permanganate with sodium carbonate[4, 5]	Mn-Al-Cl-CO_3 LDH2	ChemProducts ($MnCl_2$), Spectrum Chemical ($NaAlO_2$), Fisher Chemical ($KMnO_4$) and LabChem (Na_2CO_3)	ACS grade ($MnCl_2$); technical grade ($NaAlO_2$); ACS grade ($KMnO_4$); ACS grade (Na_2CO_3)
20	Ferrous sulfate and manganese chloride followed by sodium aluminate and potassium permanganate with sodium carbonate[4, 5]	Fe-Mn-Al-Cl-SO_4-CO_3 LDH	Acros Organics ($FeSO_4$), ChemProducts ($MnCl_2$), Spectrum Chemical ($NaAlO_2$), Fisher Chemical ($KMnO_4$), and LabChem (Na_2CO_3)	≥99% for analysis grade ($FeSO_4$); ACS grade ($MnCl_2$); technical grade ($NaAlO_2$); ACS grade ($KMnO_4$); ACS grade (Na_2CO_3)
21	Manganese chloride followed by sodium aluminate and potassium permanganate[5]	Mn-Al-Cl LDH	ChemProducts ($MnCl_2$), Fisher Chemical ($KMnO_4$), and Spectrum Chemical ($NaAlO_2$)	ACS grade ($MnCl_2$); ACS grade ($KMnO_4$); technical grade ($NaAlO_2$)
22	Ferrous sulfate and manganese chloride followed by sodium aluminate and potassium permanganate[5]	Fe-Mn-Al-Cl-SO_4 LDH	Acros Organics ($FeSO_4$), ChemProducts ($MnCl_2$), Spectrum Chemical ($NaAlO_2$), and Fisher Chemical ($KMnO_4$)	≥99% for analysis grade ($FeSO_4$); ACS grade ($MnCl_2$); technical grade ($NaAlO_2$); ACS grade ($KMnO_4$)

Notes:

1. Reagent was also tested at pH 5 (adjusted by sodium hydroxide).
2. Reagent mix was tested at neutral pH and at pH 9.5 (adjusted by sodium hydroxide).
3. Reagent mix was tested at pH 9.5 (adjusted by sodium hydroxide).
4. Reagent mix was tested during Optimization Batch Test Round 1.
5. Reagent mix was tested during Optimization Batch Test Round 2.

µm: micrometer
ACS: American Chemical Society
D50: median diameter
LDH: layered double hydroxide

Table 2
Initial Groundwater Characterization Results

Parameter	Unit	GS-AP-MW-6D		GS-AP-MW-7	
		7/25/2022	8/2/2022	7/25/2022	8/2/2022
Arsenic, dissolved	µg/L	125	43.7	265	244
Arsenic, total	µg/L	114	107	272	270
Iron, dissolved	mg/L	0.017 J	0.0181	0.217	0.202
Iron, total	mg/L	0.022 J	0.0176	0.952	0.212
Lithium, dissolved	µg/L	334	277	218	185
Lithium, total	µg/L	348	302	227	202
Manganese, dissolved	mg/L	0.186	0.169	0.0377	0.0334
Manganese, total	mg/L	0.197	0.173	0.0479	0.0354
Molybdenum, dissolved	µg/L	9.50	6.65	213	215
Molybdenum, total	µg/L	11.0	9.57	214	226
pH	SU	6.95	5.95	7.64	6.32
Dissolved oxygen	mg/L	0.1	0.89	0.53	1.07
Oxidation-reduction potential	mV	-45.1	-9.80	-173	162
Specific conductivity	µS/cm	457	489	549	561
Aluminum, dissolved	mg/L	0.00609 U	--	0.0124	--
Aluminum, total	mg/L	0.00609 U	--	0.345	--
Alkalinity	mg/L	195	--	114	--
Antimony, dissolved	mg/L	0.00051 U	--	0.00051 U	--
Antimony, total	mg/L	0.00051 U	--	0.00051 U	--
Barium, dissolved	mg/L	0.554	--	0.0567	--
Barium, total	mg/L	0.544	--	0.0677	--
Beryllium, dissolved	mg/L	0.00041 U	--	0.00041 U	--
Beryllium, total	mg/L	0.00041 U	--	0.00041 U	--
Bicarbonate alkalinity	mg/L	193	--	113	--
Boron, dissolved	mg/L	1.35	--	1.68	--
Boron, total	mg/L	1.39	--	1.73	--
Cadmium, dissolved	mg/L	0.00007 U	--	0.00007 U	--
Cadmium, total	mg/L	0.00007 U	--	0.00007 U	--
Calcium, dissolved	mg/L	65.1	--	10.4	--
Calcium, total	mg/L	57.9	--	10.6	--
Carbonate alkalinity	mg/L	1.79	--	0.99	--
Chloride	mg/L	9.51	--	7.92	--
Chromium, dissolved	mg/L	0.0002 U	--	0.000269 J	--
Chromium, total	mg/L	0.000301 J	--	0.00103	--
Radium 226 + radium 228	pCi/L	1.02 U	--	1.01 U	--
Fluoride	mg/L	0.0984 J	--	0.0906 J	--
Lead, dissolved	mg/L	0.00007 U	--	0.00007 U	--
Lead, total	mg/L	0.000171 J	--	0.000431	--
Magnesium, dissolved	mg/L	15.6	--	3.75	--
Magnesium, total	mg/L	15.8	--	3.87	--
Mercury	mg/L	0.0003 U	--	0.0003 U	--
Nitrate nitrite as N	mg/L as N	0.20 U	--	0.20 U	--
Potassium total	mg/L	2.43	--	1.35	--
Selenium, dissolved	mg/L	0.00051 U	--	0.00051 U	--
Selenium, total	mg/L	0.00051 U	--	0.00051 U	--
Silica, dissolved	mg/L	14.4	--	11.5	--
Silica, total	mg/L	14.3	--	12.3	--
Sodium, dissolved	mg/L	27.7	--	107	--
Sodium, total	mg/L	27.4	--	106	--
Sulfate	mg/L	57.6	--	136	--
Sulfide	mg/L	3	--	0	--
Total dissolved solids	mg/L	288	--	318	--
Temperature (field)	ºC	19.5	--	19.9	--
Thallium, dissolved	mg/L	0.00007 U	--	0.00007 U	--
Thallium, total	mg/L	0.00007 U	--	0.00007 U	--
Total organic carbon	mg/L	1.31 J	--	1.52 J	--
Turbidity (field)	NTU	0.35	--	10.2	--

Notes:

Samples were field filtered with a 0.45-micron filter at the time of collection and filtered again prior to analysis for dissolved constituents.

Samples were collected in the field on July 25, 2022, then sent directly to the analytical laboratories (APC Environmental Laboratory and Pace Analytical Services, LLC) and to EGL for supplemental testing. EGL submitted subsamples to ALS Environmental for additional initial characterization on August 2, 2022 (Sample Delivery Group No. K2208820).

Some analytes from the samples submitted on July 25, 2022 had two analytical results associated with a single sample. When this occurred, results were averaged for this table.

--: not measured

µg/L: microgram per liter

µS/cm: microsiemen per centimeter

EGL: Anchor QEA Environmental Geochemistry Laboratory

J: indicates the result is an estimated value

mg/L: milligram per liter

mV: millivolt

NTU: nephelometric turbidity unit

pCi/L: picocurie per liter

SU: standard unit

U: indicates the compound was analyzed for but not detected (Value is set to method detection limit.)

Table 3
Treatments Tested in Screening Batch Tests

Treatment	Notes
Aeration	No reagent; bottles were passively aerated during the screening batch test.
FS	--
FC	--
FC (pH 5)	Adjusted to pH 5 by adding a small volume of NaOH.
CleanER	--
FB-Fe+	The dose was specified by the vendor (Redox Solutions).
PM	--
Fe-Mn-Cl-SO_4 LDH	--
Fe-Mn-Cl-SO_4 LDH (pH 9.5)	Adjusted to pH 9.5 with NaOH.
Fe-Mn-Cl LDH	--
Fe-Mn-Cl LDH (pH 9.5)	Adjusted to pH 9.5 with NaOH.
$BaCl_2$	--
Mg-Al-Cl LDH	Adjusted to pH 9.5 with NaOH.
HT-4U	--
Fe-Mn-Mg-Al-Cl LDH (pH 9.5)	Adjusted to pH 9.5 with NaOH.
DH	--
DL	--
DQ	--

Notes:

--: not applicable

$BaCl_2$: barium chloride

CleanER: CleanER-10

DH: dolomite fines (Helena Quarry)

DL: dolomite fines (Lakeshore Quarry)

DQ: dolomitic quicklime

FB-Fe+: Ferroblack-Fe+

FC: ferric chloride

Fe-Mn-Cl LDH: ferric chloride with manganese chloride, followed by potassium permanganate

Fe-Mn-Cl-SO_4 LDH: ferrous sulfate with manganese chloride, followed by potassium permanganate

Fe-Mn-Mg-Al-Cl LDH (pH 9.5): ferric chloride with manganese chloride and magnesium chloride, followed by sodium aluminate and potassium permanganate

FS: ferrous sulfate

HT-4U: granular hydrotalcite

LDH: layered double hydroxide

mg: milligram

Mg-Al-Cl LDH: magnesium chloride followed by sodium aluminate

NaOH: sodium hydroxide

PM: potassium permanganate

Table 4
Screening Batch Test Results

		Dissolved Concentration (µg/L)								
Groundwater ID	**Treatment**	**Arsenic (GWPS: 10)**	**Lithium (GWPS: 80.9)**	**Molybdenum (GWPS: 100)**	**Iron**	**Manganese**	**pH**	**SC (µS/cm)**	**ORP (millivolt)**	**Sample Delivery Group ID**
GS-AP-MW-6D	Control[1]	284	310	--	1.70	177	8.19	877	422	Averaged result from SDG K2214181 and SDG K2214653
	Aeration	272	310	--	1.90	163	8.59	827	158	K2214181
	PM	48.3	305	--	0.3 U	49700	7.83	1797	670	K2214653
	PM (Dup)	46.9	298	--	0.3 U	36900	8.01	2030	618	K2214181
	FC	250	297	--	211000	163	1.88	4541	590	K2214181
	FC (pH 5)	0.09 U	299	--	29.4	150	8.41	3258	332	K2214181
	Fe-Mn-Cl LDH	0.09 U	298	--	11700	28800	1.09	15296	990	K2214653
	Fe-Mn-Cl LDH (pH 9.5)	3.55	96.4	--	11.6	38.9	9.68	7882	490	K2214653
	FS	0.68	315	--	121000	662	5.43	1505	133	K2214181
	FS (Dup)	0.52	303	--	136000	660	5.23	1412	82.2	K2214181
	Fe-Mn-Cl-SO_4 LDH	0.09 U	298	--	99400	76100	1.52	7961	961	K2214653
	Fe-Mn-Cl-SO_4 LDH (pH 9.5)	0.34	268	--	5.30	4.54	9.71	8032	443	K2214653
	$BaCl_2$	8.42	63.1	--	16.9	5.38	7.27	8457	141	K2214181
	Mg-Al-Cl LDH	6.00	76.8	--	1.50	10.8	7.65	7990	178	K2214181
	CleanER	81.7	304	--	348	1250	5.60	854	297	K2214181
	FB-Fe+	12.7	192	--	64.8	0.62	7.43	15638	85.1	K2214181
	HT-4U	2.11	71.4	--	1.90	1.03	7.92	1253	152	K2214181
	Fe-Mn-Mg-Al-Cl LDH (pH 9.5)	0.09 U	7.35	--	18	32.4	6.69	12744	666	K2214653
	DH	101	304	--	2.40	19.4	7.67	1201	172	K2214181
	DL	146	305	--	6.10	6.36	7.67	886	182	K2214181
	DQ	0.21	359	--	2.70	0.26	12.0	9348	2.80	K2214181
GS-AP-MW-7	Control[1]	260	210	220	16.2	37.6	9.00	1001	385	Averaged result from SDG K2214182 and SDG K2214653
	Aeration	248	206	225	14.1	30.9	7.72	1020	96.8	K2214182
	PM	85.4	203	0.03 U	0.3 U	50100	7.49	2225	687	K2214653
	PM (Dup)	83.6	203	0.03 U	0.3 U	47000	8.43	2188	619	K2214653
	FC	0.750	209	1.57	67600	34.2	1.82	4280	534	K2214182
	FC (pH 5)	0.09	203	0.110	11.5	303	9.99	3011	-356	K2214182
	Fe-Mn-Cl LDH	0.09 U	196	0.03 U	23800	4710	0.99	23451	989	K2214653
	Fe-Mn-Cl LDH (pH 9.5)	0.09 U	59.6	21.2	11.0	36.8	9.18	7422	467	K2214653
	FS	0.820	213	0.420	157000	552	6.13	1690	89.7	K2214182
	FS (Dup)	0.370	211	0.600	66400	303.00	6.10	1170	63.6	K2214182
	Fe-Mn-Cl-SO_4 LDH	0.09 U	193	0.03 U	83700	5910	1.41	9426	951	K2214653
	Fe-Mn-Cl-SO_4 LDH (pH 9.5)	0.09 U	83.9	41.9	18.0	20.4	9.76	7559	473	K2214653
	$BaCl_2$	247	328	6.79	2.70	167	7.24	2218	106	K2214182
	Mg-Al-Cl LDH	203	220	89.7	1.9 J	12.5	8.00	1963	123	K2214182
	CleanER	50.3	208	194	157	956	5.32	946	314	K2214182
	FB-Fe+	18.5	100	353	26.7	0.04 U	11.1	16219	-7.80	K2214182
	HT-4U	1.59	35.9	46.0	2.10	0.08 J	7.57	1249	126	K2214182
	Fe-Mn-Mg-Al-Cl LDH (pH 9.5)	0.09 U	2.03	1.79	21.4	55.4	6.31	13604	557	K2214653
	DH	124	202	271	3.40	3.83	8.17	1197	131	K2214182
	DL	155	210	222	1.40	0.62	8.35	1012	139	K2214182
	DQ	0.09 J	255	73.3	1.60	0.05 J	12.2	10546	1.80	K2214182

Notes:
Reaction time was 7 days.
Arsenic was spiked in groundwater sample GS-AP-MW-6D under anaerobic conditions.
1. Control is untreated groundwater. Values are the average of the controls used in the two sets of initial screening batch tests.
--: not applicable
µg/L: microgram per liter
µS/cm: microsiemen per centimeter
$BaCl_2$: barium chloride
CleanER: CleanER-10
DH: dolomite fines (Helena Quarry)
DL: dolomite fines (Lakeshore Quarry)
DQ: dolomitic quicklime
Dup: duplicate
FB-Fe+: Ferroblack-Fe+
FC: ferric chloride
Fe-Mn-Cl LDH: ferric chloride with manganese chloride, followed by potassium permanganate
Fe-Mn-Cl-SO_4 LDH: ferrous sulfate with manganese chloride, followed by potassium permanganate
Fe-Mn-Mg-Al-Cl LDH (pH 9.5): ferric chloride with manganese chloride and magnesium chloride, followed by sodium aluminate and potassium permanganate
FS: ferrous sulfate
GWPS: groundwater protection standard
HT-4U: granular hydrotalcite
J: indicates the result is an estimated value
LDH: layered double hydroxide
Mg-Al-Cl LDH: magnesium chloride followed by sodium aluminate
ORP: oxidation reduction potential
PM: potassium permanganate
SC: specific conductivity
U: indicates the compound was analyzed for but not detected (Value is set to instrument detection limit.)

Table 5
Treatment Performance Summary: Screening Batch Tests

Treatment	GS-AP-MW-6D		GS-AP-MW-7		
	Arsenic (GWPS: 10 µg/L)	**Lithium (GWPS: 80.9 µg/L)**	**Arsenic (GWPS: 10 µg/L)**	**Lithium (GWPS: 80.9 µg/L)**	**Molybdenum (GWPS: 100 µg/L)**
Aeration	🟧	🟧	🟧	🟧	🟥
PM	🟨	🟧	🟨	🟧	🟩
FC	🟧	🟧	🟩	🟧	🟩
FC (pH 5.0)	🟩	🟧	🟩	🟧	🟩
Fe-Mn-Cl LDH	🟩	🟧	🟩	🟧	🟩
Fe-Mn-Cl LDH (pH 9.5)	🟩	🟨	🟩	🟩	🟩
FS	🟩	🟧	🟩	🟥	🟩
Fe-Mn-Cl-SO_4 LDH	🟩	🟧	🟩	🟧	🟩
Fe-Mn-Cl-SO_4 LDH (pH 9.5)	🟩	🟧	🟩	🟨	🟩
$BaCl_2$	🟩	🟩	🟧	🟥	🟩
Mg-Al-Cl LDH	🟩	🟩	🟧	🟥	🟩
CleanER	🟨	🟧	🟨	🟧	🟧
FB-Fe+	🟨	🟧	🟨	🟨	🟥
HT-4U	🟩	🟩	🟩	🟩	🟩
Fe-Mn-Mg-Al-Cl LDH (pH 9.5)	🟩	🟩	🟩	🟩	🟩
DH	🟨	🟧	🟨	🟧	🟥
DL	🟨	🟧	🟧	🟧	🟥
DQ	🟩	🟥	🟩	🟥	🟩

Notes:

Green cells indicate the concentration was decreased to less than the GWPS.

Yellow cells indicate the concentration was decreased by >50%, but the GWPS was not reached.

Orange cells indicate the concentration was decreased by >50%, and the GWPS was not reached.

Red cells indicate the concentration was increased, and the GWPS was not reached.

µg/L: microgram per liter

$BaCl_2$: barium chloride

CleanER: CleanER-10

DH: dolomite fines (Helena Quarry)

DL: dolomite fines (Lakeshore Quarry)

DQ: dolomitic quicklime

FB-Fe+: Ferroblack-Fe+

FC: ferric chloride

Fe-Mn-Cl LDH: ferric chloride with manganese chloride, followed by potassium permanganate

Fe-Mn-Cl-SO_4 LDH: ferrous sulfate with manganese chloride followed by potassium permanganate

Fe-Mn-Mg-Al-Cl LDH (pH 9.5): ferric chloride with manganese chloride and magnesium chloride, followed by sodium aluminate and potassium permanganate

FS: ferrous sulfate

GWPS: groundwater protection standard

HT-4U: granular hydrotalcite

LDH: layered double hydroxide

Mg-Al-Cl LDH: magnesium chloride, followed by sodium aluminate

PM: potassium permanganate

Table 6
Treatments Tested in Optimization Batch Tests

Treatment	Notes
Mg-Al-Cl-CO_3 LDH	Used in Round 1 test
Fe-Al-SO_4-CO_3	Used in Round 1 test
Mn-Al-Cl-CO_3 LDH1	Used in Round 1 test
Mn-Al-Cl-CO_3 LDH2	Used in Round 1 test (dose 1)
	Used in Round 2 test (dose 2)
Fe-Mn-Al-Cl-SO_4-CO_3 LDH	Used in Round 1 test (dose 1)
	Used in Round 2 test (dose 2)
Mn-Al-Cl LDH	Used in Round 2 test
Fe-Mn-Al-Cl-SO_4 LDH	Used in Round 2 test

Notes:

Fe-Al-SO_4-CO_3: ferrous sulfate followed by sodium aluminate with sodium carbonate

Fe-Mn-Al-Cl-SO_4-CO_3 LDH: ferrous sulfate and manganese chloride followed by sodium aluminate and potassium permanganate with sodium carbonate

Fe-Mn-Al-Cl-SO_4 LDH: ferrous sulfate and manganese chloride followed by sodium aluminate and potassium permanganate

LDH: layered double hydroxide

Mg-Al-Cl-CO_3 LDH: magnesium chloride followed by sodium aluminate with sodium carbonate

mM: millimolar

Mn-Al-Cl-CO_3 LDH1: manganese chloride followed by sodium aluminate with sodium carbonate

Mn-Al-Cl-CO_3 LDH2: manganese chloride followed by sodium aluminate and potassium permanganate with sodium carbonate

Mn-Al-Cl LDH: manganese chloride followed by sodium aluminate and potassium permanganate

Table 7
Optimization Batch Test Results

Groundwater ID	Treatment	Optimization Batch Test Round	Dissolved Concentration (µg/L)					pH	SC (µS/cm)	ORP (millivolt)	SDG
			Arsenic (GWPS: 10)	Lithium (GWPS: 80.9)	Molybdenum (GWPS: 100)	Iron	Manganese				
GS-AP-MW-6D	Control	1	270	315	--	0.9 J	177	7.51	829	554	K2302336
	Mg-Al-Cl-CO_3 LDH		8.75	18.4	--	0.6 J	2.25	9.26	7099	496	K2302336
	Fe-Al-SO_4-CO_3		0.30 J	56.2	--	2320	322	7.95	6283	-148	K2302336
	Mn-Al-Cl-CO_3 LDH1		0.980	72.4	--	0.5 J	1340	9.07	7529	468	K2302336
	Mn-Al-Cl-CO_3 LDH2 (dose 1)		0.980	0.14	--	1.2 J	76.7	9.54	7897	501	K2302336
	Mn-Al-Cl-CO_3 LDH2 (dose 1) (Dup)		0.960	0.11	--	0.7 J	59.1	9.55	7879	507	K2302336
	Fe-Mn-Al-Cl-SO_4-CO_3 LDH (dose 1)		0.660	0.13	--	20.6	69.3	9.53	7572	502	K2302336
	Control	2	285	309	--	0.3 U	165	8.03	597	365	K2304400
	Mn-Al-Cl-CO_3 LDH2 (dose 2)		0.09 U	5.37	--	0.4 J	215000	6.81	4808	405	K2304400
	Mn-Al-Cl-CO_3 LDH2 (dose 2) (Dup)		0.10 J	4.93	--	0.5 J	209000	6.81	4774	415	K2304400
	Fe-Mn-Al-Cl-SO_4-CO_3 LDH (dose 2)		0.09 U	9.86	--	2.2	116000	6.55	4553	412	K2304400
	Mn-Al-Cl LDH		0.09 U	2.09	--	0.3 U	158000	6.91	4517	412	K2304400
	Fe-Mn-Al-Cl-SO_4 LDH		0.09 U	2.01	--	4.4	72200	6.91	4252	410	K2304400
GS-AP-MW-7	Control	1	245	212	221	3.0	35.3	8.01	742	512	K2302336
	Mg-Al-Cl-CO_3 LDH		54.3	10.5	150	0.4 J	0.49	8.72	7754	435	K2302336
	Fe-Al-SO_4-CO_3		7.40	35.9	90.9	4440	497	7.68	6671	-112	K2302336
	Mn-Al-Cl-CO_3 LDH1		8.18	67.8	200	0.8 J	2570	8.65	7947	438	K2302336
	Mn-Al-Cl-CO_3 LDH2 (dose 1)		1.01	0.16	184	3.5	91.3	9.69	7934	481	K2302336
	Mn-Al-Cl-CO_3 LDH2 (dose 1) (Dup)		0.99	0.10	183	1.0 J	94.3	9.69	7849	476	K2302336
	Fe-Mn-Al-Cl-SO_4-CO_3 LDH (dose 1)		0.86	0.10 U	210	25	69.6	9.79	7679	477	K2302336
	Control	2	246	210	216	1.8 J	35.1	7.44	680	408	K2304400
	Mn-Al-Cl-CO_3 LDH2 (dose 2)		0.09 U	2.43	1.39	0.5 J	210000	6.62	5100	456	K2304400
	Mn-Al-Cl-CO_3 LDH2 (dose 2) (Dup)		0.09 U	2.5	1.41	0.3 U	212000	6.68	4976	436	K2304400
	Fe-Mn-Al-Cl-SO_4-CO_3 LDH (dose 2)		0.09 U	4.76	1.12	5.5	118000	6.36	4790	428	K2304400
	Mn-Al-Cl LDH		0.09 U	1.62	0.24	0.3 U	172000	6.49	4660	432	K2304400
	Fe-Mn-Al-Cl-SO_4 LDH		0.09 U	1.70	0.85	1.9 J	35.1	6.55	4420	421	K2304400

Notes:

Reaction time was 7 days.

Arsenic was spiked in groundwater sample GS-AP-MW-6D under anaerobic conditions.

--: not applicable

µg/L: microgram per liter

µS/cm: microsiemen per centimeter

Control: untreated groundwater

Dup: duplicate

Fe-Al-SO_4-CO_3: ferrous sulfate followed by sodium aluminate with sodium carbonate

Fe-Mn-Al-Cl-SO_4-CO_3 LDH: ferrous sulfate and manganese chloride followed by sodium aluminate and potassium permanganate with sodium carbonate

Fe-Mn-Al-Cl-SO_4 LDH: ferrous sulfate and manganese chloride followed by sodium aluminate and potassium permanganate

GWPS: groundwater protection standard

J: indicates the result is an estimated value

LDH: layered double hydroxide

Mg-Al-Cl-CO_3 LDH: magnesium chloride followed by sodium aluminate with sodium carbonate

Mn-Al-Cl-CO_3 LDH1: manganese chloride followed by sodium aluminate with sodium carbonate

Mn-Al-Cl-CO_3 LDH2: manganese chloride followed by sodium aluminate and potassium permanganate with sodium carbonate

Mn-Al-Cl LDH: manganese chloride followed by sodium aluminate and potassium permanganate

ORP: oxidation reduction potential

SC: specific conductivity

SDG: sample delivery group

U: indicates the compound was analyzed for but not detected (Value is set to instrument detection limit.)

Table 8

Treatment Performance Summary: Optimization Batch Tests

Treatment	Optimization Batch Test Round	GS-AP-MW-6D		GS-AP-MW-7		
		Arsenic (GWPS: 10 µg/L)	Lithium (GWPS: 80.9 µg/L)	Arsenic (GWPS: 10 µg/L)	Lithium (GWPS: 80.9 µg/L)	Molybdenum (GWPS: 100 µg/L)
Mg-Al-Cl-CO_3 LDH	1	🟩	🟩	🟨	🟩	🟧
Fe-Al-SO_4-CO_3		🟩	🟩	🟩	🟩	🟩
Mn-Al-Cl-CO_3 LDH1		🟩	🟩	🟩	🟩	🟧
Mn-Al-Cl-CO_3 LDH2 (dose 1)		🟩	🟩	🟩	🟩	🟧
Fe-Mn-Al-Cl-SO_4-CO_3 LDH (dose 1)		🟩	🟩	🟩	🟩	🟧
Mn-Al-Cl-CO_3 LDH2 (dose 2)	2	🟩	🟩	🟩	🟩	🟩
Fe-Mn-Al-Cl-SO_4-CO_3 LDH (dose 2)		🟩	🟩	🟩	🟩	🟩
Mn-Al-Cl LDH		🟩	🟩	🟩	🟩	🟩
Fe-Mn-Al-Cl-SO_4 LDH		🟩	🟩	🟩	🟩	🟩

Notes:

Green cells indicate the concentration was decreased to less than the GWPS.

Yellow cells indicate the concentration was decreased by more than 50%, but the GWPS was not reached.

Orange cells indicate the concentration was decreased by less than 50%, and the GWPS was not reached.

Fe-Al-SO_4-CO_3: ferrous sulfate followed by sodium aluminate with sodium carbonate

Fe-Mn-Al-Cl-SO_4-CO_3 LDH: ferrous sulfate and manganese chloride followed by sodium aluminate and potassium permanganate with sodium carbonate

Fe-Mn-Al-Cl-SO_4 LDH: ferrous sulfate and manganese chloride followed by sodium aluminate and potassium permanganate

GWPS: groundwater protection standard

LDH: layered double hydroxide

Mg-Al-Cl-CO_3 LDH: magnesium chloride followed by sodium aluminate with sodium carbonate

Mn-Al-Cl-CO_3 LDH1: manganese chloride followed by sodium aluminate with sodium carbonate

Mn-Al-Cl-CO_3 LDH2: manganese chloride followed by sodium aluminate and potassium permanganate with sodium carbonate

Mn-Al-Cl LDH: manganese chloride followed by sodium aluminate and potassium permanganate

Table 9
SSE Results

Treatment	Ground-water ID	Arsenic (mg/kg)					Lithium (mg/kg)					Molybdenum (mg/kg)					Aluminum (mg/kg)					Iron (mg/kg)					Manganese (mg/kg)				
		F1	F2	F3	F4	F5	F1	F2	F3	F4	F5	F1	F2	F3	F4	F5	F1	F2	F3	F4	F5	F1	F2	F3	F4	F5	F1	F2	F3	F4	F5
Mn-Al-Cl-CO_3 LDH2	GS-AP-MW-6D	0.0532 J	37.2	24.8	8.51	100	0.71	13.20	49.0	29.1	0.4 U	--	--	--	--	--	--	--	36.8	88700	2170	--	--	0.151 J	28.9	54.7	--	--	113000	272000	273000
Fe-Mn-Al-Cl-SO_4-CO_3 LDH		0.0297 J	26.4	21.4	23.1	--	0.61	18.90	53.9	1.74	--	--	--	--	--	--	--	--	11.8	65100	--	--	--	5.68	116000	--	--	--	101000	150000	--
Mn-Al-Cl LDH		0.0404 J	25.9	24.5	15.1	--	0.12	1.10	60	6.09	--	--	--	--	--	--	--	--	15.5	112000	--	--	--	0.194 J	21.5	--	--	--	106000	213000	--
Fe-Mn-Al-Cl-SO_4 LDH		0.0489 J	20.1	12.8	18.3	--	0.44	5.68	45.9	2.75	--	--	--	--	--	--	--	--	14.0	92600	--	--	--	3.31	75400	--	--	--	86400	111000	--
Mn-Al-Cl-CO_3 LDH2	GS-AP-MW-7	0.0417 J	25.6	28.0	10.9	--	0.26	7.80	40.5	2.16	--	0.29	3.10	19.1	43.8	--	--	--	24.5	62700	--	--	--	0.194 J	42.9	--	--	--	168000	153000	--
Mn-Al-Cl-CO_3 LDH2 (Dup)		0.0401 J	28.9	28.2	24.4	--	0.19	6.88	42.6	13.9	--	0.33	3.25	21.8	52.3	--	--	--	47.0	80800	--	--	--	0.112 J	54.4	--	--	--	142000	279000	--
Fe-Mn-Al-Cl-SO_4-CO_3 LDH		0.0525 J	24.1	23.0	22.7	--	0.64	12.50	38.9	1.46	--	0.24	3.05	14.7	51.5	--	--	--	12.1	70900	--	--	--	5.69	112000	--	--	--	95900	197000	--
Mn-Al-Cl LDH		0.0410 J	21.9	20.6	10.8	--	0.05	0.71	36	2.56	--	0.10	3.39	19.4	35.8	--	--	--	12.2	101000	--	--	--	0.154 J	31.4	--	--	--	109000	165000	--
Fe-Mn-Al-Cl-SO_4 LDH		0.0442 J	19.8	15.7	24.2	--	0.20	4.08	37.1	4.56	--	0.15	3.17	12.5	46.2	--	--	--	13.2	116000	--	--	--	2.87	102000	--	--	--	60900	173000	--

Notes:

All results are reported on a dry weight basis.

Only one treatment sample retained enough solid material during the F1 to F4 extraction to be analyzed for F5 residual concentrations.

--: not applicable

Dup: duplicate

F1: Water soluble, dissolved and weakly sorbed (extracted by 1 M magnesium chloride to pH 7)

F2: Exchangeable, strongly sorbed, e.g., on oxides (extracted by 1 M monosodium phosphate at pH 5)

F3: Reducible, e.g., poorly crystalline metal oxides such as iron and manganese oxides (extracted by 0.1 M hydroxylamine/hydrogen chloride adjusted to pH 2 with nitric acid)

F4: Oxidizable, e.g., crystalline oxides (extracted by 16 M nitric acid)

F5: Residual, e.g., recalcitrant phases in the post-treatment solids (prepared by U.S. Environmental Protection Agency Method 3050B)

Fe-Mn-Al-Cl-SO_4-CO_3 LDH: ferrous sulfate and manganese chloride, followed by sodium aluminate and potassium permanganate with sodium carbonate

Fe-Mn-Al-Cl-SO_4 LDH: ferrous sulfate and manganese chloride, followed by sodium aluminate and potassium permanganate

J: indicates the result is an estimated value

LDH: layered double hydroxide

M: molar

mg/kg: milligram per kilogram

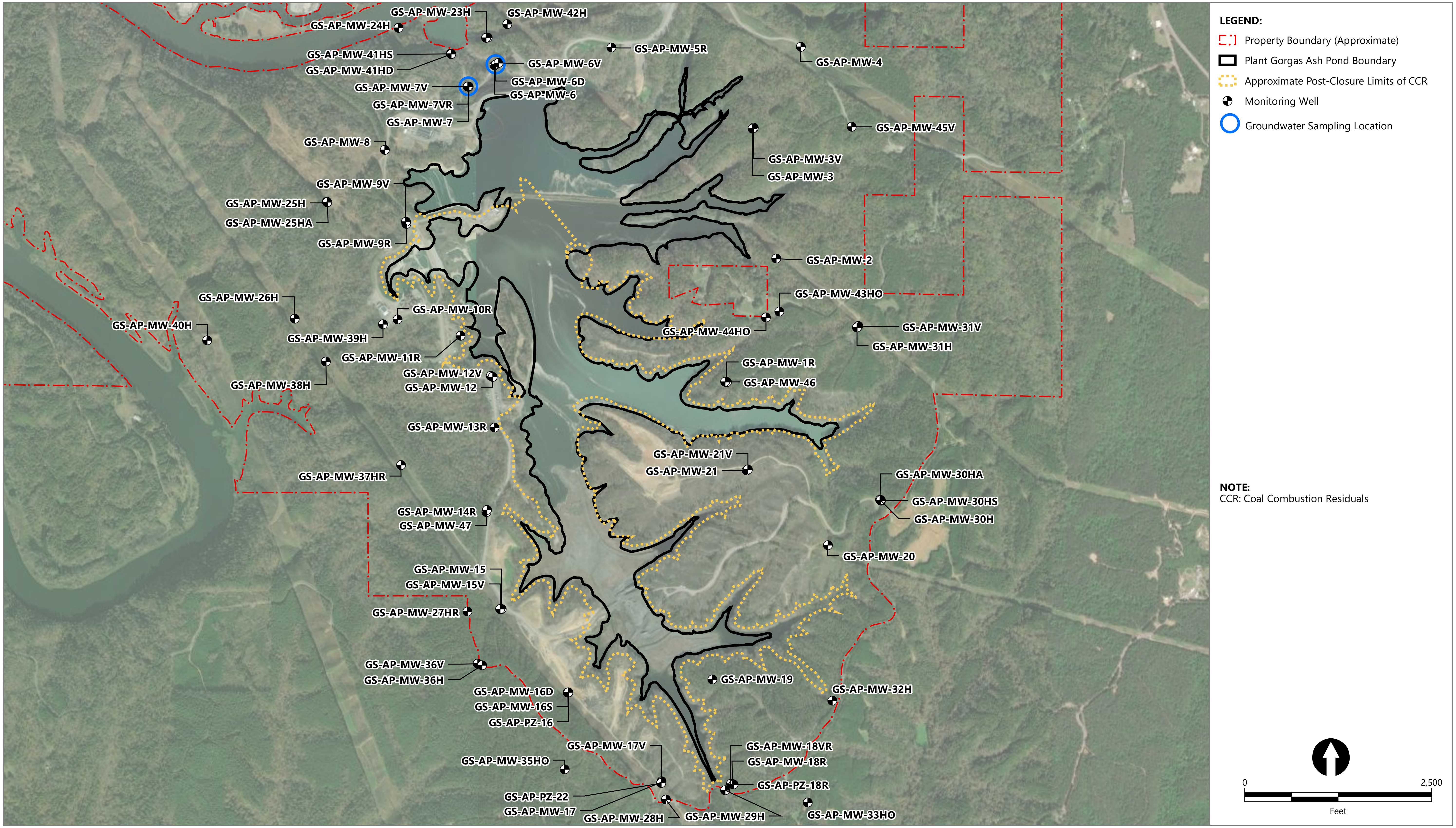
Mn-Al-Cl-CO_3 LDH2: manganese chloride followed by sodium aluminate and potassium permanganate with sodium carbonate

Mn-Al-Cl LDH: manganese chloride followed by sodium aluminate and potassium permanganate

SSE: selective sequential extraction

U: indicates the compound was analyzed for but not detected (Value is set to instrument detection limit.)

Figures



LEGEND:

- 🟥 Property Boundary (Approximate)
- ▭ Plant Gorgas Ash Pond Boundary
- ▨ Approximate Post-Closure Limits of CCR
- ◐ Monitoring Well
- ○ Groundwater Sampling Location

NOTE:
CCR: Coal Combustion Residuals

Publish Date: 2023/10/17, 12:26 PM | User: jquinley
Filepath: \\orcas\GIS\Jobs\SouthernCompany_1114\PlantGorgas\Maps\Treatability_Study\AQ_PlantGorgas_TreatabilityStudy_Figure01_SamplingLocation.mxd

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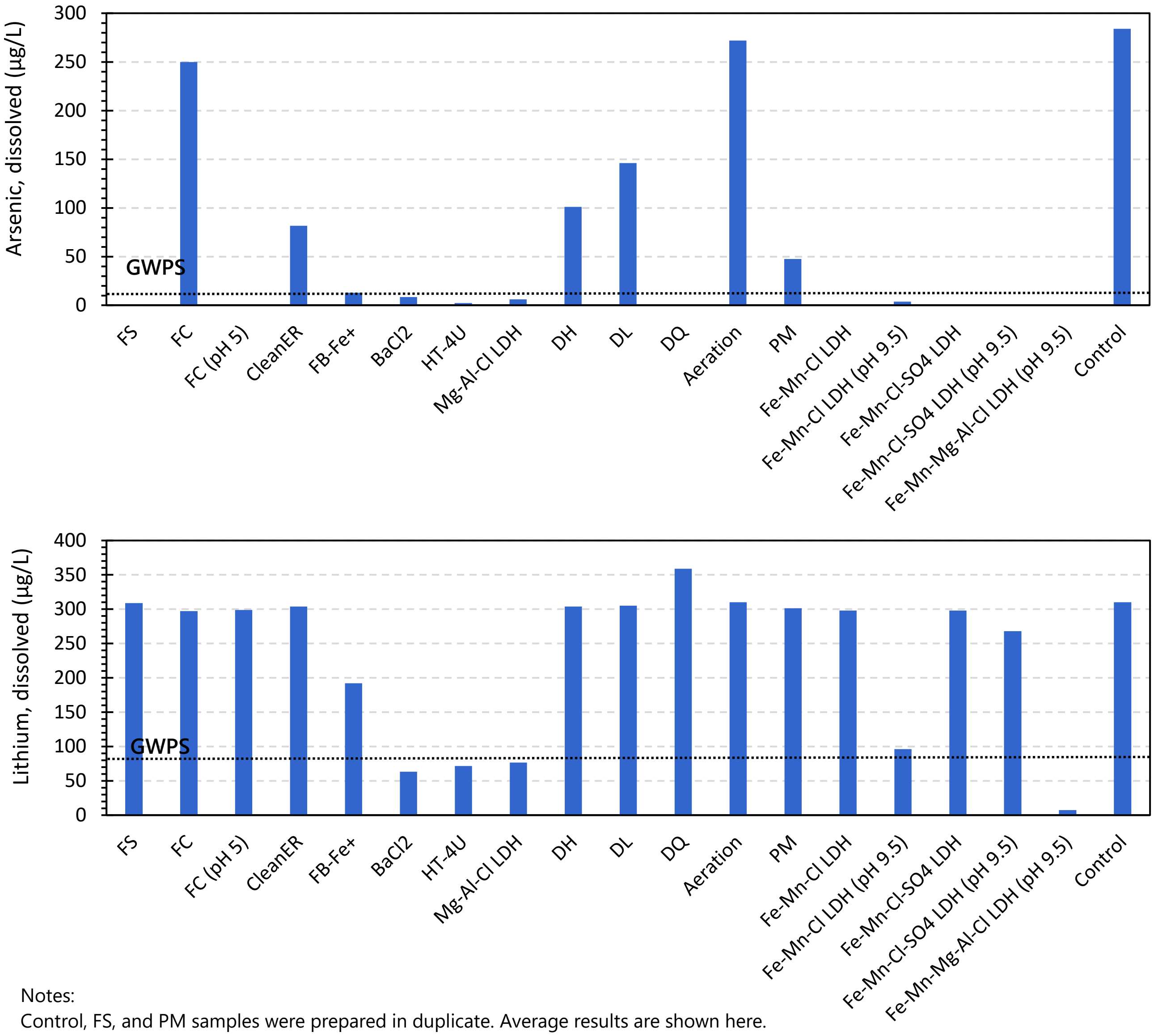
Figure 1
Sampling Locations
Laboratory Treatability Study Results
Plant Gorgas



Notes:
Control, FS, and PM samples were prepared in duplicate. Average results are shown here.
All treatments shown on graph were tested as part of the screening batch tests. Results not visible indicate that concentrations were either less than the detection limit or were detected at concentrations too low to be seen on the graph.
µg/L: microgram per liter
BaCl2: barium chloride
CleanER: CleanER-10
DH: dolomite fines (Helena Quarry)
DL: dolomite fines (Lakeshore Quarry)
DQ: dolomitic quicklime
FB-Fe+: Ferroblack-Fe+
FC: ferric chloride
Fe-Mn-Cl LDH: ferric chloride with manganese chloride, followed by potassium permanganate
Fe-Mn-Cl-SO4 LDH: ferrous sulfate with manganese chloride, followed by potassium permanganate
Fe-Mn-Mg-Al-Cl LDH (pH 9.5): ferric chloride with manganese chloride and magnesium chloride, followed by sodium aluminate and potassium permanganate
FS: ferrous sulfate
GWPS: groundwater protection standard
HT-4U: granular hydrotalcite
Mg-Al-Cl LDH: magnesium chloride, followed by sodium aluminate
PM: potassium permanganate

Figure 2
Screening Batch Test Results for GS-AP-MW-6D

Laboratory Treatability Study Results
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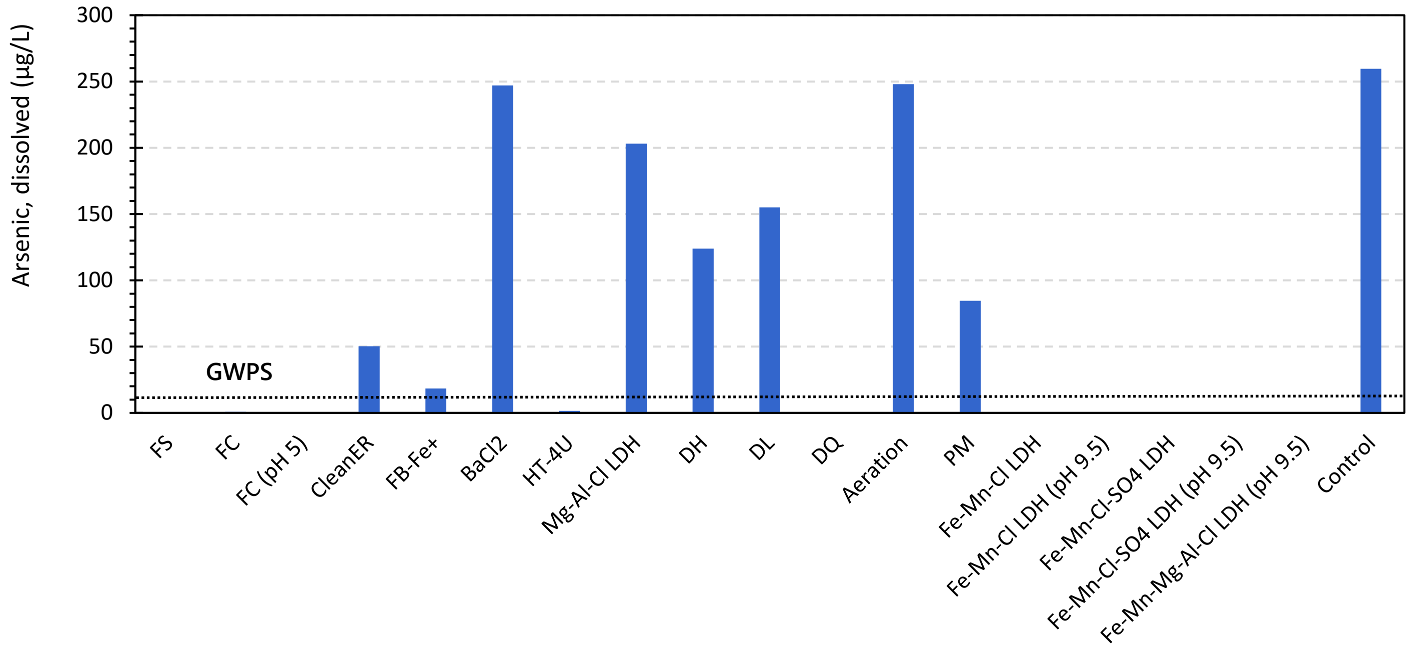
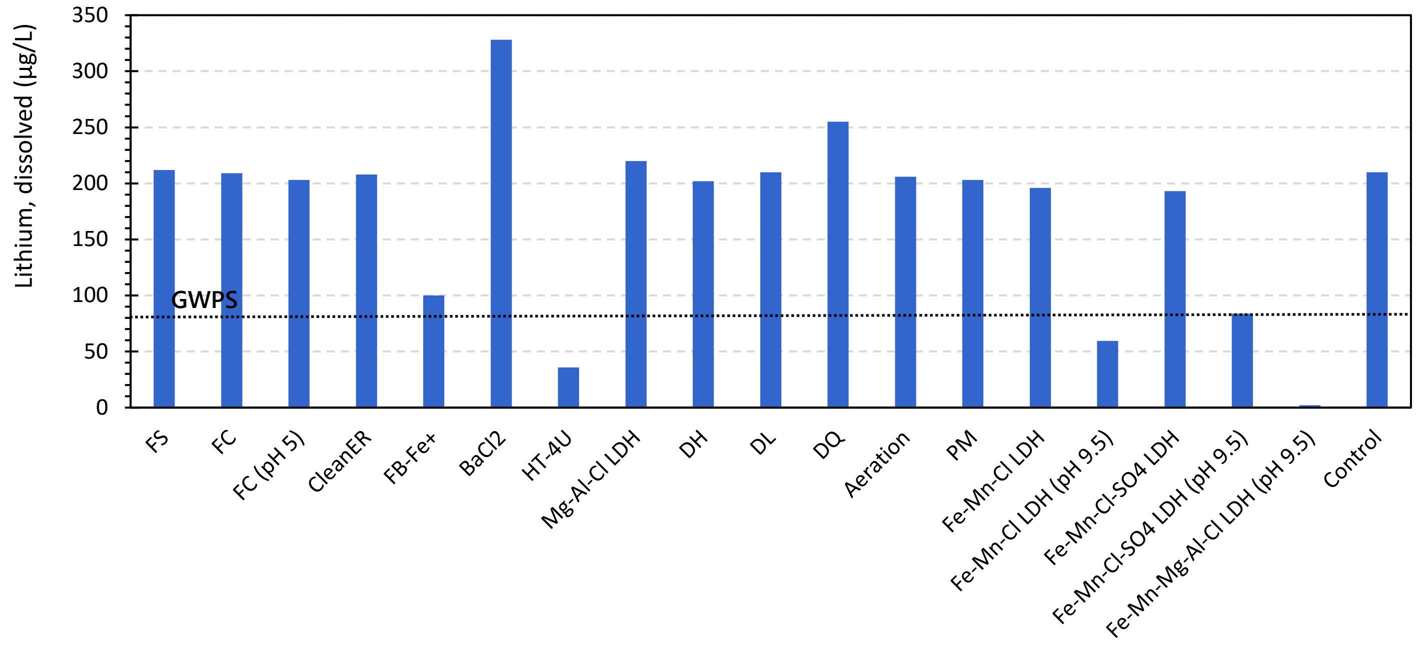
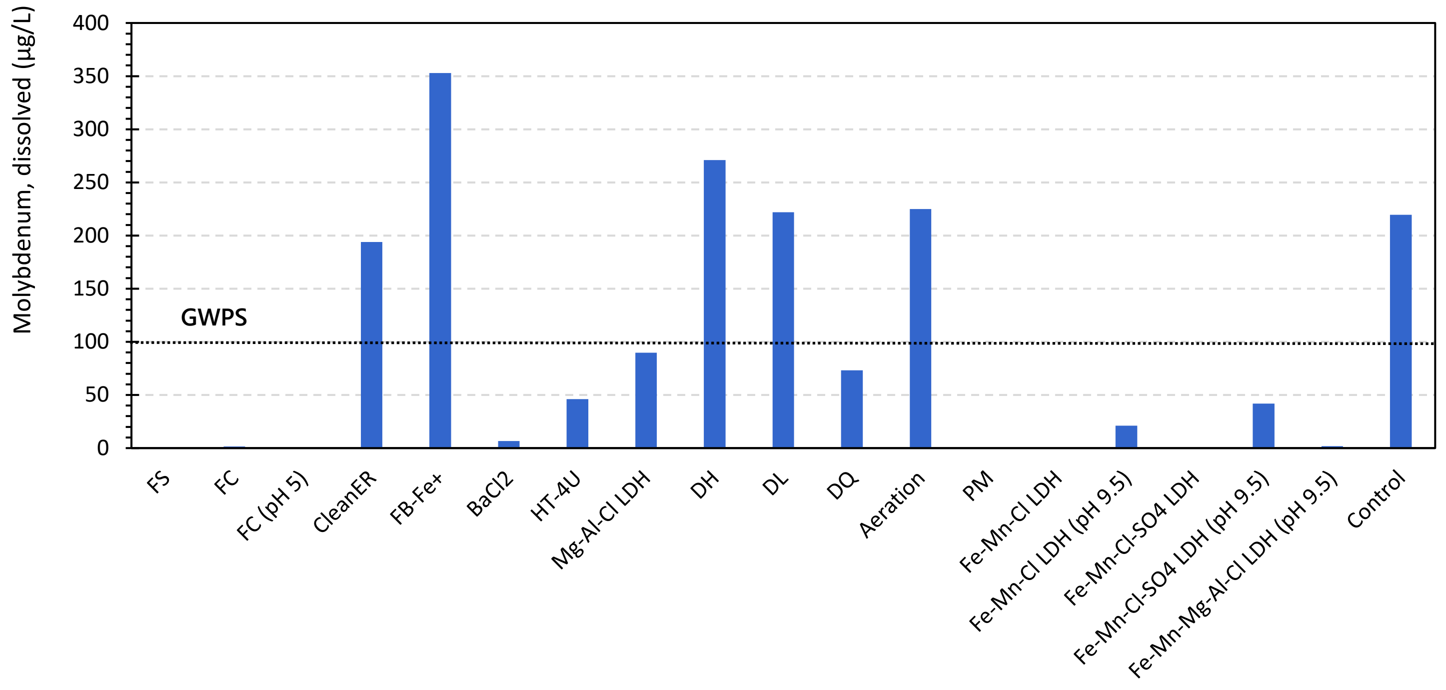
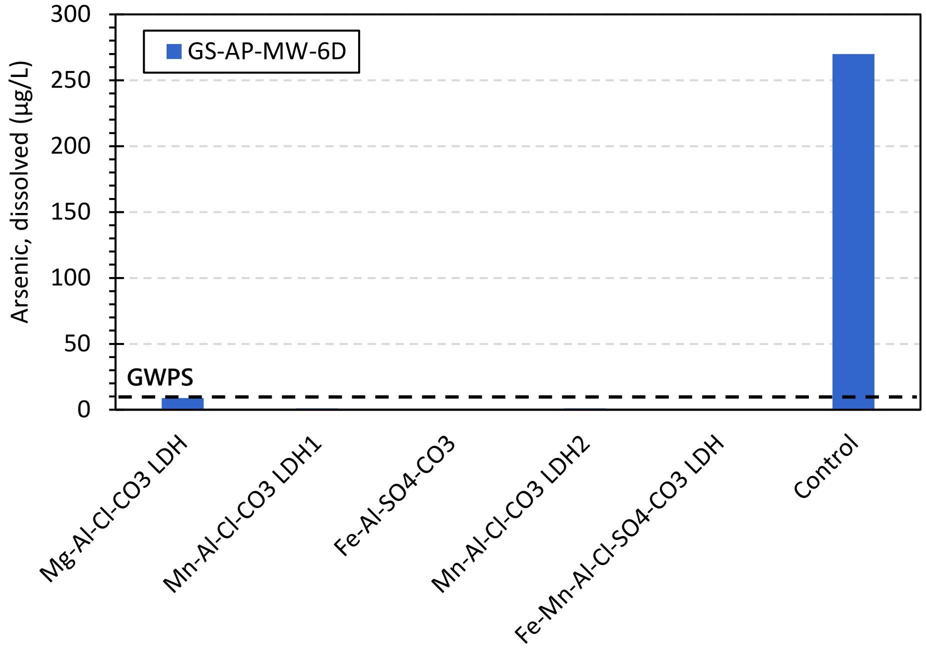


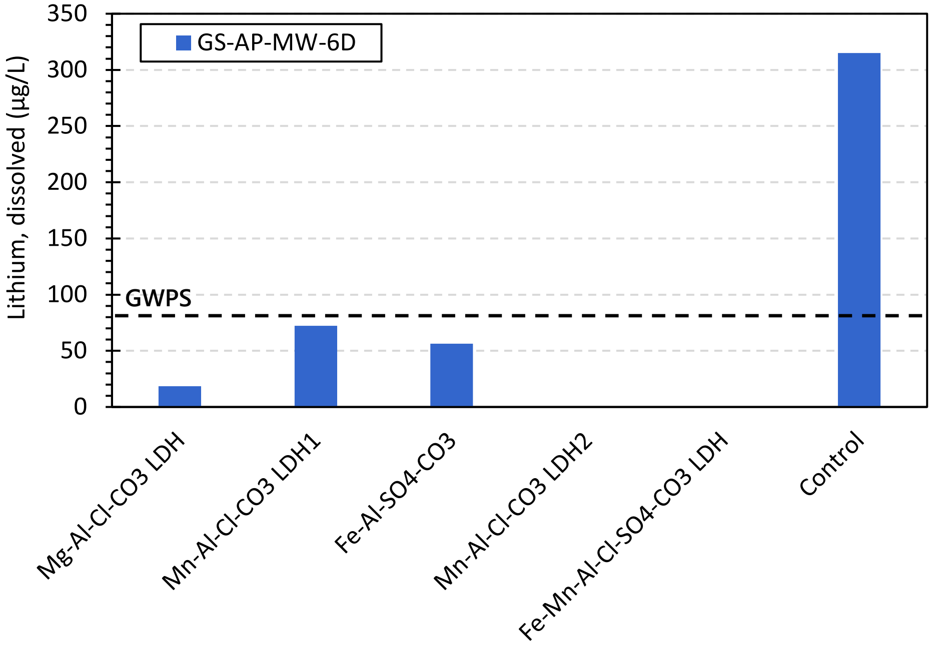




Notes:
Control, FS, and PM samples were prepared in duplicate. Average results are shown here.
All treatments shown on graph were tested as part of the screening batch tests. Results not visible indicate that concentrations were either less than the detection limit or were detected at concentrations too low to be seen on the graph.
µg/L: microgram per liter
BaCl2: barium chloride
CleanER: CleanER-10
DH: dolomite fines (Helena Quarry)
DL: dolomite fines (Lakeshore Quarry)
DQ: dolomitic quicklime
FB-Fe+: Ferroblack-Fe+
FC: ferric chloride
Fe-Mn-Cl LDH: ferric chloride with manganese chloride, followed by potassium permanganate
Fe-Mn-Cl-SO4 LDH: ferrous sulfate with manganese chloride, followed by potassium permanganate
Fe-Mn-Mg-Al-Cl LDH (pH 9.5): ferric chloride with manganese chloride and magnesium chloride, followed by sodium aluminate and potassium permanganate
FS: ferrous sulfate
GWPS: groundwater protection standard
HT-4U: granular hydrotalcite
Mg-Al-Cl LDH: magnesium chloride, followed by sodium aluminate
PM: potassium permanganate

Figure 3
Screening Batch Test Results for GS-AP-MW-7
Laboratory Treatability Study Results
Plant Gorgas





Notes:

All treatments shown on graph were tested as part of the optimization batch tests. Results not visible indicate that concentrations were either less than the detection limit or were detected at concentrations too low to be seen on the graph.

Mn-Al-Cl-CO3 LDH2 was tested in duplicate. The average result is shown here.

µg/L: microgram per liter

Fe-Al-SO4-CO3: ferrous sulfate, followed by sodium aluminate with sodium carbonate

Fe-Mn-Al-Cl-SO4-CO3 LDH: ferrous sulfate and manganese chloride, followed by sodium aluminate and potassium permanganate with sodium carbonate

GWPS: groundwater protection standard

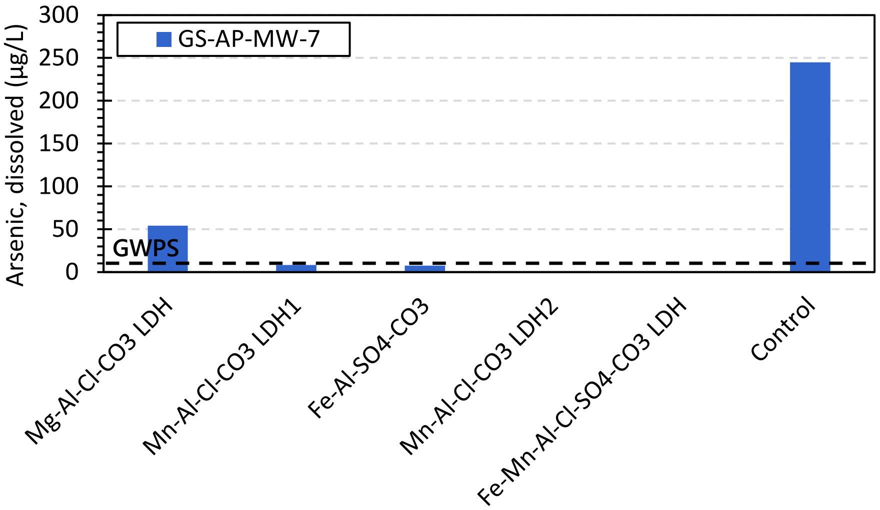
Mg-Al-Cl-CO3 LDH: magnesium chloride, followed by sodium aluminate with sodium carbonate

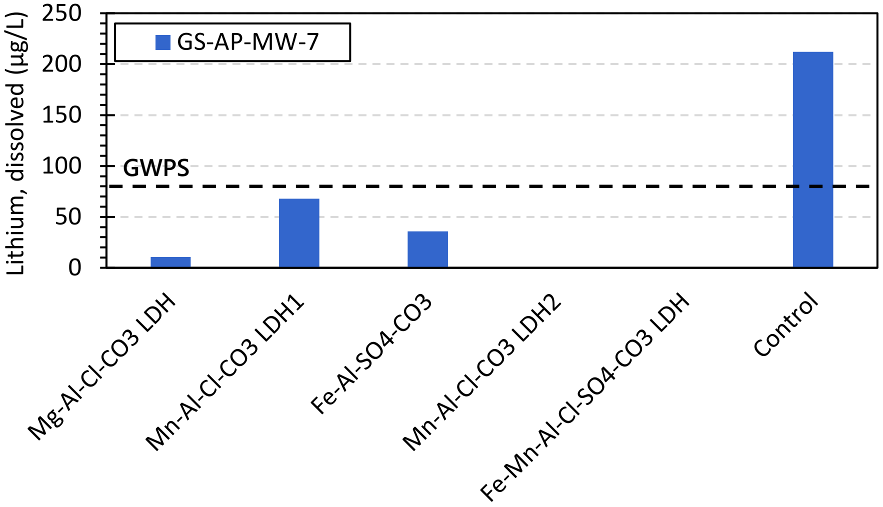
Mn-Al-Cl-CO3 LDH1: manganese chloride, followed by sodium aluminate with sodium carbonate

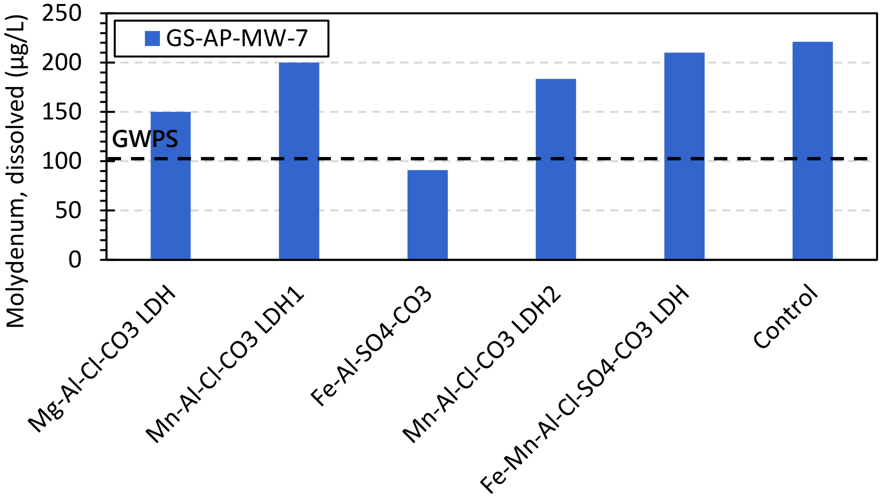
Mn-Al-Cl-CO3 LDH2: manganese chloride, followed by sodium aluminate and potassium permanganate with sodium carbonate

Figure 4

Optimization Batch Test Round 1 Results for GS-AP-MW-6D







Notes:

All treatments shown on graph were tested as part of the optimization batch tests. Results not visible indicate that concentrations were either less than the detection limit or were detected at concentrations too low to be seen on the graph.

Mn-Al-Cl-CO3 LDH2 was tested in duplicate. The average result is shown here.

µg/L: microgram per liter

Fe-Al-SO4-CO3: ferrous sulfate, followed by sodium aluminate with sodium carbonate

Fe-Mn-Al-Cl-SO4-CO3 LDH: ferrous sulfate and manganese chloride, followed by sodium aluminate and potassium permanganate with sodium carbonate

GWPS: groundwater protection standard

Mg-Al-Cl-CO3 LDH: magnesium chloride, followed by sodium aluminate with sodium carbonate

Mn-Al-Cl-CO3 LDH1: manganese chloride, followed by sodium aluminate with sodium carbonate

Mn-Al-Cl-CO3 LDH2: manganese chloride, followed by sodium aluminate and potassium permanganate with sodium carbonate

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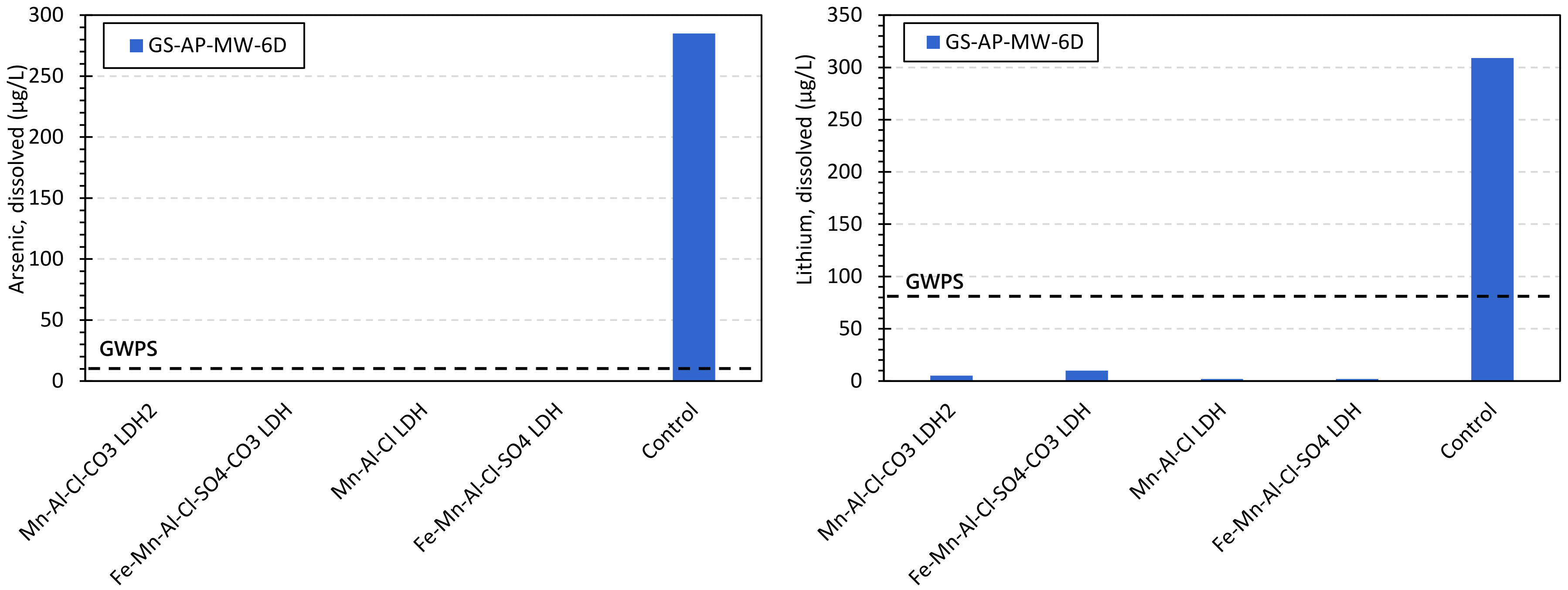
Figure 5
Optimization Batch Test Round 1 Results for GS-AP-MW-7

Laboratory Treatability Study Results
Plant Gorgas



Notes:

All treatments shown on graph were tested as part of the optimization batch tests. Results not visible indicate that concentrations were either less than the detection limit or were detected at concentrations too low to be seen on the graph.

Mn-Al-Cl-CO3 LDH2 was tested in duplicate. The average result is shown here.

µg/L: microgram per liter

Fe-Mn-Al-Cl-SO4-CO3 LDH: ferrous sulfate and manganese chloride, followed by sodium aluminate and potassium permanganate with sodium carbonate

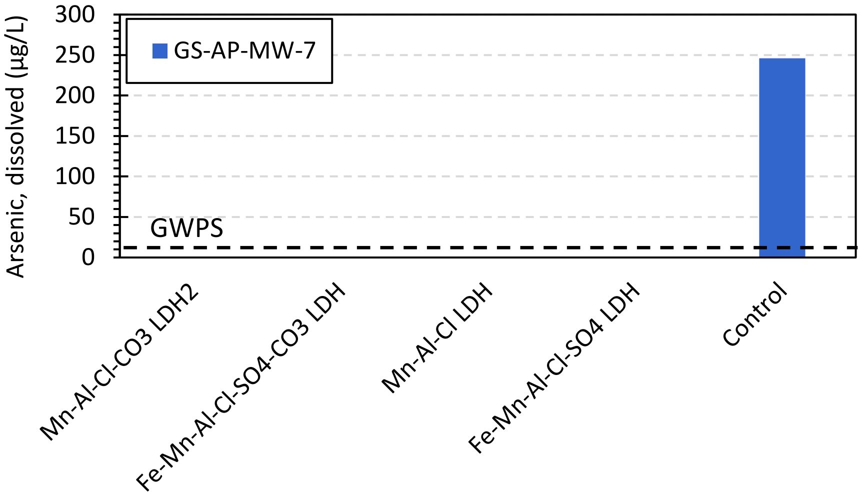
Fe-Mn-Al-Cl-SO4 LDH: ferrous sulfate and manganese chloride, followed by sodium aluminate and potassium permanganate

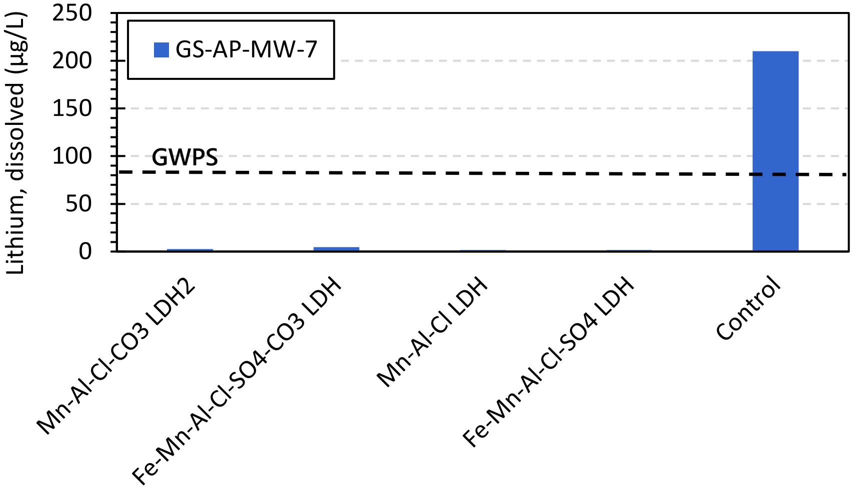
GWPS: groundwater protection standard

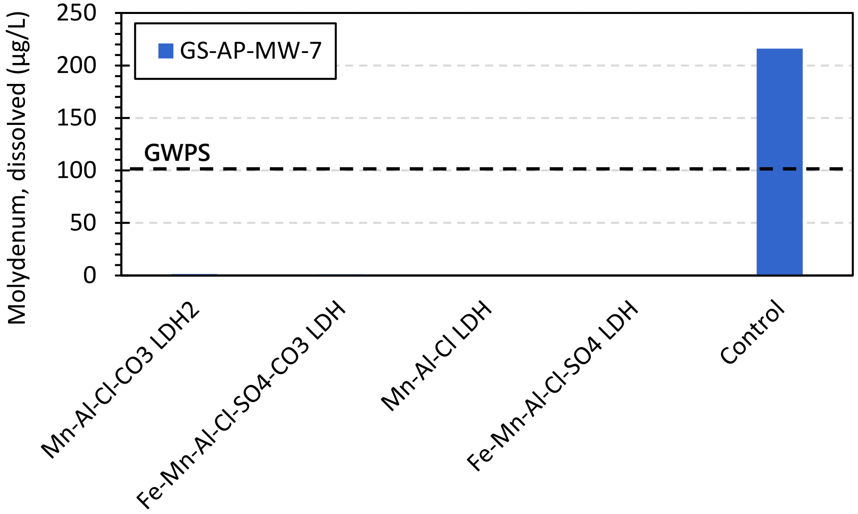
Mn-Al-Cl-CO3 LDH2: manganese chloride, followed by sodium aluminate and potassium permanganate with sodium carbonate

Mn-Al-Cl LDH: manganese chloride, followed by sodium aluminate and potassium permanganate

Figure 6
Optimization Batch Test Round 2 Results for GS-AP-MW-6D







Notes:
All treatments shown on graph were tested as part of the optimization batch tests. Results not visible indicate that concentrations were either less than the detection limit or were detected at concentrations too low to be seen on the graph.
Mn-Al-Cl-CO3 LDH2 was tested in duplicate. The average result is shown here.
µg/L: microgram per liter
Fe-Mn-Al-Cl-SO4-CO3 LDH: ferrous sulfate and manganese chloride, followed by sodium aluminate and potassium permanganate with sodium carbonate
Fe-Mn-Al-Cl-SO4 LDH: ferrous sulfate and manganese chloride, followed by sodium aluminate and potassium permanganate
GWPS: groundwater protection standard
Mn-Al-Cl-CO3 LDH2: manganese chloride, followed by sodium aluminate and potassium permanganate with sodium carbonate
Mn-Al-Cl LDH: manganese chloride, followed by sodium aluminate and potassium permanganate

Filepath: \\wcl-fs1\Mobile\Projects\Southern Company\Alabama Power ACMs - PRIVILEGED & CONFIDENTIAL\Treatability Studies\Reports\Gorgas\Figures\Figure 7 - Optimization Batch Test Round 2 Results for GS-AP-MW-7.docx

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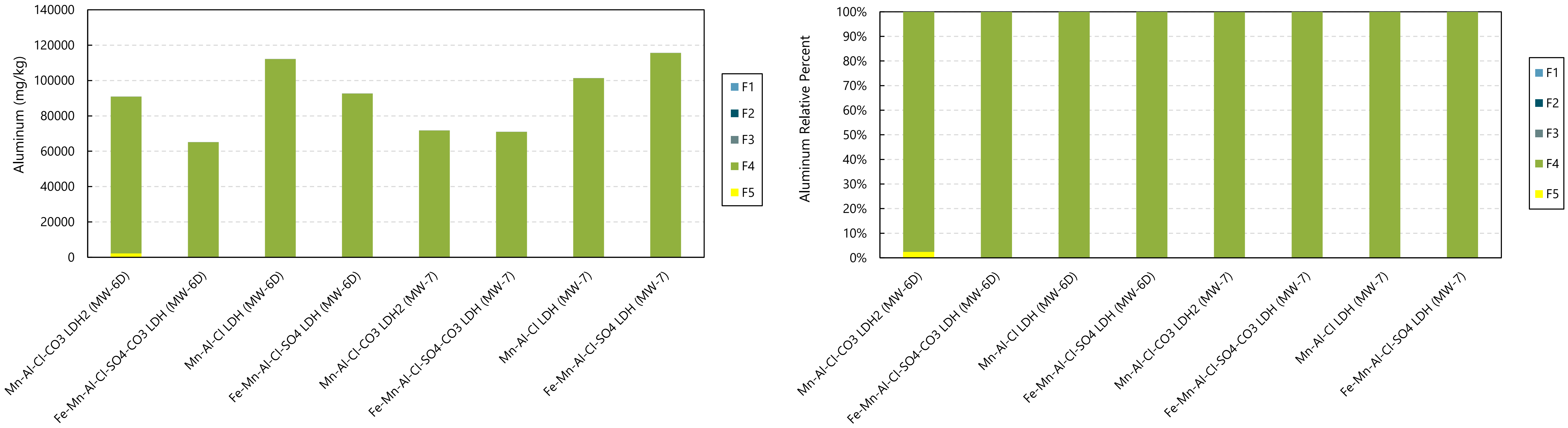
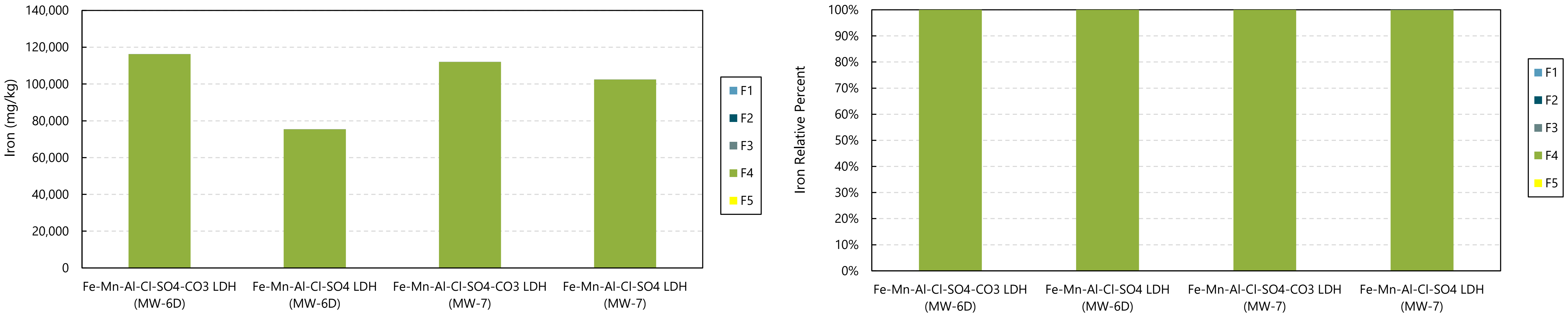
Figure 7
Optimization Batch Test Round 2 Results for GS-AP-MW-7
Laboratory Treatability Study Results
Plant Gorgas



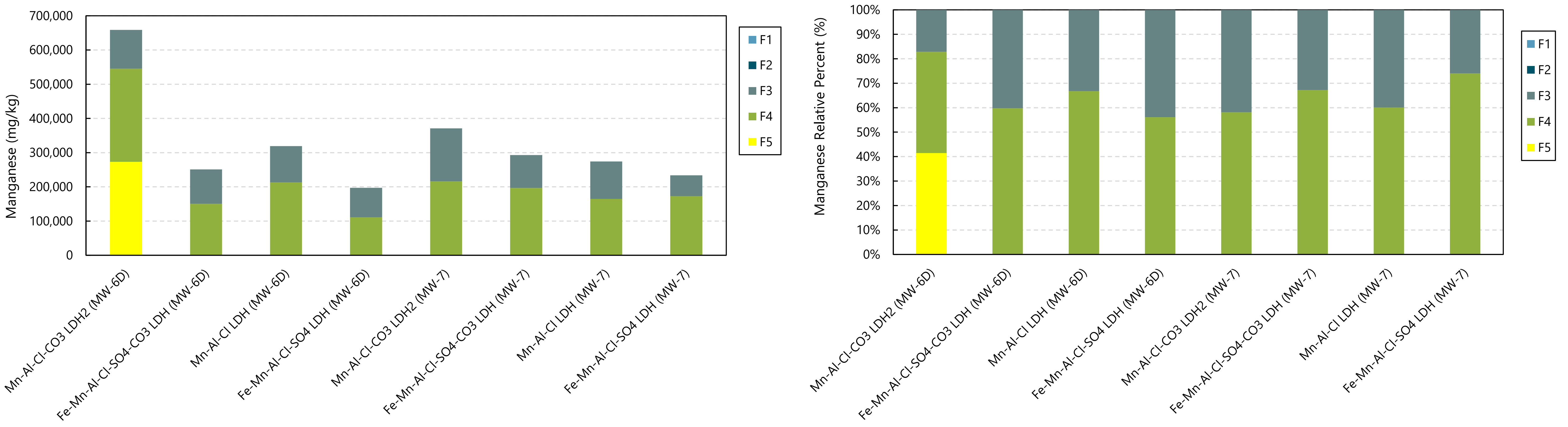
Notes:
Mn-Al-Cl-CO3 LDH2 (MW-7) was tested in duplicate. The average of the two results is shown here.
Aluminum was only analyzed in F3, F4, and F5.
F1: water soluble, dissolved, and weakly sorbed (extracted by 1 M magnesium chloride to pH 7)
F2: exchangeable, strongly sorbed, e.g., on oxides (extracted by 1 M monosodium phosphate at pH 5)
F3: reducible, e.g., poorly crystalline metal oxides such as aluminum, iron, and manganese oxides (extracted by 0.1 M hydroxylamine/hydrogen chloride adjusted to pH 2 with nitric acid)
F4: oxidizable, e.g., crystalline oxides (extracted by 16 M nitric acid)
F5: residual, e.g., recalcitrant phases in the post-treatment solids (prepared by U.S. Environmental Protection Agency Method 3050B)
Fe-Mn-Al-Cl-SO4-CO3 LDH: ferrous sulfate and manganese chloride, followed by sodium aluminate and potassium permanganate with sodium carbonate
Fe-Mn-Al-Cl-SO4 LDH: ferrous sulfate and manganese chloride, followed by sodium aluminate and potassium permanganate
M: molar
mg/kg: milligram per kilogram
Mn-Al-Cl-CO3 LDH2: manganese chloride, followed by sodium aluminate and potassium permanganate with sodium carbonate
Mn-Al-Cl LDH: manganese chloride, followed by sodium aluminate and potassium permanganate
SSE: selective sequential extraction

Figure 8
SSE Results of Aluminum for Post-Treatment Solids
Laboratory Treatability Study Results
Plant Gorgas



Notes:
Iron was only analyzed in F3, F4, and F5.
F1: water soluble, dissolved, and weakly sorbed (extracted by 1 M magnesium chloride to pH 7)
F2: exchangeable, strongly sorbed, e.g., on oxides (extracted by 1 M monosodium phosphate at pH 5)
F3: reducible, e.g., poorly crystalline metal oxides such as iron and manganese oxides (extracted by 0.1 M hydroxylamine/hydrogen chloride adjusted to pH 2 with nitric acid)
F4: oxidizable, e.g., crystalline oxides (extracted by 16 M nitric acid)
F5: residual, e.g., recalcitrant phases in the post-treatment solids (prepared by U.S. Environmental Protection Agency Method 3050B)
Fe-Mn-Al-Cl-SO4-CO3 LDH: ferrous sulfate and manganese chloride, followed by sodium aluminate and potassium permanganate with sodium carbonate
Fe-Mn-Al-Cl-SO4 LDH: ferrous sulfate and manganese chloride, followed by sodium aluminate and potassium permanganate
M: molar
mg/kg: milligram per kilogram
SSE: selective sequential extraction

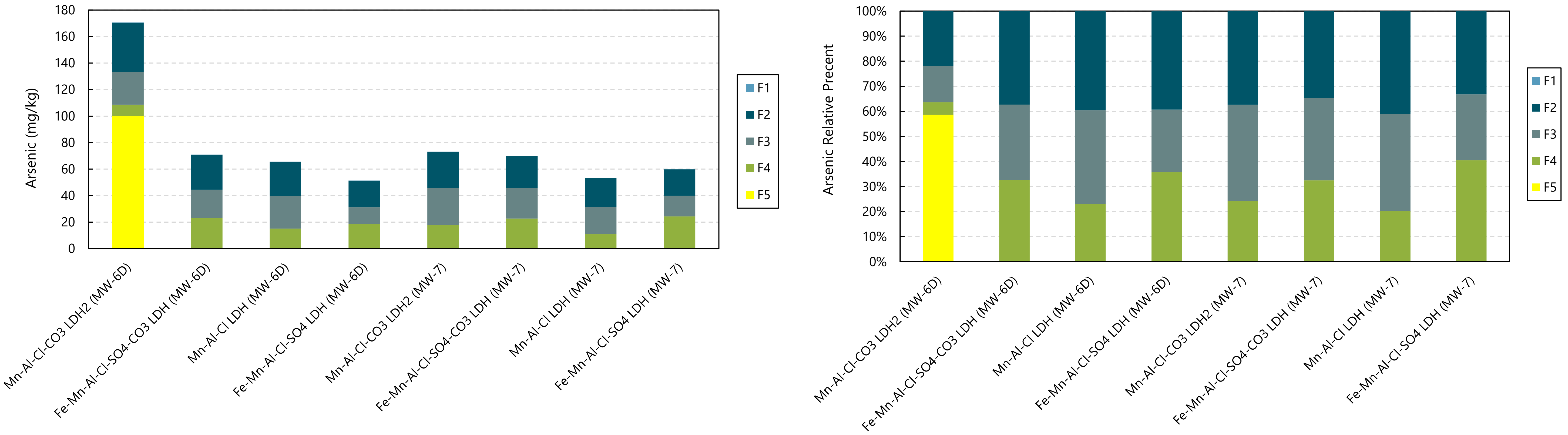
Figure 9
SSE Results of Iron for Post-Treatment Solids
Laboratory Treatability Study Results
Plant Gorgas



Notes:
Mn-Al-Cl-CO3 LDH2 (MW-7) was tested in duplicate. The average of the two results is shown here.
Manganese was only analyzed in F3, F4, and F5.
F1: water soluble, dissolved, and weakly sorbed (extracted by 1 M magnesium chloride to pH 7)
F2: exchangeable, strongly sorbed, e.g., on oxides (extracted by 1 M monosodium phosphate at pH 5)
F3: reducible, e.g., poorly crystalline metal oxides such as iron and manganese oxides (extracted by 0.1 M hydroxylamine/hydrogen chloride adjusted to pH 2 with nitric acid)
F4: oxidizable, e.g., crystalline oxides (extracted by 16 M nitric acid)
F5: residual, e.g., recalcitrant phases in the post-treatment solids (prepared by U.S. Environmental Protection Agency Method 3050B)
Fe-Mn-Al-Cl-SO4-CO3 LDH: ferrous sulfate and manganese chloride, followed by sodium aluminate and potassium permanganate with sodium carbonate
Fe-Mn-Al-Cl-SO4 LDH: ferrous sulfate and manganese chloride, followed by sodium aluminate and potassium permanganate
M: molar
mg/kg: milligram per kilogram
Mn-Al-Cl-CO3 LDH2: manganese chloride, followed by sodium aluminate and potassium permanganate with sodium carbonate
Mn-Al-Cl LDH: manganese chloride, followed by sodium aluminate and potassium permanganate
SSE: selective sequential extraction

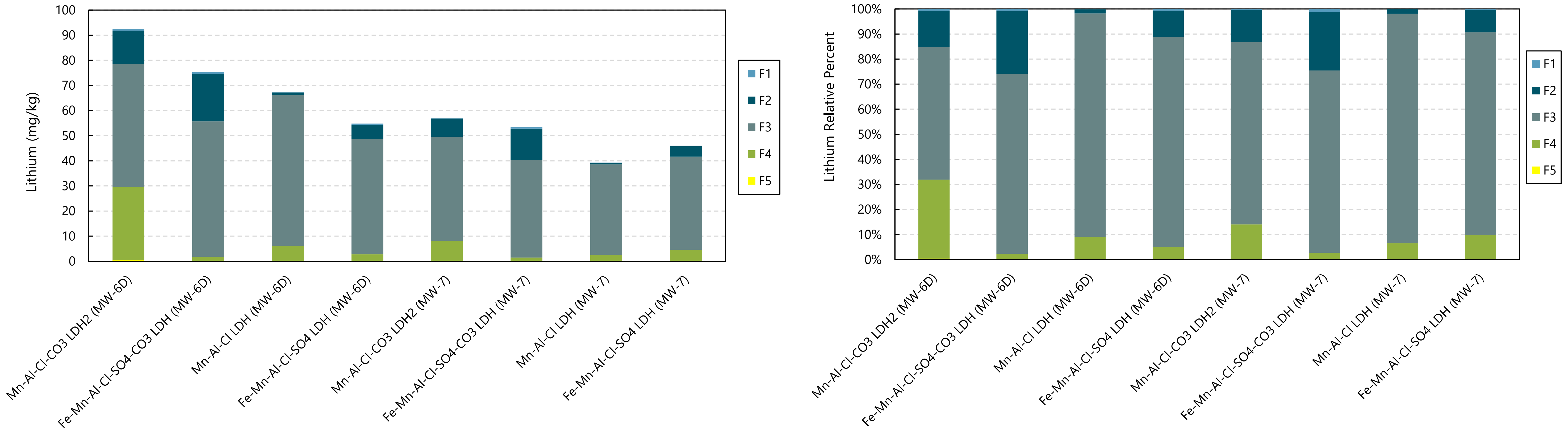
Figure 10
SSE Results of Manganese for Post-Treatment Solids

Laboratory Treatability Study Results
Plant Gorgas



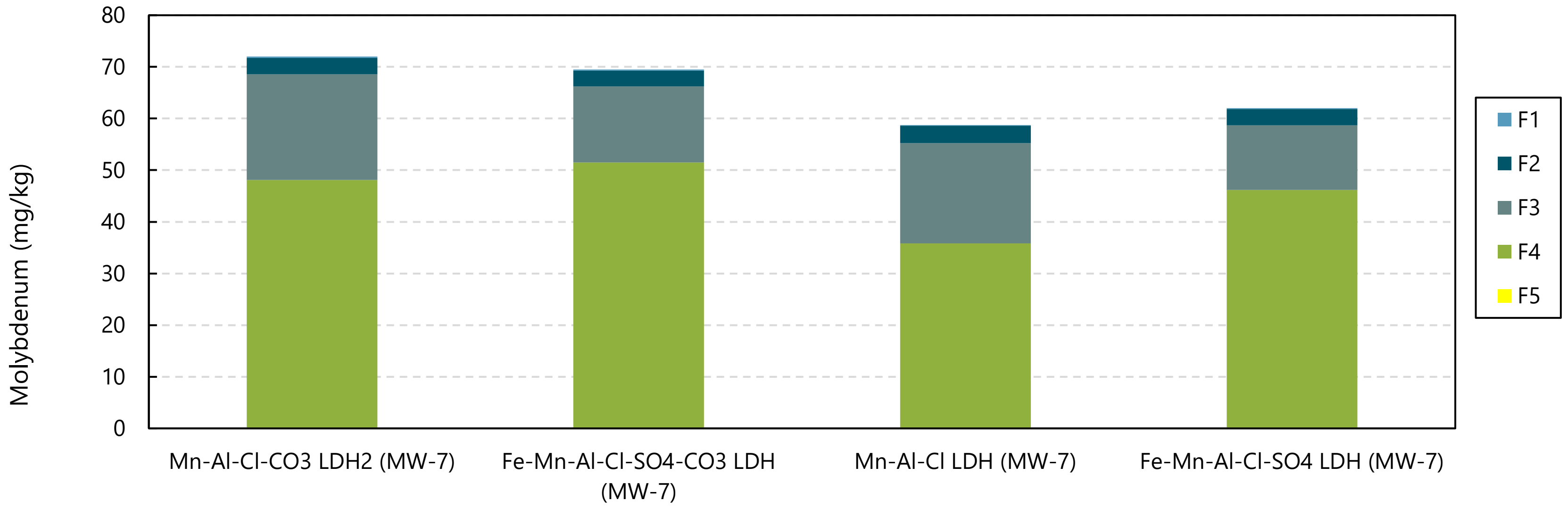
Notes:
Mn-Al-Cl-CO3 LDH2 (MW-7) was tested in duplicate. The average of the two results is shown here.
F1: water soluble, dissolved, and weakly sorbed (extracted by 1 M magnesium chloride to pH 7)
F2: exchangeable, strongly sorbed, e.g., on oxides (extracted by 1 M monosodium phosphate at pH 5)
F3: reducible, e.g., poorly crystalline metal oxides such as iron and manganese oxides (extracted by 0.1 M hydroxylamine/hydrogen chloride adjusted to pH 2 with nitric acid)
F4: oxidizable, e.g., crystalline oxides (extracted by 16 M nitric acid)
F5: residual, e.g., recalcitrant phases in the post-treatment solids (prepared by U.S. Environmental Protection Agency Method 3050B)
Fe-Mn-Al-Cl-SO4-CO3 LDH: ferrous sulfate and manganese chloride, followed by sodium aluminate and potassium permanganate with sodium carbonate
Fe-Mn-Al-Cl-SO4 LDH: ferrous sulfate and manganese chloride, followed by sodium aluminate and potassium permanganate
M: molar
mg/kg: milligram per kilogram
Mn-Al-Cl-CO3 LDH2: manganese chloride, followed by sodium aluminate and potassium permanganate with sodium carbonate
Mn-Al-Cl LDH: manganese chloride, followed by sodium aluminate and potassium permanganate
SSE: selective sequential extraction

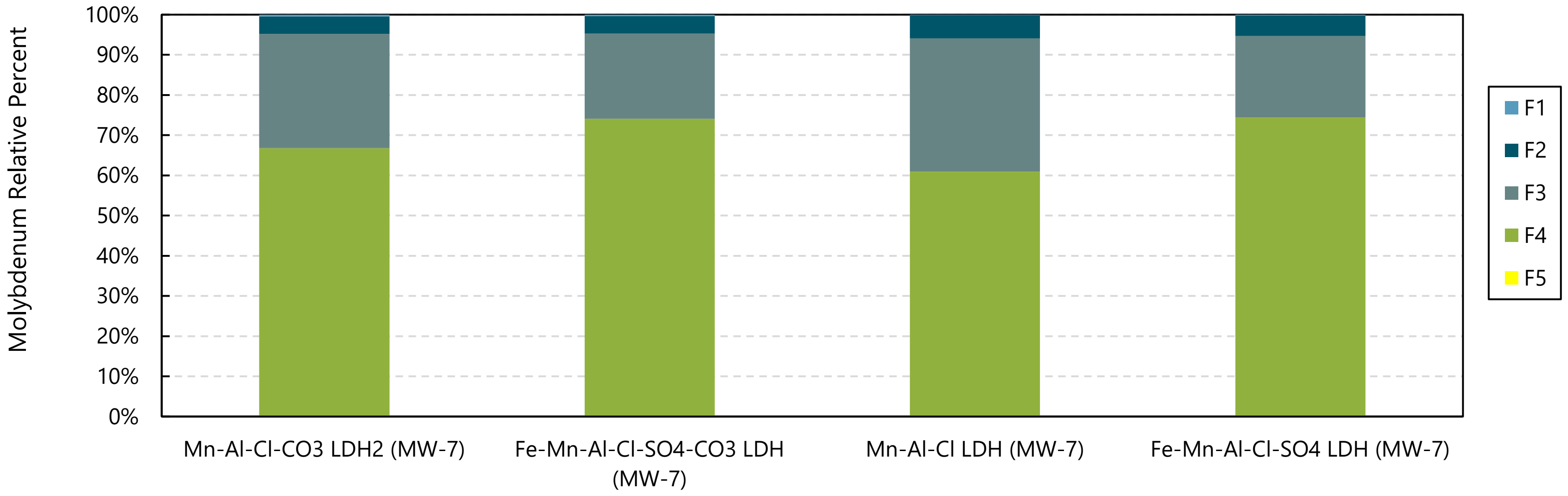
Figure 11
SSE Results of Arsenic for Post-Treatment Solids
Laboratory Treatability Study Results
Plant Gorgas



Notes:
Mn-Al-Cl-CO3 LDH2 (MW-7) was tested in duplicate. The average of the two results is shown here.
F1: water soluble, dissolved, and weakly sorbed (extracted by 1 M magnesium chloride to pH 7)
F2: exchangeable, strongly sorbed, e.g., on oxides (extracted by 1 M monosodium phosphate at pH 5)
F3: reducible, e.g., poorly crystalline metal oxides such as iron and manganese oxides (extracted by 0.1 M hydroxylamine/hydrogen chloride adjusted to pH 2 with nitric acid)
F4: oxidizable, e.g., crystalline oxides (extracted by 16 M nitric acid)
F5: residual, e.g., recalcitrant phases in the post-treatment solids (prepared by U.S. Environmental Protection Agency Method 3050B)
Fe-Mn-Al-Cl-SO4-CO3 LDH: ferrous sulfate and manganese chloride, followed by sodium aluminate and potassium permanganate with sodium carbonate
Fe-Mn-Al-Cl-SO4 LDH: ferrous sulfate and manganese chloride, followed by sodium aluminate and potassium permanganate
M: molar
mg/kg: milligram per kilogram
Mn-Al-Cl-CO3 LDH2: manganese chloride, followed by sodium aluminate and potassium permanganate with sodium carbonate
Mn-Al-Cl LDH: manganese chloride, followed by sodium aluminate and potassium permanganate
SSE: selective sequential extraction

Figure 12
SSE Results of Lithium for Post-Treatment Solids
Laboratory Treatability Study Results
Plant Gorgas





Notes:
Mn-Al-Cl-CO3 LDH2 (MW-7) was tested in duplicate. The average of the two results is shown here.
F1: water soluble, dissolved, and weakly sorbed (extracted by 1 M magnesium chloride to pH 7)
F2: exchangeable, strongly sorbed, e.g., on oxides (extracted by 1 M monosodium phosphate at pH 5)
F3: reducible, e.g., poorly crystalline metal oxides such as iron and manganese oxides (extracted by 0.1 M hydroxylamine/hydrogen chloride adjusted to pH 2 with nitric acid)
F4: oxidizable, e.g., crystalline oxides (extracted by 16 M nitric acid)
F5: residual, e.g., recalcitrant phases in the post-treatment solids (prepared by U.S. Environmental Protection Agency Method 3050B)
Fe-Mn-Al-Cl-SO4-CO3 LDH: ferrous sulfate and manganese chloride, followed by sodium aluminate and potassium permanganate with sodium carbonate
Fe-Mn-Al-Cl-SO4 LDH: ferrous sulfate and manganese chloride, followed by sodium aluminate and potassium permanganate
M: molar
mg/kg: milligram per kilogram
Mn-Al-Cl-CO3 LDH2: manganese chloride, followed by sodium aluminate and potassium permanganate with sodium carbonate
Mn-Al-Cl LDH: manganese chloride, followed by sodium aluminate and potassium permanganate
SSE: selective sequential extraction

Figure 13
SSE Results of Molybdenum for Post-Treatment Solids
Laboratory Treatability Study Results
Plant Gorgas

Appendix A

Laboratory Analytical Reports

August 10, 2022 Service Request No:K2208820

Masa Kanematsu
Anchor QEA, LLC
6720 SW Macadam Avenue
Suite 125
Portland, OR 97219

Laboratory Results for: Gorgas

Dear Masa,

Enclosed are the results of the sample(s) submitted to our laboratory August 03, 2022
For your reference, these analyses have been assigned our service request number **K2208820.**

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. All results are intended to be considered in their entirety, and ALS Group USA Corp. dba ALS Environmental (ALS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please contact me if you have any questions. My extension is 3376. You may also contact me via email at Mark.Harris@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

Mark Harris
Project Manager

ADDRESS 1317 S. 13th Avenue, Kelso, WA 98626
PHONE +1 360 577 7222 | FAX +1 360 636 1068
ALS Group USA, Corp.
dba ALS Environmental

Narrative Documents

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Client: Anchor QEA, LLC
Project: Gorgas
Sample Matrix: Water

Service Request: K2208820
Date Received: 08/03/2022

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples for the Tier II level requested by the client.

Sample Receipt:

Two water samples were received for analysis at ALS Environmental on 08/03/2022. Any discrepancies upon initial sample inspection are annotated on the sample receipt and preservation form included within this report. The samples were stored at minimum in accordance with the analytical method requirements.

Metals:

No significant anomalies were noted with this analysis.

Approved by ______________________ Date 08/10/2022

SAMPLE DETECTION SUMMARY

This form includes only detections above the reporting levels. For a full listing of sample results, continue to the Sample Results section of this Report.

CLIENT ID: GS-AP-MW-6D-20220802 **Lab ID: K2208820-001**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	43.7		0.09	0.50	ug/L	200.8
Iron, Dissolved	18.1		0.3	2.0	ug/L	200.8
Lithium, Dissolved	277		0.10	0.10	ug/L	200.8
Manganese, Dissolved	169		0.04	0.20	ug/L	200.8
Molybdenum, Dissolved	6.65		0.03	0.10	ug/L	200.8
Arsenic	107		0.09	0.50	ug/L	200.8
Iron	17.6		0.3	2.0	ug/L	200.8
Lithium	302		0.10	0.10	ug/L	200.8
Manganese	173		0.04	0.20	ug/L	200.8
Molybdenum	9.57		0.03	0.10	ug/L	200.8

CLIENT ID: GS-AP-MW-7-20220802 **Lab ID: K2208820-002**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	244		0.09	0.50	ug/L	200.8
Iron, Dissolved	202		0.3	2.0	ug/L	200.8
Lithium, Dissolved	185		0.10	0.10	ug/L	200.8
Manganese, Dissolved	33.4		0.04	0.20	ug/L	200.8
Molybdenum, Dissolved	215		0.03	0.10	ug/L	200.8
Arsenic	270		0.09	0.50	ug/L	200.8
Iron	212		0.3	2.0	ug/L	200.8
Lithium	202		0.10	0.10	ug/L	200.8
Manganese	35.4		0.04	0.20	ug/L	200.8
Molybdenum	226		0.03	0.10	ug/L	200.8

Sample Receipt Information

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Client: Anchor QEA, LLC **Service Request:**K2208820

Project: Gorgas/201114-01.01 Task 09

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
K2208820-001	GS-AP-MW-6D-20220802	8/2/2022	1330
K2208820-002	GS-AP-MW-7-20220802	8/2/2022	1335

K2208820

Chain of Custody Record & Laboratory Analysis Request

Laboratory Number: 503-972-5019	
Date:	8/3/2022
Project Name:	Gorgas
Project Number:	201114-01.01 Task 09
Project Manager:	Masa Kanematsu
Phone Number:	503-972-5001 (backup number: 971.334.8193)
Shipment Method:	ALS Carrier

ANCHOR QEA
Jessica Goin
6720 SW Macadam Ave
Suite 125
Portland OR 97219

Line	Field Sample ID	Collection		Matrix	No. of Containers	Parameters														Comments/Preservation
		Date	Time			Dissolved Metals (As, Li, Mo, Fe, Mn)	Total Metals (As, Li, Mo, Fe, Mn)													
1	GS-AP-MW-6D-20220802	8/2/2022	8/2/22 13:30	Water	2	X	X													HNO3 preserved. Each sample has one filtered and one unfiltered bottle for dissolved and total metals, respectively
2	GS-AP-MW-7-20220802	8/2/2022	8/2/22 13:35	Water	2	X	X													
3																				
4																				
5																				
6																				
7																				
8																				
9																				
10																				
11																				
12																				
13																				
14																				
15																				
16																				

Notes: Please Contact Masa (503-972-5001) if running > 10X dilution

Relinquished by:	Company:	Received by:	
Emma Nordlund	Anchor QEA	KMorrow ALS 8/3/22 1155	
Signature/Print Name:	Date/Time:	Signature/Print Name:	
	8/3/22 8:30 AM	KMorrow	
Relinquished by:	Company:	Received by:	
ALS		Kaitlin Mckenna ALS 8/3/22 1440	
Signature/Print Name:	Date/Time:	Signature/Print Name:	
KMorrow	8/3/22 1445		

Distribution: A copy will be made for the laboratory and client. The Project file will retain the original.

Page 1 of 1

PM Mack

Cooler Receipt and Preservation Form

Client Anchor QEA Service Request K22 08820

Received: 8/3/22 Opened: 8/3/22 By: KM Unloaded: 8/3/22 By: KM

1. Samples were received via? USPS Fed Ex UPS DHL PDX [✓ Courier] Hand Delivered
2. Samples were received in: (circle) [✓ Cooler] Box Envelope Other________ NA
3. Were custody seals on coolers? NA Y [✓ N] If yes, how many and where? ________

   If present, were custody seals intact? Y N If present, were they signed and dated? Y N

Temp Blank	Sample Temp	IR Gun	Cooler #/COC ID / NA	Out of temp indicate with "X"	PM Notified If out of temp	Tracking Number [✓ NA]	Filed
7.7	5.0	IR02					

4. Was a Temperature Blank present in cooler? NA [✓ Y] N If yes, notate the temperature in the appropriate column above:

   If no, take the temperature of a representative sample bottle contained within the cooler; notate in the column "Sample Temp":

5. Were samples received within the method specified temperature ranges? NA [✓ Y] N

   If no, were they received on ice and same day as collected? If not, notate the cooler # below and notify the PM. [✓ NA] Y N

If applicable, tissue samples were received: *Frozen* *Partially Thawed* *Thawed*

6. Packing material: *Inserts* *Baggies* [✓ *Bubble Wrap*] [✓ *Gel Packs*] *Wet Ice* *Dry Ice* *Sleeves* ________
7. Were custody papers properly filled out (ink, signed, etc.)? NA [✓ Y] N
8. Were samples received in good condition (unbroken) NA [✓ Y] N
9. Were all sample labels complete (ie, analysis, preservation, etc.)? NA [✓ Y] N
10. Did all sample labels and tags agree with custody papers? NA [✓ Y] N
11. Were appropriate bottles/containers and volumes received for the tests indicated? NA [✓ Y] N
12. Were the pH-preserved bottles (*see SMO GEN SOP*) received at the appropriate pH? *Indicate in the table below* ~~NA~~ [✓ Y] N
13. Were VOA vials received without headspace? *Indicate in the table below.* [✓ NA] Y N
14. Was C12/Res negative? [✓ NA] Y N
15. Were 100ml sterile microbiology bottles filled exactly to the 100ml mark? [✓ NA] Y N Under filled Overfilled

Sample ID on Bottle	Sample ID on COC	Identified by:

SHORT HOLD TIME

Sample ID	Bottle Count Bottle Type	Head-space	Broke	pH	Reagent	Volume added	Reagent Lot Number	Initials	Time

Notes, Discrepancies, Resolutions: Temp Blank isolated from samples

:________

Miscellaneous Forms

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Inorganic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated value.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.
H	The holding time for this test is immediately following sample collection. The samples were analyzed as soon as possible after receipt by the laboratory.

Metals Data Qualifiers

#	The control limit criteria is not applicable.
J	The result is an estimated value.
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
M	The duplicate injection precision was not met.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
S	The reported value was determined by the Method of Standard Additions (MSA).
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
+	The correlation coefficient for the MSA is less than 0.995.
Q	See case narrative. One or more quality control criteria was outside the limits.

Organic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
A	A tentatively identified compound, a suspected aldol-condensation product.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
C	The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
D	The reported result is from a dilution.
E	The result is an estimated value.
J	The result is an estimated value.
N	The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
P	The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a chromatographic interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.

Additional Petroleum Hydrocarbon Specific Qualifiers

F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
Y	The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
Z	The chromatographic fingerprint does not resemble a petroleum product.

ALS Group USA Corp. dba ALS Environmental (ALS) - Kelso
State Certifications, Accreditations, and Licenses

Agency	Web Site	Number
Alaska DEH	http://dec.alaska.gov/eh/lab/cs/csapproval.htm	UST-040
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0339
Arkansas - DEQ	http://www.adeq.state.ar.us/techsvs/labcert.htm	88-0637
California DHS (ELAP)	http://www.cdph.ca.gov/certlic/labs/Pages/ELAP.aspx	2795
DOD ELAP	http://www.denix.osd.mil/edqw/Accreditation/AccreditedLabs.cfm	L16-58-R4
Florida DOH	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E87412
Hawaii DOH	http://health.hawaii.gov/	-
ISO 17025	http://www.pjlabs.com/	L16-57
Louisiana DEQ	http://www.deq.louisiana.gov/page/la-lab-accreditation	03016
Maine DHS	http://www.maine.gov/dhhs/	WA01276
Minnesota DOH	http://www.health.state.mn.us/accreditation	053-999-457
Nevada DEP	http://ndep.nv.gov/bsdw/labservice.htm	WA01276
New Jersey DEP	http://www.nj.gov/dep/enforcement/oqa.html	WA005
New York - DOH	https://www.wadsworth.org/regulatory/elap	12060
North Carolina DEQ	https://deq.nc.gov/about/divisions/water-resources/water-resources-data/water-sciences-home-page/laboratory-certification-branch/non-field-lab-certification	605
Oklahoma DEQ	http://www.deq.state.ok.us/CSDnew/labcert.htm	9801
Oregon – DEQ (NELAP)	http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	WA100010
South Carolina DHEC	http://www.scdhec.gov/environment/EnvironmentalLabCertification/	61002
Texas CEQ	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	T104704427
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C544
Wyoming (EPA Region 8)	https://www.epa.gov/region8-waterops/epa-region-8-certified-drinking-water	-
Kelso Laboratory Website	www.alsglobal.com	NA

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. A complete listing of specific NELAP-certified analytes, can be found in the certification section at www.ALSGlobal.com or at the accreditation bodies web site.

Please refer to the certification and/or accreditation body's web site if samples are submitted for compliance purposes. The states highlighted above, require the analysis be listed on the state certification if used for compliance purposes and if the method/anlayte is offered by that state.

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LOD	Limit of Detection
LOQ	Limit of Quantitation
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Analyst Summary report

Client: Anchor QEA, LLC **Service Request:** K2208820
Project: Gorgas/201114-01.01 Task 09

Sample Name: GS-AP-MW-6D-20220802 **Date Collected:** 08/2/22
Lab Code: K2208820-001 **Date Received:** 08/3/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ABOYER	EMCALLISTER

Sample Name: GS-AP-MW-7-20220802 **Date Collected:** 08/2/22
Lab Code: K2208820-002 **Date Received:** 08/3/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ABOYER	EMCALLISTER

Sample Results

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RIGHT SOLUTIONS | RIGHT PARTNER

Metals

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Client:	Anchor QEA, LLC	**Service Request:**	K2208820
Project:	Gorgas/201114-01.01 Task 09	**Date Collected:**	08/02/22 13:30
Sample Matrix:	Water	**Date Received:**	08/03/22 14:40
Sample Name:	GS-AP-MW-6D-20220802	**Basis:**	NA
Lab Code:	K2208820-001		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**43.7**	ug/L	0.50	0.09	1	08/09/22 12:38	08/08/22	
Iron	200.8	**18.1**	ug/L	2.0	0.3	1	08/09/22 12:38	08/08/22	
Lithium	200.8	**277**	ug/L	0.10	0.10	1	08/09/22 12:38	08/08/22	
Manganese	200.8	**169**	ug/L	0.20	0.04	1	08/09/22 12:38	08/08/22	
Molybdenum	200.8	**6.65**	ug/L	0.10	0.03	1	08/09/22 12:38	08/08/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2208820
Project:	Gorgas/201114-01.01 Task 09	**Date Collected:**	08/02/22 13:30
Sample Matrix:	Water	**Date Received:**	08/03/22 14:40
Sample Name:	GS-AP-MW-6D-20220802	**Basis:**	NA
Lab Code:	K2208820-001		

Total Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**107**	ug/L	0.50	0.09	1	08/09/22 12:29	08/08/22	
Iron	200.8	**17.6**	ug/L	2.0	0.3	1	08/09/22 12:29	08/08/22	
Lithium	200.8	**302**	ug/L	0.10	0.10	1	08/09/22 12:29	08/08/22	
Manganese	200.8	**173**	ug/L	0.20	0.04	1	08/09/22 12:29	08/08/22	
Molybdenum	200.8	**9.57**	ug/L	0.10	0.03	1	08/09/22 12:29	08/08/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2208820
Project:	Gorgas/201114-01.01 Task 09	**Date Collected:**	08/02/22 13:35
Sample Matrix:	Water	**Date Received:**	08/03/22 14:40
Sample Name:	GS-AP-MW-7-20220802	**Basis:**	NA
Lab Code:	K2208820-002		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**244**	ug/L	0.50	0.09	1	08/09/22 12:40	08/08/22	
Iron	200.8	**202**	ug/L	2.0	0.3	1	08/09/22 12:40	08/08/22	
Lithium	200.8	**185**	ug/L	0.10	0.10	1	08/09/22 12:40	08/08/22	
Manganese	200.8	**33.4**	ug/L	0.20	0.04	1	08/09/22 12:40	08/08/22	
Molybdenum	200.8	**215**	ug/L	0.10	0.03	1	08/09/22 12:40	08/08/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2208820
Project:	Gorgas/201114-01.01 Task 09	**Date Collected:**	08/02/22 13:35
Sample Matrix:	Water	**Date Received:**	08/03/22 14:40
Sample Name:	GS-AP-MW-7-20220802	**Basis:**	NA
Lab Code:	K2208820-002		

Total Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**270**	ug/L	0.50	0.09	1	08/09/22 12:31	08/08/22	
Iron	200.8	**212**	ug/L	2.0	0.3	1	08/09/22 12:31	08/08/22	
Lithium	200.8	**202**	ug/L	0.10	0.10	1	08/09/22 12:31	08/08/22	
Manganese	200.8	**35.4**	ug/L	0.20	0.04	1	08/09/22 12:31	08/08/22	
Molybdenum	200.8	**226**	ug/L	0.10	0.03	1	08/09/22 12:31	08/08/22	

QC Summary Forms

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Metals

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Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2208820
Project:	Gorgas/201114-01.01 Task 09	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	KQ2212983-01		

Total Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	ND U	ug/L	0.50	0.09	1	08/09/22 12:01	08/08/22	
Iron	200.8	ND U	ug/L	2.0	0.3	1	08/09/22 12:01	08/08/22	
Lithium	200.8	ND U	ug/L	0.10	0.10	1	08/09/22 12:01	08/08/22	
Manganese	200.8	ND U	ug/L	0.20	0.04	1	08/09/22 12:01	08/08/22	
Molybdenum	200.8	ND U	ug/L	0.10	0.03	1	08/09/22 12:01	08/08/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2208820
Project:	Gorgas/201114-01.01 Task 09	**Date Collected:**	08/02/22
Sample Matrix:	Water	**Date Received:**	08/03/22
		Date Analyzed:	08/9/22
		Date Extracted:	08/8/22

Matrix Spike Summary
Total Metals

Sample Name:	GS-AP-MW-7-20220802	**Units:**	ug/L
Lab Code:	K2208820-002	**Basis:**	NA
Analysis Method:	200.8		
Prep Method:	EPA CLP ILM04.0		

Matrix Spike
KQ2212983-05

Analyte Name	Sample Result	Result	Spike Amount	% Rec	% Rec Limits
Arsenic	270	311	50.0	82 #	70-130
Iron	212	254	50.0	84 #	70-130
Lithium	202	250	50.0	96 #	70-130
Manganese	35.4	57.8	25.0	89	70-130
Molybdenum	226	250	25.0	98 #	70-130

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Matrix Spike and Matrix Spike Duplicate Data is presented for information purposes only. The matrix may or may not be relevant to samples reported in this report. The laboratory evaluates system performance based on the LCS and LCSD control limits.

Printed 8/10/2022 11:09:46 AM Superset Reference:22-0000635781 rev 00

Client:	Anchor QEA, LLC	**Service Request:**	K2208820
Project	Gorgas/201114-01.01 Task 09	**Date Collected:**	08/02/22
Sample Matrix:	Water	**Date Received:**	08/03/22
		Date Analyzed:	08/09/22

Replicate Sample Summary
Total Metals

Sample Name:	GS-AP-MW-7-20220802	**Units:**	ug/L
Lab Code:	K2208820-002	**Basis:**	NA

Analyte Name	Analysis Method	MRL	MDL	Sample Result	Duplicate Sample KQ2212983-06 Result	Average	RPD	RPD Limit
Arsenic	200.8	0.50	0.09	270	269	270	<1	20
Iron	200.8	2.0	0.3	212	206	209	3	20
Lithium	200.8	0.10	0.10	202	204	203	<1	20
Manganese	200.8	0.20	0.04	35.4	35.2	35.3	<1	20
Molybdenum	200.8	0.10	0.03	226	235	231	4	20

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client:	Anchor QEA, LLC	**Service Request:**	K2208820
Project:	Gorgas/201114-01.01 Task 09	**Date Analyzed:**	08/09/22
Sample Matrix:	Water		

Lab Control Sample Summary
Total Metals

Units:ug/L
Basis:NA

Lab Control Sample
KQ2212983-02

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Arsenic	200.8	51.2	50.0	102	85-115
Iron	200.8	53.7	50.0	107	85-115
Lithium	200.8	51.2	50.0	102	85-115
Manganese	200.8	26.4	25.0	105	85-115
Molybdenum	200.8	26.0	25.0	104	85-115

December 07, 2022 Service Request No:K2214178

Masa Kanematsu
Anchor QEA, LLC
6720 SW Macadam Avenue
Suite 125
Portland, OR 97219

Laboratory Results for: 2022-Gorgas

Dear Masa,

Enclosed are the results of the sample(s) submitted to our laboratory December 01, 2022
For your reference, these analyses have been assigned our service request number **K2214178.**

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. All results are intended to be considered in their entirety, and ALS Group USA Corp. dba ALS Environmental (ALS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please contact me if you have any questions. My extension is 3376. You may also contact me via email at Mark.Harris@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

Mark Harris
Project Manager

ADDRESS 1317 S. 13th Avenue, Kelso, WA 98626
PHONE +1 360 577 7222 | FAX +1 360 636 1068
ALS Group USA, Corp.
dba ALS Environmental

Narrative Documents

ALS Environmental—Kelso Laboratory
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Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Client: Anchor QEA, LLC
Project: 2022-Gorgas
Sample Matrix: Water

Service Request: K2214178
Date Received: 12/01/2022

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples for the Tier II level requested by the client.

Sample Receipt:

Two water samples were received for analysis at ALS Environmental on 12/01/2022. Any discrepancies upon initial sample inspection are annotated on the sample receipt and preservation form included within this report. The samples were stored at minimum in accordance with the analytical method requirements.

Metals:

No significant anomalies were noted with this analysis.

Approved by ______________________ Date 12/07/2022

SAMPLE DETECTION SUMMARY

This form includes only detections above the reporting levels. For a full listing of sample results, continue to the Sample Results section of this Report.

CLIENT ID: GS-As-Spike-Sol **Lab ID: K2214178-002**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic	9920		0.9	5.0	ug/L	200.8

CLIENT ID: GS-AP-MW-6D-As-Spiked **Lab ID: K2214178-001**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	145		0.09	0.50	ug/L	200.8

Sample Receipt Information

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

RIGHT SOLUTIONS | RIGHT PARTNER

Client: Anchor QEA, LLC **Service Request:** K2214178

Project: 2022-Gorgas/221114-10.01 Task 05

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
K2214178-001	GS-AP-MW-6D-As-Spiked	11/23/2022	1225
K2214178-002	GS-As-Spike-Sol	11/23/2022	1230

Chain of Custody Record & Laboratory Analysis Request

K2214178

ANCHOR QEA
Jessica Goin
6720 SW Macadam Ave
Suite 125
Portland OR 97219

Laboratory Number: 503-972-5019	
Date:	12/1/2022
Project Name:	Gorgas
Project Number:	221114-10.01 Task 05
Project Manager:	Masa Kanematsu
Phone Number:	503-972-5001 (backup number: 503-798-3456)
Shipment Method:	ALS Carrier

Line	Field Sample ID	Collection Date	Collection Time	Matrix	No. of Containers	Dissolved As	Total As	Comments/Preservation
1	GS-AP-MW-6D-As-Spiked	11/23/2022	12:25	Water	1	X		Field Filtered. Expected ~ 100 µg/L As.
2	GS-As-Spike-Sol	11/23/2022	12:30	Water	1		X	Unfiltered. Expected ~ 10 mg/L As.
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								
13								
14								
15								
16								

Notes: Analyze by EPA Method 200.8. Please analyze on a 10-Day TAT. Please Contact Masa (503-972-5001) if running > 10X dilution.

Relinquished by: Emma Nordlund	Company: Anchor QEA
Signature/Print Name:	Date/Time: 12/01/2022 9:15
Received by:	ALS
Signature/Print Name: Greg Rich	12-1-22 1015
Relinquished by:	Company: ALS
Signature/Print Name: Greg Rich	Date/Time: 12-1-22 1335
Received by:	12/1/22 1335
Signature/Print Name:	

Distribution: A copy will be made for the laboratory and client. The Project file will retain the original.

Page 1 of 1

PM MH

Cooler Receipt and Preservation Form

Client Anchor Service Request K22 14178

Received: 12/1/22 Opened: 12/1/22 By: Unloaded: 12/1/22 By:

1. Samples were received via? *USPS* *Fed Ex* *UPS* *DHL* *PDX* [✓ *Courier*] *Hand Delivered*
2. Samples were received in: (circle) *Cooler* *Box* *Envelope* *Other* ____________ *NA*
3. Were custody seals on coolers? NA Y N If yes, how many and where? ____________

   If present, were custody seals intact? Y N If present, were they signed and dated? Y N

Temp Blank	Sample Temp	IR Gun	Cooler #/COC ID / NA	Out of temp indicate with "X"	PM Notified If out of temp	Tracking Number NA	Filed
2.1		161					

4. Was a Temperature Blank present in cooler? NA [✓ Y] N If yes, notate the temperature in the appropriate column above:

   If no, take the temperature of a representative sample bottle contained within the cooler; notate in the column "Sample Temp":

5. Were samples received within the method specified temperature ranges? NA [✓ Y] N

   If no, were they received on ice and same day as collected? If not, notate the cooler # below and notify the PM. [✓ NA] Y N

If applicable, tissue samples were received: *Frozen* *Partially Thawed* *Thawed*

6. Packing material: *Inserts* [✓ *Baggies*] *Bubble Wrap* *Gel Packs* [✓ *Wet Ice*] *Dry Ice* *Sleeves* ____________
7. Were custody papers properly filled out (ink, signed, etc.)? NA [✓ Y] N
8. Were samples received in good condition (unbroken) NA [✓ Y] N
9. Were all sample labels complete (ie, analysis, preservation, etc.)? NA [✓ Y] N
10. Did all sample labels and tags agree with custody papers? NA [✓ Y] N
11. Were appropriate bottles/containers and volumes received for the tests indicated? NA [✓ Y] N
12. Were the pH-preserved bottles (*see SMO GEN SOP*) received at the appropriate pH? *Indicate in the table below* NA [✓ Y] N
13. Were VOA vials received without headspace? *Indicate in the table below.* [✓ NA] Y N
14. Was Cl2/Res negative? [✓ NA] Y N
15. Were 100ml sterile microbiology bottles filled exactly to the 100ml mark? [✓ NA] Y N Under filled Overfilled

Sample ID on Bottle	Sample ID on COC	Identified by:

Sample ID	Bottle Count Bottle Type	Head-space	Broke	pH	Reagent	Volume added	Reagent Lot Number	Initials	Time

Notes, Discrepancies, Resolutions: ____________

____

1/13/22 *Page of*

Miscellaneous Forms

ALS Environmental—Kelso Laboratory
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Inorganic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated value.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.
H	The holding time for this test is immediately following sample collection. The samples were analyzed as soon as possible after receipt by the laboratory.

Metals Data Qualifiers

#	The control limit criteria is not applicable.
J	The result is an estimated value.
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
M	The duplicate injection precision was not met.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
S	The reported value was determined by the Method of Standard Additions (MSA).
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
+	The correlation coefficient for the MSA is less than 0.995.
Q	See case narrative. One or more quality control criteria was outside the limits.

Organic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
A	A tentatively identified compound, a suspected aldol-condensation product.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
C	The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
D	The reported result is from a dilution.
E	The result is an estimated value.
J	The result is an estimated value.
N	The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
P	The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a chromatographic interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.

Additional Petroleum Hydrocarbon Specific Qualifiers

F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
Y	The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
Z	The chromatographic fingerprint does not resemble a petroleum product.

ALS Group USA Corp. dba ALS Environmental (ALS) - Kelso
State Certifications, Accreditations, and Licenses

Agency	Web Site	Number
Alaska DEH	http://dec.alaska.gov/eh/lab/cs/csapproval.htm	UST-040
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0339
Arkansas - DEQ	http://www.adeq.state.ar.us/techsvs/labcert.htm	88-0637
California DHS (ELAP)	http://www.cdph.ca.gov/certlic/labs/Pages/ELAP.aspx	2795
DOD ELAP	http://www.denix.osd.mil/edqw/Accreditation/AccreditedLabs.cfm	L16-58-R4
Florida DOH	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E87412
Hawaii DOH	http://health.hawaii.gov/	-
ISO 17025	http://www.pjlabs.com/	L16-57
Louisiana DEQ	http://www.deq.louisiana.gov/page/la-lab-accreditation	03016
Maine DHS	http://www.maine.gov/dhhs/	WA01276
Minnesota DOH	http://www.health.state.mn.us/accreditation	053-999-457
Nevada DEP	http://ndep.nv.gov/bsdw/labservice.htm	WA01276
New Jersey DEP	http://www.nj.gov/dep/enforcement/oqa.html	WA005
New York - DOH	https://www.wadsworth.org/regulatory/elap	12060
North Carolina DEQ	https://deq.nc.gov/about/divisions/water-resources/water-resources-data/water-sciences-home-page/laboratory-certification-branch/non-field-lab-certification	605
Oklahoma DEQ	http://www.deq.state.ok.us/CSDnew/labcert.htm	9801
Oregon – DEQ (NELAP)	http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	WA100010
South Carolina DHEC	http://www.scdhec.gov/environment/EnvironmentalLabCertification/	61002
Texas CEQ	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	T104704427
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C544
Wyoming (EPA Region 8)	https://www.epa.gov/region8-waterops/epa-region-8-certified-drinking-water	-
Kelso Laboratory Website	www.alsglobal.com	NA

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. A complete listing of specific NELAP-certified analytes, can be found in the certification section at www.ALSGlobal.com or at the accreditation bodies web site.
Please refer to the certification and/or accreditation body's web site if samples are submitted for compliance purposes. The states highlighted above, require the analysis be listed on the state certification if used for compliance purposes and if the method/anlayte is offered by that state.

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LOD	Limit of Detection
LOQ	Limit of Quantitation
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Analyst Summary report

Client: Anchor QEA, LLC
Service Request: K2214178
Project: 2022-Gorgas/221114-10.01 Task 05

Sample Name: GS-AP-MW-6D-As-Spiked
Date Collected: 11/23/22
Lab Code: K2214178-001
Date Received: 12/1/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	SSOLADEY	EMCALLISTER

Sample Name: GS-As-Spike-Sol
Date Collected: 11/23/22
Lab Code: K2214178-002
Date Received: 12/1/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	SSOLADEY	EMCALLISTER

Sample Results

ALS Environmental—Kelso Laboratory
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Metals

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www.alsglobal.com

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2214178
Project:	2022-Gorgas/221114-10.01 Task 05	**Date Collected:**	11/23/22 12:25
Sample Matrix:	Water	**Date Received:**	12/01/22 13:35
Sample Name:	GS-AP-MW-6D-As-Spiked	**Basis:**	NA
Lab Code:	K2214178-001		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**145**	ug/L	0.50	0.09	1	12/06/22 15:20	12/02/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2214178
Project:	2022-Gorgas/221114-10.01 Task 05	**Date Collected:**	11/23/22 12:30
Sample Matrix:	Water	**Date Received:**	12/01/22 13:35
Sample Name:	GS-As-Spike-Sol	**Basis:**	NA
Lab Code:	K2214178-002		

Total Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**9920**	ug/L	5.0	0.9	10	12/06/22 15:25	12/02/22	

QC Summary Forms

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Metals

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Client:	Anchor QEA, LLC	**Service Request:**	K2214178
Project:	2022-Gorgas/221114-10.01 Task 05	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	KQ2221303-01		

Total Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	ND U	ug/L	0.50	0.09	1	12/06/22 15:17	12/02/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2214178
Project:	2022-Gorgas/221114-10.01 Task 05	**Date Collected:**	11/23/22
Sample Matrix:	Water	**Date Received:**	12/01/22
		Date Analyzed:	12/6/22
		Date Extracted:	12/2/22

Matrix Spike Summary
Dissolved Metals

Sample Name:	GS-AP-MW-6D-As-Spiked	**Units:**	ug/L
Lab Code:	K2214178-001	**Basis:**	NA
Analysis Method:	200.8		
Prep Method:	EPA CLP ILM04.0		

Matrix Spike
KQ2221303-05

Analyte Name	Sample Result	Result	Spike Amount	% Rec	% Rec Limits
Arsenic	145	190	50.0	89	70-130

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Matrix Spike and Matrix Spike Duplicate Data is presented for information purposes only. The matrix may or may not be relevant to samples reported in this report. The laboratory evaluates system performance based on the LCS and LCSD control limits.

Client:	Anchor QEA, LLC	**Service Request:**	K2214178
Project	2022-Gorgas/221114-10.01 Task 05	**Date Collected:**	11/23/22
Sample Matrix:	Water	**Date Received:**	12/01/22
		Date Analyzed:	12/06/22

Replicate Sample Summary
Dissolved Metals

Sample Name:	GS-AP-MW-6D-As-Spiked	**Units:**	ug/L
Lab Code:	K2214178-001	**Basis:**	NA

Analyte Name	Analysis Method	MRL	MDL	Sample Result	Duplicate Sample KQ2221303-06 Result	Average	RPD	RPD Limit
Arsenic	200.8	0.50	0.09	145	146	146	<1	20

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client:	Anchor QEA, LLC	**Service Request:**	K2214178
Project:	2022-Gorgas/221114-10.01 Task 05	**Date Analyzed:**	12/06/22
Sample Matrix:	Water		

Lab Control Sample Summary
Total Metals

Units:ug/L
Basis:NA

Lab Control Sample
KQ2221303-02

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Arsenic	200.8	47.4	50.0	95	85-115

December 07, 2022 Service Request No:K2214181

Masa Kanematsu
Anchor QEA, LLC
6720 SW Macadam Avenue
Suite 125
Portland, OR 97219

Laboratory Results for: 2022-Gorgas

Dear Masa,

Enclosed are the results of the sample(s) submitted to our laboratory December 01, 2022
For your reference, these analyses have been assigned our service request number **K2214181.**

Analyses were performed according to our laboratory’s NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. All results are intended to be considered in their entirety, and ALS Group USA Corp. dba ALS Environmental (ALS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please contact me if you have any questions. My extension is 3376. You may also contact me via email at Mark.Harris@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

Mark Harris
Project Manager

Narrative Documents

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
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ALS Environmental

Client: Anchor QEA, LLC
Project: 2022-Gorgas
Sample Matrix: Water

Service Request: K2214181
Date Received: 12/01/2022

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples for the Tier II level requested by the client.

Sample Receipt:

Fifteen water samples were received for analysis at ALS Environmental on 12/01/2022. Any discrepancies upon initial sample inspection are annotated on the sample receipt and preservation form included within this report. The samples were stored at minimum in accordance with the analytical method requirements.

Metals:

No significant anomalies were noted with this analysis.

Approved by ______________________ Date 12/07/2022

SAMPLE DETECTION SUMMARY

This form includes only detections above the reporting levels. For a full listing of sample results, continue to the Sample Results section of this Report.

CLIENT ID: GS-AP-BT-MW-6D-FS **Lab ID: K2214181-001**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	0.68		0.09	0.50	ug/L	200.8
Iron, Dissolved	121000		6	40	ug/L	200.8
Lithium, Dissolved	315		0.10	0.20	ug/L	200.8
Manganese, Dissolved	662		0.04	0.20	ug/L	200.8

CLIENT ID: GS-AP-BT-MW-6D-FS-DUP **Lab ID: K2214181-002**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	0.52		0.09	0.50	ug/L	200.8
Iron, Dissolved	136000		6	40	ug/L	200.8
Lithium, Dissolved	303		0.10	0.20	ug/L	200.8
Manganese, Dissolved	660		0.04	0.20	ug/L	200.8

CLIENT ID: GS-AP-BT-MW-6D-FC **Lab ID: K2214181-003**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	250		0.09	0.50	ug/L	200.8
Iron, Dissolved	211000		6	40	ug/L	200.8
Lithium, Dissolved	297		0.10	0.20	ug/L	200.8
Manganese, Dissolved	163		0.04	0.20	ug/L	200.8

CLIENT ID: GS-AP-BT-MW-6D-CER **Lab ID: K2214181-004**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	81.7		0.09	0.50	ug/L	200.8
Iron, Dissolved	348		0.3	2.0	ug/L	200.8
Lithium, Dissolved	304		0.10	0.20	ug/L	200.8
Manganese, Dissolved	1250		0.04	0.20	ug/L	200.8

CLIENT ID: GS-AP-BT-MW-6D-FB **Lab ID: K2214181-005**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	12.7		0.09	0.50	ug/L	200.8
Iron, Dissolved	64.8		0.3	2.0	ug/L	200.8
Lithium, Dissolved	192		0.10	0.20	ug/L	200.8
Manganese, Dissolved	0.62		0.04	0.20	ug/L	200.8

CLIENT ID: GS-AP-BT-MW-6D-BC **Lab ID: K2214181-006**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	8.42		0.09	0.50	ug/L	200.8
Iron, Dissolved	16.9		0.3	2.0	ug/L	200.8
Lithium, Dissolved	63.1		0.10	0.20	ug/L	200.8
Manganese, Dissolved	5.38		0.04	0.20	ug/L	200.8

CLIENT ID: GS-AP-BT-MW-6D-GHT **Lab ID: K2214181-007**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	2.11		0.09	0.50	ug/L	200.8

SAMPLE DETECTION SUMMARY

This form includes only detections above the reporting levels. For a full listing of sample results, continue to the Sample Results section of this Report.

CLIENT ID: GS-AP-BT-MW-6D-GHT **Lab ID: K2214181-007**

Analyte	Results	Flag	MDL	MRL	Units	Method
Iron, Dissolved	1.9	J	0.3	2.0	ug/L	200.8
Lithium, Dissolved	71.4		0.10	0.20	ug/L	200.8
Manganese, Dissolved	1.03		0.04	0.20	ug/L	200.8

CLIENT ID: GS-AP-BT-MW-6D-HT **Lab ID: K2214181-008**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	6.00		0.09	0.50	ug/L	200.8
Iron, Dissolved	1.5	J	0.3	2.0	ug/L	200.8
Lithium, Dissolved	76.8		0.10	0.20	ug/L	200.8
Manganese, Dissolved	10.8		0.04	0.20	ug/L	200.8

CLIENT ID: GS-AP-BT-MW-6D-HEL **Lab ID: K2214181-009**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	101		0.09	0.50	ug/L	200.8
Iron, Dissolved	2.4		0.3	2.0	ug/L	200.8
Lithium, Dissolved	304		0.10	0.20	ug/L	200.8
Manganese, Dissolved	19.4		0.04	0.20	ug/L	200.8

CLIENT ID: GS-AP-BT-MW-6D-LS **Lab ID: K2214181-010**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	146		0.09	0.50	ug/L	200.8
Iron, Dissolved	6.1		0.3	2.0	ug/L	200.8
Lithium, Dissolved	305		0.10	0.20	ug/L	200.8
Manganese, Dissolved	6.36		0.04	0.20	ug/L	200.8

CLIENT ID: GS-AP-BT-MW-6D-CDL **Lab ID: K2214181-011**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	0.21	J	0.09	0.50	ug/L	200.8
Iron, Dissolved	2.7		0.3	2.0	ug/L	200.8
Lithium, Dissolved	359		0.10	0.10	ug/L	200.8
Manganese, Dissolved	0.26		0.04	0.20	ug/L	200.8

CLIENT ID: GS-AP-BT-MW-6D-AIR **Lab ID: K2214181-012**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	272		0.09	0.50	ug/L	200.8
Iron, Dissolved	1.9	J	0.3	2.0	ug/L	200.8
Lithium, Dissolved	310		0.10	0.10	ug/L	200.8
Manganese, Dissolved	163		0.04	0.20	ug/L	200.8

CLIENT ID: GS-AP-BT-MW-6D-CTRL **Lab ID: K2214181-014**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	274		0.09	0.50	ug/L	200.8
Iron, Dissolved	2.0	J	0.3	2.0	ug/L	200.8

SAMPLE DETECTION SUMMARY

This form includes only detections above the reporting levels. For a full listing of sample results, continue to the Sample Results section of this Report.

CLIENT ID: GS-AP-BT-MW-6D-CTRL **Lab ID: K2214181-014**

Analyte	Results	Flag	MDL	MRL	Units	Method
Lithium, Dissolved	306		0.10	0.10	ug/L	200.8
Manganese, Dissolved	167		0.04	0.20	ug/L	200.8

CLIENT ID: GS-AP-BT-MW-6D-FC-ph-5 **Lab ID: K2214181-013**

Analyte	Results	Flag	MDL	MRL	Units	Method
Iron, Dissolved	29.4		0.3	2.0	ug/L	200.8
Lithium, Dissolved	299		0.10	0.10	ug/L	200.8
Manganese, Dissolved	150		0.04	0.20	ug/L	200.8

CLIENT ID: GS-AP-BT-MB **Lab ID: K2214181-015**

Analyte	Results	Flag	MDL	MRL	Units	Method
Iron, Dissolved	0.9	J	0.3	2.0	ug/L	200.8
Lithium, Dissolved	0.16		0.10	0.10	ug/L	200.8
Manganese, Dissolved	0.40		0.04	0.20	ug/L	200.8

Sample Receipt Information

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
K2214181-001	GS-AP-BT-MW-6D-FS	11/30/2022	1110
K2214181-002	GS-AP-BT-MW-6D-FS-DUP	11/30/2022	1115
K2214181-003	GS-AP-BT-MW-6D-FC	11/30/2022	1120
K2214181-004	GS-AP-BT-MW-6D-CER	11/30/2022	1125
K2214181-005	GS-AP-BT-MW-6D-FB	11/30/2022	1130
K2214181-006	GS-AP-BT-MW-6D-BC	11/30/2022	1135
K2214181-007	GS-AP-BT-MW-6D-GHT	11/30/2022	1140
K2214181-008	GS-AP-BT-MW-6D-HT	11/30/2022	1145
K2214181-009	GS-AP-BT-MW-6D-HEL	11/30/2022	1150
K2214181-010	GS-AP-BT-MW-6D-LS	11/30/2022	1155
K2214181-011	GS-AP-BT-MW-6D-CDL	11/30/2022	1200
K2214181-012	GS-AP-BT-MW-6D-AIR	11/30/2022	1205
K2214181-013	GS-AP-BT-MW-6D-FC-ph-5	11/30/2022	1210
K2214181-014	GS-AP-BT-MW-6D-CTRL	11/30/2022	1215
K2214181-015	GS-AP-BT-MB	11/30/2022	1220

K2214181

Chain of Custody Record & Laboratory Analysis Request

ANCHOR QEA

Jessica Goin
6720 SW Macadam Ave
Suite 125
Portland OR 97219

Laboratory Number: 503-972-5019	
Date:	12/1/2022
Project Name:	Gorgas
Project Number:	221114-10.01 Task 05
Project Manager:	Masa Kanematsu
Phone Number:	503-972-5001 (backup number: 503-798-3456)
Shipment Method:	ALS Carrier

Line	Field Sample ID	Collection		Matrix	No. of Containers	Parameters														Comments/Preservation
		Date	Time			Dissolved Metals (As, Li, Mo, Fe, Mn)	Dissolved Metals (As, Li, Fe, Mn)													
1	GS-AP-BT-MW-6D-FS	11/30/2022	11:10	Water	1		X													Field Filtered and HNO3-Preserved. 10-Day TAT. Analyze by EPA Method 200.8 to achieve MDL < 1 ppb. Please analyze on a 10-Day TAT.
2	GS-AP-BT-MW-6D-FS-DUP	11/30/2022	11:15	Water	1		X													
3	GS-AP-BT-MW-6D-FC	11/30/2022	11:20	Water	1		X													
4	GS-AP-BT-MW-6D-CER	11/30/2022	11:25	Water	1		X													
5	GS-AP-BT-MW-6D-FB	11/30/2022	11:30	Water	1		X													
6	GS-AP-BT-MW-6D-BC	11/30/2022	11:35	Water	1		X													
7	GS-AP-BT-MW-6D-GHT	11/30/2022	11:40	Water	1		X													
8	GS-AP-BT-MW-6D-HT	11/30/2022	11:45	Water	1		X													
9	GS-AP-BT-MW-6D-HEL	11/30/2022	11:50	Water	1		X													
10	GS-AP-BT-MW-6D-LS	11/30/2022	11:55	Water	1		X													
11	GS-AP-BT-MW-6D-CDL	11/30/2022	12:00	Water	1		X													
12	GS-AP-BT-MW-6D-AIR	11/30/2022	12:05	Water	1		X													
13	GS-AP-BT-MW-6D-FC-pH-5	11/30/2022	12:10	Water	1		X													
14	GS-AP-BT-MW-6D-CTRL	11/30/2022	12:15	Water	1		X													
15	GS-AP-BT-MB	11/30/2022	12:20	Water	1	X														
16																				

Notes: Please Contact Masa (503-972-5001) if running > 10X dilution

Relinquished by:	Company:
Emma Nordlund	Anchor QEA
Signature/Print Name:	Date/Time:
Emma Nordlund	12/01/2022 9:15
Relinquished by: Greg Rich	Company: ALS
Signature/Print Name: Greg Rich	Date/Time: 12-1-22 1335

Received by:	
Greg Rich	ALS
Signature/Print Name:	
Greg Rich	12-1-22 1015
Received by:	
	12/1/22 1335
Signature/Print Name:	

Distribution: A copy will be made for the laboratory and client. The Project file will retain the original.

Page 2 of 2

PM MH

Cooler Receipt and Preservation Form

Client Anchor Service Request K22 14181

Received: 12/1/22 Opened: 12/1/22 By: Unloaded: 12/1/22 By:

1. Samples were received via? USPS Fed Ex UPS DHL PDX [✓ Courier] Hand Delivered
2. Samples were received in: (circle) Cooler Box Envelope Other________ NA
3. Were custody seals on coolers? NA Y N If yes, how many and where? ________
   If present, were custody seals intact? Y N If present, were they signed and dated? Y N

Temp Blank	Sample Temp	IR Gun	Cooler #/COC ID / NA	Out of temp indicate with "X"	PM Notified If out of temp	Tracking Number NA	Filed
2.1		180					

4. Was a Temperature Blank present in cooler? NA [✓ Y] N If yes, notate the temperature in the appropriate column above:
   If no, take the temperature of a representative sample bottle contained within the cooler; notate in the column "Sample Temp":
5. Were samples received within the method specified temperature ranges? NA [✓ Y] N
   If no, were they received on ice and same day as collected? If not, notate the cooler # below and notify the PM. [✓ NA] Y N

If applicable, tissue samples were received: Frozen Partially Thawed Thawed

6. Packing material: Inserts [✓ Baggies] Bubble Wrap Gel Packs [✓ Wet Ice] Dry Ice Sleeves ________
7. Were custody papers properly filled out (ink, signed, etc.)? NA [✓ Y] N
8. Were samples received in good condition (unbroken) NA [✓ Y] N
9. Were all sample labels complete (ie, analysis, preservation, etc.)? NA [✓ Y] N
10. Did all sample labels and tags agree with custody papers? NA [✓ Y] N
11. Were appropriate bottles/containers and volumes received for the tests indicated? NA [✓ Y] N
12. Were the pH-preserved bottles (*see SMO GEN SOP*) received at the appropriate pH? *Indicate in the table below* NA [✓ Y] N
13. Were VOA vials received without headspace? *Indicate in the table below.* [✓ NA] Y N
14. Was C12/Res negative? [✓ NA] Y N
15. Were 100ml sterile microbiology bottles filled exactly to the 100ml mark? [✓ NA] Y N Under filled Overfilled

Sample ID on Bottle	Sample ID on COC	Identified by:

Sample ID	Bottle Count Bottle Type	Head-space	Broke	pH	Reagent	Volume added	Reagent Lot Number	Initials	Time

Notes, Discrepancies, Resolutions:________

____

1/13/22 **Page of**

Miscellaneous Forms

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Inorganic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated value.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.
H	The holding time for this test is immediately following sample collection. The samples were analyzed as soon as possible after receipt by the laboratory.

Metals Data Qualifiers

#	The control limit criteria is not applicable.
J	The result is an estimated value.
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
M	The duplicate injection precision was not met.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
S	The reported value was determined by the Method of Standard Additions (MSA).
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
+	The correlation coefficient for the MSA is less than 0.995.
Q	See case narrative. One or more quality control criteria was outside the limits.

Organic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
A	A tentatively identified compound, a suspected aldol-condensation product.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
C	The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
D	The reported result is from a dilution.
E	The result is an estimated value.
J	The result is an estimated value.
N	The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
P	The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a chromatographic interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.

Additional Petroleum Hydrocarbon Specific Qualifiers

F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
Y	The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
Z	The chromatographic fingerprint does not resemble a petroleum product.

ALS Group USA Corp. dba ALS Environmental (ALS) - Kelso
State Certifications, Accreditations, and Licenses

Agency	Web Site	Number
Alaska DEH	http://dec.alaska.gov/eh/lab/cs/csapproval.htm	UST-040
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0339
Arkansas - DEQ	http://www.adeq.state.ar.us/techsvs/labcert.htm	88-0637
California DHS (ELAP)	http://www.cdph.ca.gov/certlic/labs/Pages/ELAP.aspx	2795
DOD ELAP	http://www.denix.osd.mil/edqw/Accreditation/AccreditedLabs.cfm	L16-58-R4
Florida DOH	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E87412
Hawaii DOH	http://health.hawaii.gov/	-
ISO 17025	http://www.pjlabs.com/	L16-57
Louisiana DEQ	http://www.deq.louisiana.gov/page/la-lab-accreditation	03016
Maine DHS	http://www.maine.gov/dhhs/	WA01276
Minnesota DOH	http://www.health.state.mn.us/accreditation	053-999-457
Nevada DEP	http://ndep.nv.gov/bsdw/labservice.htm	WA01276
New Jersey DEP	http://www.nj.gov/dep/enforcement/oqa.html	WA005
New York - DOH	https://www.wadsworth.org/regulatory/elap	12060
North Carolina DEQ	https://deq.nc.gov/about/divisions/water-resources/water-resources-data/water-sciences-home-page/laboratory-certification-branch/non-field-lab-certification	605
Oklahoma DEQ	http://www.deq.state.ok.us/CSDnew/labcert.htm	9801
Oregon – DEQ (NELAP)	http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	WA100010
South Carolina DHEC	http://www.scdhec.gov/environment/EnvironmentalLabCertification/	61002
Texas CEQ	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	T104704427
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C544
Wyoming (EPA Region 8)	https://www.epa.gov/region8-waterops/epa-region-8-certified-drinking-water	-
Kelso Laboratory Website	www.alsglobal.com	NA

Analyses were performed according to our laboratory’s NELAP-approved quality assurance program. A complete listing of specific NELAP-certified analytes, can be found in the certification section at www.ALSGlobal.com or at the accreditation bodies web site.

Please refer to the certification and/or accreditation body's web site if samples are submitted for compliance purposes. The states highlighted above, require the analysis be listed on the state certification if used for compliance purposes and if the method/anlayte is offered by that state.

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LOD	Limit of Detection
LOQ	Limit of Quantitation
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Client:	Anchor QEA, LLC	**Service Request:**	K2214181
Project:	2022-Gorgas/221114-10.01 Task 05		

Sample Name:	GS-AP-BT-MW-6D-FS	**Date Collected:**	11/30/22
Lab Code:	K2214181-001	**Date Received:**	12/1/22
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
200.8	SSOLADEY	EMCALLISTER

Sample Name:	GS-AP-BT-MW-6D-FS-DUP	**Date Collected:**	11/30/22
Lab Code:	K2214181-002	**Date Received:**	12/1/22
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
200.8	SSOLADEY	EMCALLISTER

Sample Name:	GS-AP-BT-MW-6D-FC	**Date Collected:**	11/30/22
Lab Code:	K2214181-003	**Date Received:**	12/1/22
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
200.8	SSOLADEY	EMCALLISTER

Sample Name:	GS-AP-BT-MW-6D-CER	**Date Collected:**	11/30/22
Lab Code:	K2214181-004	**Date Received:**	12/1/22
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
200.8	SSOLADEY	EMCALLISTER

Sample Name:	GS-AP-BT-MW-6D-FB	**Date Collected:**	11/30/22
Lab Code:	K2214181-005	**Date Received:**	12/1/22
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
200.8	SSOLADEY	EMCALLISTER

Client: Anchor QEA, LLC
Service Request: K2214181
Project: 2022-Gorgas/221114-10.01 Task 05

Sample Name: GS-AP-BT-MW-6D-BC
Date Collected: 11/30/22
Lab Code: K2214181-006
Date Received: 12/1/22
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
200.8	SSOLADEY	EMCALLISTER

Sample Name: GS-AP-BT-MW-6D-GHT
Date Collected: 11/30/22
Lab Code: K2214181-007
Date Received: 12/1/22
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
200.8	SSOLADEY	EMCALLISTER

Sample Name: GS-AP-BT-MW-6D-HT
Date Collected: 11/30/22
Lab Code: K2214181-008
Date Received: 12/1/22
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
200.8	SSOLADEY	EMCALLISTER

Sample Name: GS-AP-BT-MW-6D-HEL
Date Collected: 11/30/22
Lab Code: K2214181-009
Date Received: 12/1/22
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
200.8	SSOLADEY	EMCALLISTER

Sample Name: GS-AP-BT-MW-6D-LS
Date Collected: 11/30/22
Lab Code: K2214181-010
Date Received: 12/1/22
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
200.8	SSOLADEY	EMCALLISTER

Analyst Summary report

Client:	Anchor QEA, LLC	**Service Request:**	K2214181
Project:	2022-Gorgas/221114-10.01 Task 05		

Sample Name:	GS-AP-BT-MW-6D-CDL	**Date Collected:**	11/30/22
Lab Code:	K2214181-011	**Date Received:**	12/1/22
Sample Matrix:	Water		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	SSOLADEY	EMCALLISTER

Sample Name:	GS-AP-BT-MW-6D-AIR	**Date Collected:**	11/30/22
Lab Code:	K2214181-012	**Date Received:**	12/1/22
Sample Matrix:	Water		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	SSOLADEY	EMCALLISTER

Sample Name:	GS-AP-BT-MW-6D-FC-ph-5	**Date Collected:**	11/30/22
Lab Code:	K2214181-013	**Date Received:**	12/1/22
Sample Matrix:	Water		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	SSOLADEY	EMCALLISTER

Sample Name:	GS-AP-BT-MW-6D-CTRL	**Date Collected:**	11/30/22
Lab Code:	K2214181-014	**Date Received:**	12/1/22
Sample Matrix:	Water		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	SSOLADEY	EMCALLISTER

Sample Name:	GS-AP-BT-MB	**Date Collected:**	11/30/22
Lab Code:	K2214181-015	**Date Received:**	12/1/22
Sample Matrix:	Water		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	SSOLADEY	EMCALLISTER

Sample Results

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Metals

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Client:	Anchor QEA, LLC	**Service Request:**	K2214181
Project:	2022-Gorgas/221114-10.01 Task 05	**Date Collected:**	11/30/22 11:10
Sample Matrix:	Water	**Date Received:**	12/01/22 13:35
Sample Name:	GS-AP-BT-MW-6D-FS	**Basis:**	NA
Lab Code:	K2214181-001		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**0.68**	ug/L	0.50	0.09	1	12/06/22 16:11	12/02/22	
Iron	200.8	**121000**	ug/L	40	6	20	12/06/22 17:15	12/02/22	
Lithium	200.8	**315**	ug/L	0.20	0.10	1	12/06/22 16:11	12/02/22	
Manganese	200.8	**662**	ug/L	0.20	0.04	1	12/06/22 16:11	12/02/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2214181
Project:	2022-Gorgas/221114-10.01 Task 05	**Date Collected:**	11/30/22 11:15
Sample Matrix:	Water	**Date Received:**	12/01/22 13:35
Sample Name:	GS-AP-BT-MW-6D-FS-DUP	**Basis:**	NA
Lab Code:	K2214181-002		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**0.52**	ug/L	0.50	0.09	1	12/06/22 16:16	12/02/22	
Iron	200.8	**136000**	ug/L	40	6	20	12/06/22 17:20	12/02/22	
Lithium	200.8	**303**	ug/L	0.20	0.10	1	12/06/22 16:16	12/02/22	
Manganese	200.8	**660**	ug/L	0.20	0.04	1	12/06/22 16:16	12/02/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2214181
Project:	2022-Gorgas/221114-10.01 Task 05	**Date Collected:**	11/30/22 11:20
Sample Matrix:	Water	**Date Received:**	12/01/22 13:35
Sample Name:	GS-AP-BT-MW-6D-FC	**Basis:**	NA
Lab Code:	K2214181-003		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**250**	ug/L	0.50	0.09	1	12/06/22 16:17	12/02/22	
Iron	200.8	**211000**	ug/L	40	6	20	12/06/22 17:25	12/02/22	
Lithium	200.8	**297**	ug/L	0.20	0.10	1	12/06/22 16:17	12/02/22	
Manganese	200.8	**163**	ug/L	0.20	0.04	1	12/06/22 16:17	12/02/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2214181
Project:	2022-Gorgas/221114-10.01 Task 05	**Date Collected:**	11/30/22 11:25
Sample Matrix:	Water	**Date Received:**	12/01/22 13:35
Sample Name:	GS-AP-BT-MW-6D-CER	**Basis:**	NA
Lab Code:	K2214181-004		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**81.7**	ug/L	0.50	0.09	1	12/06/22 16:19	12/02/22	
Iron	200.8	**348**	ug/L	2.0	0.3	1	12/06/22 16:19	12/02/22	
Lithium	200.8	**304**	ug/L	0.20	0.10	1	12/06/22 16:19	12/02/22	
Manganese	200.8	**1250**	ug/L	0.20	0.04	1	12/06/22 16:19	12/02/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2214181
Project:	2022-Gorgas/221114-10.01 Task 05	**Date Collected:**	11/30/22 11:30
Sample Matrix:	Water	**Date Received:**	12/01/22 13:35
Sample Name:	GS-AP-BT-MW-6D-FB	**Basis:**	NA
Lab Code:	K2214181-005		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**12.7**	ug/L	0.50	0.09	1	12/06/22 16:21	12/02/22	
Iron	200.8	**64.8**	ug/L	2.0	0.3	1	12/06/22 16:21	12/02/22	
Lithium	200.8	**192**	ug/L	0.20	0.10	1	12/06/22 16:21	12/02/22	
Manganese	200.8	**0.62**	ug/L	0.20	0.04	1	12/06/22 16:21	12/02/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2214181
Project:	2022-Gorgas/221114-10.01 Task 05	**Date Collected:**	11/30/22 11:35
Sample Matrix:	Water	**Date Received:**	12/01/22 13:35
Sample Name:	GS-AP-BT-MW-6D-BC	**Basis:**	NA
Lab Code:	K2214181-006		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**8.42**	ug/L	0.50	0.09	1	12/06/22 16:22	12/02/22	
Iron	200.8	**16.9**	ug/L	2.0	0.3	1	12/06/22 16:22	12/02/22	
Lithium	200.8	**63.1**	ug/L	0.20	0.10	1	12/06/22 16:22	12/02/22	
Manganese	200.8	**5.38**	ug/L	0.20	0.04	1	12/06/22 16:22	12/02/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2214181
Project:	2022-Gorgas/221114-10.01 Task 05	**Date Collected:**	11/30/22 11:40
Sample Matrix:	Water	**Date Received:**	12/01/22 13:35
Sample Name:	GS-AP-BT-MW-6D-GHT	**Basis:**	NA
Lab Code:	K2214181-007		

Dissolved Metals

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**2.11**		ug/L	0.50	0.09	1	12/06/22 16:35	12/02/22	
Iron	200.8	**1.9**	**J**	ug/L	2.0	0.3	1	12/06/22 16:35	12/02/22	
Lithium	200.8	**71.4**		ug/L	0.20	0.10	1	12/06/22 16:35	12/02/22	
Manganese	200.8	**1.03**		ug/L	0.20	0.04	1	12/06/22 16:35	12/02/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2214181
Project:	2022-Gorgas/221114-10.01 Task 05	**Date Collected:**	11/30/22 11:45
Sample Matrix:	Water	**Date Received:**	12/01/22 13:35
Sample Name:	GS-AP-BT-MW-6D-HT	**Basis:**	NA
Lab Code:	K2214181-008		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**6.00**	ug/L	0.50	0.09	1	12/06/22 16:36	12/02/22	
Iron	200.8	**1.5 J**	ug/L	2.0	0.3	1	12/06/22 16:36	12/02/22	
Lithium	200.8	**76.8**	ug/L	0.20	0.10	1	12/06/22 16:36	12/02/22	
Manganese	200.8	**10.8**	ug/L	0.20	0.04	1	12/06/22 16:36	12/02/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2214181
Project:	2022-Gorgas/221114-10.01 Task 05	**Date Collected:**	11/30/22 11:50
Sample Matrix:	Water	**Date Received:**	12/01/22 13:35
Sample Name:	GS-AP-BT-MW-6D-HEL	**Basis:**	NA
Lab Code:	K2214181-009		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**101**	ug/L	0.50	0.09	1	12/06/22 16:38	12/02/22	
Iron	200.8	**2.4**	ug/L	2.0	0.3	1	12/06/22 16:38	12/02/22	
Lithium	200.8	**304**	ug/L	0.20	0.10	1	12/06/22 16:38	12/02/22	
Manganese	200.8	**19.4**	ug/L	0.20	0.04	1	12/06/22 16:38	12/02/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2214181
Project:	2022-Gorgas/221114-10.01 Task 05	**Date Collected:**	11/30/22 11:55
Sample Matrix:	Water	**Date Received:**	12/01/22 13:35
Sample Name:	GS-AP-BT-MW-6D-LS	**Basis:**	NA
Lab Code:	K2214181-010		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**146**	ug/L	0.50	0.09	1	12/06/22 16:39	12/02/22	
Iron	200.8	**6.1**	ug/L	2.0	0.3	1	12/06/22 16:39	12/02/22	
Lithium	200.8	**305**	ug/L	0.20	0.10	1	12/06/22 16:39	12/02/22	
Manganese	200.8	**6.36**	ug/L	0.20	0.04	1	12/06/22 16:39	12/02/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2214181
Project:	2022-Gorgas/221114-10.01 Task 05	**Date Collected:**	11/30/22 12:00
Sample Matrix:	Water	**Date Received:**	12/01/22 13:35
Sample Name:	GS-AP-BT-MW-6D-CDL	**Basis:**	NA
Lab Code:	K2214181-011		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**0.21 J**	ug/L	0.50	0.09	1	12/06/22 15:47	12/02/22	
Iron	200.8	**2.7**	ug/L	2.0	0.3	1	12/06/22 15:47	12/02/22	
Lithium	200.8	**359**	ug/L	0.10	0.10	1	12/06/22 15:47	12/02/22	
Manganese	200.8	**0.26**	ug/L	0.20	0.04	1	12/06/22 15:47	12/02/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2214181
Project:	2022-Gorgas/221114-10.01 Task 05	**Date Collected:**	11/30/22 12:05
Sample Matrix:	Water	**Date Received:**	12/01/22 13:35
Sample Name:	GS-AP-BT-MW-6D-AIR	**Basis:**	NA
Lab Code:	K2214181-012		

Dissolved Metals

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**272**		ug/L	0.50	0.09	1	12/06/22 15:49	12/02/22	
Iron	200.8	**1.9**	**J**	ug/L	2.0	0.3	1	12/06/22 15:49	12/02/22	
Lithium	200.8	**310**		ug/L	0.10	0.10	1	12/06/22 15:49	12/02/22	
Manganese	200.8	**163**		ug/L	0.20	0.04	1	12/06/22 15:49	12/02/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2214181
Project:	2022-Gorgas/221114-10.01 Task 05	**Date Collected:**	11/30/22 12:10
Sample Matrix:	Water	**Date Received:**	12/01/22 13:35
Sample Name:	GS-AP-BT-MW-6D-FC-ph-5	**Basis:**	NA
Lab Code:	K2214181-013		

Dissolved Metals

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	ND	U	ug/L	0.50	0.09	1	12/06/22 15:50	12/02/22	
Iron	200.8	**29.4**		ug/L	2.0	0.3	1	12/06/22 15:50	12/02/22	
Lithium	200.8	**299**		ug/L	0.10	0.10	1	12/06/22 15:50	12/02/22	
Manganese	200.8	**150**		ug/L	0.20	0.04	1	12/06/22 15:50	12/02/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2214181
Project:	2022-Gorgas/221114-10.01 Task 05	**Date Collected:**	11/30/22 12:15
Sample Matrix:	Water	**Date Received:**	12/01/22 13:35
Sample Name:	GS-AP-BT-MW-6D-CTRL	**Basis:**	NA
Lab Code:	K2214181-014		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**274**	ug/L	0.50	0.09	1	12/06/22 15:55	12/02/22	
Iron	200.8	**2.0 J**	ug/L	2.0	0.3	1	12/06/22 15:55	12/02/22	
Lithium	200.8	**306**	ug/L	0.10	0.10	1	12/06/22 15:55	12/02/22	
Manganese	200.8	**167**	ug/L	0.20	0.04	1	12/06/22 15:55	12/02/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2214181
Project:	2022-Gorgas/221114-10.01 Task 05	**Date Collected:**	11/30/22 12:20
Sample Matrix:	Water	**Date Received:**	12/01/22 13:35
Sample Name:	GS-AP-BT-MB	**Basis:**	NA
Lab Code:	K2214181-015		

Dissolved Metals

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	ND	U	ug/L	0.50	0.09	1	12/06/22 15:57	12/02/22	
Iron	200.8	**0.9**	**J**	ug/L	2.0	0.3	1	12/06/22 15:57	12/02/22	
Lithium	200.8	**0.16**		ug/L	0.10	0.10	1	12/06/22 15:57	12/02/22	
Manganese	200.8	**0.40**		ug/L	0.20	0.04	1	12/06/22 15:57	12/02/22	
Molybdenum	200.8	ND	U	ug/L	0.10	0.03	1	12/06/22 15:57	12/02/22	

QC Summary Forms

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Metals

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Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2214181
Project:	2022-Gorgas/221114-10.01 Task 05	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	KQ2221302-01		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	ND U	ug/L	0.50	0.09	1	12/06/22 16:08	12/02/22	
Iron	200.8	ND U	ug/L	2.0	0.3	1	12/06/22 16:08	12/02/22	
Lithium	200.8	ND U	ug/L	0.20	0.10	1	12/06/22 16:08	12/02/22	
Manganese	200.8	ND U	ug/L	0.20	0.04	1	12/06/22 16:08	12/02/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2214181
Project:	2022-Gorgas/221114-10.01 Task 05	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	KQ2221303-01		

Dissolved Metals

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	ND	U	ug/L	0.50	0.09	1	12/06/22 15:17	12/02/22	
Iron	200.8	**0.3**	**J**	ug/L	2.0	0.3	1	12/06/22 15:17	12/02/22	
Lithium	200.8	ND	U	ug/L	0.10	0.10	1	12/06/22 15:17	12/02/22	
Manganese	200.8	ND	U	ug/L	0.20	0.04	1	12/06/22 15:17	12/02/22	
Molybdenum	200.8	ND	U	ug/L	0.10	0.03	1	12/06/22 15:17	12/02/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2214181
Project:	2022-Gorgas/221114-10.01 Task 05	**Date Collected:**	11/30/22
Sample Matrix:	Water	**Date Received:**	12/01/22
		Date Analyzed:	12/6/22
		Date Extracted:	12/2/22

Matrix Spike Summary
Dissolved Metals

Sample Name:	GS-AP-BT-MW-6D-FS	**Units:**	ug/L
Lab Code:	K2214181-001	**Basis:**	NA
Analysis Method:	200.8		
Prep Method:	EPA CLP ILM04.0		

Matrix Spike
KQ2221302-03

Analyte Name	Sample Result	Result	Spike Amount	% Rec	% Rec Limits
Arsenic	0.68	48.2	50.0	95	70-130
Iron	121000	119000	50	-4353 #	70-130
Lithium	315	357	50.0	83 #	70-130
Manganese	662	674	25.0	48 #	70-130

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Matrix Spike and Matrix Spike Duplicate Data is presented for information purposes only. The matrix may or may not be relevant to samples reported in this report. The laboratory evaluates system performance based on the LCS and LCSD control limits.

QA/QC Report

Client:	Anchor QEA, LLC	**Service Request:**	K2214181
Project	2022-Gorgas/221114-10.01 Task 05	**Date Collected:**	11/30/22
Sample Matrix:	Water	**Date Received:**	12/01/22
		Date Analyzed:	12/06/22

Replicate Sample Summary
Dissolved Metals

Sample Name:	GS-AP-BT-MW-6D-FS	**Units:**	ug/L
Lab Code:	K2214181-001	**Basis:**	NA

Analyte Name	Analysis Method	MRL	MDL	Sample Result	Duplicate Sample KQ2221302-04 Result	Average	RPD	RPD Limit
Arsenic	200.8	0.50	0.09	0.68	0.54	0.61	23 #	20
Iron	200.8	40	6	121000	118000	120000	3	20
Lithium	200.8	0.20	0.10	315	318	317	<1	20
Manganese	200.8	0.20	0.04	662	646	654	2	20

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client:	Anchor QEA, LLC	**Service Request:**	K2214181
Project:	2022-Gorgas/221114-10.01 Task 05	**Date Analyzed:**	12/06/22
Sample Matrix:	Water		

Lab Control Sample Summary
Dissolved Metals

Units:ug/L
Basis:NA

Lab Control Sample
KQ2221302-02

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Arsenic	200.8	48.2	50.0	96	85-115
Iron	200.8	47.1	50.0	94	85-115
Lithium	200.8	49.1	50.0	98	85-115
Manganese	200.8	23.4	25.0	94	85-115

Client:	Anchor QEA, LLC	**Service Request:**	K2214181
Project:	2022-Gorgas/221114-10.01 Task 05	**Date Analyzed:**	12/06/22
Sample Matrix:	Water		

Lab Control Sample Summary
Dissolved Metals

Units:ug/L
Basis:NA

Lab Control Sample
KQ2221303-02

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Arsenic	200.8	47.4	50.0	95	85-115
Iron	200.8	48.7	50.0	97	85-115
Lithium	200.8	51.5	50.0	103	85-115
Manganese	200.8	23.4	25.0	94	85-115
Molybdenum	200.8	25.5	25.0	102	85-115

December 07, 2022 Service Request No:K2214182

Masa Kanematsu
Anchor QEA, LLC
6720 SW Macadam Avenue
Suite 125
Portland, OR 97219

Laboratory Results for: 2022-Gorgas

Dear Masa,

Enclosed are the results of the sample(s) submitted to our laboratory December 01, 2022
For your reference, these analyses have been assigned our service request number **K2214182.**

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. All results are intended to be considered in their entirety, and ALS Group USA Corp. dba ALS Environmental (ALS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please contact me if you have any questions. My extension is 3376. You may also contact me via email at Mark.Harris@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

Mark Harris
Project Manager

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Narrative Documents

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Client:	Anchor QEA, LLC	**Service Request:**	K2214182
Project:	2022-Gorgas	**Date Received:**	12/01/2022
Sample Matrix:	Water		

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples for the Tier II level requested by the client.

Sample Receipt:

Fourteen water samples were received for analysis at ALS Environmental on 12/01/2022. Any discrepancies upon initial sample inspection are annotated on the sample receipt and preservation form included within this report. The samples were stored at minimum in accordance with the analytical method requirements.

Metals:

No significant anomalies were noted with this analysis.

Approved by ______________________ Date 12/07/2022

SAMPLE DETECTION SUMMARY

This form includes only detections above the reporting levels. For a full listing of sample results, continue to the Sample Results section of this Report.

CLIENT ID: GS-AP-BT-MW-7-FS **Lab ID: K2214182-001**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	0.82		0.09	0.50	ug/L	200.8
Iron, Dissolved	157000		6	40	ug/L	200.8
Lithium, Dissolved	213		0.10	0.20	ug/L	200.8
Manganese, Dissolved	552		0.04	0.20	ug/L	200.8
Molybdenum, Dissolved	0.42		0.03	0.10	ug/L	200.8

CLIENT ID: GS-AP-BT-MW-7-FS-DUP **Lab ID: K2214182-002**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	0.37	J	0.09	0.50	ug/L	200.8
Iron, Dissolved	66400		6	40	ug/L	200.8
Lithium, Dissolved	211		0.10	0.20	ug/L	200.8
Manganese, Dissolved	303		0.04	0.20	ug/L	200.8
Molybdenum, Dissolved	0.60		0.03	0.10	ug/L	200.8

CLIENT ID: GS-AP-BT-MW-7-FC **Lab ID: K2214182-003**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	0.75		0.09	0.50	ug/L	200.8
Iron, Dissolved	67600		6	40	ug/L	200.8
Lithium, Dissolved	209		0.10	0.20	ug/L	200.8
Manganese, Dissolved	34.2		0.04	0.20	ug/L	200.8
Molybdenum, Dissolved	1.57		0.03	0.10	ug/L	200.8

CLIENT ID: GS-AP-BT-MW-7-CER **Lab ID: K2214182-004**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	50.3		0.09	0.50	ug/L	200.8
Iron, Dissolved	157		0.3	2.0	ug/L	200.8
Lithium, Dissolved	208		0.10	0.20	ug/L	200.8
Manganese, Dissolved	956		0.04	0.20	ug/L	200.8
Molybdenum, Dissolved	194		0.03	0.10	ug/L	200.8

CLIENT ID: GS-AP-BT-MW-7-FB **Lab ID: K2214182-005**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	18.5		0.09	0.50	ug/L	200.8
Iron, Dissolved	26.7		0.3	2.0	ug/L	200.8
Lithium, Dissolved	100		0.10	0.20	ug/L	200.8
Molybdenum, Dissolved	353		0.03	0.10	ug/L	200.8

CLIENT ID: GS-AP-BT-MW-7-BC **Lab ID: K2214182-006**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	247		0.09	0.50	ug/L	200.8
Iron, Dissolved	2.7		0.3	2.0	ug/L	200.8
Lithium, Dissolved	328		0.10	0.20	ug/L	200.8
Manganese, Dissolved	167		0.04	0.20	ug/L	200.8

SAMPLE DETECTION SUMMARY

This form includes only detections above the reporting levels. For a full listing of sample results, continue to the Sample Results section of this Report.

CLIENT ID: GS-AP-BT-MW-7-BC **Lab ID: K2214182-006**

Analyte	Results	Flag	MDL	MRL	Units	Method
Molybdenum, Dissolved	6.79		0.03	0.10	ug/L	200.8

CLIENT ID: GS-AP-BT-MW-7-GHT **Lab ID: K2214182-007**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	1.59		0.09	0.50	ug/L	200.8
Iron, Dissolved	2.1		0.3	2.0	ug/L	200.8
Lithium, Dissolved	35.9		0.10	0.20	ug/L	200.8
Manganese, Dissolved	0.08	J	0.04	0.20	ug/L	200.8
Molybdenum, Dissolved	46.0		0.03	0.10	ug/L	200.8

CLIENT ID: GS-AP-BT-MW-7-HT **Lab ID: K2214182-008**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	203		0.09	0.50	ug/L	200.8
Iron, Dissolved	1.9	J	0.3	2.0	ug/L	200.8
Lithium, Dissolved	220		0.10	0.20	ug/L	200.8
Manganese, Dissolved	12.5		0.04	0.20	ug/L	200.8
Molybdenum, Dissolved	89.7		0.03	0.10	ug/L	200.8

CLIENT ID: GS-AP-BT-MW-7-HEL **Lab ID: K2214182-009**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	124		0.09	0.50	ug/L	200.8
Iron, Dissolved	3.4		0.3	2.0	ug/L	200.8
Lithium, Dissolved	202		0.10	0.20	ug/L	200.8
Manganese, Dissolved	3.83		0.04	0.20	ug/L	200.8
Molybdenum, Dissolved	271		0.03	0.10	ug/L	200.8

CLIENT ID: GS-AP-BT-MW-7-LS **Lab ID: K2214182-010**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	155		0.09	0.50	ug/L	200.8
Iron, Dissolved	1.4	J	0.3	2.0	ug/L	200.8
Lithium, Dissolved	210		0.10	0.20	ug/L	200.8
Manganese, Dissolved	0.62		0.04	0.20	ug/L	200.8
Molybdenum, Dissolved	222		0.03	0.10	ug/L	200.8

CLIENT ID: GS-AP-BT-MW-7-CDL **Lab ID: K2214182-011**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	0.09	J	0.09	0.50	ug/L	200.8
Iron, Dissolved	1.6	J	0.3	2.0	ug/L	200.8
Lithium, Dissolved	255		0.10	0.10	ug/L	200.8
Manganese, Dissolved	0.05	J	0.04	0.20	ug/L	200.8
Molybdenum, Dissolved	73.3		0.03	0.10	ug/L	200.8

SAMPLE DETECTION SUMMARY

This form includes only detections above the reporting levels. For a full listing of sample results, continue to the Sample Results section of this Report.

CLIENT ID: GS-AP-BT-MW-7-AIR **Lab ID: K2214182-012**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	248		0.09	0.50	ug/L	200.8
Iron, Dissolved	14.1		0.3	2.0	ug/L	200.8
Lithium, Dissolved	206		0.10	0.10	ug/L	200.8
Manganese, Dissolved	30.9		0.04	0.20	ug/L	200.8
Molybdenum, Dissolved	225		0.03	0.10	ug/L	200.8

CLIENT ID: GS-AP-BT-MW-7-CTRL **Lab ID: K2214182-014**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	254		0.09	0.50	ug/L	200.8
Iron, Dissolved	22.4		0.3	2.0	ug/L	200.8
Lithium, Dissolved	209		0.10	0.10	ug/L	200.8
Manganese, Dissolved	33.8		0.04	0.20	ug/L	200.8
Molybdenum, Dissolved	225		0.03	0.10	ug/L	200.8

CLIENT ID: GS-AP-BT-MW-7-FC-pH-5 **Lab ID: K2214182-013**

Analyte	Results	Flag	MDL	MRL	Units	Method
Iron, Dissolved	11.5		0.3	2.0	ug/L	200.8
Lithium, Dissolved	203		0.10	0.10	ug/L	200.8
Manganese, Dissolved	36.3		0.04	0.20	ug/L	200.8
Molybdenum, Dissolved	0.11		0.03	0.10	ug/L	200.8

Sample Receipt Information

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
K2214182-001	GS-AP-BT-MW-7-FS	11/30/2022	1000
K2214182-002	GS-AP-BT-MW-7-FS-DUP	11/30/2022	1005
K2214182-003	GS-AP-BT-MW-7-FC	11/30/2022	1010
K2214182-004	GS-AP-BT-MW-7-CER	11/30/2022	1015
K2214182-005	GS-AP-BT-MW-7-FB	11/30/2022	1020
K2214182-006	GS-AP-BT-MW-7-BC	11/30/2022	1025
K2214182-007	GS-AP-BT-MW-7-GHT	11/30/2022	1030
K2214182-008	GS-AP-BT-MW-7-HT	11/30/2022	1035
K2214182-009	GS-AP-BT-MW-7-HEL	11/30/2022	1040
K2214182-010	GS-AP-BT-MW-7-LS	11/30/2022	1045
K2214182-011	GS-AP-BT-MW-7-CDL	11/30/2022	1050
K2214182-012	GS-AP-BT-MW-7-AIR	11/30/2022	1055
K2214182-013	GS-AP-BT-MW-7-FC-pH-5	11/30/2022	1100
K2214182-014	GS-AP-BT-MW-7-CTRL	11/30/2022	1105

V122K1182

Chain of Custody Record & Laboratory Analysis Request

Laboratory Number: 503-972-5019

Date:	12/1/2022
Project Name:	Gorgas
Project Number:	221114-10.01 Task 05
Project Manager:	Masa Kanematsu
Phone Number:	503-972-5001 (backup number: 503-798-3456)
Shipment Method:	ALS Carrier

ANCHOR QEA

Jessica Goin
6720 SW Macadam Ave
Suite 125
Portland OR 97219

Line	Field Sample ID	Collection Date	Collection Time	Matrix	No. of Containers	Dissolved Metals (As, Li, Mo, Fe, Mn)	Dissolved Metals (As, Li, Fe, Mn)													Comments/Preservation
1	GS-AP-BT-MW-7-FS	11/30/2022	10:00	Water	1	X														Field Filtered and HNO3-Preserved. Analyze by EPA Method 200.8 to achieve MDL < 1 ppb. Please analyze on a 10-Day TAT.
2	GS-AP-BT-MW-7-FS-DUP	11/30/2022	10:05	Water	1	X														
3	GS-AP-BT-MW-7-FC	11/30/2022	10:10	Water	1	X														
4	GS-AP-BT-MW-7-CER	11/30/2022	10:15	Water	1	X														
5	GS-AP-BT-MW-7-FB	11/30/2022	10:20	Water	1	X														
6	GS-AP-BT-MW-7-BC	11/30/2022	10:25	Water	1	X														
7	GS-AP-BT-MW-7-GHT	11/30/2022	10:30	Water	1	X														
8	GS-AP-BT-MW-7-HT	11/30/2022	10:35	Water	1	X														
9	GS-AP-BT-MW-7-HEL	11/30/2022	10:40	Water	1	X														
10	GS-AP-BT-MW-7-LS	11/30/2022	10:45	Water	1	X														
11	GS-AP-BT-MW-7-CDL	11/30/2022	10:50	Water	1	X														
12	GS-AP-BT-MW-7-AIR	11/30/2022	10:55	Water	1	X														
13	GS-AP-BT-MW-7-FC-pH-5	11/30/2022	11:00	Water	1	X														
14	GS-AP-BT-MW-7-CTRL	11/30/2022	11:05	Water	1	X														
15																				
16																				

Notes: Please Contact Masa (503-972-5001) if running > 10X dilution

Relinquished by:	Company:	Received by:	
Emma Nordlund	Anchor QEA	Greg Rich	ALS
Signature/Print Name:	Date/Time:	Signature/Print Name:	
	12/01/2022 9:15	Greg Rich	12-1-22 1015

Relinquished by: Greg Rich	Company: ALS	Received by:	
			ALS
Signature/Print Name: Greg Rich	Date/Time: 12-1-22 1335	Signature/Print Name:	
		Hollander	12/1/22 1335

Distribution: A copy will be made for the laboratory and client. The Project file will retain the original.

Page 1 of 2

PM MH

Cooler Receipt and Preservation Form

Client Anchor Service Request K22 14182

Received: 12/1/22 Opened: 12/1/22 By: Unloaded: 12/1/22 By:

1. Samples were received via? *USPS* *Fed Ex* *UPS* *DHL* *PDX* [✓ *Courier*] *Hand Delivered*
2. Samples were received in: (circle) *Cooler* *Box* *Envelope* *Other*________ *NA*
3. Were custody seals on coolers? NA Y N If yes, how many and where? ________
   If present, were custody seals intact? Y N If present, were they signed and dated? Y N

Temp Blank	Sample Temp	IR Gun	Cooler #/COC ID / NA	Out of temp indicate with "X"	PM Notified If out of temp	Tracking Number NA	Filed
2.1		180					

4. Was a Temperature Blank present in cooler? NA [✓ Y] N If yes, notate the temperature in the appropriate column above:
   If no, take the temperature of a representative sample bottle contained within the cooler; notate in the column "Sample Temp":
5. Were samples received within the method specified temperature ranges? NA [✓ Y] N
   If no, were they received on ice and same day as collected? If not, notate the cooler # below and notify the PM. [✓ NA] Y N

If applicable, tissue samples were received: *Frozen* *Partially Thawed* *Thawed*

6. Packing material: *Inserts* [✓ *Baggies*] *Bubble Wrap* *Gel Packs* [✓ *Wet Ice*] *Dry Ice* *Sleeves* ________
7. Were custody papers properly filled out (ink, signed, etc.)? NA [✓ Y] N
8. Were samples received in good condition (unbroken) NA [✓ Y] N
9. Were all sample labels complete (ie, analysis, preservation, etc.)? NA [✓ Y] N
10. Did all sample labels and tags agree with custody papers? NA [✓ Y] N
11. Were appropriate bottles/containers and volumes received for the tests indicated? NA [✓ Y] N
12. Were the pH-preserved bottles (*see SMO GEN SOP*) received at the appropriate pH? *Indicate in the table below* NA [✓ Y] N
13. Were VOA vials received without headspace? *Indicate in the table below.* [✓ NA] Y N
14. Was C12/Res negative? [✓ NA] Y N
15. Were 100ml sterile microbiology bottles filled exactly to the 100ml mark? [✓ NA] Y N Under filled Overfilled

Sample ID on Bottle	Sample ID on COC	Identified by:

Sample ID	Bottle Count Bottle Type	Head-space	Broke	pH	Reagent	Volume added	Reagent Lot Number	Initials	Time

Notes, Discrepancies, Resolutions:________

:________

1/13/22 *Page* *of*

Miscellaneous Forms

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Inorganic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated value.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.
H	The holding time for this test is immediately following sample collection. The samples were analyzed as soon as possible after receipt by the laboratory.

Metals Data Qualifiers

#	The control limit criteria is not applicable.
J	The result is an estimated value.
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
M	The duplicate injection precision was not met.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
S	The reported value was determined by the Method of Standard Additions (MSA).
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
+	The correlation coefficient for the MSA is less than 0.995.
Q	See case narrative. One or more quality control criteria was outside the limits.

Organic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
A	A tentatively identified compound, a suspected aldol-condensation product.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
C	The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
D	The reported result is from a dilution.
E	The result is an estimated value.
J	The result is an estimated value.
N	The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
P	The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a chromatographic interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.

Additional Petroleum Hydrocarbon Specific Qualifiers

F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
Y	The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
Z	The chromatographic fingerprint does not resemble a petroleum product.

ALS Group USA Corp. dba ALS Environmental (ALS) - Kelso
State Certifications, Accreditations, and Licenses

Agency	Web Site	Number
Alaska DEH	http://dec.alaska.gov/eh/lab/cs/csapproval.htm	UST-040
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0339
Arkansas - DEQ	http://www.adeq.state.ar.us/techsvs/labcert.htm	88-0637
California DHS (ELAP)	http://www.cdph.ca.gov/certlic/labs/Pages/ELAP.aspx	2795
DOD ELAP	http://www.denix.osd.mil/edqw/Accreditation/AccreditedLabs.cfm	L16-58-R4
Florida DOH	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E87412
Hawaii DOH	http://health.hawaii.gov/	-
ISO 17025	http://www.pjlabs.com/	L16-57
Louisiana DEQ	http://www.deq.louisiana.gov/page/la-lab-accreditation	03016
Maine DHS	http://www.maine.gov/dhhs/	WA01276
Minnesota DOH	http://www.health.state.mn.us/accreditation	053-999-457
Nevada DEP	http://ndep.nv.gov/bsdw/labservice.htm	WA01276
New Jersey DEP	http://www.nj.gov/dep/enforcement/oqa.html	WA005
New York - DOH	https://www.wadsworth.org/regulatory/elap	12060
North Carolina DEQ	https://deq.nc.gov/about/divisions/water-resources/water-resources-data/water-sciences-home-page/laboratory-certification-branch/non-field-lab-certification	605
Oklahoma DEQ	http://www.deq.state.ok.us/CSDnew/labcert.htm	9801
Oregon – DEQ (NELAP)	http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	WA100010
South Carolina DHEC	http://www.scdhec.gov/environment/EnvironmentalLabCertification/	61002
Texas CEQ	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	T104704427
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C544
Wyoming (EPA Region 8)	https://www.epa.gov/region8-waterops/epa-region-8-certified-drinking-water	-
Kelso Laboratory Website	www.alsglobal.com	NA

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. A complete listing of specific NELAP-certified analytes, can be found in the certification section at www.ALSGlobal.com or at the accreditation bodies web site.
Please refer to the certification and/or accreditation body's web site if samples are submitted for compliance purposes. The states highlighted above, require the analysis be listed on the state certification if used for compliance purposes and if the method/anlayte is offered by that state.

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LOD	Limit of Detection
LOQ	Limit of Quantitation
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

ALS Group USA, Corp.
dba ALS Environmental

Analyst Summary report

Client:	Anchor QEA, LLC	**Service Request:**	K2214182
Project:	2022-Gorgas/221114-10.01 Task 05		

Sample Name:	GS-AP-BT-MW-7-FS	**Date Collected:**	11/30/22
Lab Code:	K2214182-001	**Date Received:**	12/1/22
Sample Matrix:	Water		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	SSOLADEY	EMCALLISTER

Sample Name:	GS-AP-BT-MW-7-FS-DUP	**Date Collected:**	11/30/22
Lab Code:	K2214182-002	**Date Received:**	12/1/22
Sample Matrix:	Water		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	SSOLADEY	EMCALLISTER

Sample Name:	GS-AP-BT-MW-7-FC	**Date Collected:**	11/30/22
Lab Code:	K2214182-003	**Date Received:**	12/1/22
Sample Matrix:	Water		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	SSOLADEY	EMCALLISTER

Sample Name:	GS-AP-BT-MW-7-CER	**Date Collected:**	11/30/22
Lab Code:	K2214182-004	**Date Received:**	12/1/22
Sample Matrix:	Water		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	SSOLADEY	EMCALLISTER

Sample Name:	GS-AP-BT-MW-7-FB	**Date Collected:**	11/30/22
Lab Code:	K2214182-005	**Date Received:**	12/1/22
Sample Matrix:	Water		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	SSOLADEY	EMCALLISTER

Client: Anchor QEA, LLC
Service Request: K2214182
Project: 2022-Gorgas/221114-10.01 Task 05

Sample Name: GS-AP-BT-MW-7-BC
Date Collected: 11/30/22
Lab Code: K2214182-006
Date Received: 12/1/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	SSOLADEY	EMCALLISTER

Sample Name: GS-AP-BT-MW-7-GHT
Date Collected: 11/30/22
Lab Code: K2214182-007
Date Received: 12/1/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	SSOLADEY	EMCALLISTER

Sample Name: GS-AP-BT-MW-7-HT
Date Collected: 11/30/22
Lab Code: K2214182-008
Date Received: 12/1/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	SSOLADEY	EMCALLISTER

Sample Name: GS-AP-BT-MW-7-HEL
Date Collected: 11/30/22
Lab Code: K2214182-009
Date Received: 12/1/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	SSOLADEY	EMCALLISTER

Sample Name: GS-AP-BT-MW-7-LS
Date Collected: 11/30/22
Lab Code: K2214182-010
Date Received: 12/1/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	SSOLADEY	EMCALLISTER

ALS Group USA, Corp.
dba ALS Environmental

Analyst Summary report

Client: Anchor QEA, LLC
Service Request: K2214182
Project: 2022-Gorgas/221114-10.01 Task 05

Sample Name: GS-AP-BT-MW-7-CDL
Date Collected: 11/30/22
Lab Code: K2214182-011
Date Received: 12/1/22
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
200.8	SSOLADEY	EMCALLISTER

Sample Name: GS-AP-BT-MW-7-AIR
Date Collected: 11/30/22
Lab Code: K2214182-012
Date Received: 12/1/22
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
200.8	SSOLADEY	EMCALLISTER

Sample Name: GS-AP-BT-MW-7-FC-pH-5
Date Collected: 11/30/22
Lab Code: K2214182-013
Date Received: 12/1/22
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
200.8	SSOLADEY	EMCALLISTER

Sample Name: GS-AP-BT-MW-7-CTRL
Date Collected: 11/30/22
Lab Code: K2214182-014
Date Received: 12/1/22
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
200.8	SSOLADEY	EMCALLISTER

Sample Results

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Metals

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Client:	Anchor QEA, LLC	**Service Request:**	K2214182
Project:	2022-Gorgas/221114-10.01 Task 05	**Date Collected:**	11/30/22 10:00
Sample Matrix:	Water	**Date Received:**	12/01/22 13:35
Sample Name:	GS-AP-BT-MW-7-FS	**Basis:**	NA
Lab Code:	K2214182-001		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**0.82**	ug/L	0.50	0.09	1	12/06/22 16:41	12/02/22	
Iron	200.8	**157000**	ug/L	40	6	20	12/06/22 17:27	12/02/22	
Lithium	200.8	**213**	ug/L	0.20	0.10	1	12/06/22 16:41	12/02/22	
Manganese	200.8	**552**	ug/L	0.20	0.04	1	12/06/22 16:41	12/02/22	
Molybdenum	200.8	**0.42**	ug/L	0.10	0.03	1	12/06/22 16:41	12/02/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2214182
Project:	2022-Gorgas/221114-10.01 Task 05	**Date Collected:**	11/30/22 10:05
Sample Matrix:	Water	**Date Received:**	12/01/22 13:35
Sample Name:	GS-AP-BT-MW-7-FS-DUP	**Basis:**	NA
Lab Code:	K2214182-002		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**0.37 J**	ug/L	0.50	0.09	1	12/06/22 16:46	12/02/22	
Iron	200.8	**66400**	ug/L	40	6	20	12/06/22 17:31	12/02/22	
Lithium	200.8	**211**	ug/L	0.20	0.10	1	12/06/22 16:46	12/02/22	
Manganese	200.8	**303**	ug/L	0.20	0.04	1	12/06/22 16:46	12/02/22	
Molybdenum	200.8	**0.60**	ug/L	0.10	0.03	1	12/06/22 16:46	12/02/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2214182
Project:	2022-Gorgas/221114-10.01 Task 05	**Date Collected:**	11/30/22 10:10
Sample Matrix:	Water	**Date Received:**	12/01/22 13:35
Sample Name:	GS-AP-BT-MW-7-FC	**Basis:**	NA
Lab Code:	K2214182-003		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**0.75**	ug/L	0.50	0.09	1	12/06/22 16:47	12/02/22	
Iron	200.8	**67600**	ug/L	40	6	20	12/06/22 17:33	12/02/22	
Lithium	200.8	**209**	ug/L	0.20	0.10	1	12/06/22 16:47	12/02/22	
Manganese	200.8	**34.2**	ug/L	0.20	0.04	1	12/06/22 16:47	12/02/22	
Molybdenum	200.8	**1.57**	ug/L	0.10	0.03	1	12/06/22 16:47	12/02/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2214182
Project:	2022-Gorgas/221114-10.01 Task 05	**Date Collected:**	11/30/22 10:15
Sample Matrix:	Water	**Date Received:**	12/01/22 13:35
Sample Name:	GS-AP-BT-MW-7-CER	**Basis:**	NA
Lab Code:	K2214182-004		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**50.3**	ug/L	0.50	0.09	1	12/06/22 16:49	12/02/22	
Iron	200.8	**157**	ug/L	2.0	0.3	1	12/06/22 16:49	12/02/22	
Lithium	200.8	**208**	ug/L	0.20	0.10	1	12/06/22 16:49	12/02/22	
Manganese	200.8	**956**	ug/L	0.20	0.04	1	12/06/22 16:49	12/02/22	
Molybdenum	200.8	**194**	ug/L	0.10	0.03	1	12/06/22 16:49	12/02/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2214182
Project:	2022-Gorgas/221114-10.01 Task 05	**Date Collected:**	11/30/22 10:20
Sample Matrix:	Water	**Date Received:**	12/01/22 13:35
Sample Name:	GS-AP-BT-MW-7-FB	**Basis:**	NA
Lab Code:	K2214182-005		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**18.5**	ug/L	0.50	0.09	1	12/06/22 17:06	12/02/22	
Iron	200.8	**26.7**	ug/L	2.0	0.3	1	12/06/22 17:06	12/02/22	
Lithium	200.8	**100**	ug/L	0.20	0.10	1	12/06/22 17:06	12/02/22	
Manganese	200.8	ND U	ug/L	0.20	0.04	1	12/06/22 17:06	12/02/22	
Molybdenum	200.8	**353**	ug/L	0.10	0.03	1	12/06/22 17:06	12/02/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2214182
Project:	2022-Gorgas/221114-10.01 Task 05	**Date Collected:**	11/30/22 10:25
Sample Matrix:	Water	**Date Received:**	12/01/22 13:35
Sample Name:	GS-AP-BT-MW-7-BC	**Basis:**	NA
Lab Code:	K2214182-006		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**247**	ug/L	0.50	0.09	1	12/06/22 17:07	12/02/22	
Iron	200.8	**2.7**	ug/L	2.0	0.3	1	12/06/22 17:07	12/02/22	
Lithium	200.8	**328**	ug/L	0.20	0.10	1	12/06/22 17:07	12/02/22	
Manganese	200.8	**167**	ug/L	0.20	0.04	1	12/06/22 17:07	12/02/22	
Molybdenum	200.8	**6.79**	ug/L	0.10	0.03	1	12/06/22 17:07	12/02/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2214182
Project:	2022-Gorgas/221114-10.01 Task 05	**Date Collected:**	11/30/22 10:30
Sample Matrix:	Water	**Date Received:**	12/01/22 13:35
Sample Name:	GS-AP-BT-MW-7-GHT	**Basis:**	NA
Lab Code:	K2214182-007		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**1.59**	ug/L	0.50	0.09	1	12/06/22 17:09	12/02/22	
Iron	200.8	**2.1**	ug/L	2.0	0.3	1	12/06/22 17:09	12/02/22	
Lithium	200.8	**35.9**	ug/L	0.20	0.10	1	12/06/22 17:09	12/02/22	
Manganese	200.8	**0.08 J**	ug/L	0.20	0.04	1	12/06/22 17:09	12/02/22	
Molybdenum	200.8	**46.0**	ug/L	0.10	0.03	1	12/06/22 17:09	12/02/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2214182
Project:	2022-Gorgas/221114-10.01 Task 05	**Date Collected:**	11/30/22 10:35
Sample Matrix:	Water	**Date Received:**	12/01/22 13:35
Sample Name:	GS-AP-BT-MW-7-HT	**Basis:**	NA
Lab Code:	K2214182-008		

Dissolved Metals

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**203**		ug/L	0.50	0.09	1	12/06/22 17:11	12/02/22	
Iron	200.8	**1.9**	**J**	ug/L	2.0	0.3	1	12/06/22 17:11	12/02/22	
Lithium	200.8	**220**		ug/L	0.20	0.10	1	12/06/22 17:11	12/02/22	
Manganese	200.8	**12.5**		ug/L	0.20	0.04	1	12/06/22 17:11	12/02/22	
Molybdenum	200.8	**89.7**		ug/L	0.10	0.03	1	12/06/22 17:11	12/02/22	

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Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2214182
Project:	2022-Gorgas/221114-10.01 Task 05	**Date Collected:**	11/30/22 10:40
Sample Matrix:	Water	**Date Received:**	12/01/22 13:35
Sample Name:	GS-AP-BT-MW-7-HEL	**Basis:**	NA
Lab Code:	K2214182-009		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**124**	ug/L	0.50	0.09	1	12/06/22 17:12	12/02/22	
Iron	200.8	**3.4**	ug/L	2.0	0.3	1	12/06/22 17:12	12/02/22	
Lithium	200.8	**202**	ug/L	0.20	0.10	1	12/06/22 17:12	12/02/22	
Manganese	200.8	**3.83**	ug/L	0.20	0.04	1	12/06/22 17:12	12/02/22	
Molybdenum	200.8	**271**	ug/L	0.10	0.03	1	12/06/22 17:12	12/02/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2214182
Project:	2022-Gorgas/221114-10.01 Task 05	**Date Collected:**	11/30/22 10:45
Sample Matrix:	Water	**Date Received:**	12/01/22 13:35
Sample Name:	GS-AP-BT-MW-7-LS	**Basis:**	NA
Lab Code:	K2214182-010		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**155**	ug/L	0.50	0.09	1	12/06/22 17:14	12/02/22	
Iron	200.8	**1.4 J**	ug/L	2.0	0.3	1	12/06/22 17:14	12/02/22	
Lithium	200.8	**210**	ug/L	0.20	0.10	1	12/06/22 17:14	12/02/22	
Manganese	200.8	**0.62**	ug/L	0.20	0.04	1	12/06/22 17:14	12/02/22	
Molybdenum	200.8	**222**	ug/L	0.10	0.03	1	12/06/22 17:14	12/02/22	

ALS Group USA, Corp.

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Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2214182
Project:	2022-Gorgas/221114-10.01 Task 05	**Date Collected:**	11/30/22 10:50
Sample Matrix:	Water	**Date Received:**	12/01/22 13:35
Sample Name:	GS-AP-BT-MW-7-CDL	**Basis:**	NA
Lab Code:	K2214182-011		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**0.09 J**	ug/L	0.50	0.09	1	12/06/22 15:58	12/02/22	
Iron	200.8	**1.6 J**	ug/L	2.0	0.3	1	12/06/22 15:58	12/02/22	
Lithium	200.8	**255**	ug/L	0.10	0.10	1	12/06/22 15:58	12/02/22	
Manganese	200.8	**0.05 J**	ug/L	0.20	0.04	1	12/06/22 15:58	12/02/22	
Molybdenum	200.8	**73.3**	ug/L	0.10	0.03	1	12/06/22 15:58	12/02/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2214182
Project:	2022-Gorgas/221114-10.01 Task 05	**Date Collected:**	11/30/22 10:55
Sample Matrix:	Water	**Date Received:**	12/01/22 13:35
Sample Name:	GS-AP-BT-MW-7-AIR	**Basis:**	NA
Lab Code:	K2214182-012		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**248**	ug/L	0.50	0.09	1	12/06/22 16:00	12/02/22	
Iron	200.8	**14.1**	ug/L	2.0	0.3	1	12/06/22 16:00	12/02/22	
Lithium	200.8	**206**	ug/L	0.10	0.10	1	12/06/22 16:00	12/02/22	
Manganese	200.8	**30.9**	ug/L	0.20	0.04	1	12/06/22 16:00	12/02/22	
Molybdenum	200.8	**225**	ug/L	0.10	0.03	1	12/06/22 16:00	12/02/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2214182
Project:	2022-Gorgas/221114-10.01 Task 05	**Date Collected:**	11/30/22 11:00
Sample Matrix:	Water	**Date Received:**	12/01/22 13:35
Sample Name:	GS-AP-BT-MW-7-FC-pH-5	**Basis:**	NA
Lab Code:	K2214182-013		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	ND U	ug/L	0.50	0.09	1	12/06/22 16:02	12/02/22	
Iron	200.8	**11.5**	ug/L	2.0	0.3	1	12/06/22 16:02	12/02/22	
Lithium	200.8	**203**	ug/L	0.10	0.10	1	12/06/22 16:02	12/02/22	
Manganese	200.8	**36.3**	ug/L	0.20	0.04	1	12/06/22 16:02	12/02/22	
Molybdenum	200.8	**0.11**	ug/L	0.10	0.03	1	12/06/22 16:02	12/02/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2214182
Project:	2022-Gorgas/221114-10.01 Task 05	**Date Collected:**	11/30/22 11:05
Sample Matrix:	Water	**Date Received:**	12/01/22 13:35
Sample Name:	GS-AP-BT-MW-7-CTRL	**Basis:**	NA
Lab Code:	K2214182-014		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**254**	ug/L	0.50	0.09	1	12/06/22 16:03	12/02/22	
Iron	200.8	**22.4**	ug/L	2.0	0.3	1	12/06/22 16:03	12/02/22	
Lithium	200.8	**209**	ug/L	0.10	0.10	1	12/06/22 16:03	12/02/22	
Manganese	200.8	**33.8**	ug/L	0.20	0.04	1	12/06/22 16:03	12/02/22	
Molybdenum	200.8	**225**	ug/L	0.10	0.03	1	12/06/22 16:03	12/02/22	

QC Summary Forms

ALS Environmental—Kelso Laboratory
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Metals

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Client:	Anchor QEA, LLC	**Service Request:**	K2214182
Project:	2022-Gorgas/221114-10.01 Task 05	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	KQ2221302-01		

Dissolved Metals

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	ND	U	ug/L	0.50	0.09	1	12/06/22 16:08	12/02/22	
Iron	200.8	ND	U	ug/L	2.0	0.3	1	12/06/22 16:08	12/02/22	
Lithium	200.8	ND	U	ug/L	0.20	0.10	1	12/06/22 16:08	12/02/22	
Manganese	200.8	ND	U	ug/L	0.20	0.04	1	12/06/22 16:08	12/02/22	
Molybdenum	200.8	ND	U	ug/L	0.10	0.03	1	12/06/22 16:08	12/02/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2214182
Project:	2022-Gorgas/221114-10.01 Task 05	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	KQ2221303-01		

Dissolved Metals

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	ND	U	ug/L	0.50	0.09	1	12/06/22 15:17	12/02/22	
Iron	200.8	**0.3**	**J**	ug/L	2.0	0.3	1	12/06/22 15:17	12/02/22	
Lithium	200.8	ND	U	ug/L	0.10	0.10	1	12/06/22 15:17	12/02/22	
Manganese	200.8	ND	U	ug/L	0.20	0.04	1	12/06/22 15:17	12/02/22	
Molybdenum	200.8	ND	U	ug/L	0.10	0.03	1	12/06/22 15:17	12/02/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2214182
Project:	2022-Gorgas/221114-10.01 Task 05	**Date Collected:**	11/30/22
Sample Matrix:	Water	**Date Received:**	12/01/22
		Date Analyzed:	12/6/22
		Date Extracted:	12/2/22

Matrix Spike Summary
Dissolved Metals

Sample Name:	GS-AP-BT-MW-7-FS	**Units:**	ug/L
Lab Code:	K2214182-001	**Basis:**	NA
Analysis Method:	200.8		
Prep Method:	EPA CLP ILM04.0		

Matrix Spike
KQ2221302-05

Analyte Name	Sample Result	Result	Spike Amount	% Rec	% Rec Limits
Arsenic	0.82	48.3	50.0	95	70-130
Iron	157000	157000	50	362 #	70-130
Lithium	213	263	50.0	100 #	70-130
Manganese	552	553	25.0	3 #	70-130
Molybdenum	0.42	26.8	25.0	105	70-130

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Matrix Spike and Matrix Spike Duplicate Data is presented for information purposes only. The matrix may or may not be relevant to samples reported in this report. The laboratory evaluates system performance based on the LCS and LCSD control limits.

ALS Group USA, Corp.

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QA/QC Report

Client:	Anchor QEA, LLC	**Service Request:**	K2214182
Project	2022-Gorgas/221114-10.01 Task 05	**Date Collected:**	11/30/22
Sample Matrix:	Water	**Date Received:**	12/01/22
		Date Analyzed:	12/06/22

Replicate Sample Summary
Dissolved Metals

Sample Name:	GS-AP-BT-MW-7-FS	**Units:**	ug/L
Lab Code:	K2214182-001	**Basis:**	NA

Analyte Name	Analysis Method	MRL	MDL	Sample Result	Duplicate Sample KQ2221302-06 Result	Average	RPD	RPD Limit
Arsenic	200.8	0.50	0.09	0.82	0.71	0.77	14	20
Iron	200.8	40	6	157000	158000	158000	<1	20
Lithium	200.8	0.20	0.10	213	207	210	3	20
Manganese	200.8	0.20	0.04	552	535	544	3	20
Molybdenum	200.8	0.10	0.03	0.42	0.41	0.42	2	20

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client:	Anchor QEA, LLC	**Service Request:**	K2214182
Project:	2022-Gorgas/221114-10.01 Task 05	**Date Analyzed:**	12/06/22
Sample Matrix:	Water		

Lab Control Sample Summary
Dissolved Metals

Units:ug/L
Basis:NA

Lab Control Sample
KQ2221302-02

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Arsenic	200.8	48.2	50.0	96	85-115
Iron	200.8	47.1	50.0	94	85-115
Lithium	200.8	49.1	50.0	98	85-115
Manganese	200.8	23.4	25.0	94	85-115
Molybdenum	200.8	24.9	25.0	100	85-115

Client:	Anchor QEA, LLC	**Service Request:**	K2214182
Project:	2022-Gorgas/221114-10.01 Task 05	**Date Analyzed:**	12/06/22
Sample Matrix:	Water		

Lab Control Sample Summary
Dissolved Metals

Units:ug/L
Basis:NA

Lab Control Sample
KQ2221303-02

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Arsenic	200.8	47.4	50.0	95	85-115
Iron	200.8	48.7	50.0	97	85-115
Lithium	200.8	51.5	50.0	103	85-115
Manganese	200.8	23.4	25.0	94	85-115
Molybdenum	200.8	25.5	25.0	102	85-115

January 05, 2023

Service Request No:K2214651

Masa Kanematsu
Anchor QEA, LLC
6720 SW Macadam Avenue
Suite 125
Portland, OR 97219

Laboratory Results for: 2022-Gorgas

Dear Masa,

Enclosed are the results of the sample(s) submitted to our laboratory December 12, 2022
For your reference, these analyses have been assigned our service request number **K2214651.**

Analyses were performed according to our laboratory’s NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. All results are intended to be considered in their entirety, and ALS Group USA Corp. dba ALS Environmental (ALS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please contact me if you have any questions. My extension is 3376. You may also contact me via email at Mark.Harris@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

Mark Harris
Project Manager

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Narrative Documents

ALS Environmental—Kelso Laboratory
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Client: Anchor QEA, LLC
Project: 2022-Gorgas
Sample Matrix: Water

Service Request: K2214651
Date Received: 12/12/2022

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples for the Tier II level requested by the client.

Sample Receipt:

One water sample was received for analysis at ALS Environmental on 12/12/2022. Any discrepancies upon initial sample inspection are annotated on the sample receipt and preservation form included within this report. The sample was stored at minimum in accordance with the analytical method requirements.

Metals:

No significant anomalies were noted with this analysis.

Approved by ______________________ Date 01/05/2023

SAMPLE DETECTION SUMMARY

This form includes only detections above the reporting levels. For a full listing of sample results, continue to the Sample Results section of this Report.

CLIENT ID: GS-AP-MW-6D-As-Spiked-2 **Lab ID: K2214651-001**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	274		0.09	0.50	ug/L	200.8

Sample Receipt Information

ALS Environmental—Kelso Laboratory
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www.alsglobal.com

Client: Anchor QEA, LLC **Service Request:** K2214651
Project: 2022-Gorgas/221114-10.01 Task 05

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
K2214651-001	GS-AP-MW-6D-As-Spiked-2	12/2/2022	0830

V2214651

Chain of Custody Record & Laboratory Analysis Request

Laboratory Number:	503-972-5019
Date:	12/12/2022
Project Name:	Gorgas
Project Number:	221114-10.01 Task 05
Project Manager:	Masa Kanematsu
Phone Number:	503-972-5001 (backup number: 503-798-3456)
Shipment Method:	ALS Carrier

ANCHOR QEA
Masa Kanematsu
6720 SW Macadam Ave
Suite 125
Portland OR 97219

Line	Field Sample ID	Collection		Matrix	No. of Containers	Parameters														Comments/Preservation
		Date	Time			Dissolved Metals (As)														
1	GS-AP-MW-6D-As-Spiked-2	12/2/2022	8:30	Water	1	X														HNO3 preserved. Field Filtered. Approx. 500 µg/L As
2																				
3																				
4																				
5																				
6																				
7																				
8																				
9																				
10																				
11																				
12																				
13																				
14																				
15																				

Notes: Please Contact Masa (503-972-5001, mkanematsu@anchorqea.com) if running > 10X dilution. Please analyze by ICP-MS method 200.8.

Relinquished by:	Company:	Received by:	
Emma Nordlund	Anchor QEA	Greg Rich	ALS
Signature/Print Name:	Date/Time:	Signature/Print Name:	
	12/12/2022 9:15	Greg Rich	12/12/22 1055
Relinquished by:	Company:	Received by:	
Greg Rich	ALS		12/12/22 1255
Signature/Print Name:	Date/Time:	Signature/Print Name:	
Greg Rich	12-12-22 1255	Katelyn Mitola	

Distribution: A copy will be made for the laboratory and client. The Project file will retain the original.

Page 1 of 1

PM MH

Cooler Receipt and Preservation Form

Client Anchor Service Request K22 14651

Received: 12/12/22 Opened: 12/12/22 By: VM Unloaded: 12/12/22 By: VM

1. Samples were received via? *USPS* *Fed Ex* *UPS* *DHL* *PDX* [✓ *Courier*] *Hand Delivered*
2. Samples were received in: (circle) [✓ *Cooler*] *Box* *Envelope* *Other* ______ *NA*
3. Were custody seals on coolers? NA Y [✓ N] If yes, how many and where? ______

   If present, were custody seals intact? Y N If present, were they signed and dated? Y N

Temp Blank	Sample Temp	IR Gun	Cooler #/COC ID / NA	Out of temp indicate with "X"	PM Notified If out of temp	Tracking Number NA	Filed
3.5		IR02					

4. Was a Temperature Blank present in cooler? NA [✓ Y] N If yes, notate the temperature in the appropriate column above:

   If no, take the temperature of a representative sample bottle contained within the cooler; notate in the column "Sample Temp":

5. Were samples received within the method specified temperature ranges? NA [✓ Y] N

   If no, were they received on ice and same day as collected? If not, notate the cooler # above and notify the PM. [✓ NA] Y N

If applicable, tissue samples were received: *Frozen* *Partially Thawed* *Thawed*

6. Packing material: *Inserts* [✓ *Baggies*] *Bubble Wrap* *Gel Packs* [✓ *Wet Ice*] *Dry Ice* *Sleeves* ______
7. Were custody papers properly filled out (ink, signed, etc.)? NA [✓ Y] N
8. Were samples received in good condition (unbroken) NA [✓ Y] N
9. Were all sample labels complete (ie, analysis, preservation, etc.)? NA [✓ Y] N
10. Did all sample labels and tags agree with custody papers? NA [✓ Y] N
11. Were appropriate bottles/containers and volumes received for the tests indicated? NA [✓ Y] N
12. Were the pH-preserved bottles (*see SMO GEN SOP*) received at the appropriate pH? *Indicate in the table below* [✓ NA] Y N
13. Were VOA vials received without headspace? *Indicate in the table below.* [✓ NA] Y N
14. Was C12/Res negative? [✓ NA] Y N
15. Were samples received within the method specified time limit? If not, notate the error below and notify the PM [✓ NA] Y N
16. Were 100ml sterile microbiology bottles filled exactly to the 100ml mark? [✓ NA] Y N Underfilled Overfilled

Sample ID on Bottle	Sample ID on COC	Identified by:

Sample ID	Bottle Count Bottle Type	Head-space	Broke	pH	Reagent	Volume added	Reagent Lot Number	Initials	Time

Notes, Discrepancies, Resolutions: Did not PH due to limited volume

Miscellaneous Forms

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Inorganic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated value.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.
H	The holding time for this test is immediately following sample collection. The samples were analyzed as soon as possible after receipt by the laboratory.

Metals Data Qualifiers

#	The control limit criteria is not applicable.
J	The result is an estimated value.
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
M	The duplicate injection precision was not met.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
S	The reported value was determined by the Method of Standard Additions (MSA).
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
+	The correlation coefficient for the MSA is less than 0.995.
Q	See case narrative. One or more quality control criteria was outside the limits.

Organic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
A	A tentatively identified compound, a suspected aldol-condensation product.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
C	The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
D	The reported result is from a dilution.
E	The result is an estimated value.
J	The result is an estimated value.
N	The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
P	The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a chromatographic interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.

Additional Petroleum Hydrocarbon Specific Qualifiers

F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
Y	The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
Z	The chromatographic fingerprint does not resemble a petroleum product.

ALS Group USA Corp. dba ALS Environmental (ALS) - Kelso
State Certifications, Accreditations, and Licenses

Agency	Web Site	Number
Alaska DEH	http://dec.alaska.gov/eh/lab/cs/csapproval.htm	UST-040
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0339
Arkansas - DEQ	http://www.adeq.state.ar.us/techsvs/labcert.htm	88-0637
California DHS (ELAP)	http://www.cdph.ca.gov/certlic/labs/Pages/ELAP.aspx	2795
DOD ELAP	http://www.denix.osd.mil/edqw/Accreditation/AccreditedLabs.cfm	L16-58-R4
Florida DOH	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E87412
Hawaii DOH	http://health.hawaii.gov/	-
ISO 17025	http://www.pjlabs.com/	L16-57
Louisiana DEQ	http://www.deq.louisiana.gov/page/la-lab-accreditation	03016
Maine DHS	http://www.maine.gov/dhhs/	WA01276
Minnesota DOH	http://www.health.state.mn.us/accreditation	053-999-457
Nevada DEP	http://ndep.nv.gov/bsdw/labservice.htm	WA01276
New Jersey DEP	http://www.nj.gov/dep/enforcement/oqa.html	WA005
New York - DOH	https://www.wadsworth.org/regulatory/elap	12060
North Carolina DEQ	https://deq.nc.gov/about/divisions/water-resources/water-resources-data/water-sciences-home-page/laboratory-certification-branch/non-field-lab-certification	605
Oklahoma DEQ	http://www.deq.state.ok.us/CSDnew/labcert.htm	9801
Oregon – DEQ (NELAP)	http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	WA100010
South Carolina DHEC	http://www.scdhec.gov/environment/EnvironmentalLabCertification/	61002
Texas CEQ	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	T104704427
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C544
Wyoming (EPA Region 8)	https://www.epa.gov/region8-waterops/epa-region-8-certified-drinking-water	-
Kelso Laboratory Website	www.alsglobal.com	NA

Analyses were performed according to our laboratory’s NELAP-approved quality assurance program. A complete listing of specific NELAP-certified analytes, can be found in the certification section at www.ALSGlobal.com or at the accreditation bodies web site.

Please refer to the certification and/or accreditation body's web site if samples are submitted for compliance purposes. The states highlighted above, require the analysis be listed on the state certification if used for compliance purposes and if the method/anlayte is offered by that state.

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LOD	Limit of Detection
LOQ	Limit of Quantitation
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

ALS Group USA, Corp.
dba ALS Environmental

Analyst Summary report

Client: Anchor QEA, LLC

Service Request: K2214651

Project: 2022-Gorgas/221114-10.01 Task 05

Sample Name: GS-AP-MW-6D-As-Spiked-2

Date Collected: 12/2/22

Lab Code: K2214651-001

Date Received: 12/12/22

Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
200.8	SSOLADEY	JCHAN

Sample Name: GS-AP-MW-6D-As-Spiked-2

Date Collected: 12/2/22

Lab Code: K2214651-001.R01

Date Received: 12/12/22

Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
200.8	ACOUCH	EMCALLISTER

Sample Results

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Metals

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Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2214651
Project:	2022-Gorgas/221114-10.01 Task 05	**Date Collected:**	12/02/22 08:30
Sample Matrix:	Water	**Date Received:**	12/12/22 12:55
Sample Name:	GS-AP-MW-6D-As-Spiked-2	**Basis:**	NA
Lab Code:	K2214651-001		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**274**	ug/L	0.50	0.09	1	01/04/23 12:54	12/30/22	

QC Summary Forms

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Metals

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1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2214651
Project:	2022-Gorgas/221114-10.01 Task 05	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	KQ2222903-05		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	ND U	ug/L	0.50	0.09	1	01/04/23 12:51	12/30/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2214651
Project:	2022-Gorgas/221114-10.01 Task 05	**Date Analyzed:**	01/04/23
Sample Matrix:	Water		

Lab Control Sample Summary
Dissolved Metals

Units:ug/L
Basis:NA

Lab Control Sample
KQ2222903-06

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Arsenic	200.8	49.3	50.0	99	85-115

January 05, 2023 Service Request No:K2214653

Masa Kanematsu
Anchor QEA, LLC
6720 SW Macadam Avenue
Suite 125
Portland, OR 97219

Laboratory Results for: 2022-Gorgas

Dear Masa,

Enclosed are the results of the sample(s) submitted to our laboratory December 12, 2022
For your reference, these analyses have been assigned our service request number **K2214653.**

Analyses were performed according to our laboratory’s NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. All results are intended to be considered in their entirety, and ALS Group USA Corp. dba ALS Environmental (ALS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please contact me if you have any questions. My extension is 3376. You may also contact me via email at Mark.Harris@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

Mark Harris
Project Manager

ADDRESS 1317 S. 13th Avenue, Kelso, WA 98626
PHONE +1 360 577 7222 | FAX +1 360 636 1068
ALS Group USA, Corp.
dba ALS Environmental

Narrative Documents

ALS Environmental—Kelso Laboratory
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Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Client: Anchor QEA, LLC
Project: 2022-Gorgas
Sample Matrix: Water

Service Request: K2214653
Date Received: 12/12/2022

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples for the Tier II level requested by the client.

Sample Receipt:

Sixteen water samples were received for analysis at ALS Environmental on 12/12/2022. Any discrepancies upon initial sample inspection are annotated on the sample receipt and preservation form included within this report. The samples were stored at minimum in accordance with the analytical method requirements.

Metals:

No significant anomalies were noted with this analysis.

Approved by ______________________

Date 01/05/2023

SAMPLE DETECTION SUMMARY

This form includes only detections above the reporting levels. For a full listing of sample results, continue to the Sample Results section of this Report.

CLIENT ID: GS-AP-BT-MW-6D-PM **Lab ID: K2214653-001**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	48.3		0.09	0.50	ug/L	200.8
Lithium, Dissolved	305		0.10	0.10	ug/L	200.8
Manganese, Dissolved	49700		4	50	ug/L	200.8

CLIENT ID: GS-AP-BT-MW-6D-FC-PM-MC-pH-9.5 **Lab ID: K2214653-005**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	3.55		0.09	0.50	ug/L	200.8
Iron, Dissolved	11.6		0.3	2.0	ug/L	200.8
Lithium, Dissolved	96.4		0.10	0.10	ug/L	200.8
Manganese, Dissolved	38.9		0.04	0.50	ug/L	200.8

CLIENT ID: GS-AP-BT-MW-6D-FS-PM-MC-pH-9.5 **Lab ID: K2214653-006**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	0.34	J	0.09	0.50	ug/L	200.8
Iron, Dissolved	5.3		0.3	2.0	ug/L	200.8
Lithium, Dissolved	268		0.10	0.10	ug/L	200.8
Manganese, Dissolved	4.54		0.04	0.50	ug/L	200.8

CLIENT ID: GS-AP-BT-MW-6D-PM-DUP **Lab ID: K2214653-007**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	46.9		0.09	0.50	ug/L	200.8
Lithium, Dissolved	298		0.10	0.10	ug/L	200.8
Manganese, Dissolved	36900		4	50	ug/L	200.8

CLIENT ID: GS-AP-BT-MW-6D-CTRL-2 **Lab ID: K2214653-008**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	294		0.09	0.50	ug/L	200.8
Iron, Dissolved	1.3	J	0.3	2.0	ug/L	200.8
Lithium, Dissolved	314		0.10	0.10	ug/L	200.8
Manganese, Dissolved	187		0.04	0.50	ug/L	200.8

CLIENT ID: GS-AP-BT-MW-7-PM **Lab ID: K2214653-009**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	85.4		0.09	0.50	ug/L	200.8
Lithium, Dissolved	203		0.10	0.10	ug/L	200.8
Manganese, Dissolved	50100		4	50	ug/L	200.8

CLIENT ID: GS-AP-BT-MW-7-PM-DUP **Lab ID: K2214653-015**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	83.6		0.09	0.50	ug/L	200.8
Lithium, Dissolved	203		0.10	0.10	ug/L	200.8
Manganese, Dissolved	47000		4	50	ug/L	200.8

SAMPLE DETECTION SUMMARY

This form includes only detections above the reporting levels. For a full listing of sample results, continue to the Sample Results section of this Report.

CLIENT ID: GS-AP-BT-MW-7-CTRL-2 **Lab ID: K2214653-016**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	265		0.09	0.50	ug/L	200.8
Iron, Dissolved	10.0		0.3	2.0	ug/L	200.8
Lithium, Dissolved	211		0.10	0.10	ug/L	200.8
Manganese, Dissolved	41.3		0.04	0.50	ug/L	200.8
Molybdenum, Dissolved	214		0.03	0.10	ug/L	200.8

CLIENT ID: GS-AP-BT-MW-6D-FC-PM-MC **Lab ID: K2214653-002**

Analyte	Results	Flag	MDL	MRL	Units	Method
Iron, Dissolved	11700		0.3	2.0	ug/L	200.8
Lithium, Dissolved	298		0.10	0.10	ug/L	200.8
Manganese, Dissolved	28800		4	50	ug/L	200.8

CLIENT ID: GS-AP-BT-MW-6D-FS-PM-MC **Lab ID: K2214653-003**

Analyte	Results	Flag	MDL	MRL	Units	Method
Iron, Dissolved	99400		30	200	ug/L	200.8
Lithium, Dissolved	298		0.10	0.10	ug/L	200.8
Manganese, Dissolved	76100		4	50	ug/L	200.8

CLIENT ID: GS-AP-BT-MW-6D-HT-MMO **Lab ID: K2214653-004**

Analyte	Results	Flag	MDL	MRL	Units	Method
Iron, Dissolved	18.0		0.3	2.0	ug/L	200.8
Lithium, Dissolved	7.35		0.10	0.10	ug/L	200.8
Manganese, Dissolved	32.4		0.04	0.50	ug/L	200.8

CLIENT ID: GS-AP-BT-MW-7-FC-PM-MC **Lab ID: K2214653-010**

Analyte	Results	Flag	MDL	MRL	Units	Method
Iron, Dissolved	23800		0.3	2.0	ug/L	200.8
Lithium, Dissolved	196		0.10	0.10	ug/L	200.8
Manganese, Dissolved	4710		4	50	ug/L	200.8

CLIENT ID: GS-AP-BT-MW-7-FS-PM-MC **Lab ID: K2214653-011**

Analyte	Results	Flag	MDL	MRL	Units	Method
Iron, Dissolved	83700		30	200	ug/L	200.8
Lithium, Dissolved	193		0.10	0.10	ug/L	200.8
Manganese, Dissolved	5910		4	50	ug/L	200.8

CLIENT ID: GS-AP-BT-MW-7-HT-MMO **Lab ID: K2214653-012**

Analyte	Results	Flag	MDL	MRL	Units	Method
Iron, Dissolved	21.4		0.3	2.0	ug/L	200.8
Lithium, Dissolved	2.03		0.10	0.10	ug/L	200.8
Manganese, Dissolved	55.4		0.04	0.50	ug/L	200.8
Molybdenum, Dissolved	1.79		0.03	0.10	ug/L	200.8

SAMPLE DETECTION SUMMARY

This form includes only detections above the reporting levels. For a full listing of sample results, continue to the Sample Results section of this Report.

CLIENT ID: GS-AP-BT-MW-7-FC-PMMC-pH-9.5 **Lab ID: K2214653-013**

Analyte	Results	Flag	MDL	MRL	Units	Method
Iron, Dissolved	11		2	10	ug/L	200.8
Lithium, Dissolved	59.6		0.10	0.10	ug/L	200.8
Manganese, Dissolved	36.8		0.2	2.5	ug/L	200.8
Molybdenum, Dissolved	21.2		0.15	0.50	ug/L	200.8

CLIENT ID: GS-AP-BT-MW-7-FS-PM-MC-pH-9.5 **Lab ID: K2214653-014**

Analyte	Results	Flag	MDL	MRL	Units	Method
Iron, Dissolved	18		2	10	ug/L	200.8
Lithium, Dissolved	83.9		0.10	0.10	ug/L	200.8
Manganese, Dissolved	20.4		0.2	2.5	ug/L	200.8
Molybdenum, Dissolved	41.9		0.15	0.50	ug/L	200.8

Sample Receipt Information

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

RIGHT SOLUTIONS | RIGHT PARTNER

Client: Anchor QEA, LLC **Service Request:**K2214653
Project: 2022-Gorgas/221114-10.01 Task 05

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
K2214653-001	GS-AP-BT-MW-6D-PM	12/9/2022	0800
K2214653-002	GS-AP-BT-MW-6D-FC-PM-MC	12/9/2022	0805
K2214653-003	GS-AP-BT-MW-6D-FS-PM-MC	12/9/2022	0810
K2214653-004	GS-AP-BT-MW-6D-HT-MMO	12/9/2022	0815
K2214653-005	GS-AP-BT-MW-6D-FC-PM-MC-pH-9.5	12/9/2022	0820
K2214653-006	GS-AP-BT-MW-6D-FS-PM-MC-pH-9.5	12/9/2022	0825
K2214653-007	GS-AP-BT-MW-6D-PM-DUP	12/9/2022	0830
K2214653-008	GS-AP-BT-MW-6D-CTRL-2	12/9/2022	0835
K2214653-009	GS-AP-BT-MW-7-PM	12/9/2022	0840
K2214653-010	GS-AP-BT-MW-7-FC-PM-MC	12/9/2022	0845
K2214653-011	GS-AP-BT-MW-7-FS-PM-MC	12/9/2022	0850
K2214653-012	GS-AP-BT-MW-7-HT-MMO	12/9/2022	0855
K2214653-013	GS-AP-BT-MW-7-FC-PMMC-pH-9.5	12/9/2022	0900
K2214653-014	GS-AP-BT-MW-7-FS-PM-MC-pH-9.5	12/9/2022	0905
K2214653-015	GS-AP-BT-MW-7-PM-DUP	12/9/2022	0910
K2214653-016	GS-AP-BT-MW-7-CTRL-2	12/9/2022	0915

VA2214653

Chain of Custody Record & Laboratory Analysis Request

Laboratory Number: 503-972-5019	
Date:	12/12/2022
Project Name:	Gorgas
Project Number:	221114-10.01 Task 05
Project Manager:	Masa Kanematsu
Phone Number:	503-972-5001 (backup number: 503-798-3456)
Shipment Method:	ALS Carrier

ANCHOR QEA

Masa Kanematsu
6720 SW Macadam Ave Suite 125
Portland OR 97219

Line	Field Sample ID	Collection Date	Collection Time	Matrix	No. of Containers	Dissolved Metals (As, Li, Mo, Fe, Mn)	Dissolved Metals (As, Li, Fe, Mn)												Comments/Preservation
1	GS-AP-BT-MW-6D-PM	12/9/2022	8:00	Water	1		X												HNO3 preserved. Field Filtered. KMnO4 added
2	GS-AP-BT-MW-6D-FC-PM-MC	12/9/2022	8:05	Water	1		X												HNO3 preserved. Field Filtered. KMnO4 added
3	GS-AP-BT-MW-6D-FS-PM-MC	12/9/2022	8:10	Water	1		X												HNO3 preserved. Field Filtered. KMnO4 added
4	GS-AP-BT-MW-6D-HT-MMO	12/9/2022	8:15	Water	1		X												HNO3 preserved. Field Filtered. KMnO4 added
5	GS-AP-BT-MW-6D-FC-PM-MC-pH-9.5	12/9/2022	8:20	Water	1		X												HNO3 preserved. Field Filtered. KMnO4 added
6	GS-AP-BT-MW-6D-FS-PM-MC-pH-9.5	12/9/2022	8:25	Water	1		X												HNO3 preserved. Field Filtered. KMnO4 added
7	GS-AP-BT-MW-6D-PM-DUP	12/9/2022	8:30	Water	1		X												HNO3 preserved. Field Filtered. KMnO4 added
8	GS-AP-BT-MW-6D-CTRL-2	12/9/2022	8:35	Water	1		X												HNO3 preserved. Field Filtered.
9	GS-AP-BT-MW-7-PM	12/9/2022	8:40	Water	1	X													HNO3 preserved. Field Filtered. KMnO4 added
10	GS-AP-BT-MW-7-FC-PM-MC	12/9/2022	8:45	Water	1	X													HNO3 preserved. Field Filtered. KMnO4 added
11	GS-AP-BT-MW-7-FS-PM-MC	12/9/2022	8:50	Water	1	X													HNO3 preserved. Field Filtered. KMnO4 added
12	GS-AP-BT-MW-7-HT-MMO	12/9/2022	8:55	Water	1	X													HNO3 preserved. Field Filtered. KMnO4 added
13	GS-AP-BT-MW-7-FC-PM-MC-pH-9.5	12/9/2022	9:00	Water	1	X													HNO3 preserved. Field Filtered. KMnO4 added
14	GS-AP-BT-MW-7-FS-PM-MC-pH-9.5	12/9/2022	9:05	Water	1	X													HNO3 preserved. Field Filtered. KMnO4 added
15	GS-AP-BT-MW-7-PM-DUP	12/9/2022	9:10	Water	1	X													HNO3 preserved. Field Filtered. KMnO4 added
16	GS-AP-BT-MW-7-CTRL-2	12/9/2022	9:15	Water	1	X													HNO3 preserved. Field Filtered.

Notes: Please Contact Masa (503-972-5001, mkanematsu@anchorqea.com) if running > 10X dilution. Please analyze by ICP-MS method 200.8 to achieve the MDL < 1 ppb. Some samples may have residual purple color associated with potassium permanganate (KMnO4). If those samples need to be diluted in order to not damage the ICP-MS, please do so and let Masa know the dilution factor.

Relinquished by:	Company:
Emma Nordlund	Anchor QEA
Signature/Print Name:	Date/Time:
	12/12/2022 9:15

Received by:		
Greg Rich	ALS	
Signature/Print Name:		
Greg Rich	12/12/22	1055

Relinquished by:	Company:
Greg Rich	ALS
Signature/Print Name:	Date/Time:
Greg Rich	12-22-22 1255

Received by:		
	12/12/22	1255
Signature/Print Name:		
Vinelyn Mitalo		

Distribution: A copy will be made for the laboratory and client. The Project file will retain the original.

PM MH

Cooler Receipt and Preservation Form

Client AnChoC Service Request K22 14653

Received: 12/12/22 Opened: 12/12/22 By: VM Unloaded: 12/12/22 By: VM

1. Samples were received via? *USPS* *Fed Ex* *UPS* *DHL* *PDX* [✓ *Courier*] *Hand Delivered*
2. Samples were received in: (circle) [✓ *Cooler*] *Box* *Envelope* *Other* ______ *NA*
3. Were custody seals on coolers? NA Y [✓ N] If yes, how many and where? ______

   If present, were custody seals intact? Y N If present, were they signed and dated? Y N

Temp Blank	Sample Temp	IR Gun	Cooler #/COC ID / NA	Out of temp indicate with "X"	PM Notified If out of temp	Tracking Number NA	Filed
3.5		IR02					

4. Was a Temperature Blank present in cooler? NA [✓ Y] N If yes, notate the temperature in the appropriate column above:

   If no, take the temperature of a representative sample bottle contained within the cooler; notate in the column "Sample Temp":

5. Were samples received within the method specified temperature ranges? NA [✓ Y] N

   If no, were they received on ice and same day as collected? If not, notate the cooler # above and notify the PM. [✓ NA] Y N

If applicable, tissue samples were received: *Frozen* *Partially Thawed* *Thawed*

6. Packing material: *Inserts* [✓ *Baggies*] *Bubble Wrap* *Gel Packs* [✓ *Wet Ice*] *Dry Ice* *Sleeves* ______
7. Were custody papers properly filled out (ink, signed, etc.)? NA [✓ Y] N
8. Were samples received in good condition (unbroken) NA [✓ Y] N
9. Were all sample labels complete (ie, analysis, preservation, etc.)? NA [✓ Y] N
10. Did all sample labels and tags agree with custody papers? NA [✓ Y] N
11. Were appropriate bottles/containers and volumes received for the tests indicated? NA [✓ Y] N
12. Were the pH-preserved bottles (*see SMO GEN SOP*) received at the appropriate pH? *Indicate in the table below* [✓ NA] Y N
13. Were VOA vials received without headspace? *Indicate in the table below.* [✓ NA] Y N
14. Was C12/Res negative? [✓ NA] Y N
15. Were samples received within the method specified time limit? If not, notate the error below and notify the PM [✓ NA] Y N
16. Were 100ml sterile microbiology bottles filled exactly to the 100ml mark? [✓ NA] Y N Underfilled Overfilled

Sample ID on Bottle	Sample ID on COC	Identified by:

Sample ID	Bottle Count Bottle Type	Head-space	Broke	pH	Reagent	Volume added	Reagent Lot Number	Initials	Time

Notes, Discrepancies, Resolutions: Did not PH due to limited volume

G:\SMO\2022 Forms SOP: SMO-GEN Reviewed: 12/9/2022

Miscellaneous Forms

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Inorganic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated value.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.
H	The holding time for this test is immediately following sample collection. The samples were analyzed as soon as possible after receipt by the laboratory.

Metals Data Qualifiers

#	The control limit criteria is not applicable.
J	The result is an estimated value.
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
M	The duplicate injection precision was not met.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
S	The reported value was determined by the Method of Standard Additions (MSA).
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
+	The correlation coefficient for the MSA is less than 0.995.
Q	See case narrative. One or more quality control criteria was outside the limits.

Organic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
A	A tentatively identified compound, a suspected aldol-condensation product.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
C	The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
D	The reported result is from a dilution.
E	The result is an estimated value.
J	The result is an estimated value.
N	The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
P	The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a chromatographic interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.

Additional Petroleum Hydrocarbon Specific Qualifiers

F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
Y	The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
Z	The chromatographic fingerprint does not resemble a petroleum product.

ALS Group USA Corp. dba ALS Environmental (ALS) - Kelso
State Certifications, Accreditations, and Licenses

Agency	Web Site	Number
Alaska DEH	http://dec.alaska.gov/eh/lab/cs/csapproval.htm	UST-040
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0339
Arkansas - DEQ	http://www.adeq.state.ar.us/techsvs/labcert.htm	88-0637
California DHS (ELAP)	http://www.cdph.ca.gov/certlic/labs/Pages/ELAP.aspx	2795
DOD ELAP	http://www.denix.osd.mil/edqw/Accreditation/AccreditedLabs.cfm	L16-58-R4
Florida DOH	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E87412
Hawaii DOH	http://health.hawaii.gov/	-
ISO 17025	http://www.pjlabs.com/	L16-57
Louisiana DEQ	http://www.deq.louisiana.gov/page/la-lab-accreditation	03016
Maine DHS	http://www.maine.gov/dhhs/	WA01276
Minnesota DOH	http://www.health.state.mn.us/accreditation	053-999-457
Nevada DEP	http://ndep.nv.gov/bsdw/labservice.htm	WA01276
New Jersey DEP	http://www.nj.gov/dep/enforcement/oqa.html	WA005
New York - DOH	https://www.wadsworth.org/regulatory/elap	12060
North Carolina DEQ	https://deq.nc.gov/about/divisions/water-resources/water-resources-data/water-sciences-home-page/laboratory-certification-branch/non-field-lab-certification	605
Oklahoma DEQ	http://www.deq.state.ok.us/CSDnew/labcert.htm	9801
Oregon – DEQ (NELAP)	http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	WA100010
South Carolina DHEC	http://www.scdhec.gov/environment/EnvironmentalLabCertification/	61002
Texas CEQ	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	T104704427
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C544
Wyoming (EPA Region 8)	https://www.epa.gov/region8-waterops/epa-region-8-certified-drinking-water	-
Kelso Laboratory Website	www.alsglobal.com	NA

Analyses were performed according to our laboratory’s NELAP-approved quality assurance program. A complete listing of specific NELAP-certified analytes, can be found in the certification section at www.ALSGlobal.com or at the accreditation bodies web site.
Please refer to the certification and/or accreditation body's web site if samples are submitted for compliance purposes. The states highlighted above, require the analysis be listed on the state certification if used for compliance purposes and if the method/anlayte is offered by that state.

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LOD	Limit of Detection
LOQ	Limit of Quantitation
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Client:	Anchor QEA, LLC	**Service Request:**	K2214653
Project:	2022-Gorgas/221114-10.01 Task 05		

Sample Name:	GS-AP-BT-MW-6D-PM	**Date Collected:**	12/9/22
Lab Code:	K2214653-001	**Date Received:**	12/12/22
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
200.8	SSOLADEY	JCHAN

Sample Name:	GS-AP-BT-MW-6D-PM	**Date Collected:**	12/9/22
Lab Code:	K2214653-001.R01	**Date Received:**	12/12/22
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
200.8	ACOUCH	EMCALLISTER

Sample Name:	GS-AP-BT-MW-6D-FC-PM-MC	**Date Collected:**	12/9/22
Lab Code:	K2214653-002	**Date Received:**	12/12/22
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
200.8	SSOLADEY	JCHAN

Sample Name:	GS-AP-BT-MW-6D-FC-PM-MC	**Date Collected:**	12/9/22
Lab Code:	K2214653-002.R01	**Date Received:**	12/12/22
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
200.8	ACOUCH	EMCALLISTER

Sample Name:	GS-AP-BT-MW-6D-FS-PM-MC	**Date Collected:**	12/9/22
Lab Code:	K2214653-003	**Date Received:**	12/12/22
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
200.8	SSOLADEY	JCHAN

Client:	Anchor QEA, LLC	**Service Request:**	K2214653
Project:	2022-Gorgas/221114-10.01 Task 05		

Sample Name:	GS-AP-BT-MW-6D-FS-PM-MC	**Date Collected:**	12/9/22
Lab Code:	K2214653-003.R01	**Date Received:**	12/12/22
Sample Matrix:	Water		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ACOUCH	EMCALLISTER

Sample Name:	GS-AP-BT-MW-6D-HT-MMO	**Date Collected:**	12/9/22
Lab Code:	K2214653-004	**Date Received:**	12/12/22
Sample Matrix:	Water		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	SSOLADEY	JCHAN

Sample Name:	GS-AP-BT-MW-6D-HT-MMO	**Date Collected:**	12/9/22
Lab Code:	K2214653-004.R01	**Date Received:**	12/12/22
Sample Matrix:	Water		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ACOUCH	EMCALLISTER

Sample Name:	GS-AP-BT-MW-6D-FC-PM-MC-pH-9.5	**Date Collected:**	12/9/22
Lab Code:	K2214653-005	**Date Received:**	12/12/22
Sample Matrix:	Water		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	SSOLADEY	JCHAN

Sample Name:	GS-AP-BT-MW-6D-FC-PM-MC-pH-9.5	**Date Collected:**	12/9/22
Lab Code:	K2214653-005.R01	**Date Received:**	12/12/22
Sample Matrix:	Water		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ACOUCH	EMCALLISTER

Client: Anchor QEA, LLC
Service Request: K2214653
Project: 2022-Gorgas/221114-10.01 Task 05

Sample Name: GS-AP-BT-MW-6D-FS-PM-MC-pH-9.5
Date Collected: 12/9/22
Lab Code: K2214653-006
Date Received: 12/12/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	SSOLADEY	JCHAN

Sample Name: GS-AP-BT-MW-6D-FS-PM-MC-pH-9.5
Date Collected: 12/9/22
Lab Code: K2214653-006.R01
Date Received: 12/12/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ACOUCH	EMCALLISTER

Sample Name: GS-AP-BT-MW-6D-PM-DUP
Date Collected: 12/9/22
Lab Code: K2214653-007
Date Received: 12/12/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	SSOLADEY	JCHAN

Sample Name: GS-AP-BT-MW-6D-PM-DUP
Date Collected: 12/9/22
Lab Code: K2214653-007.R01
Date Received: 12/12/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ACOUCH	EMCALLISTER

Sample Name: GS-AP-BT-MW-6D-CTRL-2
Date Collected: 12/9/22
Lab Code: K2214653-008
Date Received: 12/12/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	SSOLADEY	JCHAN

Client:	Anchor QEA, LLC	**Service Request:**	K2214653
Project:	2022-Gorgas/221114-10.01 Task 05		

Sample Name:	GS-AP-BT-MW-6D-CTRL-2	**Date Collected:**	12/9/22
Lab Code:	K2214653-008.R01	**Date Received:**	12/12/22
Sample Matrix:	Water		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ACOUCH	EMCALLISTER

Sample Name:	GS-AP-BT-MW-7-PM	**Date Collected:**	12/9/22
Lab Code:	K2214653-009	**Date Received:**	12/12/22
Sample Matrix:	Water		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	SSOLADEY	JCHAN

Sample Name:	GS-AP-BT-MW-7-PM	**Date Collected:**	12/9/22
Lab Code:	K2214653-009.R01	**Date Received:**	12/12/22
Sample Matrix:	Water		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ACOUCH	EMCALLISTER

Sample Name:	GS-AP-BT-MW-7-FC-PM-MC	**Date Collected:**	12/9/22
Lab Code:	K2214653-010	**Date Received:**	12/12/22
Sample Matrix:	Water		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	SSOLADEY	JCHAN

Sample Name:	GS-AP-BT-MW-7-FC-PM-MC	**Date Collected:**	12/9/22
Lab Code:	K2214653-010.R01	**Date Received:**	12/12/22
Sample Matrix:	Water		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ACOUCH	EMCALLISTER

Client: Anchor QEA, LLC

Service Request: K2214653

Project: 2022-Gorgas/221114-10.01 Task 05

Sample Name: GS-AP-BT-MW-7-FS-PM-MC
Date Collected: 12/9/22
Lab Code: K2214653-011
Date Received: 12/12/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	SSOLADEY	JCHAN

Sample Name: GS-AP-BT-MW-7-FS-PM-MC
Date Collected: 12/9/22
Lab Code: K2214653-011.R01
Date Received: 12/12/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ACOUCH	EMCALLISTER

Sample Name: GS-AP-BT-MW-7-HT-MMO
Date Collected: 12/9/22
Lab Code: K2214653-012
Date Received: 12/12/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	SSOLADEY	JCHAN

Sample Name: GS-AP-BT-MW-7-HT-MMO
Date Collected: 12/9/22
Lab Code: K2214653-012.R01
Date Received: 12/12/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ACOUCH	EMCALLISTER

Sample Name: GS-AP-BT-MW-7-FC-PMMC-pH-9.5
Date Collected: 12/9/22
Lab Code: K2214653-013
Date Received: 12/12/22
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	SSOLADEY	JCHAN

Client:	Anchor QEA, LLC	**Service Request:**	K2214653
Project:	2022-Gorgas/221114-10.01 Task 05		

Sample Name:	GS-AP-BT-MW-7-FC-PMMC-pH-9.5	**Date Collected:**	12/9/22
Lab Code:	K2214653-013.R01	**Date Received:**	12/12/22
Sample Matrix:	Water		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ACOUCH	EMCALLISTER

Sample Name:	GS-AP-BT-MW-7-FS-PM-MC-pH-9.5	**Date Collected:**	12/9/22
Lab Code:	K2214653-014	**Date Received:**	12/12/22
Sample Matrix:	Water		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	SSOLADEY	JCHAN

Sample Name:	GS-AP-BT-MW-7-FS-PM-MC-pH-9.5	**Date Collected:**	12/9/22
Lab Code:	K2214653-014.R01	**Date Received:**	12/12/22
Sample Matrix:	Water		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ACOUCH	EMCALLISTER

Sample Name:	GS-AP-BT-MW-7-PM-DUP	**Date Collected:**	12/9/22
Lab Code:	K2214653-015	**Date Received:**	12/12/22
Sample Matrix:	Water		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	SSOLADEY	JCHAN

Sample Name:	GS-AP-BT-MW-7-PM-DUP	**Date Collected:**	12/9/22
Lab Code:	K2214653-015.R01	**Date Received:**	12/12/22
Sample Matrix:	Water		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ACOUCH	EMCALLISTER

ALS Group USA, Corp.
dba ALS Environmental

Analyst Summary report

Client:	Anchor QEA, LLC	**Service Request:**	K2214653
Project:	2022-Gorgas/221114-10.01 Task 05		

Sample Name:	GS-AP-BT-MW-7-CTRL-2	**Date Collected:**	12/9/22
Lab Code:	K2214653-016	**Date Received:**	12/12/22
Sample Matrix:	Water		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	SSOLADEY	JCHAN

Sample Name:	GS-AP-BT-MW-7-CTRL-2	**Date Collected:**	12/9/22
Lab Code:	K2214653-016.R01	**Date Received:**	12/12/22
Sample Matrix:	Water		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ACOUCH	EMCALLISTER

Sample Results

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Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2214653
Project:	2022-Gorgas/221114-10.01 Task 05	**Date Collected:**	12/09/22 08:00
Sample Matrix:	Water	**Date Received:**	12/12/22 12:55
Sample Name:	GS-AP-BT-MW-6D-PM	**Basis:**	NA
Lab Code:	K2214653-001		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**48.3**	ug/L	0.50	0.09	1	01/04/23 12:55	12/30/22	
Iron	200.8	ND U	ug/L	2.0	0.3	1	01/04/23 12:55	12/30/22	
Lithium	200.8	**305**	ug/L	0.10	0.10	1	12/28/22 15:09	12/15/22	
Manganese	200.8	**49700**	ug/L	50	4	100	01/04/23 14:04	12/30/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2214653
Project:	2022-Gorgas/221114-10.01 Task 05	**Date Collected:**	12/09/22 08:05
Sample Matrix:	Water	**Date Received:**	12/12/22 12:55
Sample Name:	GS-AP-BT-MW-6D-FC-PM-MC	**Basis:**	NA
Lab Code:	K2214653-002		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	ND U	ug/L	0.50	0.09	1	01/04/23 12:57	12/30/22	
Iron	200.8	**11700**	ug/L	2.0	0.3	1	01/04/23 12:57	12/30/22	
Lithium	200.8	**298**	ug/L	0.10	0.10	1	12/28/22 15:10	12/15/22	
Manganese	200.8	**28800**	ug/L	50	4	100	01/04/23 14:06	12/30/22	

Analytical Report

Client:	Anchor QEA, LLC		**Service Request:**	K2214653
Project:	2022-Gorgas/221114-10.01 Task 05		**Date Collected:**	12/09/22 08:10
Sample Matrix:	Water		**Date Received:**	12/12/22 12:55
Sample Name:	GS-AP-BT-MW-6D-FS-PM-MC		**Basis:**	NA
Lab Code:	K2214653-003			

Dissolved Metals

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	ND	U	ug/L	0.50	0.09	1	01/04/23 12:59	12/30/22	
Iron	200.8	**99400**		ug/L	200	30	100	01/04/23 14:07	12/30/22	
Lithium	200.8	**298**		ug/L	0.10	0.10	1	12/28/22 15:14	12/15/22	
Manganese	200.8	**76100**		ug/L	50	4	100	01/04/23 14:07	12/30/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2214653
Project:	2022-Gorgas/221114-10.01 Task 05	**Date Collected:**	12/09/22 08:15
Sample Matrix:	Water	**Date Received:**	12/12/22 12:55
Sample Name:	GS-AP-BT-MW-6D-HT-MMO	**Basis:**	NA
Lab Code:	K2214653-004		

Dissolved Metals

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	ND	U	ug/L	0.50	0.09	1	01/04/23 13:03	12/30/22	
Iron	200.8	**18.0**		ug/L	2.0	0.3	1	01/04/23 13:03	12/30/22	
Lithium	200.8	**7.35**		ug/L	0.10	0.10	1	12/28/22 15:24	12/15/22	
Manganese	200.8	**32.4**		ug/L	0.50	0.04	1	01/04/23 13:03	12/30/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2214653
Project:	2022-Gorgas/221114-10.01 Task 05	**Date Collected:**	12/09/22 08:20
Sample Matrix:	Water	**Date Received:**	12/12/22 12:55
Sample Name:	GS-AP-BT-MW-6D-FC-PM-MC-pH-9.5	**Basis:**	NA
Lab Code:	K2214653-005		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**3.55**	ug/L	0.50	0.09	1	01/04/23 13:05	12/30/22	
Iron	200.8	**11.6**	ug/L	2.0	0.3	1	01/04/23 13:05	12/30/22	
Lithium	200.8	**96.4**	ug/L	0.10	0.10	1	12/28/22 15:25	12/15/22	
Manganese	200.8	**38.9**	ug/L	0.50	0.04	1	01/04/23 13:05	12/30/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2214653
Project:	2022-Gorgas/221114-10.01 Task 05	**Date Collected:**	12/09/22 08:25
Sample Matrix:	Water	**Date Received:**	12/12/22 12:55
Sample Name:	GS-AP-BT-MW-6D-FS-PM-MC-pH-9.5	**Basis:**	NA
Lab Code:	K2214653-006		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**0.34 J**	ug/L	0.50	0.09	1	01/04/23 13:19	12/30/22	
Iron	200.8	**5.3**	ug/L	2.0	0.3	1	01/04/23 13:19	12/30/22	
Lithium	200.8	**268**	ug/L	0.10	0.10	1	12/28/22 15:26	12/15/22	
Manganese	200.8	**4.54**	ug/L	0.50	0.04	1	01/04/23 13:19	12/30/22	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2214653
Project:	2022-Gorgas/221114-10.01 Task 05	**Date Collected:**	12/09/22 08:30
Sample Matrix:	Water	**Date Received:**	12/12/22 12:55
Sample Name:	GS-AP-BT-MW-6D-PM-DUP	**Basis:**	NA
Lab Code:	K2214653-007		

Dissolved Metals

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**46.9**		ug/L	0.50	0.09	1	01/04/23 13:20	12/30/22	
Iron	200.8	ND	U	ug/L	2.0	0.3	1	01/04/23 13:20	12/30/22	
Lithium	200.8	**298**		ug/L	0.10	0.10	1	12/28/22 15:27	12/15/22	
Manganese	200.8	**36900**		ug/L	50	4	100	01/04/23 14:11	12/30/22	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2214653
Project:	2022-Gorgas/221114-10.01 Task 05	**Date Collected:**	12/09/22 08:35
Sample Matrix:	Water	**Date Received:**	12/12/22 12:55
Sample Name:	GS-AP-BT-MW-6D-CTRL-2	**Basis:**	NA
Lab Code:	K2214653-008		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**294**	ug/L	0.50	0.09	1	01/04/23 13:21	12/30/22	
Iron	200.8	**1.3 J**	ug/L	2.0	0.3	1	01/04/23 13:21	12/30/22	
Lithium	200.8	**314**	ug/L	0.10	0.10	1	12/28/22 15:28	12/15/22	
Manganese	200.8	**187**	ug/L	0.50	0.04	1	01/04/23 13:21	12/30/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2214653
Project:	2022-Gorgas/221114-10.01 Task 05	**Date Collected:**	12/09/22 08:40
Sample Matrix:	Water	**Date Received:**	12/12/22 12:55
Sample Name:	GS-AP-BT-MW-7-PM	**Basis:**	NA
Lab Code:	K2214653-009		

Dissolved Metals

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**85.4**		ug/L	0.50	0.09	1	01/04/23 13:23	12/30/22	
Iron	200.8	ND	U	ug/L	2.0	0.3	1	01/04/23 13:23	12/30/22	
Lithium	200.8	**203**		ug/L	0.10	0.10	1	12/28/22 15:29	12/15/22	
Manganese	200.8	**50100**		ug/L	50	4	100	01/04/23 14:26	12/30/22	
Molybdenum	200.8	ND	U	ug/L	0.10	0.03	1	01/04/23 13:23	12/30/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2214653
Project:	2022-Gorgas/221114-10.01 Task 05	**Date Collected:**	12/09/22 08:45
Sample Matrix:	Water	**Date Received:**	12/12/22 12:55
Sample Name:	GS-AP-BT-MW-7-FC-PM-MC	**Basis:**	NA
Lab Code:	K2214653-010		

Dissolved Metals

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	ND	U	ug/L	0.50	0.09	1	01/04/23 13:24	12/30/22	
Iron	200.8	**23800**		ug/L	2.0	0.3	1	01/04/23 13:24	12/30/22	
Lithium	200.8	**196**		ug/L	0.10	0.10	1	12/28/22 15:31	12/15/22	
Manganese	200.8	**4710**		ug/L	50	4	100	01/04/23 14:28	12/30/22	
Molybdenum	200.8	ND	U	ug/L	0.10	0.03	1	01/04/23 13:24	12/30/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2214653
Project:	2022-Gorgas/221114-10.01 Task 05	**Date Collected:**	12/09/22 08:50
Sample Matrix:	Water	**Date Received:**	12/12/22 12:55
Sample Name:	GS-AP-BT-MW-7-FS-PM-MC	**Basis:**	NA
Lab Code:	K2214653-011		

Dissolved Metals

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	ND	U	ug/L	0.50	0.09	1	01/04/23 13:26	12/30/22	
Iron	200.8	**83700**		ug/L	200	30	100	01/04/23 14:29	12/30/22	
Lithium	200.8	**193**		ug/L	0.10	0.10	1	12/28/22 15:32	12/15/22	
Manganese	200.8	**5910**		ug/L	50	4	100	01/04/23 14:29	12/30/22	
Molybdenum	200.8	ND	U	ug/L	0.10	0.03	1	01/04/23 13:26	12/30/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2214653
Project:	2022-Gorgas/221114-10.01 Task 05	**Date Collected:**	12/09/22 08:55
Sample Matrix:	Water	**Date Received:**	12/12/22 12:55
Sample Name:	GS-AP-BT-MW-7-HT-MMO	**Basis:**	NA
Lab Code:	K2214653-012		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	ND U	ug/L	0.50	0.09	1	01/04/23 13:27	12/30/22	
Iron	200.8	**21.4**	ug/L	2.0	0.3	1	01/04/23 13:27	12/30/22	
Lithium	200.8	**2.03**	ug/L	0.10	0.10	1	12/28/22 15:33	12/15/22	
Manganese	200.8	**55.4**	ug/L	0.50	0.04	1	01/04/23 13:27	12/30/22	
Molybdenum	200.8	**1.79**	ug/L	0.10	0.03	1	01/04/23 13:27	12/30/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2214653
Project:	2022-Gorgas/221114-10.01 Task 05	**Date Collected:**	12/09/22 09:00
Sample Matrix:	Water	**Date Received:**	12/12/22 12:55
Sample Name:	GS-AP-BT-MW-7-FC-PMMC-pH-9.5	**Basis:**	NA
Lab Code:	K2214653-013		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	ND U	ug/L	2.5	0.5	5	01/04/23 13:58	12/30/22	
Iron	200.8	**11**	ug/L	10	2	5	01/04/23 13:58	12/30/22	
Lithium	200.8	**59.6**	ug/L	0.10	0.10	1	12/28/22 15:34	12/15/22	
Manganese	200.8	**36.8**	ug/L	2.5	0.2	5	01/04/23 13:58	12/30/22	
Molybdenum	200.8	**21.2**	ug/L	0.50	0.15	5	01/04/23 13:58	12/30/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2214653
Project:	2022-Gorgas/221114-10.01 Task 05	**Date Collected:**	12/09/22 09:05
Sample Matrix:	Water	**Date Received:**	12/12/22 12:55
Sample Name:	GS-AP-BT-MW-7-FS-PM-MC-pH-9.5	**Basis:**	NA
Lab Code:	K2214653-014		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	ND U	ug/L	2.5	0.5	5	01/04/23 14:00	12/30/22	
Iron	200.8	**18**	ug/L	10	2	5	01/04/23 14:00	12/30/22	
Lithium	200.8	**83.9**	ug/L	0.10	0.10	1	12/28/22 15:48	12/15/22	
Manganese	200.8	**20.4**	ug/L	2.5	0.2	5	01/04/23 14:00	12/30/22	
Molybdenum	200.8	**41.9**	ug/L	0.50	0.15	5	01/04/23 14:00	12/30/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2214653
Project:	2022-Gorgas/221114-10.01 Task 05	**Date Collected:**	12/09/22 09:10
Sample Matrix:	Water	**Date Received:**	12/12/22 12:55
Sample Name:	GS-AP-BT-MW-7-PM-DUP	**Basis:**	NA
Lab Code:	K2214653-015		

Dissolved Metals

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**83.6**		ug/L	0.50	0.09	1	01/04/23 14:01	12/30/22	
Iron	200.8	ND	U	ug/L	2.0	0.3	1	01/04/23 14:01	12/30/22	
Lithium	200.8	**203**		ug/L	0.10	0.10	1	12/28/22 15:49	12/15/22	
Manganese	200.8	**47000**		ug/L	50	4	100	01/04/23 14:31	12/30/22	
Molybdenum	200.8	ND	U	ug/L	0.10	0.03	1	01/04/23 14:01	12/30/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2214653
Project:	2022-Gorgas/221114-10.01 Task 05	**Date Collected:**	12/09/22 09:15
Sample Matrix:	Water	**Date Received:**	12/12/22 12:55
Sample Name:	GS-AP-BT-MW-7-CTRL-2	**Basis:**	NA
Lab Code:	K2214653-016		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**265**	ug/L	0.50	0.09	1	01/04/23 14:03	12/30/22	
Iron	200.8	**10.0**	ug/L	2.0	0.3	1	01/04/23 14:03	12/30/22	
Lithium	200.8	**211**	ug/L	0.10	0.10	1	12/28/22 15:51	12/15/22	
Manganese	200.8	**41.3**	ug/L	0.50	0.04	1	01/04/23 14:03	12/30/22	
Molybdenum	200.8	**214**	ug/L	0.10	0.03	1	01/04/23 14:03	12/30/22	

QC Summary Forms

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Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2214653
Project:	2022-Gorgas/221114-10.01 Task 05	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	KQ2221935-01		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Lithium	200.8	ND U	ug/L	0.10	0.10	1	12/28/22 15:03	12/15/22	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2214653
Project:	2022-Gorgas/221114-10.01 Task 05	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	KQ2222903-05		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	ND U	ug/L	0.50	0.09	1	01/04/23 12:51	12/30/22	
Iron	200.8	ND U	ug/L	2.0	0.3	1	01/04/23 12:51	12/30/22	
Manganese	200.8	ND U	ug/L	0.50	0.04	1	01/04/23 12:51	12/30/22	
Molybdenum	200.8	ND U	ug/L	0.10	0.03	1	01/04/23 12:51	12/30/22	

Client:	Anchor QEA, LLC	**Service Request:**	K2214653
Project:	2022-Gorgas/221114-10.01 Task 05	**Date Collected:**	12/09/22
Sample Matrix:	Water	**Date Received:**	12/12/22
		Date Analyzed:	12/28/22
		Date Extracted:	12/15/22

Matrix Spike Summary
Dissolved Metals

Sample Name:	GS-AP-BT-MW-6D-FC-PM-MC	**Units:**	ug/L
Lab Code:	K2214653-002	**Basis:**	NA
Analysis Method:	200.8		
Prep Method:	EPA CLP ILM04.0		

Matrix Spike
KQ2221935-05

Analyte Name	Sample Result	Result	Spike Amount	% Rec	% Rec Limits
Lithium	298	327	50.0	58 #	70-130

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Matrix Spike and Matrix Spike Duplicate Data is presented for information purposes only. The matrix may or may not be relevant to samples reported in this report. The laboratory evaluates system performance based on the LCS and LCSD control limits.

Client:	Anchor QEA, LLC	**Service Request:**	K2214653
Project:	2022-Gorgas/221114-10.01 Task 05	**Date Collected:**	12/09/22
Sample Matrix:	Water	**Date Received:**	12/12/22
		Date Analyzed:	01/4/23
		Date Extracted:	12/30/22

Matrix Spike Summary
Dissolved Metals

Sample Name:	GS-AP-BT-MW-6D-FS-PM-MC	**Units:**	ug/L
Lab Code:	K2214653-003	**Basis:**	NA
Analysis Method:	200.8		
Prep Method:	EPA CLP ILM04.0		

Matrix Spike
KQ2222903-07

Analyte Name	Sample Result	Result	Spike Amount	% Rec	% Rec Limits
Arsenic	ND U	49.6	50.0	99	70-130
Iron	99400	94500	50	-9807 #	70-130
Manganese	76100	68900	25	-28855 #	70-130
Molybdenum	ND U	26.4	25.0	106	70-130

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Matrix Spike and Matrix Spike Duplicate Data is presented for information purposes only. The matrix may or may not be relevant to samples reported in this report. The laboratory evaluates system performance based on the LCS and LCSD control limits.

Client:	Anchor QEA, LLC	**Service Request:**	K2214653
Project:	2022-Gorgas/221114-10.01 Task 05	**Date Collected:**	12/09/22
Sample Matrix:	Water	**Date Received:**	12/12/22
		Date Analyzed:	01/4/23
		Date Extracted:	12/30/22

Matrix Spike Summary
Dissolved Metals

Sample Name:	GS-AP-BT-MW-6D-FC-PM-MC-pH-9.5	**Units:**	ug/L
Lab Code:	K2214653-005	**Basis:**	NA
Analysis Method:	200.8		
Prep Method:	EPA CLP ILM04.0		

Matrix Spike
KQ2222903-09

Analyte Name	Sample Result	Result	Spike Amount	% Rec	% Rec Limits
Arsenic	3.55	52.6	50.0	98	70-130
Iron	11.6	53.7	50.0	84	70-130
Manganese	38.9	64.4	25.0	102	70-130
Molybdenum	2.14	27.7	25.0	102	70-130

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Matrix Spike and Matrix Spike Duplicate Data is presented for information purposes only. The matrix may or may not be relevant to samples reported in this report. The laboratory evaluates system performance based on the LCS and LCSD control limits.

Client:	Anchor QEA, LLC	**Service Request:**	K2214653
Project	2022-Gorgas/221114-10.01 Task 05	**Date Collected:**	12/09/22
Sample Matrix:	Water	**Date Received:**	12/12/22
		Date Analyzed:	12/28/22

Replicate Sample Summary
Dissolved Metals

Sample Name:	GS-AP-BT-MW-6D-FC-PM-MC	**Units:**	ug/L
Lab Code:	K2214653-002	**Basis:**	NA

Analyte Name	Analysis Method	MRL	MDL	Sample Result	Duplicate Sample KQ2221935-06 Result	Average	RPD	RPD Limit
Lithium	200.8	0.10	0.10	298	312	305	5	20

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

QA/QC Report

Client:	Anchor QEA, LLC	**Service Request:**	K2214653
Project	2022-Gorgas/221114-10.01 Task 05	**Date Collected:**	12/09/22
Sample Matrix:	Water	**Date Received:**	12/12/22
		Date Analyzed:	01/04/23

Replicate Sample Summary
Dissolved Metals

Sample Name:	GS-AP-BT-MW-6D-FS-PM-MC	**Units:**	ug/L
Lab Code:	K2214653-003	**Basis:**	NA

Analyte Name	Analysis Method	MRL	MDL	Sample Result	Duplicate Sample KQ2222903-08 Result	Average	RPD	RPD Limit
Arsenic	200.8	0.50	0.09	ND U	ND U	ND	-	20
Iron	200.8	200	30	99400	104000	102000	5	20
Manganese	200.8	50	4	76100	78600	77400	3	20
Molybdenum	200.8	0.10	0.03	ND U	ND U	ND	-	20

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client:	Anchor QEA, LLC	**Service Request:**	K2214653
Project	2022-Gorgas/221114-10.01 Task 05	**Date Collected:**	12/09/22
Sample Matrix:	Water	**Date Received:**	12/12/22
		Date Analyzed:	01/04/23

Replicate Sample Summary
Dissolved Metals

Sample Name:	GS-AP-BT-MW-6D-FC-PM-MC-pH-9.5	**Units:**	ug/L
Lab Code:	K2214653-005	**Basis:**	NA

Analyte Name	Analysis Method	MRL	MDL	Sample Result	Duplicate Sample KQ2222903-10 Result	Average	RPD	RPD Limit
Arsenic	200.8	0.50	0.09	3.55	3.55	3.55	<1	20
Iron	200.8	2.0	0.3	11.6	10.2	10.9	13	20
Manganese	200.8	0.50	0.04	38.9	38.6	38.8	<1	20
Molybdenum	200.8	0.10	0.03	2.14	2.15	2.15	<1	20

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client:	Anchor QEA, LLC	**Service Request:**	K2214653
Project:	2022-Gorgas/221114-10.01 Task 05	**Date Analyzed:**	12/28/22
Sample Matrix:	Water		

Lab Control Sample Summary
Dissolved Metals

Units:ug/L
Basis:NA

Lab Control Sample
KQ2221935-02

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Lithium	200.8	50.5	50.0	101	85-115

Client:	Anchor QEA, LLC	**Service Request:**	K2214653
Project:	2022-Gorgas/221114-10.01 Task 05	**Date Analyzed:**	01/04/23
Sample Matrix:	Water		

Lab Control Sample Summary
Dissolved Metals

Units:ug/L
Basis:NA

Lab Control Sample
KQ2222903-06

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Arsenic	200.8	49.3	50.0	99	85-115
Iron	200.8	44.7	50.0	89	85-115
Manganese	200.8	25.3	25.0	101	85-115
Molybdenum	200.8	26.1	25.0	104	85-115

March 03, 2023 Service Request No:K2302336

Masa Kanematsu
Anchor QEA, LLC
6720 SW Macadam Avenue
Suite 125
Portland, OR 97219

Laboratory Results for: Plant Gorgas Treatability

Dear Masa,

Enclosed are the results of the sample(s) submitted to our laboratory February 27, 2023
For your reference, these analyses have been assigned our service request number **K2302336.**

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. All results are intended to be considered in their entirety, and ALS Group USA Corp. dba ALS Environmental (ALS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please contact me if you have any questions. My extension is 3376. You may also contact me via email at Mark.Harris@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

Mark Harris
Project Manager

ADDRESS 1317 S. 13th Avenue, Kelso, WA 98626
PHONE +1 360 577 7222 | FAX +1 360 636 1068
ALS Group USA, Corp.
dba ALS Environmental

Narrative Documents

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Client: Anchor QEA, LLC
Service Request: K2302336
Project: Plant Gorgas Treatability
Date Received: 02/27/2023
Sample Matrix: Water

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples for the Tier II level requested by the client.

Sample Receipt:

Sixteen water samples were received for analysis at ALS Environmental on 02/27/2023. Any discrepancies upon initial sample inspection are annotated on the sample receipt and preservation form included within this report. The samples were stored at minimum in accordance with the analytical method requirements.

Metals:

No significant anomalies were noted with this analysis.

Approved by ______________________ Date 03/03/2023

SAMPLE DETECTION SUMMARY

This form includes only detections above the reporting levels. For a full listing of sample results, continue to the Sample Results section of this Report.

CLIENT ID: GS-AP-OBT-MW-6D-HT **Lab ID: K2302336-001**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	8.75		0.09	0.50	ug/L	200.8
Iron, Dissolved	0.6	J	0.3	2.0	ug/L	200.8
Lithium, Dissolved	18.4		0.10	0.10	ug/L	200.8
Manganese, Dissolved	2.25		0.04	0.20	ug/L	200.8

CLIENT ID: GS-AP-OBT-MW-6D-Mn-Al-LDH **Lab ID: K2302336-002**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	0.98		0.09	0.50	ug/L	200.8
Iron, Dissolved	0.5	J	0.3	2.0	ug/L	200.8
Lithium, Dissolved	72.4		0.10	0.10	ug/L	200.8
Manganese, Dissolved	1340		0.04	0.20	ug/L	200.8

CLIENT ID: GS-AP-OBT-MW-6D-Fe-Al-LDH **Lab ID: K2302336-003**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	0.30	J	0.09	0.50	ug/L	200.8
Iron, Dissolved	2320		0.3	2.0	ug/L	200.8
Lithium, Dissolved	56.2		0.10	0.10	ug/L	200.8
Manganese, Dissolved	322		0.04	0.20	ug/L	200.8

CLIENT ID: GS-AP-OBT-MW-6D-Mn-LP **Lab ID: K2302336-004**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	0.98		0.09	0.50	ug/L	200.8
Iron, Dissolved	1.2	J	0.3	2.0	ug/L	200.8
Lithium, Dissolved	0.14		0.10	0.10	ug/L	200.8
Manganese, Dissolved	76.7		0.04	0.20	ug/L	200.8

CLIENT ID: GS-AP-OBT-MW-6D-Mn-Fe-LP **Lab ID: K2302336-005**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	0.66		0.09	0.50	ug/L	200.8
Iron, Dissolved	20.6		0.3	2.0	ug/L	200.8
Lithium, Dissolved	0.13		0.10	0.10	ug/L	200.8
Manganese, Dissolved	69.3		0.04	0.20	ug/L	200.8

CLIENT ID: GS-AP-OBT-MW-6D-Mn-LP-DUP **Lab ID: K2302336-006**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	0.96		0.09	0.50	ug/L	200.8
Iron, Dissolved	0.7	J	0.3	2.0	ug/L	200.8
Lithium, Dissolved	0.11		0.10	0.10	ug/L	200.8
Manganese, Dissolved	59.1		0.04	0.20	ug/L	200.8

CLIENT ID: GS-AP-OBT-MW-6D-CTRL **Lab ID: K2302336-007**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	270		0.09	0.50	ug/L	200.8

SAMPLE DETECTION SUMMARY

This form includes only detections above the reporting levels. For a full listing of sample results, continue to the Sample Results section of this Report.

CLIENT ID: GS-AP-OBT-MW-6D-CTRL **Lab ID: K2302336-007**

Analyte	Results	Flag	MDL	MRL	Units	Method
Iron, Dissolved	0.9	J	0.3	2.0	ug/L	200.8
Lithium, Dissolved	315		0.50	0.50	ug/L	200.8
Manganese, Dissolved	177		0.04	0.20	ug/L	200.8

CLIENT ID: GS-AP-OBT-MW-7-HT **Lab ID: K2302336-008**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	54.3		0.09	0.50	ug/L	200.8
Iron, Dissolved	0.4	J	0.3	2.0	ug/L	200.8
Lithium, Dissolved	10.5		0.10	0.10	ug/L	200.8
Manganese, Dissolved	0.49		0.04	0.20	ug/L	200.8
Molybdenum, Dissolved	150		0.03	0.10	ug/L	200.8

CLIENT ID: GS-AP-OBT-MW-7-Mn-Al-LDH **Lab ID: K2302336-009**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	8.18		0.09	0.50	ug/L	200.8
Iron, Dissolved	0.8	J	0.3	2.0	ug/L	200.8
Lithium, Dissolved	67.8		0.10	0.10	ug/L	200.8
Manganese, Dissolved	2570		0.04	0.20	ug/L	200.8
Molybdenum, Dissolved	200		0.03	0.10	ug/L	200.8

CLIENT ID: GS-AP-OBT-MW-7-Fe-Al-LDH **Lab ID: K2302336-010**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	7.40		0.09	0.50	ug/L	200.8
Iron, Dissolved	4440		0.3	2.0	ug/L	200.8
Lithium, Dissolved	35.9		0.10	0.10	ug/L	200.8
Manganese, Dissolved	497		0.04	0.20	ug/L	200.8
Molybdenum, Dissolved	90.9		0.03	0.10	ug/L	200.8

CLIENT ID: GS-AP-OBT-MW-7-Mn-LP **Lab ID: K2302336-011**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	1.01		0.09	0.50	ug/L	200.8
Iron, Dissolved	3.5		0.3	2.0	ug/L	200.8
Lithium, Dissolved	0.16		0.10	0.10	ug/L	200.8
Manganese, Dissolved	91.3		0.04	0.20	ug/L	200.8
Molybdenum, Dissolved	184		0.03	0.10	ug/L	200.8

CLIENT ID: GS-AP-OBT-MW-7-Mn-Fe-LP **Lab ID: K2302336-012**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	0.86		0.09	0.50	ug/L	200.8
Iron, Dissolved	24.5		0.3	2.0	ug/L	200.8
Manganese, Dissolved	69.6		0.04	0.20	ug/L	200.8
Molybdenum, Dissolved	210		0.03	0.10	ug/L	200.8

SAMPLE DETECTION SUMMARY

This form includes only detections above the reporting levels. For a full listing of sample results, continue to the Sample Results section of this Report.

CLIENT ID: GS-AP-OBT-MW-7-Mn-LP-DUP **Lab ID: K2302336-013**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	0.99		0.09	0.50	ug/L	200.8
Iron, Dissolved	1.0	J	0.3	2.0	ug/L	200.8
Lithium, Dissolved	0.10		0.10	0.10	ug/L	200.8
Manganese, Dissolved	94.3		0.04	0.20	ug/L	200.8
Molybdenum, Dissolved	183		0.03	0.10	ug/L	200.8

CLIENT ID: GS-AP-OBT-MW-7-CTRL **Lab ID: K2302336-014**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	245		0.09	0.50	ug/L	200.8
Iron, Dissolved	3.0		0.3	2.0	ug/L	200.8
Lithium, Dissolved	212		0.10	0.10	ug/L	200.8
Manganese, Dissolved	35.3		0.04	0.20	ug/L	200.8
Molybdenum, Dissolved	221		0.03	0.10	ug/L	200.8

CLIENT ID: GS-AP-OBT-MB **Lab ID: K2302336-015**

Analyte	Results	Flag	MDL	MRL	Units	Method
Iron, Dissolved	1.0	J	0.3	2.0	ug/L	200.8
Manganese, Dissolved	0.53		0.04	0.20	ug/L	200.8

Sample Receipt Information

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
K2302336-001	GS-AP-OBT-MW-6D-HT	2/24/2023	1000
K2302336-002	GS-AP-OBT-MW-6D-Mn-Al-LDH	2/24/2023	1005
K2302336-003	GS-AP-OBT-MW-6D-Fe-Al-LDH	2/24/2023	1010
K2302336-004	GS-AP-OBT-MW-6D-Mn-LP	2/24/2023	1015
K2302336-005	GS-AP-OBT-MW-6D-Mn-Fe-LP	2/24/2023	1020
K2302336-006	GS-AP-OBT-MW-6D-Mn-LP-DUP	2/24/2023	1025
K2302336-007	GS-AP-OBT-MW-6D-CTRL	2/24/2023	1030
K2302336-008	GS-AP-OBT-MW-7-HT	2/24/2023	1035
K2302336-009	GS-AP-OBT-MW-7-Mn-Al-LDH	2/24/2023	1040
K2302336-010	GS-AP-OBT-MW-7-Fe-Al-LDH	2/24/2023	1045
K2302336-011	GS-AP-OBT-MW-7-Mn-LP	2/24/2023	1050
K2302336-012	GS-AP-OBT-MW-7-Mn-Fe-LP	2/24/2023	1055
K2302336-013	GS-AP-OBT-MW-7-Mn-LP-DUP	2/24/2023	1100
K2302336-014	GS-AP-OBT-MW-7-CTRL	2/24/2023	1105
K2302336-015	GS-AP-OBT-MB	2/24/2023	1110

K2302336

Chain of Custody Record & Laboratory Analysis Request

ANCHOR QEA

Masa Kanematsu
6720 SW Macadam Ave
Suite 125
Portland OR 97219

Laboratory Number: 503-972-5019	
Date:	2/27/2023
Project Name:	Plant Gorgas Treatability
Project Number:	221114-10.01 Task 05
Project Manager:	Masa Kanematsu
Phone Number:	503-972-5001 (backup number: 971.334.8193)
Shipment Method:	ALS Carrier

Line	Field Sample ID	Collection Date	Collection Time	Matrix	No. of Containers	Dissolved Metals (As, Li, Mo, Fe, Mn)	Dissolved Metals (As, Li, Fe, Mn)	Dissolved Metals (As)	Comments/Preservation
1	GS-AP-OBT-MW-6D-HT	2/24/2023	10:00	Water	1		X		HNO3 preserved. Field Filtered.
2	GS-AP-OBT-MW-6D-Mn-Al-LDH	2/24/2023	10:05	Water	1		X		HNO3 preserved. Field Filtered.
3	GS-AP-OBT-MW-6D-Fe-Al-LDH	2/24/2023	10:10	Water	1		X		HNO3 preserved. Field Filtered.
4	GS-AP-OBT-MW-6D-Mn-LP	2/24/2023	10:15	Water	1		X		HNO3 preserved. Field Filtered.
5	GS-AP-OBT-MW-6D-Mn-Fe-LP	2/24/2023	10:20	Water	1		X		HNO3 preserved. Field Filtered.
6	GS-AP-OBT-MW-6D-Mn-LP-DUP	2/24/2023	10:25	Water	1		X		HNO3 preserved. Field Filtered.
7	GS-AP-OBT-MW-6D-CTRL	2/24/2023	10:30	Water	1		X		HNO3 preserved. Field Filtered.
8	GS-AP-OBT-MW-7-HT	2/24/2023	10:35	Water	1	X			HNO3 preserved. Field Filtered.
9	GS-AP-OBT-MW-7-Mn-Al-LDH	2/24/2023	10:40	Water	1	X			HNO3 preserved. Field Filtered.
10	GS-AP-OBT-MW-7-Fe-Al-LDH	2/24/2023	10:45	Water	1	X			HNO3 preserved. Field Filtered.
11	GS-AP-OBT-MW-7-Mn-LP	2/24/2023	10:50	Water	1	X			HNO3 preserved. Field Filtered.
12	GS-AP-OBT-MW-7--Mn-Fe-LP	2/24/2023	10:55	Water	1	X			HNO3 preserved. Field Filtered.
13	GS-AP-OBT-MW-7-Mn-LP-DUP	2/24/2023	11:00	Water	1	X			HNO3 preserved. Field Filtered.
14	GS-AP-OBT-MW-7-CTRL	2/24/2023	11:05	Water	1	X			HNO3 preserved. Field Filtered.
15	GS-AP-OBT-MB	2/24/2023	11:10	Water	1	X			HNO3 preserved. Field Filtered.
16	GS-AP-MW-6D-As-Spiked-2	2/17/2023	11:15	Water	1			X	Approx 500 µg/L As. HNO3 and filtered.

Notes: Please Contact Masa (503-972-5001; mkanematsu@anchorqea.com) if running > 10X dilution. Please analyze by ICP-MS method 200.8 to achieve the MDL < 1 ppb.

Relinquished by: Emma Nordlund
Company: Anchor QEA
Signature/Print Name:
Date/Time: 2/27/23 9:55

Received by: Greg Rich ALS
Signature/Print Name: Greg Rich 2-27-23 1023

Relinquished by: Greg Rich
Company: 2-27-23 1215 PM
Signature/Print Name: Greg Rich
Date/Time: ALS

Received by: 2/27/23 1215
Signature/Print Name:

Distribution: A copy will be made for the laboratory and client. The Project file will retain the original.

Page 1 of 1

PM MH

Cooler Receipt and Preservation Form

Client Anchor QEA Service Request K23 02336

Received: 2/27/23 Opened: 2/27/23 By: AP Unloaded: 2/27/23 By: AP

1. Samples were received via? USPS Fed Ex UPS DHL PDX [✓ Courier] Hand Delivered
2. Samples were received in: (circle) [✓ Cooler] Box Envelope Other ______ NA
3. Were custody seals on coolers? NA Y [✓ N] If yes, how many and where? ______

   If present, were custody seals intact? Y N If present, were they signed and dated? Y N

Temp Blank	Sample Temp	IR Gun	Cooler #/COC ID / [✓ NA]	Out of temp indicate with "X"	PM Notified If out of temp	Tracking Number [✓ NA]	Filed
4.5	4.2	1802		—			

4. Was a Temperature Blank present in cooler? NA [✓ Y] N If yes, notate the temperature in the appropriate column above:

   If no, take the temperature of a representative sample bottle contained within the cooler; notate in the column "Sample Temp":

5. Were samples received within the method specified temperature ranges? NA [✓ Y] N

   If no, were they received on ice and same day as collected? If not, notate the cooler # above and notify the PM. [✓ NA] Y N

If applicable, tissue samples were received: Frozen Partially Thawed Thawed

6. Packing material: Inserts [✓ Baggies] Bubble Wrap Gel Packs [✓ Wet Ice] Dry Ice Sleeves ______
7. Were custody papers properly filled out (ink, signed, etc.)? NA [✓ Y] N
8. Were samples received in good condition (unbroken) NA [✓ Y] N
9. Were all sample labels complete (ie, analysis, preservation, etc.)? NA [✓ Y] N
10. Did all sample labels and tags agree with custody papers? NA [✓ Y] N
11. Were appropriate bottles/containers and volumes received for the tests indicated? NA [✓ Y] N
12. Were the pH-preserved bottles (*see SMO GEN SOP*) received at the appropriate pH? *Indicate in the table below* [✓ NA] Y N
13. Were VOA vials received without headspace? *Indicate in the table below.* [✓ NA] Y N
14. Was C12/Res negative? [✓ NA] Y N
15. Were samples received within the method specified time limit? If not, notate the error below and notify the PM [✓ NA] Y N
16. Were 100ml sterile microbiology bottles filled exactly to the 100ml mark? [✓ NA] Y N Underfilled Overfilled

Sample ID on Bottle	Sample ID on COC	Identified by:

Sample ID	Bottle Count Bottle Type	Head-space	Broke	pH	Reagent	Volume added	Reagent Lot Number	Initials	Time

Notes, Discrepancies, Resolutions: Did not pH due to Limited Volume

G:\SMO\2022 Forms SOP: SMO-GEN Reviewed: 12/9/2022

Miscellaneous Forms

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Inorganic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated value.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.
H	The holding time for this test is immediately following sample collection. The samples were analyzed as soon as possible after receipt by the laboratory.

Metals Data Qualifiers

#	The control limit criteria is not applicable.
J	The result is an estimated value.
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
M	The duplicate injection precision was not met.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
S	The reported value was determined by the Method of Standard Additions (MSA).
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
+	The correlation coefficient for the MSA is less than 0.995.
Q	See case narrative. One or more quality control criteria was outside the limits.

Organic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
A	A tentatively identified compound, a suspected aldol-condensation product.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
C	The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
D	The reported result is from a dilution.
E	The result is an estimated value.
J	The result is an estimated value.
N	The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
P	The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a chromatographic interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.

Additional Petroleum Hydrocarbon Specific Qualifiers

F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
Y	The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
Z	The chromatographic fingerprint does not resemble a petroleum product.

ALS Group USA Corp. dba ALS Environmental (ALS) - Kelso
State Certifications, Accreditations, and Licenses

Agency	Web Site	Number
Alaska DEH	http://dec.alaska.gov/eh/lab/cs/csapproval.htm	UST-040
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0339
Arkansas - DEQ	http://www.adeq.state.ar.us/techsvs/labcert.htm	88-0637
California DHS (ELAP)	http://www.cdph.ca.gov/certlic/labs/Pages/ELAP.aspx	2795
DOD ELAP	http://www.denix.osd.mil/edqw/Accreditation/AccreditedLabs.cfm	L16-58-R4
Florida DOH	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E87412
Hawaii DOH	http://health.hawaii.gov/	-
ISO 17025	http://www.pjlabs.com/	L16-57
Louisiana DEQ	http://www.deq.louisiana.gov/page/la-lab-accreditation	03016
Maine DHS	http://www.maine.gov/dhhs/	WA01276
Minnesota DOH	http://www.health.state.mn.us/accreditation	053-999-457
Nevada DEP	http://ndep.nv.gov/bsdw/labservice.htm	WA01276
New Jersey DEP	http://www.nj.gov/dep/enforcement/oqa.html	WA005
New York - DOH	https://www.wadsworth.org/regulatory/elap	12060
North Carolina DEQ	https://deq.nc.gov/about/divisions/water-resources/water-resources-data/water-sciences-home-page/laboratory-certification-branch/non-field-lab-certification	605
Oklahoma DEQ	http://www.deq.state.ok.us/CSDnew/labcert.htm	9801
Oregon – DEQ (NELAP)	http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	WA100010
South Carolina DHEC	http://www.scdhec.gov/environment/EnvironmentalLabCertification/	61002
Texas CEQ	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	T104704427
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C544
Wyoming (EPA Region 8)	https://www.epa.gov/region8-waterops/epa-region-8-certified-drinking-water	-
Kelso Laboratory Website	www.alsglobal.com	NA

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. A complete listing of specific NELAP-certified analytes, can be found in the certification section at www.ALSGlobal.com or at the accreditation bodies web site.

Please refer to the certification and/or accreditation body's web site if samples are submitted for compliance purposes. The states highlighted above, require the analysis be listed on the state certification if used for compliance purposes and if the method/anlayte is offered by that state.

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LOD	Limit of Detection
LOQ	Limit of Quantitation
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Analyst Summary report

Client:	Anchor QEA, LLC	**Service Request:**	K2302336
Project:	Plant Gorgas Treatability/221114-10.01 Task 05		

Sample Name:	GS-AP-OBT-MW-6D-HT	**Date Collected:**	02/24/23
Lab Code:	K2302336-001	**Date Received:**	02/27/23
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
200.8	ACOUCH	EMCALLISTER

Sample Name:	GS-AP-OBT-MW-6D-HT	**Date Collected:**	02/24/23
Lab Code:	K2302336-001.R01	**Date Received:**	02/27/23
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
200.8	ACOUCH	EMCALLISTER

Sample Name:	GS-AP-OBT-MW-6D-Mn-AI-LDH	**Date Collected:**	02/24/23
Lab Code:	K2302336-002	**Date Received:**	02/27/23
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
200.8	ACOUCH	EMCALLISTER

Sample Name:	GS-AP-OBT-MW-6D-Mn-AI-LDH	**Date Collected:**	02/24/23
Lab Code:	K2302336-002.R01	**Date Received:**	02/27/23
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
200.8	ACOUCH	EMCALLISTER

Sample Name:	GS-AP-OBT-MW-6D-Fe-AI-LDH	**Date Collected:**	02/24/23
Lab Code:	K2302336-003	**Date Received:**	02/27/23
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
200.8	ACOUCH	EMCALLISTER

Client: Anchor QEA, LLC **Service Request:** K2302336
Project: Plant Gorgas Treatability/221114-10.01 Task 05

Sample Name: GS-AP-OBT-MW-6D-Mn-LP **Date Collected:** 02/24/23
Lab Code: K2302336-004 **Date Received:** 02/27/23
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
200.8	ACOUCH	EMCALLISTER

Sample Name: GS-AP-OBT-MW-6D-Mn-LP **Date Collected:** 02/24/23
Lab Code: K2302336-004.R01 **Date Received:** 02/27/23
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
200.8	ACOUCH	EMCALLISTER

Sample Name: GS-AP-OBT-MW-6D-Mn-Fe-LP **Date Collected:** 02/24/23
Lab Code: K2302336-005 **Date Received:** 02/27/23
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
200.8	ACOUCH	EMCALLISTER

Sample Name: GS-AP-OBT-MW-6D-Mn-Fe-LP **Date Collected:** 02/24/23
Lab Code: K2302336-005.R01 **Date Received:** 02/27/23
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
200.8	ACOUCH	EMCALLISTER

Sample Name: GS-AP-OBT-MW-6D-Mn-LP-DUP **Date Collected:** 02/24/23
Lab Code: K2302336-006 **Date Received:** 02/27/23
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
200.8	ACOUCH	EMCALLISTER

Client:	Anchor QEA, LLC	**Service Request:**	K2302336
Project:	Plant Gorgas Treatability/221114-10.01 Task 05		

Sample Name:	GS-AP-OBT-MW-6D-Mn-LP-DUP	**Date Collected:**	02/24/23
Lab Code:	K2302336-006.R01	**Date Received:**	02/27/23
Sample Matrix:	Water		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ACOUCH	EMCALLISTER

Sample Name:	GS-AP-OBT-MW-6D-CTRL	**Date Collected:**	02/24/23
Lab Code:	K2302336-007	**Date Received:**	02/27/23
Sample Matrix:	Water		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ACOUCH	EMCALLISTER

Sample Name:	GS-AP-OBT-MW-6D-CTRL	**Date Collected:**	02/24/23
Lab Code:	K2302336-007.R01	**Date Received:**	02/27/23
Sample Matrix:	Water		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ACOUCH	EMCALLISTER

Sample Name:	GS-AP-OBT-MW-7-HT	**Date Collected:**	02/24/23
Lab Code:	K2302336-008	**Date Received:**	02/27/23
Sample Matrix:	Water		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ACOUCH	EMCALLISTER

Sample Name:	GS-AP-OBT-MW-7-HT	**Date Collected:**	02/24/23
Lab Code:	K2302336-008.R01	**Date Received:**	02/27/23
Sample Matrix:	Water		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ACOUCH	EMCALLISTER

Client:	Anchor QEA, LLC	**Service Request:**	K2302336
Project:	Plant Gorgas Treatability/221114-10.01 Task 05		

Sample Name:	GS-AP-OBT-MW-7-Mn-AI-LDH	**Date Collected:**	02/24/23
Lab Code:	K2302336-009	**Date Received:**	02/27/23
Sample Matrix:	Water		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ACOUCH	EMCALLISTER

Sample Name:	GS-AP-OBT-MW-7-Mn-AI-LDH	**Date Collected:**	02/24/23
Lab Code:	K2302336-009.R01	**Date Received:**	02/27/23
Sample Matrix:	Water		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ACOUCH	EMCALLISTER

Sample Name:	GS-AP-OBT-MW-7-Fe-AI-LDH	**Date Collected:**	02/24/23
Lab Code:	K2302336-010	**Date Received:**	02/27/23
Sample Matrix:	Water		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ACOUCH	EMCALLISTER

Sample Name:	GS-AP-OBT-MW-7-Fe-AI-LDH	**Date Collected:**	02/24/23
Lab Code:	K2302336-010.R01	**Date Received:**	02/27/23
Sample Matrix:	Water		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ACOUCH	EMCALLISTER

Sample Name:	GS-AP-OBT-MW-7-Mn-LP	**Date Collected:**	02/24/23
Lab Code:	K2302336-011	**Date Received:**	02/27/23
Sample Matrix:	Water		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ACOUCH	EMCALLISTER

Client: Anchor QEA, LLC **Service Request:** K2302336
Project: Plant Gorgas Treatability/221114-10.01 Task 05

Sample Name: GS-AP-OBT-MW-7-Mn-LP **Date Collected:** 02/24/23
Lab Code: K2302336-011.R01 **Date Received:** 02/27/23
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ACOUCH	EMCALLISTER

Sample Name: GS-AP-OBT-MW-7-Mn-Fe-LP **Date Collected:** 02/24/23
Lab Code: K2302336-012 **Date Received:** 02/27/23
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ACOUCH	EMCALLISTER

Sample Name: GS-AP-OBT-MW-7-Mn-Fe-LP **Date Collected:** 02/24/23
Lab Code: K2302336-012.R01 **Date Received:** 02/27/23
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ACOUCH	EMCALLISTER

Sample Name: GS-AP-OBT-MW-7-Mn-LP-DUP **Date Collected:** 02/24/23
Lab Code: K2302336-013 **Date Received:** 02/27/23
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ACOUCH	EMCALLISTER

Sample Name: GS-AP-OBT-MW-7-Mn-LP-DUP **Date Collected:** 02/24/23
Lab Code: K2302336-013.R01 **Date Received:** 02/27/23
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ACOUCH	EMCALLISTER

Client: Anchor QEA, LLC
Service Request: K2302336
Project: Plant Gorgas Treatability/221114-10.01 Task 05

Sample Name: GS-AP-OBT-MW-7-CTRL
Date Collected: 02/24/23
Lab Code: K2302336-014
Date Received: 02/27/23
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
200.8	ACOUCH	EMCALLISTER

Sample Name: GS-AP-OBT-MW-7-CTRL
Date Collected: 02/24/23
Lab Code: K2302336-014.R01
Date Received: 02/27/23
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
200.8	ACOUCH	EMCALLISTER

Sample Name: GS-AP-OBT-MB
Date Collected: 02/24/23
Lab Code: K2302336-015
Date Received: 02/27/23
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
200.8	ACOUCH	EMCALLISTER

Sample Name: GS-AP-MW-6D-As-Spiked-2
Date Collected: 02/17/23
Lab Code: K2302336-016
Date Received: 02/27/23
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
200.8	ACOUCH	EMCALLISTER

Sample Results

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
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Metals

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RIGHT SOLUTIONS | RIGHT PARTNER

Client:	Anchor QEA, LLC	**Service Request:**	K2302336
Project:	Plant Gorgas Treatability/221114-10.01 Task 05	**Date Collected:**	02/24/23 10:00
Sample Matrix:	Water	**Date Received:**	02/27/23 12:15
Sample Name:	GS-AP-OBT-MW-6D-HT	**Basis:**	NA
Lab Code:	K2302336-001		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**8.75**	ug/L	0.50	0.09	1	03/01/23 12:18	02/28/23	
Iron	200.8	**0.6 J**	ug/L	2.0	0.3	1	03/01/23 12:18	02/28/23	
Lithium	200.8	**18.4**	ug/L	0.10	0.10	1	03/01/23 14:53	02/28/23	
Manganese	200.8	**2.25**	ug/L	0.20	0.04	1	03/01/23 12:18	02/28/23	

Client:	Anchor QEA, LLC	**Service Request:**	K2302336
Project:	Plant Gorgas Treatability/221114-10.01 Task 05	**Date Collected:**	02/24/23 10:05
Sample Matrix:	Water	**Date Received:**	02/27/23 12:15
Sample Name:	GS-AP-OBT-MW-6D-Mn-AI-LDH	**Basis:**	NA
Lab Code:	K2302336-002		

Dissolved Metals

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**0.98**		ug/L	0.50	0.09	1	03/01/23 12:23	02/28/23	
Iron	200.8	**0.5**	**J**	ug/L	2.0	0.3	1	03/01/23 12:23	02/28/23	
Lithium	200.8	**72.4**		ug/L	0.10	0.10	1	03/01/23 14:59	02/28/23	
Manganese	200.8	**1340**		ug/L	0.20	0.04	1	03/01/23 12:23	02/28/23	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2302336
Project:	Plant Gorgas Treatability/221114-10.01 Task 05	**Date Collected:**	02/24/23 10:10
Sample Matrix:	Water	**Date Received:**	02/27/23 12:15
Sample Name:	GS-AP-OBT-MW-6D-Fe-AI-LDH	**Basis:**	NA
Lab Code:	K2302336-003		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**0.30 J**	ug/L	0.50	0.09	1	03/01/23 12:28	02/28/23	
Iron	200.8	**2320**	ug/L	2.0	0.3	1	03/01/23 12:28	02/28/23	
Lithium	200.8	**56.2**	ug/L	0.10	0.10	1	03/01/23 12:28	02/28/23	
Manganese	200.8	**322**	ug/L	0.20	0.04	1	03/01/23 12:28	02/28/23	

Client:	Anchor QEA, LLC	**Service Request:**	K2302336
Project:	Plant Gorgas Treatability/221114-10.01 Task 05	**Date Collected:**	02/24/23 10:15
Sample Matrix:	Water	**Date Received:**	02/27/23 12:15
Sample Name:	GS-AP-OBT-MW-6D-Mn-LP	**Basis:**	NA
Lab Code:	K2302336-004		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**0.98**	ug/L	0.50	0.09	1	03/01/23 13:22	02/28/23	
Iron	200.8	**1.2 J**	ug/L	2.0	0.3	1	03/01/23 13:22	02/28/23	
Lithium	200.8	**0.14**	ug/L	0.10	0.10	1	03/01/23 15:05	02/28/23	
Manganese	200.8	**76.7**	ug/L	0.20	0.04	1	03/01/23 13:22	02/28/23	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2302336
Project:	Plant Gorgas Treatability/221114-10.01 Task 05	**Date Collected:**	02/24/23 10:20
Sample Matrix:	Water	**Date Received:**	02/27/23 12:15
Sample Name:	GS-AP-OBT-MW-6D-Mn-Fe-LP	**Basis:**	NA
Lab Code:	K2302336-005		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**0.66**	ug/L	0.50	0.09	1	03/01/23 13:23	02/28/23	
Iron	200.8	**20.6**	ug/L	2.0	0.3	1	03/01/23 13:23	02/28/23	
Lithium	200.8	**0.13**	ug/L	0.10	0.10	1	03/01/23 15:07	02/28/23	
Manganese	200.8	**69.3**	ug/L	0.20	0.04	1	03/01/23 13:23	02/28/23	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2302336
Project:	Plant Gorgas Treatability/221114-10.01 Task 05	**Date Collected:**	02/24/23 10:25
Sample Matrix:	Water	**Date Received:**	02/27/23 12:15
Sample Name:	GS-AP-OBT-MW-6D-Mn-LP-DUP	**Basis:**	NA
Lab Code:	K2302336-006		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**0.96**	ug/L	0.50	0.09	1	03/01/23 13:25	02/28/23	
Iron	200.8	**0.7 J**	ug/L	2.0	0.3	1	03/01/23 13:25	02/28/23	
Lithium	200.8	**0.11**	ug/L	0.10	0.10	1	03/01/23 15:08	02/28/23	
Manganese	200.8	**59.1**	ug/L	0.20	0.04	1	03/01/23 13:25	02/28/23	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2302336
Project:	Plant Gorgas Treatability/221114-10.01 Task 05	**Date Collected:**	02/24/23 10:30
Sample Matrix:	Water	**Date Received:**	02/27/23 12:15
Sample Name:	GS-AP-OBT-MW-6D-CTRL	**Basis:**	NA
Lab Code:	K2302336-007		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**270**	ug/L	0.50	0.09	1	03/01/23 14:19	02/28/23	
Iron	200.8	**0.9 J**	ug/L	2.0	0.3	1	03/01/23 14:19	02/28/23	
Lithium	200.8	**315**	ug/L	0.50	0.50	5	03/01/23 15:09	02/28/23	
Manganese	200.8	**177**	ug/L	0.20	0.04	1	03/01/23 14:19	02/28/23	

Client:	Anchor QEA, LLC	**Service Request:**	K2302336
Project:	Plant Gorgas Treatability/221114-10.01 Task 05	**Date Collected:**	02/24/23 10:35
Sample Matrix:	Water	**Date Received:**	02/27/23 12:15
Sample Name:	GS-AP-OBT-MW-7-HT	**Basis:**	NA
Lab Code:	K2302336-008		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**54.3**	ug/L	0.50	0.09	1	03/01/23 13:29	02/28/23	
Iron	200.8	**0.4 J**	ug/L	2.0	0.3	1	03/01/23 13:29	02/28/23	
Lithium	200.8	**10.5**	ug/L	0.10	0.10	1	03/01/23 15:15	02/28/23	
Manganese	200.8	**0.49**	ug/L	0.20	0.04	1	03/01/23 13:29	02/28/23	
Molybdenum	200.8	**150**	ug/L	0.10	0.03	1	03/01/23 13:29	02/28/23	

Client: Anchor QEA, LLC
Project: Plant Gorgas Treatability/221114-10.01 Task 05
Sample Matrix: Water

Service Request: K2302336
Date Collected: 02/24/23 10:40
Date Received: 02/27/23 12:15

Sample Name: GS-AP-OBT-MW-7-Mn-AI-LDH
Lab Code: K2302336-009

Basis: NA

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**8.18**	ug/L	0.50	0.09	1	03/01/23 13:31	02/28/23	
Iron	200.8	**0.8 J**	ug/L	2.0	0.3	1	03/01/23 13:31	02/28/23	
Lithium	200.8	**67.8**	ug/L	0.10	0.10	1	03/01/23 15:16	02/28/23	
Manganese	200.8	**2570**	ug/L	0.20	0.04	1	03/01/23 13:31	02/28/23	
Molybdenum	200.8	**200**	ug/L	0.10	0.03	1	03/01/23 13:31	02/28/23	

Client:	Anchor QEA, LLC	**Service Request:**	K2302336
Project:	Plant Gorgas Treatability/221114-10.01 Task 05	**Date Collected:**	02/24/23 10:45
Sample Matrix:	Water	**Date Received:**	02/27/23 12:15
Sample Name:	GS-AP-OBT-MW-7-Fe-AI-LDH	**Basis:**	NA
Lab Code:	K2302336-010		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**7.40**	ug/L	0.50	0.09	1	03/01/23 13:35	02/28/23	
Iron	200.8	**4440**	ug/L	2.0	0.3	1	03/01/23 13:35	02/28/23	
Lithium	200.8	**35.9**	ug/L	0.10	0.10	1	03/01/23 15:18	02/28/23	
Manganese	200.8	**497**	ug/L	0.20	0.04	1	03/01/23 13:35	02/28/23	
Molybdenum	200.8	**90.9**	ug/L	0.10	0.03	1	03/01/23 13:35	02/28/23	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2302336
Project:	Plant Gorgas Treatability/221114-10.01 Task 05	**Date Collected:**	02/24/23 10:50
Sample Matrix:	Water	**Date Received:**	02/27/23 12:15
Sample Name:	GS-AP-OBT-MW-7-Mn-LP	**Basis:**	NA
Lab Code:	K2302336-011		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**1.01**	ug/L	0.50	0.09	1	03/01/23 13:37	02/28/23	
Iron	200.8	**3.5**	ug/L	2.0	0.3	1	03/01/23 13:37	02/28/23	
Lithium	200.8	**0.16**	ug/L	0.10	0.10	1	03/01/23 15:19	02/28/23	
Manganese	200.8	**91.3**	ug/L	0.20	0.04	1	03/01/23 13:37	02/28/23	
Molybdenum	200.8	**184**	ug/L	0.10	0.03	1	03/01/23 13:37	02/28/23	

Client:	Anchor QEA, LLC	**Service Request:**	K2302336
Project:	Plant Gorgas Treatability/221114-10.01 Task 05	**Date Collected:**	02/24/23 10:55
Sample Matrix:	Water	**Date Received:**	02/27/23 12:15
Sample Name:	GS-AP-OBT-MW-7-Mn-Fe-LP	**Basis:**	NA
Lab Code:	K2302336-012		

Dissolved Metals

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**0.86**		ug/L	0.50	0.09	1	03/01/23 13:38	02/28/23	
Iron	200.8	**24.5**		ug/L	2.0	0.3	1	03/01/23 13:38	02/28/23	
Lithium	200.8	ND	U	ug/L	0.10	0.10	1	03/01/23 15:20	02/28/23	
Manganese	200.8	**69.6**		ug/L	0.20	0.04	1	03/01/23 13:38	02/28/23	
Molybdenum	200.8	**210**		ug/L	0.10	0.03	1	03/01/23 13:38	02/28/23	

Client: Anchor QEA, LLC
Service Request: K2302336
Project: Plant Gorgas Treatability/221114-10.01 Task 05
Date Collected: 02/24/23 11:00
Sample Matrix: Water
Date Received: 02/27/23 12:15

Sample Name: GS-AP-OBT-MW-7-Mn-LP-DUP
Basis: NA
Lab Code: K2302336-013

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**0.99**	ug/L	0.50	0.09	1	03/01/23 13:40	02/28/23	
Iron	200.8	**1.0 J**	ug/L	2.0	0.3	1	03/01/23 13:40	02/28/23	
Lithium	200.8	**0.10**	ug/L	0.10	0.10	1	03/01/23 15:21	02/28/23	
Manganese	200.8	**94.3**	ug/L	0.20	0.04	1	03/01/23 13:40	02/28/23	
Molybdenum	200.8	**183**	ug/L	0.10	0.03	1	03/01/23 13:40	02/28/23	

Client:	Anchor QEA, LLC	**Service Request:**	K2302336
Project:	Plant Gorgas Treatability/221114-10.01 Task 05	**Date Collected:**	02/24/23 11:05
Sample Matrix:	Water	**Date Received:**	02/27/23 12:15
Sample Name:	GS-AP-OBT-MW-7-CTRL	**Basis:**	NA
Lab Code:	K2302336-014		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**245**	ug/L	0.50	0.09	1	03/01/23 13:57	02/28/23	
Iron	200.8	**3.0**	ug/L	2.0	0.3	1	03/01/23 13:57	02/28/23	
Lithium	200.8	**212**	ug/L	0.10	0.10	1	03/01/23 15:23	02/28/23	
Manganese	200.8	**35.3**	ug/L	0.20	0.04	1	03/01/23 13:57	02/28/23	
Molybdenum	200.8	**221**	ug/L	0.10	0.03	1	03/01/23 13:57	02/28/23	

Client:	Anchor QEA, LLC	**Service Request:**	K2302336
Project:	Plant Gorgas Treatability/221114-10.01 Task 05	**Date Collected:**	02/24/23 11:10
Sample Matrix:	Water	**Date Received:**	02/27/23 12:15
Sample Name:	GS-AP-OBT-MB	**Basis:**	NA
Lab Code:	K2302336-015		

Dissolved Metals

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	ND	U	ug/L	0.50	0.09	1	03/01/23 12:15	02/28/23	
Iron	200.8	**1.0**	**J**	ug/L	2.0	0.3	1	03/01/23 12:15	02/28/23	
Lithium	200.8	ND	U	ug/L	0.10	0.10	1	03/01/23 12:15	02/28/23	
Manganese	200.8	**0.53**		ug/L	0.20	0.04	1	03/01/23 12:15	02/28/23	
Molybdenum	200.8	ND	U	ug/L	0.10	0.03	1	03/01/23 12:15	02/28/23	

QC Summary Forms

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
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Metals

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
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RIGHT SOLUTIONS | RIGHT PARTNER

Client:	Anchor QEA, LLC	**Service Request:**	K2302336
Project:	Plant Gorgas Treatability/221114-10.01 Task 05	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	KQ2303663-05		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	ND U	ug/L	0.50	0.09	1	03/01/23 12:14	02/28/23	
Iron	200.8	ND U	ug/L	2.0	0.3	1	03/01/23 12:14	02/28/23	
Lithium	200.8	ND U	ug/L	0.10	0.10	1	03/01/23 12:14	02/28/23	
Manganese	200.8	ND U	ug/L	0.20	0.04	1	03/01/23 12:14	02/28/23	
Molybdenum	200.8	ND U	ug/L	0.10	0.03	1	03/01/23 12:14	02/28/23	

Client:	Anchor QEA, LLC	**Service Request:**	K2302336
Project:	Plant Gorgas Treatability/221114-10.01 Task 05	**Date Collected:**	02/24/23
Sample Matrix:	Water	**Date Received:**	02/27/23
		Date Analyzed:	03/1/23
		Date Extracted:	02/28/23

Matrix Spike Summary
Dissolved Metals

Sample Name:	GS-AP-OBT-MW-6D-HT	**Units:**	ug/L
Lab Code:	K2302336-001	**Basis:**	NA
Analysis Method:	200.8		
Prep Method:	EPA CLP ILM04.0		

Matrix Spike
KQ2303663-01

Analyte Name	Sample Result	Result	Spike Amount	% Rec	% Rec Limits
Arsenic	8.75	56.8	50.0	96	70-130
Iron	0.6 J	51.2	50.0	101	70-130
Lithium	18.4	68.5	50.0	100	70-130
Manganese	2.25	28.6	25.0	105	70-130
Molybdenum	17.7	45.4	25.0	111	70-130

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Matrix Spike and Matrix Spike Duplicate Data is presented for information purposes only. The matrix may or may not be relevant to samples reported in this report. The laboratory evaluates system performance based on the LCS and LCSD control limits.

Client:	Anchor QEA, LLC	**Service Request:**	K2302336
Project:	Plant Gorgas Treatability/221114-10.01 Task 05	**Date Collected:**	02/24/23
Sample Matrix:	Water	**Date Received:**	02/27/23
		Date Analyzed:	03/1/23
		Date Extracted:	02/28/23

Matrix Spike Summary
Dissolved Metals

Sample Name:	GS-AP-OBT-MW-6D-Mn-AI-LDH	**Units:**	ug/L
Lab Code:	K2302336-002	**Basis:**	NA
Analysis Method:	200.8		
Prep Method:	EPA CLP ILM04.0		

Matrix Spike
KQ2303663-03

Analyte Name	Sample Result	Result	Spike Amount	% Rec	% Rec Limits
Arsenic	0.98	47.8	50.0	94	70-130
Iron	0.5 J	49.1	50.0	97	70-130
Lithium	72.4	121	50.0	97	70-130
Manganese	1340	1350	25.0	47 #	70-130
Molybdenum	11.4	39.7	25.0	113	70-130

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Matrix Spike and Matrix Spike Duplicate Data is presented for information purposes only. The matrix may or may not be relevant to samples reported in this report. The laboratory evaluates system performance based on the LCS and LCSD control limits.

Client:	Anchor QEA, LLC	**Service Request:**	K2302336
Project	Plant Gorgas Treatability/221114-10.01 Task 05	**Date Collected:**	02/24/23
Sample Matrix:	Water	**Date Received:**	02/27/23
		Date Analyzed:	03/01/23

Replicate Sample Summary
Dissolved Metals

Sample Name:	GS-AP-OBT-MW-6D-HT	**Units:**	ug/L
Lab Code:	K2302336-001	**Basis:**	NA

Analyte Name	Analysis Method	MRL	MDL	Sample Result	Duplicate Sample KQ2303663-02 Result	Average	RPD	RPD Limit
Arsenic	200.8	0.50	0.09	8.75	8.79	8.77	<1	20
Iron	200.8	2.0	0.3	0.6 J	0.6 J	0.6	<1	20
Lithium	200.8	0.10	0.10	18.4	18.9	18.7	3	20
Manganese	200.8	0.20	0.04	2.25	2.28	2.27	1	20
Molybdenum	200.8	0.10	0.03	17.7	17.7	17.7	<1	20

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client:	Anchor QEA, LLC	**Service Request:**	K2302336
Project	Plant Gorgas Treatability/221114-10.01 Task 05	**Date Collected:**	02/24/23
Sample Matrix:	Water	**Date Received:**	02/27/23
		Date Analyzed:	03/01/23

Replicate Sample Summary
Dissolved Metals

Sample Name:	GS-AP-OBT-MW-6D-Mn-AI-LDH	**Units:**	ug/L
Lab Code:	K2302336-002	**Basis:**	NA

Analyte Name	Analysis Method	MRL	MDL	Sample Result	Duplicate Sample KQ2303663-04 Result	Average	RPD	RPD Limit
Arsenic	200.8	0.50	0.09	0.98	0.96	0.97	2	20
Iron	200.8	2.0	0.3	0.5 J	0.5 J	0.5	<1	20
Lithium	200.8	0.10	0.10	72.4	72.1	72.3	<1	20
Manganese	200.8	0.20	0.04	1340	1360	1350	1	20
Molybdenum	200.8	0.10	0.03	11.4	11.5	11.5	<1	20

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client:	Anchor QEA, LLC	**Service Request:**	K2302336
Project:	Plant Gorgas Treatability/221114-10.01 Task 05	**Date Analyzed:**	03/01/23
Sample Matrix:	Water		

Lab Control Sample Summary
Dissolved Metals

Units:ug/L
Basis:NA

Lab Control Sample
KQ2303663-06

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Arsenic	200.8	46.6	50.0	93	85-115
Iron	200.8	47.0	50.0	94	85-115
Lithium	200.8	48.4	50.0	97	85-115
Manganese	200.8	24.6	25.0	98	85-115
Molybdenum	200.8	26.3	25.0	105	85-115

March 10, 2023 Service Request No:K2302469

Masa Kanematsu
Anchor QEA, LLC
6720 SW Macadam Avenue
Suite 125
Portland, OR 97219

Laboratory Results for: Plant Gorgas Treatability

Dear Masa,

Enclosed are the results of the sample(s) submitted to our laboratory March 01, 2023
For your reference, these analyses have been assigned our service request number **K2302469.**

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. All results are intended to be considered in their entirety, and ALS Group USA Corp. dba ALS Environmental (ALS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please contact me if you have any questions. My extension is 3376. You may also contact me via email at Mark.Harris@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

Mark Harris
Project Manager

Narrative Documents

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Client: Anchor QEA, LLC
Project: Plant Gorgas Treatability
Sample Matrix: Water

Service Request: K2302469
Date Received: 03/01/2023

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples for the Tier II level requested by the client.

Sample Receipt:

One water sample was received for analysis at ALS Environmental on 03/01/2023. Any discrepancies upon initial sample inspection are annotated on the sample receipt and preservation form included within this report. The sample was stored at minimum in accordance with the analytical method requirements.

Metals:

No significant anomalies were noted with this analysis.

Approved by ______________________ Date 03/10/2023

SAMPLE DETECTION SUMMARY

This form includes only detections above the reporting levels. For a full listing of sample results, continue to the Sample Results section of this Report.

CLIENT ID: GS-AP-MW-6D-As-Spiked-2 **Lab ID: K2302469-001**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	282		0.09	0.50	ug/L	200.8

Sample Receipt Information

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Client: Anchor QEA, LLC **Service Request:** K2302469
Project: Plant Gorgas Treatability/221114-10.01 Task 05

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
K2302469-001	GS-AP-MW-6D-As-Spiked-2	2/17/2023	1115

K2302469

Chain of Custody Record & Laboratory Analysis Request

Laboratory Number: 503-972-5019	
Date:	2/27/2023
Project Name:	Plant Gorgas Treatability
Project Number:	221114-10.01 Task 05
Project Manager:	Masa Kanematsu
Phone Number:	503-972-5001 (backup number: 971.334.8193)
Shipment Method:	ALS Carrier

ANCHOR QEA

Masa Kanematsu
6720 SW Macadam Ave
Suite 125
Portland OR 97219

Line	Field Sample ID	Collection Date	Collection Time	Matrix	No. of Containers	Parameters: Dissolved Metals (As, Li, Mo, Fe, Mn)	Dissolved Metals (As, Li, Fe, Mn)	Dissolved Metals (As)	Comments/Preservation
1	GS-AP-OBT-MW-6D-HT	2/24/2023	10:00	Water	1		X		HNO3 preserved. Field Filtered. ①
2	GS-AP-OBT-MW-6D-Mn-Al-LDH	2/24/2023	10:05	Water	1		X		HNO3 preserved. Field Filtered.
3	GS-AP-OBT-MW-6D-Fe-Al-LDH	2/24/2023	10:10	Water	1		X		HNO3 preserved. Field Filtered.
4	GS-AP-OBT-MW-6D-Mn-LP	2/24/2023	10:15	Water	1		X		HNO3 preserved. Field Filtered.
5	GS-AP-OBT-MW-6D-Mn-Fe-LP	2/24/2023	10:20	Water	1		X		HNO3 preserved. Field Filtered.
6	GS-AP-OBT-MW-6D-Mn-LP-DUP	2/24/2023	10:25	Water	1		X		HNO3 preserved. Field Filtered.
7	GS-AP-OBT-MW-6D-CTRL	2/24/2023	10:30	Water	1		X		HNO3 preserved. Field Filtered.
8	GS-AP-OBT-MW-7-HT	2/24/2023	10:35	Water	1	X			HNO3 preserved. Field Filtered.
9	GS-AP-OBT-MW-7-Mn-Al-LDH	2/24/2023	10:40	Water	1	X			HNO3 preserved. Field Filtered.
10	GS-AP-OBT-MW-7-Fe-Al-LDH	2/24/2023	10:45	Water	1	X			HNO3 preserved. Field Filtered.
11	GS-AP-OBT-MW-7-Mn-LP	2/24/2023	10:50	Water	1	X			HNO3 preserved. Field Filtered.
12	GS-AP-OBT-MW-7--Mn-Fe-LP	2/24/2023	10:55	Water	1	X			HNO3 preserved. Field Filtered.
13	GS-AP-OBT-MW-7-Mn-LP-DUP	2/24/2023	11:00	Water	1	X			HNO3 preserved. Field Filtered.
14	GS-AP-OBT-MW-7-CTRL	2/24/2023	11:05	Water	1	X			HNO3 preserved. Field Filtered.
15	GS-AP-OBT-MB	2/24/2023	11:10	Water	1	X			HNO3 preserved. Field Filtered.
16	GS-AP-MW-6D-As-Spiked-2	2/17/2023	11:15	Water	1			X	Approx 500 µg/L As. HNO3 and filtered.

EN 2/28/23

Notes: Please Contact Masa (503-972-5001; mkanematsu@anchorqea.com) if running > 10X dilution. Please analyze by ICP-MS method 200.8 to achieve the MDL < 1 ppb.

Relinquished by: Emma Nordlund	Company: Anchor QEA	Received by: Greg Rich	
Signature/Print Name:	Date/Time: 3/1/23 8:45	Signature/Print Name: Greg Rich	3/1/23 1225 pm
Relinquished by: Greg Rich	Company: ALS	Received by:	
Signature/Print Name: Greg Rich	Date/Time: 3-1-23 1400	Signature/Print Name: Katelyn Matolo	3/1/23 1400

Distribution: A copy will be made for the laboratory and client. The Project file will retain the original.

Page 1 of 1

① Samples on lines 1-15 were submitted 2/27/23. The sample on line 16 was incorrectly submitted to ALS on 2/27/23, and ~~was~~ EN the correct sample was picked up on 3/1/23.

PM MH

Cooler Receipt and Preservation Form

Client Anchor Service Request K23 02469

Received: 3.1.23 Opened: 3.1.23 By: YM Unloaded: 3.1.23 By: YM

1. Samples were received via? USPS Fed Ex UPS DHL PDX [✓ Courier] Hand Delivered
2. Samples were received in: (circle) [✓ Cooler] Box Envelope Other ______ NA
3. Were custody seals on coolers? NA Y [✓ N] If yes, how many and where? ______
   If present, were custody seals intact? Y N If present, were they signed and dated? Y N

Temp Blank	Sample Temp	IR Gun	Cooler #/COC ID / NA	Out of temp indicate with "X"	PM Notified If out of temp	Tracking Number NA	Filed
4.7		IR01					

4. Was a Temperature Blank present in cooler? NA [✓ Y] N If yes, notate the temperature in the appropriate column above:
   If no, take the temperature of a representative sample bottle contained within the cooler; notate in the column "Sample Temp":
5. Were samples received within the method specified temperature ranges? NA [✓ Y] N
   If no, were they received on ice and same day as collected? If not, notate the cooler # above and notify the PM. [✓ NA] Y N

If applicable, tissue samples were received: *Frozen* *Partially Thawed* *Thawed*

6. Packing material: *Inserts* [✓ *Baggies*] *Bubble Wrap* *Gel Packs* [✓ *Wet Ice*] *Dry Ice* *Sleeves* ______
7. Were custody papers properly filled out (ink, signed, etc.)? NA [✓ Y] N
8. Were samples received in good condition (unbroken) NA [✓ Y] N
9. Were all sample labels complete (ie, analysis, preservation, etc.)? NA [✓ Y] N
10. Did all sample labels and tags agree with custody papers? NA [✓ Y] N
11. Were appropriate bottles/containers and volumes received for the tests indicated? NA [✓ Y] N
12. Were the pH-preserved bottles (*see SMO GEN SOP*) received at the appropriate pH? *Indicate in the table below* NA [✓ Y] N
13. Were VOA vials received without headspace? *Indicate in the table below.* [✓ NA] Y N
14. Was C12/Res negative? [✓ NA] Y N
15. Were samples received within the method specified time limit? If not, notate the error below and notify the PM [✓ NA] Y N
16. Were 100ml sterile microbiology bottles filled exactly to the 100ml mark? [✓ NA] Y N Underfilled Overfilled

Sample ID on Bottle	Sample ID on COC	Identified by:

Sample ID	Bottle Count Bottle Type	Head-space	Broke	pH	Reagent	Volume added	Reagent Lot Number	Initials	Time

Notes, Discrepancies, Resolutions: ______

G:\SMO\2022 Forms SOP: SMO-GEN Reviewed: 12/9/2022

Miscellaneous Forms

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Inorganic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated value.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.
H	The holding time for this test is immediately following sample collection. The samples were analyzed as soon as possible after receipt by the laboratory.

Metals Data Qualifiers

#	The control limit criteria is not applicable.
J	The result is an estimated value.
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
M	The duplicate injection precision was not met.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
S	The reported value was determined by the Method of Standard Additions (MSA).
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
+	The correlation coefficient for the MSA is less than 0.995.
Q	See case narrative. One or more quality control criteria was outside the limits.

Organic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
A	A tentatively identified compound, a suspected aldol-condensation product.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
C	The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
D	The reported result is from a dilution.
E	The result is an estimated value.
J	The result is an estimated value.
N	The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
P	The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a chromatographic interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.

Additional Petroleum Hydrocarbon Specific Qualifiers

F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
Y	The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
Z	The chromatographic fingerprint does not resemble a petroleum product.

ALS Group USA Corp. dba ALS Environmental (ALS) - Kelso
State Certifications, Accreditations, and Licenses

Agency	Web Site	Number
Alaska DEH	http://dec.alaska.gov/eh/lab/cs/csapproval.htm	UST-040
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0339
Arkansas - DEQ	http://www.adeq.state.ar.us/techsvs/labcert.htm	88-0637
California DHS (ELAP)	http://www.cdph.ca.gov/certlic/labs/Pages/ELAP.aspx	2795
DOD ELAP	http://www.denix.osd.mil/edqw/Accreditation/AccreditedLabs.cfm	L16-58-R4
Florida DOH	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E87412
Hawaii DOH	http://health.hawaii.gov/	-
ISO 17025	http://www.pjlabs.com/	L16-57
Louisiana DEQ	http://www.deq.louisiana.gov/page/la-lab-accreditation	03016
Maine DHS	http://www.maine.gov/dhhs/	WA01276
Minnesota DOH	http://www.health.state.mn.us/accreditation	053-999-457
Nevada DEP	http://ndep.nv.gov/bsdw/labservice.htm	WA01276
New Jersey DEP	http://www.nj.gov/dep/enforcement/oqa.html	WA005
New York - DOH	https://www.wadsworth.org/regulatory/elap	12060
North Carolina DEQ	https://deq.nc.gov/about/divisions/water-resources/water-resources-data/water-sciences-home-page/laboratory-certification-branch/non-field-lab-certification	605
Oklahoma DEQ	http://www.deq.state.ok.us/CSDnew/labcert.htm	9801
Oregon – DEQ (NELAP)	http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	WA100010
South Carolina DHEC	http://www.scdhec.gov/environment/EnvironmentalLabCertification/	61002
Texas CEQ	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	T104704427
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C544
Wyoming (EPA Region 8)	https://www.epa.gov/region8-waterops/epa-region-8-certified-drinking-water	-
Kelso Laboratory Website	www.alsglobal.com	NA

Analyses were performed according to our laboratory’s NELAP-approved quality assurance program. A complete listing of specific NELAP-certified analytes, can be found in the certification section at www.ALSGlobal.com or at the accreditation bodies web site.

Please refer to the certification and/or accreditation body's web site if samples are submitted for compliance purposes. The states highlighted above, require the analysis be listed on the state certification if used for compliance purposes and if the method/anlayte is offered by that state.

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LOD	Limit of Detection
LOQ	Limit of Quantitation
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

ALS Group USA, Corp.
dba ALS Environmental

Analyst Summary report

Client:	Anchor QEA, LLC	**Service Request:**	K2302469
Project:	Plant Gorgas Treatability/221114-10.01 Task 05		

Sample Name:	GS-AP-MW-6D-As-Spiked-2	**Date Collected:**	02/17/23
Lab Code:	K2302469-001	**Date Received:**	03/1/23
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
200.8	SSOLADEY	EMCALLISTER

Sample Results

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1317 South 13th Avenue, Kelso, WA 98626
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Metals

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2302469
Project:	Plant Gorgas Treatability/221114-10.01 Task 05	**Date Collected:**	02/17/23 11:15
Sample Matrix:	Water	**Date Received:**	03/01/23 14:00
Sample Name:	GS-AP-MW-6D-As-Spiked-2	**Basis:**	NA
Lab Code:	K2302469-001		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**282**	ug/L	0.50	0.09	1	03/09/23 12:28	03/08/23	

QC Summary Forms

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Metals

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Client:	Anchor QEA, LLC	**Service Request:**	K2302469
Project:	Plant Gorgas Treatability/221114-10.01 Task 05	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	KQ2304009-07		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	ND U	ug/L	0.50	0.09	1	03/09/23 12:23	03/08/23	

Client:	Anchor QEA, LLC	**Service Request:**	K2302469
Project:	Plant Gorgas Treatability/221114-10.01 Task 05	**Date Analyzed:**	03/09/23
Sample Matrix:	Water		

Lab Control Sample Summary
Dissolved Metals

Units:ug/L
Basis:NA

Lab Control Sample
KQ2304009-08

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Arsenic	200.8	48.3	50.0	97	85-115

April 25, 2023 Service Request No:K2304400

Masa Kanematsu
Anchor QEA, LLC
6720 SW Macadam Avenue
Suite 125
Portland, OR 97219

Laboratory Results for: Gorgas

Dear Masa,

Enclosed are the results of the sample(s) submitted to our laboratory April 17, 2023
For your reference, these analyses have been assigned our service request number **K2304400.**

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. All results are intended to be considered in their entirety, and ALS Group USA Corp. dba ALS Environmental (ALS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please contact me if you have any questions. My extension is 3376. You may also contact me via email at Mark.Harris@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

for Mark Harris
Project Manager

Narrative Documents

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Client: Anchor QEA, LLC

Project: Gorgas

Sample Matrix: Water

Service Request: K2304400

Date Received: 04/17/2023

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples for the Tier II level requested by the client.

Sample Receipt:

Fourteen water samples were received for analysis at ALS Environmental on 04/17/2023. Any discrepancies upon initial sample inspection are annotated on the sample receipt and preservation form included within this report. The samples were stored at minimum in accordance with the analytical method requirements.

Metals:

No significant anomalies were noted with this analysis.

SMO:

No significant anomalies were noted with this analysis.

Approved by ______________________

Date 04/25/2023

SAMPLE DETECTION SUMMARY

This form includes only detections above the reporting levels. For a full listing of sample results, continue to the Sample Results section of this Report.

CLIENT ID: GS-AP-OBT2-MW-6D-Mn-LDH-BUF-DUP **Lab ID: K2304400-002**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	0.10	J	0.09	0.50	ug/L	200.8
Iron, Dissolved	0.5	J	0.3	2.0	ug/L	200.8
Lithium, Dissolved	4.93		0.10	0.20	ug/L	200.8
Manganese, Dissolved	209000		4	20	ug/L	200.8

CLIENT ID: GS-AP-OBT2-MW-6D-CTRL **Lab ID: K2304400-006**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	285		0.09	0.50	ug/L	200.8
Lithium, Dissolved	309		0.10	0.20	ug/L	200.8
Manganese, Dissolved	165		0.04	0.20	ug/L	200.8

CLIENT ID: GS-AP-OBT2-MW-7-CTRL **Lab ID: K2304400-012**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	246		0.09	0.50	ug/L	200.8
Iron, Dissolved	1.8	J	0.3	2.0	ug/L	200.8
Lithium, Dissolved	210		0.10	0.20	ug/L	200.8
Manganese, Dissolved	35.1		0.04	0.20	ug/L	200.8
Molybdenum, Dissolved	216		0.03	0.10	ug/L	200.8

CLIENT ID: GS-AP-OBT-MW-6D-ARSENIC-SPIKED **Lab ID: K2304400-014**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	285		0.09	0.50	ug/L	200.8

CLIENT ID: GS-AP-OBT2-MW-6D-Mn-LDH-BUF **Lab ID: K2304400-001**

Analyte	Results	Flag	MDL	MRL	Units	Method
Iron, Dissolved	0.4	J	0.3	2.0	ug/L	200.8
Lithium, Dissolved	5.37		0.10	0.20	ug/L	200.8
Manganese, Dissolved	215000		4	20	ug/L	200.8

CLIENT ID: GS-AP-OBT2-MW-6D-Mn-Fe-LDH-BUF **Lab ID: K2304400-003**

Analyte	Results	Flag	MDL	MRL	Units	Method
Iron, Dissolved	2.2		0.3	2.0	ug/L	200.8
Lithium, Dissolved	9.86		0.10	0.20	ug/L	200.8
Manganese, Dissolved	116000		4	20	ug/L	200.8

CLIENT ID: GS-AP-OBT2-MW-6D-Mn-Fe-LDH **Lab ID: K2304400-005**

Analyte	Results	Flag	MDL	MRL	Units	Method
Iron, Dissolved	4.4		0.3	2.0	ug/L	200.8
Lithium, Dissolved	2.01		0.10	0.20	ug/L	200.8
Manganese, Dissolved	72200		4	20	ug/L	200.8

CLIENT ID: GS-AP-OBT2-MW-7-Mn-LDH-BUF **Lab ID: K2304400-007**

Analyte	Results	Flag	MDL	MRL	Units	Method
Iron, Dissolved	0.5	J	0.3	2.0	ug/L	200.8

SAMPLE DETECTION SUMMARY

This form includes only detections above the reporting levels. For a full listing of sample results, continue to the Sample Results section of this Report.

CLIENT ID: GS-AP-OBT2-MW-7-Mn-LDH-BUF **Lab ID: K2304400-007**

Analyte	Results	Flag	MDL	MRL	Units	Method
Lithium, Dissolved	2.43		0.10	0.20	ug/L	200.8
Manganese, Dissolved	210000		4	20	ug/L	200.8
Molybdenum, Dissolved	1.39		0.03	0.10	ug/L	200.8

CLIENT ID: GS-AP-OBT2-MW-7-Mn-Fe-LDH-BUF **Lab ID: K2304400-009**

Analyte	Results	Flag	MDL	MRL	Units	Method
Iron, Dissolved	5.5		0.3	2.0	ug/L	200.8
Lithium, Dissolved	4.76		0.10	0.20	ug/L	200.8
Manganese, Dissolved	118000		4	20	ug/L	200.8
Molybdenum, Dissolved	1.12		0.03	0.10	ug/L	200.8

CLIENT ID: GS-AP-OBT2-MW-7-Mn-Fe-LDH **Lab ID: K2304400-011**

Analyte	Results	Flag	MDL	MRL	Units	Method
Iron, Dissolved	1.9	J	0.3	2.0	ug/L	200.8
Lithium, Dissolved	1.70		0.10	0.20	ug/L	200.8
Manganese, Dissolved	79400		4	20	ug/L	200.8
Molybdenum, Dissolved	0.85		0.03	0.10	ug/L	200.8

CLIENT ID: GS-AP-OBT2-MW-6D-Mn-LDH **Lab ID: K2304400-004**

Analyte	Results	Flag	MDL	MRL	Units	Method
Lithium, Dissolved	2.09		0.10	0.20	ug/L	200.8
Manganese, Dissolved	158000		4	20	ug/L	200.8

CLIENT ID: GS-AP-OBT2-MW-7-Mn-LDH-BUF-DUP **Lab ID: K2304400-008**

Analyte	Results	Flag	MDL	MRL	Units	Method
Lithium, Dissolved	2.50		0.10	0.20	ug/L	200.8
Manganese, Dissolved	212000		4	20	ug/L	200.8
Molybdenum, Dissolved	1.41		0.03	0.10	ug/L	200.8

CLIENT ID: GS-AP-OBT2-MW-7-Mn-LDH **Lab ID: K2304400-010**

Analyte	Results	Flag	MDL	MRL	Units	Method
Lithium, Dissolved	1.62		0.10	0.20	ug/L	200.8
Manganese, Dissolved	172000		4	20	ug/L	200.8
Molybdenum, Dissolved	0.24		0.03	0.10	ug/L	200.8

CLIENT ID: GS-AP-OBT-MB **Lab ID: K2304400-013**

Analyte	Results	Flag	MDL	MRL	Units	Method
Lithium, Dissolved	0.49		0.10	0.20	ug/L	200.8
Manganese, Dissolved	0.66		0.04	0.20	ug/L	200.8
Molybdenum, Dissolved	0.05	J	0.03	0.10	ug/L	200.8

Sample Receipt Information

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
K2304400-001	GS-AP-OBT2-MW-6D-Mn-LDH-BUF	4/14/2023	0900
K2304400-002	GS-AP-OBT2-MW-6D-Mn-LDH-BUF-DUP	4/14/2023	0905
K2304400-003	GS-AP-OBT2-MW-6D-Mn-Fe-LDH-BUF	4/14/2023	0910
K2304400-004	GS-AP-OBT2-MW-6D-Mn-LDH	4/14/2023	0915
K2304400-005	GS-AP-OBT2-MW-6D-Mn-Fe-LDH	4/14/2023	0920
K2304400-006	GS-AP-OBT2-MW-6D-CTRL	4/14/2023	0925
K2304400-007	GS-AP-OBT2-MW-7-Mn-LDH-BUF	4/14/2023	0930
K2304400-008	GS-AP-OBT2-MW-7-Mn-LDH-BUF-DUP	4/14/2023	0935
K2304400-009	GS-AP-OBT2-MW-7-Mn-Fe-LDH-BUF	4/14/2023	0940
K2304400-010	GS-AP-OBT2-MW-7-Mn-LDH	4/14/2023	0945
K2304400-011	GS-AP-OBT2-MW-7-Mn-Fe-LDH	4/14/2023	0950
K2304400-012	GS-AP-OBT2-MW-7-CTRL	4/14/2023	0955
K2304400-013	GS-AP-OBT-MB	4/14/2023	1000
K2304400-014	GS-AP-OBT-MW-6D-ARSENIC-SPIKED	4/7/2023	1000

K2304400

Chain of Custody Record & Laboratory Analysis Request

Laboratory Number: 503-972-5019

Date:	ER ~~4/13/2023~~ 4/17/23
Project Name:	Gorgas
Project Number:	221114-10.01 Task 05
Project Manager:	Masa Kanematsu
Phone Number:	503-972-5001 (backup number: 503-798-3456)
Shipment Method:	ALS Carrier

ANCHOR QEA

Masa Kanematsu
6720 SW Macadam Ave Suite 125
Portland OR 97219

Line	Field Sample ID	Collection Date	Collection Time	Matrix	No. of Containers	Dissolved As, Li, Fe, Mn	Dissolved As, Li, Mo, Fe, Mn	Dissolved As											Comments/Preservation
1	GS-AP-OBT2-MW-6D-Mn-LDH-BUF	4/14/2023	9:00	Water	1	X													HNO3-preserved. 0.45um filtered.
2	GS-AP-OBT2-MW-6D-Mn-LDH-BUF-DUP	4/14/2023	9:05	Water	1	X													HNO3-preserved. 0.45um filtered.
3	GS-AP-OBT2-MW-6D-Mn-Fe-LDH-BUF	4/14/2023	9:10	Water	1	X													HNO3-preserved. 0.45um filtered.
4	GS-AP-OBT2-MW-6D-Mn-LDH	4/14/2023	9:15	Water	1	X													HNO3-preserved. 0.45um filtered.
5	GS-AP-OBT2-MW-6D-Mn-Fe-LDH	4/14/2023	9:20	Water	1	X													HNO3-preserved. 0.45um filtered.
6	GS-AP-OBT2-MW-6D-CTRL	4/14/2023	9:25	Water	1	X													HNO3-preserved. 0.45um filtered.
7	GS-AP-OBT2-MW-7-Mn-LDH-BUF	4/14/2023	9:30	Water	1		X												HNO3-preserved. 0.45um filtered.
8	GS-AP-OBT2-MW-7-Mn-LDH-BUF-DUP	4/14/2023	9:35	Water	1		X												HNO3-preserved. 0.45um filtered.
9	GS-AP-OBT2-MW-7-Mn-Fe-LDH-BUF	4/14/2023	9:40	Water	1		X												HNO3-preserved. 0.45um filtered.
10	GS-AP-OBT2-MW-7-Mn-LDH	4/14/2023	9:45	Water	1		X												HNO3-preserved. 0.45um filtered.
11	GS-AP-OBT2-MW-7-Mn-Fe-LDH	4/14/2023	9:50	Water	1		X												HNO3-preserved. 0.45um filtered.
12	GS-AP-OBT2-MW-7-CTRL	4/14/2023	9:55	Water	1		X												HNO3-preserved. 0.45um filtered.
13	GS-AP-OBT-MB	4/14/2023	10:00	Water	1		X												↓ ↓
14	GS-AP-OBT-MW-6D-ARSENIC-SPIKED	4/7/2023	10:00	Water	1			X											
15																			
16																			
17																			
18																			
19																			
20																			

Notes: Please Contact Masa (503-972-5001, mkanematsu@anchorqea.com) if running > 10X dilution. Please analyze by ICP-MS method 200.8 to achieve the MDL < 1 ppb. **Please analyze on a 5-day TAT.**

Relinquished by: Emma Nordlund	Company: Anchor QEA	Received by: Greg Rich	Company: ALS
Signature/Print Name:	Date/Time: 4/17/23 9:03	Signature/Print Name: Greg Rich	Date/Time: 4-17-23 1018
Relinquished by: Greg Rich	Company: ALS	Received by:	Company: ALS
Signature/Print Name: Greg Rich	Date/Time: 4-17-23 1250 PM	Signature/Print Name: Kaitlyn Mick	Date/Time 4/17/23 1250

Distribution: A copy will be made for the laboratory and client. The Project file will retain the original.

Page 1 of 3

PM MH

Cooler Receipt and Preservation Form

Client Anchor QEA Service Request K23 04400

Received: 4/17/23 Opened: 4/17/23 By: KM Unloaded: 4/17/23 By: KM

1. Samples were received via? USPS Fed Ex UPS DHL PDX [✓ *Courier*] *Hand Delivered*
2. Samples were received in: (circle) [✓ *Cooler*] *Box* *Envelope* *Other* ______ *NA*
3. Were custody seals on coolers? NA Y [✓ N] If yes, how many and where? ______

   If present, were custody seals intact? Y N If present, were they signed and dated? Y N

Temp Blank	Sample Temp	IR Gun	Cooler #/COC ID / NA	Out of temp indicate with "X"	PM Notified If out of temp	Tracking Number NA	Filed
4.2		IR01					

4. Was a Temperature Blank present in cooler? NA [✓ Y] N If yes, notate the temperature in the appropriate column above:

   If no, take the temperature of a representative sample bottle contained within the cooler; notate in the column "Sample Temp":
5. Were samples received within the method specified temperature ranges? NA [✓ Y] N

   If no, were they received on ice and same day as collected? If not, notate the cooler # above and notify the PM. [✓ NA] Y N

If applicable, tissue samples were received: *Frozen* *Partially Thawed* *Thawed*

6. Packing material: *Inserts* [✓ *Baggies*] *Bubble Wrap* *Gel Packs* [✓ *Wet Ice*] *Dry Ice* *Sleeves* ______
7. Were custody papers properly filled out (ink, signed, etc.)? NA [✓ Y] N
8. Were samples received in good condition (unbroken) NA [✓ Y] N
9. Were all sample labels complete (ie, analysis, preservation, etc.)? NA [✓ Y] N
10. Did all sample labels and tags agree with custody papers? NA [✓ Y] N
11. Were appropriate bottles/containers and volumes received for the tests indicated? NA [✓ Y] N
12. Were the pH-preserved bottles (*see SMO GEN SOP*) received at the appropriate pH? *Indicate in the table below* NA [✓ Y] N
13. Were VOA vials received without headspace? *Indicate in the table below.* [✓ NA] Y N
14. Was C12/Res negative? [✓ NA] Y N
15. Were samples received within the method specified time limit? If not, notate the error below and notify the PM [✓ NA] Y N
16. Were 100ml sterile microbiology bottles filled exactly to the 100ml mark? [✓ NA] Y N Underfilled Overfilled

Sample ID on Bottle	Sample ID on COC	Identified by:

RUSH

Sample ID	Bottle Count Bottle Type	Head-space	Broke	pH	Reagent	Volume added	Reagent Lot Number	Initials	Time

Notes, Discrepancies, Resolutions: ______

Miscellaneous Forms

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

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Inorganic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated value.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.
H	The holding time for this test is immediately following sample collection. The samples were analyzed as soon as possible after receipt by the laboratory.

Metals Data Qualifiers

#	The control limit criteria is not applicable.
J	The result is an estimated value.
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
M	The duplicate injection precision was not met.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
S	The reported value was determined by the Method of Standard Additions (MSA).
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
+	The correlation coefficient for the MSA is less than 0.995.
Q	See case narrative. One or more quality control criteria was outside the limits.

Organic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
A	A tentatively identified compound, a suspected aldol-condensation product.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
C	The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
D	The reported result is from a dilution.
E	The result is an estimated value.
J	The result is an estimated value.
N	The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
P	The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a chromatographic interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.

Additional Petroleum Hydrocarbon Specific Qualifiers

F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
Y	The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
Z	The chromatographic fingerprint does not resemble a petroleum product.

ALS Group USA Corp. dba ALS Environmental (ALS) - Kelso
State Certifications, Accreditations, and Licenses

Agency	Web Site	Number
Alaska DEH	http://dec.alaska.gov/eh/lab/cs/csapproval.htm	UST-040
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0339
Arkansas - DEQ	http://www.adeq.state.ar.us/techsvs/labcert.htm	88-0637
California DHS (ELAP)	http://www.cdph.ca.gov/certlic/labs/Pages/ELAP.aspx	2795
DOD ELAP	http://www.denix.osd.mil/edqw/Accreditation/AccreditedLabs.cfm	L16-58-R4
Florida DOH	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E87412
Hawaii DOH	http://health.hawaii.gov/	-
ISO 17025	http://www.pjlabs.com/	L16-57
Louisiana DEQ	http://www.deq.louisiana.gov/page/la-lab-accreditation	03016
Maine DHS	http://www.maine.gov/dhhs/	WA01276
Minnesota DOH	http://www.health.state.mn.us/accreditation	053-999-457
Nevada DEP	http://ndep.nv.gov/bsdw/labservice.htm	WA01276
New Jersey DEP	http://www.nj.gov/dep/enforcement/oqa.html	WA005
New York - DOH	https://www.wadsworth.org/regulatory/elap	12060
North Carolina DEQ	https://deq.nc.gov/about/divisions/water-resources/water-resources-data/water-sciences-home-page/laboratory-certification-branch/non-field-lab-certification	605
Oklahoma DEQ	http://www.deq.state.ok.us/CSDnew/labcert.htm	9801
Oregon – DEQ (NELAP)	http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	WA100010
South Carolina DHEC	http://www.scdhec.gov/environment/EnvironmentalLabCertification/	61002
Texas CEQ	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	T104704427
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C544
Wyoming (EPA Region 8)	https://www.epa.gov/region8-waterops/epa-region-8-certified-drinking-water	-
Kelso Laboratory Website	www.alsglobal.com	NA

Analyses were performed according to our laboratory’s NELAP-approved quality assurance program. A complete listing of specific NELAP-certified analytes, can be found in the certification section at www.ALSGlobal.com or at the accreditation bodies web site.
Please refer to the certification and/or accreditation body's web site if samples are submitted for compliance purposes. The states highlighted above, require the analysis be listed on the state certification if used for compliance purposes and if the method/anlayte is offered by that state.

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LOD	Limit of Detection
LOQ	Limit of Quantitation
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Analyst Summary report

Client: Anchor QEA, LLC
Service Request: K2304400
Project: Gorgas/221114-10.01 Task 05

Sample Name: GS-AP-OBT2-MW-6D-Mn-LDH-BUF
Date Collected: 04/14/23
Lab Code: K2304400-001
Date Received: 04/17/23
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ACOUCH	EMCALLISTER

Sample Name: GS-AP-OBT2-MW-6D-Mn-LDH-BUF
Date Collected: 04/14/23
Lab Code: K2304400-001.R01
Date Received: 04/17/23
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ACOUCH	EMCALLISTER

Sample Name: GS-AP-OBT2-MW-6D-Mn-LDH-BUF-
Date Collected: 04/14/23
Lab Code: K2304400-002
Date Received: 04/17/23
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ACOUCH	EMCALLISTER

Sample Name: GS-AP-OBT2-MW-6D-Mn-LDH-BUF-
Date Collected: 04/14/23
Lab Code: K2304400-002.R01
Date Received: 04/17/23
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ACOUCH	EMCALLISTER

Sample Name: GS-AP-OBT2-MW-6D-Mn-Fe-LDH-BUF
Date Collected: 04/14/23
Lab Code: K2304400-003
Date Received: 04/17/23
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ACOUCH	EMCALLISTER

Client: Anchor QEA, LLC
Service Request: K2304400
Project: Gorgas/221114-10.01 Task 05

Sample Name: GS-AP-OBT2-MW-6D-Mn-Fe-LDH-BUF
Date Collected: 04/14/23
Lab Code: K2304400-003.R01
Date Received: 04/17/23
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
200.8	ACOUCH	EMCALLISTER

Sample Name: GS-AP-OBT2-MW-6D-Mn-LDH
Date Collected: 04/14/23
Lab Code: K2304400-004
Date Received: 04/17/23
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
200.8	ACOUCH	EMCALLISTER

Sample Name: GS-AP-OBT2-MW-6D-Mn-LDH
Date Collected: 04/14/23
Lab Code: K2304400-004.R01
Date Received: 04/17/23
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
200.8	ACOUCH	EMCALLISTER

Sample Name: GS-AP-OBT2-MW-6D-Mn-Fe-LDH
Date Collected: 04/14/23
Lab Code: K2304400-005
Date Received: 04/17/23
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
200.8	ACOUCH	EMCALLISTER

Sample Name: GS-AP-OBT2-MW-6D-Mn-Fe-LDH
Date Collected: 04/14/23
Lab Code: K2304400-005.R01
Date Received: 04/17/23
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
200.8	ACOUCH	EMCALLISTER

Client: Anchor QEA, LLC

Project: Gorgas/221114-10.01 Task 05

Service Request: K2304400

Sample Name: GS-AP-OBT2-MW-6D-CTRL
Lab Code: K2304400-006
Sample Matrix: Water

Date Collected: 04/14/23
Date Received: 04/17/23

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ACOUCH	EMCALLISTER

Sample Name: GS-AP-OBT2-MW-6D-CTRL
Lab Code: K2304400-006.R01
Sample Matrix: Water

Date Collected: 04/14/23
Date Received: 04/17/23

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ACOUCH	EMCALLISTER

Sample Name: GS-AP-OBT2-MW-7-Mn-LDH-BUF
Lab Code: K2304400-007
Sample Matrix: Water

Date Collected: 04/14/23
Date Received: 04/17/23

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ACOUCH	EMCALLISTER

Sample Name: GS-AP-OBT2-MW-7-Mn-LDH-BUF
Lab Code: K2304400-007.R01
Sample Matrix: Water

Date Collected: 04/14/23
Date Received: 04/17/23

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ACOUCH	EMCALLISTER

Sample Name: GS-AP-OBT2-MW-7-Mn-LDH-BUF-
Lab Code: K2304400-008
Sample Matrix: Water

Date Collected: 04/14/23
Date Received: 04/17/23

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ACOUCH	EMCALLISTER

Client:	Anchor QEA, LLC	**Service Request:**	K2304400
Project:	Gorgas/221114-10.01 Task 05		

Sample Name:	GS-AP-OBT2-MW-7-Mn-LDH-BUF-	**Date Collected:**	04/14/23
Lab Code:	K2304400-008.R01	**Date Received:**	04/17/23
Sample Matrix:	Water		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ACOUCH	EMCALLISTER

Sample Name:	GS-AP-OBT2-MW-7-Mn-LDH-BUF-	**Date Collected:**	04/14/23
Lab Code:	K2304400-008.R02	**Date Received:**	04/17/23
Sample Matrix:	Water		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ACOUCH	EMCALLISTER

Sample Name:	GS-AP-OBT2-MW-7-Mn-Fe-LDH-BUF	**Date Collected:**	04/14/23
Lab Code:	K2304400-009	**Date Received:**	04/17/23
Sample Matrix:	Water		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ACOUCH	EMCALLISTER

Sample Name:	GS-AP-OBT2-MW-7-Mn-Fe-LDH-BUF	**Date Collected:**	04/14/23
Lab Code:	K2304400-009.R01	**Date Received:**	04/17/23
Sample Matrix:	Water		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ACOUCH	EMCALLISTER

Sample Name:	GS-AP-OBT2-MW-7-Mn-Fe-LDH-BUF	**Date Collected:**	04/14/23
Lab Code:	K2304400-009.R02	**Date Received:**	04/17/23
Sample Matrix:	Water		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ACOUCH	EMCALLISTER

Client: Anchor QEA, LLC
Service Request: K2304400
Project: Gorgas/221114-10.01 Task 05

Sample Name: GS-AP-OBT2-MW-7-Mn-LDH
Date Collected: 04/14/23
Lab Code: K2304400-010
Date Received: 04/17/23
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ACOUCH	EMCALLISTER

Sample Name: GS-AP-OBT2-MW-7-Mn-LDH
Date Collected: 04/14/23
Lab Code: K2304400-010.R01
Date Received: 04/17/23
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ACOUCH	EMCALLISTER

Sample Name: GS-AP-OBT2-MW-7-Mn-LDH
Date Collected: 04/14/23
Lab Code: K2304400-010.R02
Date Received: 04/17/23
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ACOUCH	EMCALLISTER

Sample Name: GS-AP-OBT2-MW-7-Mn-Fe-LDH
Date Collected: 04/14/23
Lab Code: K2304400-011
Date Received: 04/17/23
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ACOUCH	EMCALLISTER

Sample Name: GS-AP-OBT2-MW-7-Mn-Fe-LDH
Date Collected: 04/14/23
Lab Code: K2304400-011.R01
Date Received: 04/17/23
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ACOUCH	EMCALLISTER

Client: Anchor QEA, LLC
Service Request: K2304400
Project: Gorgas/221114-10.01 Task 05

Sample Name: GS-AP-OBT2-MW-7-Mn-Fe-LDH
Date Collected: 04/14/23
Lab Code: K2304400-011.R02
Date Received: 04/17/23
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ACOUCH	EMCALLISTER

Sample Name: GS-AP-OBT2-MW-7-CTRL
Date Collected: 04/14/23
Lab Code: K2304400-012
Date Received: 04/17/23
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ACOUCH	EMCALLISTER

Sample Name: GS-AP-OBT2-MW-7-CTRL
Date Collected: 04/14/23
Lab Code: K2304400-012.R01
Date Received: 04/17/23
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ACOUCH	EMCALLISTER

Sample Name: GS-AP-OBT-MB
Date Collected: 04/14/23
Lab Code: K2304400-013
Date Received: 04/17/23
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ACOUCH	EMCALLISTER

Sample Name: GS-AP-OBT-MB
Date Collected: 04/14/23
Lab Code: K2304400-013.R01
Date Received: 04/17/23
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ACOUCH	EMCALLISTER

Analyst Summary report

Client:	Anchor QEA, LLC	**Service Request:**	K2304400
Project:	Gorgas/221114-10.01 Task 05		

Sample Name:	GS-AP-OBT-MW-6D-ARSENIC-SPIKED	**Date Collected:**	04/7/23
Lab Code:	K2304400-014	**Date Received:**	04/17/23
Sample Matrix:	Water		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ACOUCH	EMCALLISTER

Sample Results

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
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Metals

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
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Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2304400
Project:	Gorgas/221114-10.01 Task 05	**Date Collected:**	04/14/23 09:00
Sample Matrix:	Water	**Date Received:**	04/17/23 12:50
Sample Name:	GS-AP-OBT2-MW-6D-Mn-LDH-BUF	**Basis:**	NA
Lab Code:	K2304400-001		

Dissolved Metals

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	ND	U	ug/L	0.50	0.09	1	04/21/23 12:59	04/18/23	
Iron	200.8	**0.4**	**J**	ug/L	2.0	0.3	1	04/21/23 12:59	04/18/23	
Lithium	200.8	**5.37**		ug/L	0.20	0.10	1	04/21/23 12:59	04/18/23	
Manganese	200.8	**215000**		ug/L	20	4	100	04/24/23 10:54	04/18/23	

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Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2304400
Project:	Gorgas/221114-10.01 Task 05	**Date Collected:**	04/14/23 09:05
Sample Matrix:	Water	**Date Received:**	04/17/23 12:50
Sample Name:	GS-AP-OBT2-MW-6D-Mn-LDH-BUF-DUP	**Basis:**	NA
Lab Code:	K2304400-002		

Dissolved Metals

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**0.10**	**J**	ug/L	0.50	0.09	1	04/21/23 13:04	04/18/23	
Iron	200.8	**0.5**	**J**	ug/L	2.0	0.3	1	04/21/23 13:04	04/18/23	
Lithium	200.8	**4.93**		ug/L	0.20	0.10	1	04/21/23 13:04	04/18/23	
Manganese	200.8	**209000**		ug/L	20	4	100	04/24/23 10:57	04/18/23	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2304400
Project:	Gorgas/221114-10.01 Task 05	**Date Collected:**	04/14/23 09:10
Sample Matrix:	Water	**Date Received:**	04/17/23 12:50
Sample Name:	GS-AP-OBT2-MW-6D-Mn-Fe-LDH-BUF	**Basis:**	NA
Lab Code:	K2304400-003		

Dissolved Metals

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	ND	U	ug/L	0.50	0.09	1	04/21/23 13:08	04/18/23	
Iron	200.8	**2.2**		ug/L	2.0	0.3	1	04/21/23 13:08	04/18/23	
Lithium	200.8	**9.86**		ug/L	0.20	0.10	1	04/21/23 13:08	04/18/23	
Manganese	200.8	**116000**		ug/L	20	4	100	04/24/23 11:01	04/18/23	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2304400
Project:	Gorgas/221114-10.01 Task 05	**Date Collected:**	04/14/23 09:15
Sample Matrix:	Water	**Date Received:**	04/17/23 12:50
Sample Name:	GS-AP-OBT2-MW-6D-Mn-LDH	**Basis:**	NA
Lab Code:	K2304400-004		

Dissolved Metals

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	ND	U	ug/L	0.50	0.09	1	04/21/23 13:10	04/18/23	
Iron	200.8	ND	U	ug/L	2.0	0.3	1	04/21/23 13:10	04/18/23	
Lithium	200.8	**2.09**		ug/L	0.20	0.10	1	04/21/23 13:10	04/18/23	
Manganese	200.8	**158000**		ug/L	20	4	100	04/24/23 11:03	04/18/23	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2304400
Project:	Gorgas/221114-10.01 Task 05	**Date Collected:**	04/14/23 09:20
Sample Matrix:	Water	**Date Received:**	04/17/23 12:50
Sample Name:	GS-AP-OBT2-MW-6D-Mn-Fe-LDH	**Basis:**	NA
Lab Code:	K2304400-005		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	ND U	ug/L	0.50	0.09	1	04/21/23 13:40	04/18/23	
Iron	200.8	**4.4**	ug/L	2.0	0.3	1	04/21/23 13:40	04/18/23	
Lithium	200.8	**2.01**	ug/L	0.20	0.10	1	04/21/23 13:40	04/18/23	
Manganese	200.8	**72200**	ug/L	20	4	100	04/24/23 11:04	04/18/23	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2304400
Project:	Gorgas/221114-10.01 Task 05	**Date Collected:**	04/14/23 09:25
Sample Matrix:	Water	**Date Received:**	04/17/23 12:50
Sample Name:	GS-AP-OBT2-MW-6D-CTRL	**Basis:**	NA
Lab Code:	K2304400-006		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**285**	ug/L	0.50	0.09	1	04/21/23 13:42	04/18/23	
Iron	200.8	ND U	ug/L	2.0	0.3	1	04/21/23 13:42	04/18/23	
Lithium	200.8	**309**	ug/L	0.20	0.10	1	04/21/23 13:42	04/18/23	
Manganese	200.8	**165**	ug/L	0.20	0.04	1	04/24/23 10:47	04/18/23	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2304400
Project:	Gorgas/221114-10.01 Task 05	**Date Collected:**	04/14/23 09:30
Sample Matrix:	Water	**Date Received:**	04/17/23 12:50
Sample Name:	GS-AP-OBT2-MW-7-Mn-LDH-BUF	**Basis:**	NA
Lab Code:	K2304400-007		

Dissolved Metals

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	ND	U	ug/L	0.50	0.09	1	04/21/23 13:43	04/18/23	
Iron	200.8	**0.5**	**J**	ug/L	2.0	0.3	1	04/21/23 13:43	04/18/23	
Lithium	200.8	**2.43**		ug/L	0.20	0.10	1	04/21/23 13:43	04/18/23	
Manganese	200.8	**210000**		ug/L	20	4	100	04/24/23 11:05	04/18/23	
Molybdenum	200.8	**1.39**		ug/L	0.10	0.03	1	04/21/23 13:43	04/18/23	

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Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2304400
Project:	Gorgas/221114-10.01 Task 05	**Date Collected:**	04/14/23 09:35
Sample Matrix:	Water	**Date Received:**	04/17/23 12:50
Sample Name:	GS-AP-OBT2-MW-7-Mn-LDH-BUF-DUP	**Basis:**	NA
Lab Code:	K2304400-008		

Dissolved Metals

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	ND	U	ug/L	0.50	0.09	1	04/21/23 13:45	04/18/23	
Iron	200.8	ND	U	ug/L	2.0	0.3	1	04/21/23 13:45	04/18/23	
Lithium	200.8	**2.50**		ug/L	0.20	0.10	1	04/21/23 13:45	04/18/23	
Manganese	200.8	**212000**		ug/L	20	4	100	04/24/23 11:32	04/18/23	
Molybdenum	200.8	**1.41**		ug/L	0.10	0.03	1	04/21/23 13:45	04/18/23	

Client:	Anchor QEA, LLC	**Service Request:**	K2304400
Project:	Gorgas/221114-10.01 Task 05	**Date Collected:**	04/14/23 09:40
Sample Matrix:	Water	**Date Received:**	04/17/23 12:50
Sample Name:	GS-AP-OBT2-MW-7-Mn-Fe-LDH-BUF	**Basis:**	NA
Lab Code:	K2304400-009		

Dissolved Metals

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	ND	U	ug/L	0.50	0.09	1	04/21/23 13:46	04/18/23	
Iron	200.8	**5.5**		ug/L	2.0	0.3	1	04/21/23 13:46	04/18/23	
Lithium	200.8	**4.76**		ug/L	0.20	0.10	1	04/21/23 13:46	04/18/23	
Manganese	200.8	**118000**		ug/L	20	4	100	04/24/23 11:34	04/18/23	
Molybdenum	200.8	**1.12**		ug/L	0.10	0.03	1	04/21/23 13:46	04/18/23	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2304400
Project:	Gorgas/221114-10.01 Task 05	**Date Collected:**	04/14/23 09:45
Sample Matrix:	Water	**Date Received:**	04/17/23 12:50
Sample Name:	GS-AP-OBT2-MW-7-Mn-LDH	**Basis:**	NA
Lab Code:	K2304400-010		

Dissolved Metals

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	ND	U	ug/L	0.50	0.09	1	04/21/23 13:48	04/18/23	
Iron	200.8	ND	U	ug/L	2.0	0.3	1	04/21/23 13:48	04/18/23	
Lithium	200.8	**1.62**		ug/L	0.20	0.10	1	04/21/23 13:48	04/18/23	
Manganese	200.8	**172000**		ug/L	20	4	100	04/24/23 11:35	04/18/23	
Molybdenum	200.8	**0.24**		ug/L	0.10	0.03	1	04/21/23 13:48	04/18/23	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2304400
Project:	Gorgas/221114-10.01 Task 05	**Date Collected:**	04/14/23 09:50
Sample Matrix:	Water	**Date Received:**	04/17/23 12:50
Sample Name:	GS-AP-OBT2-MW-7-Mn-Fe-LDH	**Basis:**	NA
Lab Code:	K2304400-011		

Dissolved Metals

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	ND	U	ug/L	0.50	0.09	1	04/21/23 13:50	04/18/23	
Iron	200.8	**1.9**	**J**	ug/L	2.0	0.3	1	04/21/23 13:50	04/18/23	
Lithium	200.8	**1.70**		ug/L	0.20	0.10	1	04/21/23 13:50	04/18/23	
Manganese	200.8	**79400**		ug/L	20	4	100	04/24/23 11:36	04/18/23	
Molybdenum	200.8	**0.85**		ug/L	0.10	0.03	1	04/21/23 13:50	04/18/23	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2304400
Project:	Gorgas/221114-10.01 Task 05	**Date Collected:**	04/14/23 09:55
Sample Matrix:	Water	**Date Received:**	04/17/23 12:50
Sample Name:	GS-AP-OBT2-MW-7-CTRL	**Basis:**	NA
Lab Code:	K2304400-012		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**246**	ug/L	0.50	0.09	1	04/21/23 13:51	04/18/23	
Iron	200.8	**1.8 J**	ug/L	2.0	0.3	1	04/21/23 13:51	04/18/23	
Lithium	200.8	**210**	ug/L	0.20	0.10	1	04/21/23 13:51	04/18/23	
Manganese	200.8	**35.1**	ug/L	0.20	0.04	1	04/24/23 10:48	04/18/23	
Molybdenum	200.8	**216**	ug/L	0.10	0.03	1	04/21/23 13:51	04/18/23	

Client:	Anchor QEA, LLC	**Service Request:**	K2304400
Project:	Gorgas/221114-10.01 Task 05	**Date Collected:**	04/14/23 10:00
Sample Matrix:	Water	**Date Received:**	04/17/23 12:50
Sample Name:	GS-AP-OBT-MB	**Basis:**	NA
Lab Code:	K2304400-013		

Dissolved Metals

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	ND	U	ug/L	0.50	0.09	1	04/21/23 13:53	04/18/23	
Iron	200.8	ND	U	ug/L	2.0	0.3	1	04/21/23 13:53	04/18/23	
Lithium	200.8	**0.49**		ug/L	0.20	0.10	1	04/21/23 13:53	04/18/23	
Manganese	200.8	**0.66**		ug/L	0.20	0.04	1	04/24/23 10:50	04/18/23	
Molybdenum	200.8	**0.05**	**J**	ug/L	0.10	0.03	1	04/21/23 13:53	04/18/23	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2304400
Project:	Gorgas/221114-10.01 Task 05	**Date Collected:**	04/07/23 10:00
Sample Matrix:	Water	**Date Received:**	04/17/23 12:50
Sample Name:	GS-AP-OBT-MW-6D-ARSENIC-SPIKED	**Basis:**	NA
Lab Code:	K2304400-014		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**285**	ug/L	0.50	0.09	1	04/21/23 13:54	04/18/23	

QC Summary Forms

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Metals

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Client:	Anchor QEA, LLC	**Service Request:**	K2304400
Project:	Gorgas/221114-10.01 Task 05	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	KQ2306934-05		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	ND U	ug/L	0.50	0.09	1	04/21/23 12:56	04/18/23	
Iron	200.8	ND U	ug/L	2.0	0.3	1	04/21/23 12:56	04/18/23	
Lithium	200.8	ND U	ug/L	0.20	0.10	1	04/21/23 12:56	04/18/23	
Manganese	200.8	ND U	ug/L	0.20	0.04	1	04/24/23 10:45	04/18/23	
Molybdenum	200.8	ND U	ug/L	0.10	0.03	1	04/21/23 12:56	04/18/23	

Client:	Anchor QEA, LLC	**Service Request:**	K2304400
Project:	Gorgas/221114-10.01 Task 05	**Date Collected:**	04/14/23
Sample Matrix:	Water	**Date Received:**	04/17/23
		Date Analyzed:	04/21/23 - 04/24/23
		Date Extracted:	04/18/23

Matrix Spike Summary
Dissolved Metals

Sample Name:	GS-AP-OBT2-MW-6D-Mn-LDH-BUF	**Units:**	ug/L
Lab Code:	K2304400-001	**Basis:**	NA
Analysis Method:	200.8		
Prep Method:	EPA CLP ILM04.0		

Matrix Spike
KQ2306934-01

Analyte Name	Sample Result	Result	Spike Amount	% Rec	% Rec Limits
Arsenic	ND U	50.0	50.0	100	70-130
Iron	0.4 J	52.8	50.0	105	70-130
Lithium	5.37	58.8	50.0	107	70-130
Manganese	215000	214000	25	-3319 #	70-130
Molybdenum	0.12	28.1	25.0	112	70-130

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Matrix Spike and Matrix Spike Duplicate Data is presented for information purposes only. The matrix may or may not be relevant to samples reported in this report. The laboratory evaluates system performance based on the LCS and LCSD control limits.

Client:	Anchor QEA, LLC	**Service Request:**	K2304400
Project:	Gorgas/221114-10.01 Task 05	**Date Collected:**	04/14/23
Sample Matrix:	Water	**Date Received:**	04/17/23
		Date Analyzed:	04/21/23 - 04/24/23
		Date Extracted:	04/18/23

Matrix Spike Summary
Dissolved Metals

Sample Name:	GS-AP-OBT2-MW-6D-Mn-LDH-BUF-DUP	**Units:**	ug/L
Lab Code:	K2304400-002	**Basis:**	NA
Analysis Method:	200.8		
Prep Method:	EPA CLP ILM04.0		

Matrix Spike
KQ2306934-03

Analyte Name	Sample Result	Result	Spike Amount	% Rec	% Rec Limits
Arsenic	0.10 J	48.4	50.0	97	70-130
Iron	0.5 J	51.6	50.0	102	70-130
Lithium	4.93	57.4	50.0	105	70-130
Manganese	209000	215000	25	23127 #	70-130
Molybdenum	0.10	27.6	25.0	110	70-130

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Matrix Spike and Matrix Spike Duplicate Data is presented for information purposes only. The matrix may or may not be relevant to samples reported in this report. The laboratory evaluates system performance based on the LCS and LCSD control limits.

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dba ALS Environmental

QA/QC Report

Client:	Anchor QEA, LLC	**Service Request:**	K2304400
Project	Gorgas/221114-10.01 Task 05	**Date Collected:**	04/14/23
Sample Matrix:	Water	**Date Received:**	04/17/23
		Date Analyzed:	04/21/23 - 04/24/23

Replicate Sample Summary
Dissolved Metals

Sample Name:	GS-AP-OBT2-MW-6D-Mn-LDH-BUF	**Units:**	ug/L
Lab Code:	K2304400-001	**Basis:**	NA

Analyte Name	Analysis Method	MRL	MDL	Sample Result	Duplicate Sample KQ2306934-02 Result	Average	RPD	RPD Limit
Arsenic	200.8	0.50	0.09	ND U	ND U	ND	-	20
Iron	200.8	2.0	0.3	0.4 J	ND U	NC	NC	20
Lithium	200.8	0.20	0.10	5.37	6.35	5.86	17	20
Manganese	200.8	20	4	215000	214000	215000	<1	20
Molybdenum	200.8	0.10	0.03	0.12	0.11	0.12	9	20

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client:	Anchor QEA, LLC	**Service Request:**	K2304400
Project	Gorgas/221114-10.01 Task 05	**Date Collected:**	04/14/23
Sample Matrix:	Water	**Date Received:**	04/17/23
		Date Analyzed:	04/21/23 - 04/24/23

Replicate Sample Summary
Dissolved Metals

Sample Name:	GS-AP-OBT2-MW-6D-Mn-LDH-BUF-DUP	**Units:**	ug/L
Lab Code:	K2304400-002	**Basis:**	NA

Analyte Name	Analysis Method	MRL	MDL	Sample Result	Duplicate Sample KQ2306934-04 Result	Average	RPD	RPD Limit
Arsenic	200.8	0.50	0.09	0.10 J	ND U	NC	NC	20
Iron	200.8	2.0	0.3	0.5 J	0.4 J	0.5	22 #	20
Lithium	200.8	0.20	0.10	4.93	4.98	4.96	1	20
Manganese	200.8	20	4	209000	211000	210000	<1	20
Molybdenum	200.8	0.10	0.03	0.10	0.12	0.11	18	20

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client:	Anchor QEA, LLC	**Service Request:**	K2304400
Project:	Gorgas/221114-10.01 Task 05	**Date Analyzed:**	04/21/23 - 04/24/23
Sample Matrix:	Water		

Lab Control Sample Summary
Dissolved Metals

Units:ug/L
Basis:NA

Lab Control Sample
KQ2306934-06

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Arsenic	200.8	48.3	50.0	97	85-115
Iron	200.8	50.3	50.0	101	85-115
Lithium	200.8	49.7	50.0	99	85-115
Manganese	200.8	25.7	25.0	103	85-115
Molybdenum	200.8	25.6	25.0	102	85-115

June 13, 2023 Service Request No:K2305974

Masa Kanematsu
Anchor QEA, LLC
6720 SW Macadam Avenue
Suite 125
Portland, OR 97219

Laboratory Results for: Gorgas

Dear Masa,

Enclosed are the results of the sample(s) submitted to our laboratory May 25, 2023
For your reference, these analyses have been assigned our service request number **K2305974.**

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. All results are intended to be considered in their entirety, and ALS Group USA Corp. dba ALS Environmental (ALS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please contact me if you have any questions. My extension is 3376. You may also contact me via email at Mark.Harris@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

Mark Harris
Project Manager

Narrative Documents

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
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Client: Anchor QEA, LLC
Project: Gorgas
Sample Matrix: Water

Service Request: K2305974
Date Received: 05/25/2023

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples for the Tier II level requested by the client.

Sample Receipt:

Nine water samples were received for analysis at ALS Environmental on 05/25/2023. Any discrepancies upon initial sample inspection are annotated on the sample receipt and preservation form included within this report. The samples were stored at minimum in accordance with the analytical method requirements.

Metals:

No significant anomalies were noted with this analysis.

Approved by ______________________ Date 06/13/2023

SAMPLE DETECTION SUMMARY

This form includes only detections above the reporting levels. For a full listing of sample results, continue to the Sample Results section of this Report.

CLIENT ID: GS-AP-OBT2-MW-6D-Mn-LDH-BUF-F1 Lab ID: K2305974-001

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	0.5	J	0.5	2.5	ug/L	200.8
Lithium, Dissolved	6.65		0.50	0.50	ug/L	200.8

CLIENT ID: GS-AP-OBT2-MW-6D-Mn-Fe-LDH-BUF-F1 Lab ID: K2305974-002

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	0.5	J	0.5	2.5	ug/L	200.8
Lithium, Dissolved	10.3		0.50	0.50	ug/L	200.8

CLIENT ID: GS-AP-OBT2-MW-6D-Mn-LDH-F1 Lab ID: K2305974-003

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	0.5	J	0.5	2.5	ug/L	200.8
Lithium, Dissolved	1.51		0.50	0.50	ug/L	200.8

CLIENT ID: GS-AP-OBT2-MW-6D-Mn-Fe-LDH-F1 Lab ID: K2305974-004

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	0.6	J	0.5	2.5	ug/L	200.8
Lithium, Dissolved	5.44		0.50	0.50	ug/L	200.8

CLIENT ID: GS-AP-OBT2-MW-7-Mn-LDH-BUF-F1 Lab ID: K2305974-005

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	0.5	J	0.5	2.5	ug/L	200.8
Lithium, Dissolved	3.10		0.50	0.50	ug/L	200.8
Molybdenum, Dissolved	3.51		0.15	0.50	ug/L	200.8

CLIENT ID: GS-AP-OBT2-MW-7-Mn-LDH-BUF-DUP-F1 Lab ID: K2305974-006

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	0.5	J	0.5	2.5	ug/L	200.8
Lithium, Dissolved	2.32		0.50	0.50	ug/L	200.8
Molybdenum, Dissolved	4.07		0.15	0.50	ug/L	200.8

CLIENT ID: GS-AP-OBT2-MW-7-Mn-Fe-LDH-BUF-F1 Lab ID: K2305974-007

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	0.6	J	0.5	2.5	ug/L	200.8
Lithium, Dissolved	7.32		0.50	0.50	ug/L	200.8
Molybdenum, Dissolved	2.75		0.15	0.50	ug/L	200.8

CLIENT ID: GS-AP-OBT2-MW-7-Mn-LDH-F1 Lab ID: K2305974-008

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	0.5	J	0.5	2.5	ug/L	200.8
Lithium, Dissolved	0.64		0.50	0.50	ug/L	200.8
Molybdenum, Dissolved	1.17		0.15	0.50	ug/L	200.8

SAMPLE DETECTION SUMMARY

This form includes only detections above the reporting levels. For a full listing of sample results, continue to the Sample Results section of this Report.

CLIENT ID: GS-AP-OBT2-MW-7-Mn-Fe-LDH-F1 **Lab ID: K2305974-009**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	0.5	J	0.5	2.5	ug/L	200.8
Lithium, Dissolved	2.30		0.50	0.50	ug/L	200.8
Molybdenum, Dissolved	1.68		0.15	0.50	ug/L	200.8

Sample Receipt Information

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
K2305974-001	GS-AP-OBT2-MW-6D-Mn-LDH-BUF-F1	5/15/2023	1600
K2305974-002	GS-AP-OBT2-MW-6D-Mn-Fe-LDH-BUF-F1	5/15/2023	1605
K2305974-003	GS-AP-OBT2-MW-6D-Mn-LDH-F1	5/15/2023	1610
K2305974-004	GS-AP-OBT2-MW-6D-Mn-Fe-LDH-F1	5/15/2023	1615
K2305974-005	GS-AP-OBT2-MW-7-Mn-LDH-BUF-F1	5/15/2023	1620
K2305974-006	GS-AP-OBT2-MW-7-Mn-LDH-BUF-DUP-F1	5/15/2023	1625
K2305974-007	GS-AP-OBT2-MW-7-Mn-Fe-LDH-BUF-F1	5/15/2023	1630
K2305974-008	GS-AP-OBT2-MW-7-Mn-LDH-F1	5/15/2023	1635
K2305974-009	GS-AP-OBT2-MW-7-Mn-Fe-LDH-F1	5/15/2023	1640

Chain of Custody Record & Laboratory Analysis Request

K2305974

Laboratory Number: 503-972-5019

Date:	5/23/2023
Project Name:	Gorgas
Project Number:	221114-10.01 Task 05
Project Manager:	Masa Kanematsu, mkanematsu@anchorqea.com
Phone Number:	503-972-5001
Shipment Method:	ALS Carrier

ANCHOR QEA

Jason Stuckey
6720 SW Macadam Ave Suite 125
Portland OR 97219

Line	Field Sample ID	Collection Date	Collection Time	Matrix	No. of Containers	Parameters: Dissolved metals (As, Li)	Parameters: Dissolved metals (As, Li, Mo)	Comments/Preservation
1	GS-AP-OBT2-MW-6D-Mn-LDH-BUF-F1	5/15/2023	16:00	Water	1	X		0.67 M magnesium chloride
2	GS-AP-OBT2-MW-6D-Mn-Fe-LDH-BUF-F1	5/15/2023	16:05	Water	1	X		0.67 M magnesium chloride
3	GS-AP-OBT2-MW-6D-Mn-LDH-F1	5/15/2023	16:10	Water	1	X		0.67 M magnesium chloride
4	GS-AP-OBT2-MW-6D-Mn-Fe-LDH-F1	5/15/2023	16:15	Water	1	X		0.67 M magnesium chloride
5	GS-AP-OBT2-MW-7-Mn-LDH-BUF-F1	5/15/2023	16:20	Water	1		X	0.67 M magnesium chloride
6	GS-AP-OBT2-MW-7-Mn-LDH-BUF-DUP-F1	5/15/2023	16:25	Water	1		X	0.67 M magnesium chloride
7	GS-AP-OBT2-MW-7-Mn-Fe-LDH-BUF-F1	5/15/2023	16:30	Water	1		X	0.67 M magnesium chloride
8	GS-AP-OBT2-MW-7-Mn-LDH-F1	5/15/2023	16:35	Water	1		X	0.67 M magnesium chloride
9	GS-AP-OBT2-MW-7-Mn-Fe-LDH-F1	5/15/2023	16:40	Water	1		X	0.67 M magnesium chloride
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								

Notes: All samples are HNO3-preserved and 0.45-um filtered. The comment section lists the chemical composition of the sample. Please Contact Masa (mkanematsu@anchorqea.com) if running > 10X dilution. Please analyze by ICP-MS method 200.8 to achieve the MDL < 1 ppb. **Please analyze on a standard TAT.**

Relinquished by: Masa Kanematsu
Company: Anchor QEA
Signature/Print Name:
Date/Time: 5/23/2023 9:30

Received by: ALS 5/25/23 1015
Signature/Print Name: Katelyn Mitelo

Relinquished by:
Company:
Signature/Print Name:
Date/Time:

Received by:
Signature/Print Name:

Distribution: A copy will be made for the laboratory and client. The Project file will retain the original.

Page 1 of 1

PM Mark

Cooler Receipt and Preservation Form

Client Anchor Service Request K23 05974

Received: 5/25/23 Opened: 5/25/23 By: VM Unloaded: 5/25/23 By: VM

1. Samples were received via? USPS [✓ Fed Ex] UPS DHL PDX Courier Hand Delivered
2. Samples were received in: (circle) [✓ Cooler] Box Envelope Other ____ NA
3. Were custody seals on coolers? NA Y [✓ N] If yes, how many and where? ____

If present, were custody seals intact? Y N If present, were they signed and dated? Y N

Temp Blank	Sample Temp	IR Gun	Cooler #/COC ID / NA	Out of temp indicate with "X"	PM Notified If out of temp	Tracking Number NA	Filed
3.3		IR01	Cooler 1			772246558027	
	4.9	IR01	Cooler 2			772246558141	

4. Was a Temperature Blank present in cooler? NA [✓ Y] [✓ N] If yes, notate the temperature in the appropriate column above:

If no, take the temperature of a representative sample bottle contained within the cooler; notate in the column "Sample Temp":

5. Were samples received within the method specified temperature ranges? NA [✓ Y] N

If no, were they received on ice and same day as collected? If not, notate the cooler # above and notify the PM. [✓ NA] Y N

If applicable, tissue samples were received: *Frozen* *Partially Thawed* *Thawed*

6. Packing material: *Inserts* [✓ *Baggies*] *Bubble Wrap* *Gel Packs* [✓ *Wet Ice*] *Dry Ice* *Sleeves* ____
7. Were custody papers properly filled out (ink, signed, etc.)? NA [✓ Y] N
8. Were samples received in good condition (unbroken) NA [✓ Y] N
9. Were all sample labels complete (ie, analysis, preservation, etc.)? NA [✓ Y] N
10. Did all sample labels and tags agree with custody papers? NA [✓ Y] N
11. Were appropriate bottles/containers and volumes received for the tests indicated? NA [✓ Y] N
12. Were the pH-preserved bottles (*see SMO GEN SOP*) received at the appropriate pH? *Indicate in the table below* [✓ NA] Y N
13. Were VOA vials received without headspace? *Indicate in the table below.* [✓ NA] Y N
14. Was C12/Res negative? [✓ NA] Y N
15. Were samples received within the method specified time limit? If not, notate the error below and notify the PM [✓ NA] Y N
16. Were 100ml sterile microbiology bottles filled exactly to the 100ml mark? [✓ NA] Y N Underfilled Overfilled

Sample ID on Bottle	Sample ID on COC	Identified by:

Sample ID	Bottle Count Bottle Type	Head-space	Broke	pH	Reagent	Volume added	Reagent Lot Number	Initials	Time

Notes, Discrepancies, Resolutions: Didnt ph due to limited volume

Miscellaneous Forms

ALS Environmental—Kelso Laboratory
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Inorganic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated value.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.
H	The holding time for this test is immediately following sample collection. The samples were analyzed as soon as possible after receipt by the laboratory.

Metals Data Qualifiers

#	The control limit criteria is not applicable.
J	The result is an estimated value.
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
M	The duplicate injection precision was not met.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
S	The reported value was determined by the Method of Standard Additions (MSA).
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
+	The correlation coefficient for the MSA is less than 0.995.
Q	See case narrative. One or more quality control criteria was outside the limits.

Organic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
A	A tentatively identified compound, a suspected aldol-condensation product.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
C	The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
D	The reported result is from a dilution.
E	The result is an estimated value.
J	The result is an estimated value.
N	The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
P	The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a chromatographic interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.

Additional Petroleum Hydrocarbon Specific Qualifiers

F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
Y	The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
Z	The chromatographic fingerprint does not resemble a petroleum product.

ALS Group USA Corp. dba ALS Environmental (ALS) - Kelso
State Certifications, Accreditations, and Licenses

Agency	Web Site	Number
Alaska DEH	http://dec.alaska.gov/eh/lab/cs/csapproval.htm	UST-040
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0339
Arkansas - DEQ	http://www.adeq.state.ar.us/techsvs/labcert.htm	88-0637
California DHS (ELAP)	http://www.cdph.ca.gov/certlic/labs/Pages/ELAP.aspx	2795
DOD ELAP	http://www.denix.osd.mil/edqw/Accreditation/AccreditedLabs.cfm	L16-58-R4
Florida DOH	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E87412
Hawaii DOH	http://health.hawaii.gov/	-
ISO 17025	http://www.pjlabs.com/	L16-57
Louisiana DEQ	http://www.deq.louisiana.gov/page/la-lab-accreditation	03016
Maine DHS	http://www.maine.gov/dhhs/	WA01276
Minnesota DOH	http://www.health.state.mn.us/accreditation	053-999-457
Nevada DEP	http://ndep.nv.gov/bsdw/labservice.htm	WA01276
New Jersey DEP	http://www.nj.gov/dep/enforcement/oqa.html	WA005
New York - DOH	https://www.wadsworth.org/regulatory/elap	12060
North Carolina DEQ	https://deq.nc.gov/about/divisions/water-resources/water-resources-data/water-sciences-home-page/laboratory-certification-branch/non-field-lab-certification	605
Oklahoma DEQ	http://www.deq.state.ok.us/CSDnew/labcert.htm	9801
Oregon – DEQ (NELAP)	http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	WA100010
South Carolina DHEC	http://www.scdhec.gov/environment/EnvironmentalLabCertification/	61002
Texas CEQ	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	T104704427
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C544
Wyoming (EPA Region 8)	https://www.epa.gov/region8-waterops/epa-region-8-certified-drinking-water	-
Kelso Laboratory Website	www.alsglobal.com	NA

Analyses were performed according to our laboratory’s NELAP-approved quality assurance program. A complete listing of specific NELAP-certified analytes, can be found in the certification section at www.ALSGlobal.com or at the accreditation bodies web site.
Please refer to the certification and/or accreditation body's web site if samples are submitted for compliance purposes. The states highlighted above, require the analysis be listed on the state certification if used for compliance purposes and if the method/anlayte is offered by that state.

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LOD	Limit of Detection
LOQ	Limit of Quantitation
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

ALS Group USA, Corp.
dba ALS Environmental

Analyst Summary report

Client: Anchor QEA, LLC
Service Request: K2305974
Project: Gorgas/221114-10.01 Task 05

Sample Name: GS-AP-OBT2-MW-6D-Mn-LDH-BUF-F1
Date Collected: 05/15/23
Lab Code: K2305974-001
Date Received: 05/25/23
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
200.8	ACOUCH	JCHAN

Sample Name: GS-AP-OBT2-MW-6D-Mn-Fe-LDH-BUF
Date Collected: 05/15/23
Lab Code: K2305974-002
Date Received: 05/25/23
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
200.8	ACOUCH	JCHAN

Sample Name: GS-AP-OBT2-MW-6D-Mn-LDH-F1
Date Collected: 05/15/23
Lab Code: K2305974-003
Date Received: 05/25/23
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
200.8	ACOUCH	JCHAN

Sample Name: GS-AP-OBT2-MW-6D-Mn-Fe-LDH-F1
Date Collected: 05/15/23
Lab Code: K2305974-004
Date Received: 05/25/23
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
200.8	ACOUCH	JCHAN

Sample Name: GS-AP-OBT2-MW-7-Mn-LDH-BUF-F1
Date Collected: 05/15/23
Lab Code: K2305974-005
Date Received: 05/25/23
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
200.8	ACOUCH	JCHAN

Analyst Summary report

Client: Anchor QEA, LLC
Project: Gorgas/221114-10.01 Task 05
Service Request: K2305974

Sample Name: GS-AP-OBT2-MW-7-Mn-LDH-BUF-
Lab Code: K2305974-006
Sample Matrix: Water
Date Collected: 05/15/23
Date Received: 05/25/23

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ACOUCH	JCHAN

Sample Name: GS-AP-OBT2-MW-7-Mn-Fe-LDH-BUF-
Lab Code: K2305974-007
Sample Matrix: Water
Date Collected: 05/15/23
Date Received: 05/25/23

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ACOUCH	JCHAN

Sample Name: GS-AP-OBT2-MW-7-Mn-LDH-F1
Lab Code: K2305974-008
Sample Matrix: Water
Date Collected: 05/15/23
Date Received: 05/25/23

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ACOUCH	JCHAN

Sample Name: GS-AP-OBT2-MW-7-Mn-Fe-LDH-F1
Lab Code: K2305974-009
Sample Matrix: Water
Date Collected: 05/15/23
Date Received: 05/25/23

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ACOUCH	JCHAN

Sample Results

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Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2305974
Project:	Gorgas/221114-10.01 Task 05	**Date Collected:**	05/15/23 16:00
Sample Matrix:	Water	**Date Received:**	05/25/23 10:15
Sample Name:	GS-AP-OBT2-MW-6D-Mn-LDH-BUF-F1	**Basis:**	NA
Lab Code:	K2305974-001		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**0.5 J**	ug/L	2.5	0.5	1	06/12/23 10:53	06/01/23	
Lithium	200.8	**6.65**	ug/L	0.50	0.50	1	06/12/23 10:53	06/01/23	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2305974
Project:	Gorgas/221114-10.01 Task 05	**Date Collected:**	05/15/23 16:05
Sample Matrix:	Water	**Date Received:**	05/25/23 10:15
Sample Name:	GS-AP-OBT2-MW-6D-Mn-Fe-LDH-BUF-F1	**Basis:**	NA
Lab Code:	K2305974-002		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**0.5 J**	ug/L	2.5	0.5	1	06/12/23 10:58	06/01/23	
Lithium	200.8	**10.3**	ug/L	0.50	0.50	1	06/12/23 10:58	06/01/23	

Client:	Anchor QEA, LLC	**Service Request:**	K2305974
Project:	Gorgas/221114-10.01 Task 05	**Date Collected:**	05/15/23 16:10
Sample Matrix:	Water	**Date Received:**	05/25/23 10:15
Sample Name:	GS-AP-OBT2-MW-6D-Mn-LDH-F1	**Basis:**	NA
Lab Code:	K2305974-003		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**0.5 J**	ug/L	2.5	0.5	1	06/12/23 11:00	06/01/23	
Lithium	200.8	**1.51**	ug/L	0.50	0.50	1	06/12/23 11:00	06/01/23	

Client:	Anchor QEA, LLC	**Service Request:**	K2305974
Project:	Gorgas/221114-10.01 Task 05	**Date Collected:**	05/15/23 16:15
Sample Matrix:	Water	**Date Received:**	05/25/23 10:15
Sample Name:	GS-AP-OBT2-MW-6D-Mn-Fe-LDH-F1	**Basis:**	NA
Lab Code:	K2305974-004		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**0.6 J**	ug/L	2.5	0.5	1	06/12/23 11:01	06/01/23	
Lithium	200.8	**5.44**	ug/L	0.50	0.50	1	06/12/23 11:01	06/01/23	

Client:	Anchor QEA, LLC	**Service Request:**	K2305974
Project:	Gorgas/221114-10.01 Task 05	**Date Collected:**	05/15/23 16:20
Sample Matrix:	Water	**Date Received:**	05/25/23 10:15
Sample Name:	GS-AP-OBT2-MW-7-Mn-LDH-BUF-F1	**Basis:**	NA
Lab Code:	K2305974-005		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**0.5 J**	ug/L	2.5	0.5	1	06/12/23 11:03	06/01/23	
Lithium	200.8	**3.10**	ug/L	0.50	0.50	1	06/12/23 11:03	06/01/23	
Molybdenum	200.8	**3.51**	ug/L	0.50	0.15	1	06/12/23 11:03	06/01/23	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2305974
Project:	Gorgas/221114-10.01 Task 05	**Date Collected:**	05/15/23 16:25
Sample Matrix:	Water	**Date Received:**	05/25/23 10:15
Sample Name:	GS-AP-OBT2-MW-7-Mn-LDH-BUF-DUP-F1	**Basis:**	NA
Lab Code:	K2305974-006		

Dissolved Metals

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**0.5**	**J**	ug/L	2.5	0.5	1	06/12/23 11:05	06/01/23	
Lithium	200.8	**2.32**		ug/L	0.50	0.50	1	06/12/23 11:05	06/01/23	
Molybdenum	200.8	**4.07**		ug/L	0.50	0.15	1	06/12/23 11:05	06/01/23	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2305974
Project:	Gorgas/221114-10.01 Task 05	**Date Collected:**	05/15/23 16:30
Sample Matrix:	Water	**Date Received:**	05/25/23 10:15
Sample Name:	GS-AP-OBT2-MW-7-Mn-Fe-LDH-BUF-F1	**Basis:**	NA
Lab Code:	K2305974-007		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**0.6** J	ug/L	2.5	0.5	1	06/12/23 11:17	06/01/23	
Lithium	200.8	**7.32**	ug/L	0.50	0.50	1	06/12/23 11:17	06/01/23	
Molybdenum	200.8	**2.75**	ug/L	0.50	0.15	1	06/12/23 11:17	06/01/23	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2305974
Project:	Gorgas/221114-10.01 Task 05	**Date Collected:**	05/15/23 16:35
Sample Matrix:	Water	**Date Received:**	05/25/23 10:15
Sample Name:	GS-AP-OBT2-MW-7-Mn-LDH-F1	**Basis:**	NA
Lab Code:	K2305974-008		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**0.5 J**	ug/L	2.5	0.5	1	06/12/23 11:19	06/01/23	
Lithium	200.8	**0.64**	ug/L	0.50	0.50	1	06/12/23 11:19	06/01/23	
Molybdenum	200.8	**1.17**	ug/L	0.50	0.15	1	06/12/23 11:19	06/01/23	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2305974
Project:	Gorgas/221114-10.01 Task 05	**Date Collected:**	05/15/23 16:40
Sample Matrix:	Water	**Date Received:**	05/25/23 10:15
Sample Name:	GS-AP-OBT2-MW-7-Mn-Fe-LDH-F1	**Basis:**	NA
Lab Code:	K2305974-009		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**0.5 J**	ug/L	2.5	0.5	1	06/12/23 11:20	06/01/23	
Lithium	200.8	**2.30**	ug/L	0.50	0.50	1	06/12/23 11:20	06/01/23	
Molybdenum	200.8	**1.68**	ug/L	0.50	0.15	1	06/12/23 11:20	06/01/23	

QC Summary Forms

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Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2305974
Project:	Gorgas/221114-10.01 Task 05	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	KQ2309615-01		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	ND U	ug/L	0.50	0.09	1	06/12/23 10:50	06/01/23	
Lithium	200.8	ND U	ug/L	0.10	0.10	1	06/12/23 10:50	06/01/23	
Molybdenum	200.8	ND U	ug/L	0.10	0.03	1	06/12/23 10:50	06/01/23	

Client:	Anchor QEA, LLC	**Service Request:**	K2305974
Project:	Gorgas/221114-10.01 Task 05	**Date Collected:**	05/15/23
Sample Matrix:	Water	**Date Received:**	05/25/23
		Date Analyzed:	06/12/23
		Date Extracted:	06/1/23

Matrix Spike Summary
Dissolved Metals

Sample Name:	GS-AP-OBT2-MW-6D-Mn-LDH-BUF-F1	**Units:**	ug/L
Lab Code:	K2305974-001	**Basis:**	NA
Analysis Method:	200.8		
Prep Method:	EPA CLP ILM04.0		

Matrix Spike
KQ2309615-04

Analyte Name	Sample Result	Result	Spike Amount	% Rec	% Rec Limits
Arsenic	0.5 J	264	250	106	70-130
Lithium	6.65	249	250	97	70-130
Molybdenum	1.64	142	125	112	70-130

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Matrix Spike and Matrix Spike Duplicate Data is presented for information purposes only. The matrix may or may not be relevant to samples reported in this report. The laboratory evaluates system performance based on the LCS and LCSD control limits.

Client:	Anchor QEA, LLC	**Service Request:**	K2305974
Project	Gorgas/221114-10.01 Task 05	**Date Collected:**	05/15/23
Sample Matrix:	Water	**Date Received:**	05/25/23
		Date Analyzed:	06/12/23

Replicate Sample Summary
Dissolved Metals

Sample Name:	GS-AP-OBT2-MW-6D-Mn-LDH-BUF-F1	**Units:**	ug/L
Lab Code:	K2305974-001	**Basis:**	NA

Analyte Name	Analysis Method	MRL	MDL	Sample Result	Duplicate Sample KQ2309615-03 Result	Average	RPD	RPD Limit
Arsenic	200.8	2.5	0.5	0.5 J	0.5 J	0.5	<1	20
Lithium	200.8	0.50	0.50	6.65	6.49	6.57	2	20
Molybdenum	200.8	0.50	0.15	1.64	1.48	1.56	10	20

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client:	Anchor QEA, LLC	**Service Request:**	K2305974
Project:	Gorgas/221114-10.01 Task 05	**Date Analyzed:**	06/12/23
Sample Matrix:	Water		

Lab Control Sample Summary
Dissolved Metals

Units:ug/L
Basis:NA

Lab Control Sample
KQ2309615-02

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Arsenic	200.8	50.5	50.0	101	85-115
Lithium	200.8	49.4	50.0	99	85-115
Molybdenum	200.8	26.1	25.0	104	85-115

June 13, 2023 Service Request No:K2305975

Masa Kanematsu
Anchor QEA, LLC
6720 SW Macadam Avenue
Suite 125
Portland, OR 97219

Laboratory Results for: Gorgas

Dear Masa,

Enclosed are the results of the sample(s) submitted to our laboratory May 25, 2023
For your reference, these analyses have been assigned our service request number **K2305975.**

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. All results are intended to be considered in their entirety, and ALS Group USA Corp. dba ALS Environmental (ALS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please contact me if you have any questions. My extension is 3376. You may also contact me via email at Mark.Harris@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

Mark Harris
Project Manager

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Narrative Documents

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Client:	Anchor QEA, LLC	**Service Request:**	K2305975
Project:	Gorgas	**Date Received:**	05/25/2023
Sample Matrix:	Water		

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples for the Tier II level requested by the client.

Sample Receipt:

Nine water samples were received for analysis at ALS Environmental on 05/25/2023. Any discrepancies upon initial sample inspection are annotated on the sample receipt and preservation form included within this report. The samples were stored at minimum in accordance with the analytical method requirements.

Metals:

No significant anomalies were noted with this analysis.

Approved by ______________________ Date 06/13/2023

SAMPLE DETECTION SUMMARY

This form includes only detections above the reporting levels. For a full listing of sample results, continue to the Sample Results section of this Report.

CLIENT ID: GS-AP-OBT2-MW-6D-Mn-LDH-BUF-F2 **Lab ID: K2305975-001**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	478		0.5	2.5	ug/L	200.8
Lithium, Dissolved	170		0.5	1.0	ug/L	200.8

CLIENT ID: GS-AP-OBT2-MW-6D-Mn-Fe-LDH-BUF-F2 **Lab ID: K2305975-002**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	372		0.5	2.5	ug/L	200.8
Lithium, Dissolved	266		0.5	1.0	ug/L	200.8

CLIENT ID: GS-AP-OBT2-MW-6D-Mn-LDH-F2 **Lab ID: K2305975-003**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	371		0.5	2.5	ug/L	200.8
Lithium, Dissolved	15.7		0.5	1.0	ug/L	200.8

CLIENT ID: GS-AP-OBT2-MW-6D-Mn-Fe-LDH-F2 **Lab ID: K2305975-004**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	288		0.5	2.5	ug/L	200.8
Lithium, Dissolved	81.3		0.5	1.0	ug/L	200.8

CLIENT ID: GS-AP-OBT2-MW-7-Mn-LDH-BUF-F2 **Lab ID: K2305975-005**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	361		0.5	2.5	ug/L	200.8
Lithium, Dissolved	110		0.5	1.0	ug/L	200.8
Molybdenum, Dissolved	43.7		0.15	0.50	ug/L	200.8

CLIENT ID: GS-AP-OBT2-MW-7-Mn-LDH-BUF-DUP-F2 **Lab ID: K2305975-006**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	410		0.5	2.5	ug/L	200.8
Lithium, Dissolved	97.6		0.5	1.0	ug/L	200.8
Molybdenum, Dissolved	46.1		0.15	0.50	ug/L	200.8

CLIENT ID: GS-AP-OBT2-MW-7-Mn-Fe-LDH-BUF-F2 **Lab ID: K2305975-007**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	348		0.5	2.5	ug/L	200.8
Lithium, Dissolved	180		0.5	1.0	ug/L	200.8
Molybdenum, Dissolved	44.0		0.15	0.50	ug/L	200.8

CLIENT ID: GS-AP-OBT2-MW-7-Mn-LDH-F2 **Lab ID: K2305975-008**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	314		0.5	2.5	ug/L	200.8
Lithium, Dissolved	10.1		0.5	1.0	ug/L	200.8
Molybdenum, Dissolved	48.5		0.15	0.50	ug/L	200.8

SAMPLE DETECTION SUMMARY

This form includes only detections above the reporting levels. For a full listing of sample results, continue to the Sample Results section of this Report.

CLIENT ID: GS-AP-OBT2-MW-7-Mn-Fe-LDH-F2 **Lab ID: K2305975-009**

Analyte	Results	Flag	MDL	MRL	Units	Method
Arsenic, Dissolved	290		0.5	2.5	ug/L	200.8
Lithium, Dissolved	59.7		0.5	1.0	ug/L	200.8
Molybdenum, Dissolved	46.3		0.15	0.50	ug/L	200.8

Sample Receipt Information

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
K2305975-001	GS-AP-OBT2-MW-6D-Mn-LDH-BUF-F2	5/17/2023	1600
K2305975-002	GS-AP-OBT2-MW-6D-Mn-Fe-LDH-BUF-F2	5/17/2023	1605
K2305975-003	GS-AP-OBT2-MW-6D-Mn-LDH-F2	5/17/2023	1610
K2305975-004	GS-AP-OBT2-MW-6D-Mn-Fe-LDH-F2	5/17/2023	1615
K2305975-005	GS-AP-OBT2-MW-7-Mn-LDH-BUF-F2	5/17/2023	1620
K2305975-006	GS-AP-OBT2-MW-7-Mn-LDH-BUF-DUP-F2	5/17/2023	1625
K2305975-007	GS-AP-OBT2-MW-7-Mn-Fe-LDH-BUF-F2	5/17/2023	1630
K2305975-008	GS-AP-OBT2-MW-7-Mn-LDH-F2	5/17/2023	1635
K2305975-009	GS-AP-OBT2-MW-7-Mn-Fe-LDH-F2	5/17/2023	1640

Chain of Custody Record & Laboratory Analysis Request

K2305975

Laboratory Number: 503-972-5019	
Date:	5/23/2023
Project Name:	Gorgas
Project Number:	221114-10.01 Task 05
Project Manager:	Masa Kanematsu, mkanematsu@anchorqea.com
Phone Number:	503-972-5001
Shipment Method:	ALS Carrier

ANCHOR QEA

Jason Stuckey
6720 SW Macadam Ave Suite
125
Portland OR 97219

Line	Field Sample ID	Collection Date	Collection Time	Matrix	No. of Containers	Dissolved metals (As, Li)	Dissolved metals (As, Li, Mo)	Comments/Preservation
1	GS-AP-OBT2-MW-6D-Mn-LDH-BUF-F2	5/17/2023	16:00	Water	1	X		0.67 M monosodium phosphate
2	GS-AP-OBT2-MW-6D-Mn-Fe-LDH-BUF-F2	5/17/2023	16:05	Water	1	X		0.67 M monosodium phosphate
3	GS-AP-OBT2-MW-6D-Mn-LDH-F2	5/17/2023	16:10	Water	1	X		0.67 M monosodium phosphate
4	GS-AP-OBT2-MW-6D-Mn-Fe-LDH-F2	5/17/2023	16:15	Water	1	X		0.67 M monosodium phosphate
5	GS-AP-OBT2-MW-7-Mn-LDH-BUF-F2	5/17/2023	16:20	Water	1		X	0.67 M monosodium phosphate
6	GS-AP-OBT2-MW-7-Mn-LDH-BUF-DUP-F2	5/17/2023	16:25	Water	1		X	0.67 M monosodium phosphate
7	GS-AP-OBT2-MW-7-Mn-Fe-LDH-BUF-F2	5/17/2023	16:30	Water	1		X	0.67 M monosodium phosphate
8	GS-AP-OBT2-MW-7-Mn-LDH-F2	5/17/2023	16:35	Water	1		X	0.67 M monosodium phosphate
9	GS-AP-OBT2-MW-7-Mn-Fe-LDH-F2	5/17/2023	16:40	Water	1		X	0.67 M monosodium phosphate
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								

Notes: All samples are HNO3-preserved and 0.45-um filtered. The comment section lists the chemical composition of the sample. Please Contact Masa (mkanematsu@anchorqea.com) if running > 10X dilution. Please analyze by ICP-MS method 200.8 to achieve the MDL < 1 ppb. **Please analyze on a standard TAT.**

Relinquished by: Masa Kanematsu	Company: Anchor QEA	Received by:	ALS 5/25/23 1015
Signature/Print Name:	Date/Time: 5/23/2023 9:30	Signature/Print Name:	Kaitlyn Mitolo
Relinquished by:	Company:	Received by:	
Signature/Print Name:	Date/Time:	Signature/Print Name:	

Distribution: A copy will be made for the laboratory and client. The Project file will retain the original.

Page 1 of 1

PM Mark

Cooler Receipt and Preservation Form

Client Anchor Service Request **K23** 05925

Received: 5/25/23 Opened: 5/25/23 By: VM Unloaded: 5/25/23 By: VM

1. Samples were received via? *USPS* [✓ *Fed Ex*] *UPS* *DHL* *PDX* *Courier* *Hand Delivered*
2. Samples were received in: (circle) [✓ *Cooler*] *Box* *Envelope* *Other* ______ *NA*
3. Were custody seals on coolers? NA Y [✓ N] If yes, how many and where? ______

   If present, were custody seals intact? Y N If present, were they signed and dated? Y N

Temp Blank	Sample Temp	IR Gun	Cooler #/COC ID / NA	Out of temp indicate with "X"	PM Notified If out of temp	Tracking Number NA	Filed
3.3		IR01	Cooler 1			772246558027	
	4.9	IR01	Cooler 2			772246558141	

4. Was a Temperature Blank present in cooler? NA [✓ Y] [✓ N] If yes, notate the temperature in the appropriate column above:

   If no, take the temperature of a representative sample bottle contained within the cooler; notate in the column "Sample Temp":

5. Were samples received within the method specified temperature ranges? NA [✓ Y] N

   If no, were they received on ice and same day as collected? If not, notate the cooler # above and notify the PM. [✓ NA] Y N

If applicable, tissue samples were received: *Frozen* *Partially Thawed* *Thawed*

6. Packing material: *Inserts* [✓ *Baggies*] *Bubble Wrap* *Gel Packs* [✓ *Wet Ice*] *Dry Ice* *Sleeves* ______
7. Were custody papers properly filled out (ink, signed, etc.)? NA [✓ Y] N
8. Were samples received in good condition (unbroken) NA [✓ Y] N
9. Were all sample labels complete (ie, analysis, preservation, etc.)? NA [✓ Y] N
10. Did all sample labels and tags agree with custody papers? NA [✓ Y] N
11. Were appropriate bottles/containers and volumes received for the tests indicated? NA [✓ Y] N
12. Were the pH-preserved bottles (*see SMO GEN SOP*) received at the appropriate pH? *Indicate in the table below* [✓ NA] Y N
13. Were VOA vials received without headspace? *Indicate in the table below.* [✓ NA] Y N
14. Was C12/Res negative? [✓ NA] Y N
15. Were samples received within the method specified time limit? If not, notate the error below and notify the PM [✓ NA] Y N
16. Were 100ml sterile microbiology bottles filled exactly to the 100ml mark? [✓ NA] Y N Underfilled Overfilled

Sample ID on Bottle	Sample ID on COC	Identified by:

Sample ID	Bottle Count Bottle Type	Head-space	Broke	pH	Reagent	Volume added	Reagent Lot Number	Initials	Time

Notes, Discrepancies, Resolutions: Didnt ph due to limited volume

Miscellaneous Forms

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Inorganic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated value.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.
H	The holding time for this test is immediately following sample collection. The samples were analyzed as soon as possible after receipt by the laboratory.

Metals Data Qualifiers

#	The control limit criteria is not applicable.
J	The result is an estimated value.
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
M	The duplicate injection precision was not met.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
S	The reported value was determined by the Method of Standard Additions (MSA).
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
+	The correlation coefficient for the MSA is less than 0.995.
Q	See case narrative. One or more quality control criteria was outside the limits.

Organic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
A	A tentatively identified compound, a suspected aldol-condensation product.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
C	The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
D	The reported result is from a dilution.
E	The result is an estimated value.
J	The result is an estimated value.
N	The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
P	The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a chromatographic interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.

Additional Petroleum Hydrocarbon Specific Qualifiers

F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
Y	The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
Z	The chromatographic fingerprint does not resemble a petroleum product.

ALS Group USA Corp. dba ALS Environmental (ALS) - Kelso
State Certifications, Accreditations, and Licenses

Agency	Web Site	Number
Alaska DEH	http://dec.alaska.gov/eh/lab/cs/csapproval.htm	UST-040
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0339
Arkansas - DEQ	http://www.adeq.state.ar.us/techsvs/labcert.htm	88-0637
California DHS (ELAP)	http://www.cdph.ca.gov/certlic/labs/Pages/ELAP.aspx	2795
DOD ELAP	http://www.denix.osd.mil/edqw/Accreditation/AccreditedLabs.cfm	L16-58-R4
Florida DOH	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E87412
Hawaii DOH	http://health.hawaii.gov/	-
ISO 17025	http://www.pjlabs.com/	L16-57
Louisiana DEQ	http://www.deq.louisiana.gov/page/la-lab-accreditation	03016
Maine DHS	http://www.maine.gov/dhhs/	WA01276
Minnesota DOH	http://www.health.state.mn.us/accreditation	053-999-457
Nevada DEP	http://ndep.nv.gov/bsdw/labservice.htm	WA01276
New Jersey DEP	http://www.nj.gov/dep/enforcement/oqa.html	WA005
New York - DOH	https://www.wadsworth.org/regulatory/elap	12060
North Carolina DEQ	https://deq.nc.gov/about/divisions/water-resources/water-resources-data/water-sciences-home-page/laboratory-certification-branch/non-field-lab-certification	605
Oklahoma DEQ	http://www.deq.state.ok.us/CSDnew/labcert.htm	9801
Oregon – DEQ (NELAP)	http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	WA100010
South Carolina DHEC	http://www.scdhec.gov/environment/EnvironmentalLabCertification/	61002
Texas CEQ	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	T104704427
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C544
Wyoming (EPA Region 8)	https://www.epa.gov/region8-waterops/epa-region-8-certified-drinking-water	-
Kelso Laboratory Website	www.alsglobal.com	NA

Analyses were performed according to our laboratory’s NELAP-approved quality assurance program. A complete listing of specific NELAP-certified analytes, can be found in the certification section at www.ALSGlobal.com or at the accreditation bodies web site.

Please refer to the certification and/or accreditation body's web site if samples are submitted for compliance purposes. The states highlighted above, require the analysis be listed on the state certification if used for compliance purposes and if the method/anlayte is offered by that state.

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LOD	Limit of Detection
LOQ	Limit of Quantitation
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

ALS Group USA, Corp.
dba ALS Environmental

Analyst Summary report

Client: Anchor QEA, LLC
Service Request: K2305975
Project: Gorgas/221114-10.01 Task 05

Sample Name: GS-AP-OBT2-MW-6D-Mn-LDH-BUF-F2
Date Collected: 05/17/23
Lab Code: K2305975-001
Date Received: 05/25/23
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ACOUCH	JCHAN

Sample Name: GS-AP-OBT2-MW-6D-Mn-Fe-LDH-BUF
Date Collected: 05/17/23
Lab Code: K2305975-002
Date Received: 05/25/23
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ACOUCH	JCHAN

Sample Name: GS-AP-OBT2-MW-6D-Mn-LDH-F2
Date Collected: 05/17/23
Lab Code: K2305975-003
Date Received: 05/25/23
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ACOUCH	JCHAN

Sample Name: GS-AP-OBT2-MW-6D-Mn-Fe-LDH-F2
Date Collected: 05/17/23
Lab Code: K2305975-004
Date Received: 05/25/23
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ACOUCH	JCHAN

Sample Name: GS-AP-OBT2-MW-7-Mn-LDH-BUF-F2
Date Collected: 05/17/23
Lab Code: K2305975-005
Date Received: 05/25/23
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ACOUCH	JCHAN

Client: Anchor QEA, LLC
Service Request: K2305975
Project: Gorgas/221114-10.01 Task 05

Sample Name: GS-AP-OBT2-MW-7-Mn-LDH-BUF-
Date Collected: 05/17/23
Lab Code: K2305975-006
Date Received: 05/25/23
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ACOUCH	JCHAN

Sample Name: GS-AP-OBT2-MW-7-Mn-Fe-LDH-BUF-
Date Collected: 05/17/23
Lab Code: K2305975-007
Date Received: 05/25/23
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ACOUCH	JCHAN

Sample Name: GS-AP-OBT2-MW-7-Mn-LDH-F2
Date Collected: 05/17/23
Lab Code: K2305975-008
Date Received: 05/25/23
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ACOUCH	JCHAN

Sample Name: GS-AP-OBT2-MW-7-Mn-Fe-LDH-F2
Date Collected: 05/17/23
Lab Code: K2305975-009
Date Received: 05/25/23
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ACOUCH	JCHAN

Sample Results

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Metals

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2305975
Project:	Gorgas/221114-10.01 Task 05	**Date Collected:**	05/17/23 16:00
Sample Matrix:	Water	**Date Received:**	05/25/23 10:15
Sample Name:	GS-AP-OBT2-MW-6D-Mn-LDH-BUF-F2	**Basis:**	NA
Lab Code:	K2305975-001		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**478**	ug/L	2.5	0.5	1	06/12/23 13:18	06/01/23	
Lithium	200.8	**170**	ug/L	1.0	0.5	1	06/12/23 13:18	06/01/23	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2305975
Project:	Gorgas/221114-10.01 Task 05	**Date Collected:**	05/17/23 16:05
Sample Matrix:	Water	**Date Received:**	05/25/23 10:15
Sample Name:	GS-AP-OBT2-MW-6D-Mn-Fe-LDH-BUF-F2	**Basis:**	NA
Lab Code:	K2305975-002		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**372**	ug/L	2.5	0.5	1	06/12/23 13:23	06/01/23	
Lithium	200.8	**266**	ug/L	1.0	0.5	1	06/12/23 13:23	06/01/23	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2305975
Project:	Gorgas/221114-10.01 Task 05	**Date Collected:**	05/17/23 16:10
Sample Matrix:	Water	**Date Received:**	05/25/23 10:15
Sample Name:	GS-AP-OBT2-MW-6D-Mn-LDH-F2	**Basis:**	NA
Lab Code:	K2305975-003		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**371**	ug/L	2.5	0.5	1	06/12/23 13:25	06/01/23	
Lithium	200.8	**15.7**	ug/L	1.0	0.5	1	06/12/23 13:25	06/01/23	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2305975
Project:	Gorgas/221114-10.01 Task 05	**Date Collected:**	05/17/23 16:15
Sample Matrix:	Water	**Date Received:**	05/25/23 10:15
Sample Name:	GS-AP-OBT2-MW-6D-Mn-Fe-LDH-F2	**Basis:**	NA
Lab Code:	K2305975-004		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**288**	ug/L	2.5	0.5	1	06/12/23 13:27	06/01/23	
Lithium	200.8	**81.3**	ug/L	1.0	0.5	1	06/12/23 13:27	06/01/23	

Client:	Anchor QEA, LLC	**Service Request:**	K2305975
Project:	Gorgas/221114-10.01 Task 05	**Date Collected:**	05/17/23 16:20
Sample Matrix:	Water	**Date Received:**	05/25/23 10:15
Sample Name:	GS-AP-OBT2-MW-7-Mn-LDH-BUF-F2	**Basis:**	NA
Lab Code:	K2305975-005		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**361**	ug/L	2.5	0.5	1	06/12/23 13:28	06/01/23	
Lithium	200.8	**110**	ug/L	1.0	0.5	1	06/12/23 13:28	06/01/23	
Molybdenum	200.8	**43.7**	ug/L	0.50	0.15	1	06/12/23 13:28	06/01/23	

Client:	Anchor QEA, LLC	**Service Request:**	K2305975
Project:	Gorgas/221114-10.01 Task 05	**Date Collected:**	05/17/23 16:25
Sample Matrix:	Water	**Date Received:**	05/25/23 10:15
Sample Name:	GS-AP-OBT2-MW-7-Mn-LDH-BUF-DUP-F2	**Basis:**	NA
Lab Code:	K2305975-006		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**410**	ug/L	2.5	0.5	1	06/12/23 13:30	06/01/23	
Lithium	200.8	**97.6**	ug/L	1.0	0.5	1	06/12/23 13:30	06/01/23	
Molybdenum	200.8	**46.1**	ug/L	0.50	0.15	1	06/12/23 13:30	06/01/23	

Client:	Anchor QEA, LLC	**Service Request:**	K2305975
Project:	Gorgas/221114-10.01 Task 05	**Date Collected:**	05/17/23 16:30
Sample Matrix:	Water	**Date Received:**	05/25/23 10:15
Sample Name:	GS-AP-OBT2-MW-7-Mn-Fe-LDH-BUF-F2	**Basis:**	NA
Lab Code:	K2305975-007		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**348**	ug/L	2.5	0.5	1	06/12/23 13:36	06/01/23	
Lithium	200.8	**180**	ug/L	1.0	0.5	1	06/12/23 13:36	06/01/23	
Molybdenum	200.8	**44.0**	ug/L	0.50	0.15	1	06/12/23 13:36	06/01/23	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2305975
Project:	Gorgas/221114-10.01 Task 05	**Date Collected:**	05/17/23 16:35
Sample Matrix:	Water	**Date Received:**	05/25/23 10:15
Sample Name:	GS-AP-OBT2-MW-7-Mn-LDH-F2	**Basis:**	NA
Lab Code:	K2305975-008		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**314**	ug/L	2.5	0.5	1	06/12/23 13:38	06/01/23	
Lithium	200.8	**10.1**	ug/L	1.0	0.5	1	06/12/23 13:38	06/01/23	
Molybdenum	200.8	**48.5**	ug/L	0.50	0.15	1	06/12/23 13:38	06/01/23	

Client:	Anchor QEA, LLC	**Service Request:**	K2305975
Project:	Gorgas/221114-10.01 Task 05	**Date Collected:**	05/17/23 16:40
Sample Matrix:	Water	**Date Received:**	05/25/23 10:15
Sample Name:	GS-AP-OBT2-MW-7-Mn-Fe-LDH-F2	**Basis:**	NA
Lab Code:	K2305975-009		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	**290**	ug/L	2.5	0.5	1	06/12/23 13:39	06/01/23	
Lithium	200.8	**59.7**	ug/L	1.0	0.5	1	06/12/23 13:39	06/01/23	
Molybdenum	200.8	**46.3**	ug/L	0.50	0.15	1	06/12/23 13:39	06/01/23	

QC Summary Forms

ALS Environmental—Kelso Laboratory
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Metals

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Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2305975
Project:	Gorgas/221114-10.01 Task 05	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	KQ2309616-01		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	200.8	ND U	ug/L	0.50	0.09	1	06/12/23 13:15	06/01/23	
Lithium	200.8	ND U	ug/L	0.20	0.10	1	06/12/23 13:15	06/01/23	
Molybdenum	200.8	ND U	ug/L	0.10	0.03	1	06/12/23 13:15	06/01/23	

Client:	Anchor QEA, LLC	**Service Request:**	K2305975
Project:	Gorgas/221114-10.01 Task 05	**Date Collected:**	05/17/23
Sample Matrix:	Water	**Date Received:**	05/25/23
		Date Analyzed:	06/12/23
		Date Extracted:	06/1/23

Matrix Spike Summary
Dissolved Metals

Sample Name:	GS-AP-OBT2-MW-6D-Mn-LDH-BUF-F2	**Units:**	ug/L
Lab Code:	K2305975-001	**Basis:**	NA
Analysis Method:	200.8		
Prep Method:	EPA CLP ILM04.0		

Matrix Spike
KQ2309616-04

Analyte Name	Sample Result	Result	Spike Amount	% Rec	% Rec Limits
Arsenic	478	742	250	106	70-130
Lithium	170	455	250	114	70-130
Molybdenum	12.8	158	125	116	70-130

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Matrix Spike and Matrix Spike Duplicate Data is presented for information purposes only. The matrix may or may not be relevant to samples reported in this report. The laboratory evaluates system performance based on the LCS and LCSD control limits.

QA/QC Report

Client:	Anchor QEA, LLC	**Service Request:**	K2305975
Project	Gorgas/221114-10.01 Task 05	**Date Collected:**	05/17/23
Sample Matrix:	Water	**Date Received:**	05/25/23
		Date Analyzed:	06/12/23

Replicate Sample Summary
Dissolved Metals

Sample Name:	GS-AP-OBT2-MW-6D-Mn-LDH-BUF-F2	**Units:**	ug/L
Lab Code:	K2305975-001	**Basis:**	NA

Analyte Name	Analysis Method	MRL	MDL	Sample Result	Duplicate Sample KQ2309616-03 Result	Average	RPD	RPD Limit
Arsenic	200.8	2.5	0.5	478	486	482	2	20
Lithium	200.8	1.0	0.5	170	176	173	3	20
Molybdenum	200.8	0.50	0.15	12.8	13.0	12.9	2	20

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client:	Anchor QEA, LLC	**Service Request:**	K2305975
Project:	Gorgas/221114-10.01 Task 05	**Date Analyzed:**	06/12/23
Sample Matrix:	Water		

Lab Control Sample Summary
Dissolved Metals

Units:ug/L
Basis:NA

Lab Control Sample
KQ2309616-02

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Arsenic	200.8	50.3	50.0	101	85-115
Lithium	200.8	51.8	50.0	104	85-115
Molybdenum	200.8	26.8	25.0	107	85-115

June 14, 2023 Service Request No:K2305977

Masa Kanematsu
Anchor QEA, LLC
6720 SW Macadam Avenue
Suite 125
Portland, OR 97219

Laboratory Results for: Gorgas

Dear Masa,

Enclosed are the results of the sample(s) submitted to our laboratory May 25, 2023
For your reference, these analyses have been assigned our service request number **K2305977.**

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. All results are intended to be considered in their entirety, and ALS Group USA Corp. dba ALS Environmental (ALS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please contact me if you have any questions. My extension is 3376. You may also contact me via email at Mark.Harris@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

Mark Harris
Project Manager

ADDRESS 1317 S. 13th Avenue, Kelso, WA 98626
PHONE +1 360 577 7222 | FAX +1 360 636 1068
ALS Group USA, Corp.
dba ALS Environmental

Narrative Documents

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Client: Anchor QEA, LLC
Service Request: K2305977
Project: Gorgas
Date Received: 05/25/2023
Sample Matrix: Water

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples for the Tier II level requested by the client.

Sample Receipt:

Nine water samples were received for analysis at ALS Environmental on 05/25/2023. Any discrepancies upon initial sample inspection are annotated on the sample receipt and preservation form included within this report. The samples were stored at minimum in accordance with the analytical method requirements.

Metals:

No significant anomalies were noted with this analysis.

Approved by ______________________ Date 06/14/2023

SAMPLE DETECTION SUMMARY

This form includes only detections above the reporting levels. For a full listing of sample results, continue to the Sample Results section of this Report.

CLIENT ID: GS-AP-OBT2-MW-6D-Mn-LDH-BUF-F3 **Lab ID: K2305977-001**

Analyte	Results	Flag	MDL	MRL	Units	Method
Aluminum, Dissolved	220		0.5	4.0	ug/L	200.8
Arsenic, Dissolved	148		0.09	0.50	ug/L	200.8
Iron, Dissolved	0.9	J	0.3	2.0	ug/L	200.8
Lithium, Dissolved	293		0.10	0.20	ug/L	200.8
Manganese, Dissolved	677000		400	6000	ug/L	200.8

CLIENT ID: GS-AP-OBT2-MW-6D-Mn-Fe-LDH-BUF-F3 **Lab ID: K2305977-002**

Analyte	Results	Flag	MDL	MRL	Units	Method
Aluminum, Dissolved	61.0		0.5	4.0	ug/L	200.8
Arsenic, Dissolved	111		0.09	0.50	ug/L	200.8
Iron, Dissolved	29.5		0.3	2.0	ug/L	200.8
Lithium, Dissolved	280		0.10	0.20	ug/L	200.8
Manganese, Dissolved	525000		400	6000	ug/L	200.8

CLIENT ID: GS-AP-OBT2-MW-6D-Mn-LDH-F3 **Lab ID: K2305977-003**

Analyte	Results	Flag	MDL	MRL	Units	Method
Aluminum, Dissolved	79.8		0.5	4.0	ug/L	200.8
Arsenic, Dissolved	126		0.09	0.50	ug/L	200.8
Iron, Dissolved	1.0	J	0.3	2.0	ug/L	200.8
Lithium, Dissolved	309		0.10	0.20	ug/L	200.8
Manganese, Dissolved	547000		400	6000	ug/L	200.8

CLIENT ID: GS-AP-OBT2-MW-6D-Mn-Fe-LDH-F3 **Lab ID: K2305977-004**

Analyte	Results	Flag	MDL	MRL	Units	Method
Aluminum, Dissolved	72.0		0.5	4.0	ug/L	200.8
Arsenic, Dissolved	66.2		0.09	0.50	ug/L	200.8
Iron, Dissolved	17.1		0.3	2.0	ug/L	200.8
Lithium, Dissolved	237		0.10	0.20	ug/L	200.8
Manganese, Dissolved	446000		400	6000	ug/L	200.8

CLIENT ID: GS-AP-OBT2-MW-7-Mn-LDH-BUF-F3 **Lab ID: K2305977-005**

Analyte	Results	Flag	MDL	MRL	Units	Method
Aluminum, Dissolved	126		0.5	4.0	ug/L	200.8
Arsenic, Dissolved	144		0.09	0.50	ug/L	200.8
Iron, Dissolved	1.0	J	0.3	2.0	ug/L	200.8
Lithium, Dissolved	208		0.10	0.20	ug/L	200.8
Manganese, Dissolved	865000		400	6000	ug/L	200.8
Molybdenum, Dissolved	98.1		0.03	0.10	ug/L	200.8

CLIENT ID: GS-AP-OBT2-MW-7-Mn-LDH-BUF-DUP-F3 **Lab ID: K2305977-006**

Analyte	Results	Flag	MDL	MRL	Units	Method
Aluminum, Dissolved	252		0.5	4.0	ug/L	200.8
Arsenic, Dissolved	151		0.09	0.50	ug/L	200.8

SAMPLE DETECTION SUMMARY

This form includes only detections above the reporting levels. For a full listing of sample results, continue to the Sample Results section of this Report.

CLIENT ID: GS-AP-OBT2-MW-7-Mn-LDH-BUF-DUP-F3 **Lab ID: K2305977-006**

Analyte	Results	Flag	MDL	MRL	Units	Method
Iron, Dissolved	0.6	J	0.3	2.0	ug/L	200.8
Lithium, Dissolved	228		0.10	0.20	ug/L	200.8
Manganese, Dissolved	761000		400	6000	ug/L	200.8
Molybdenum, Dissolved	117		0.03	0.10	ug/L	200.8

CLIENT ID: GS-AP-OBT2-MW-7-Mn-Fe-LDH-BUF-F3 **Lab ID: K2305977-007**

Analyte	Results	Flag	MDL	MRL	Units	Method
Aluminum, Dissolved	63.0		0.5	4.0	ug/L	200.8
Arsenic, Dissolved	120		0.09	0.50	ug/L	200.8
Iron, Dissolved	29.7		0.3	2.0	ug/L	200.8
Lithium, Dissolved	203		0.10	0.20	ug/L	200.8
Manganese, Dissolved	501000		400	6000	ug/L	200.8
Molybdenum, Dissolved	77.0		0.03	0.10	ug/L	200.8

CLIENT ID: GS-AP-OBT2-MW-7-Mn-LDH-F3 **Lab ID: K2305977-008**

Analyte	Results	Flag	MDL	MRL	Units	Method
Aluminum, Dissolved	63.2		0.5	4.0	ug/L	200.8
Arsenic, Dissolved	107		0.09	0.50	ug/L	200.8
Iron, Dissolved	0.8	J	0.3	2.0	ug/L	200.8
Lithium, Dissolved	187		0.10	0.20	ug/L	200.8
Manganese, Dissolved	568000		400	6000	ug/L	200.8
Molybdenum, Dissolved	101		0.03	0.10	ug/L	200.8

CLIENT ID: GS-AP-OBT2-MW-7-Mn-Fe-LDH-F3 **Lab ID: K2305977-009**

Analyte	Results	Flag	MDL	MRL	Units	Method
Aluminum, Dissolved	69.1		0.5	4.0	ug/L	200.8
Arsenic, Dissolved	82.3		0.09	0.50	ug/L	200.8
Iron, Dissolved	15.0		0.3	2.0	ug/L	200.8
Lithium, Dissolved	194		0.10	0.20	ug/L	200.8
Manganese, Dissolved	318000		400	6000	ug/L	200.8
Molybdenum, Dissolved	65.5		0.03	0.10	ug/L	200.8

Sample Receipt Information

ALS Environmental—Kelso Laboratory
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www.alsglobal.com

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
K2305977-001	GS-AP-OBT2-MW-6D-Mn-LDH-BUF-F3	5/18/2023	1600
K2305977-002	GS-AP-OBT2-MW-6D-Mn-Fe-LDH-BUF-F3	5/18/2023	1605
K2305977-003	GS-AP-OBT2-MW-6D-Mn-LDH-F3	5/18/2023	1610
K2305977-004	GS-AP-OBT2-MW-6D-Mn-Fe-LDH-F3	5/18/2023	1615
K2305977-005	GS-AP-OBT2-MW-7-Mn-LDH-BUF-F3	5/18/2023	1620
K2305977-006	GS-AP-OBT2-MW-7-Mn-LDH-BUF-DUP-F3	5/18/2023	1625
K2305977-007	GS-AP-OBT2-MW-7-Mn-Fe-LDH-BUF-F3	5/18/2023	1630
K2305977-008	GS-AP-OBT2-MW-7-Mn-LDH-F3	5/18/2023	1635
K2305977-009	GS-AP-OBT2-MW-7-Mn-Fe-LDH-F3	5/18/2023	1640

Chain of Custody Record & Laboratory Analysis Request

K2305977

Laboratory Number: 503-972-5019

Date:	5/23/2023
Project Name:	Gorgas
Project Number:	221114-10.01 Task 05
Project Manager:	Masa Kanematsu, mkanematsu@anchorqea.com
Phone Number:	503-972-5001
Shipment Method:	ALS Carrier

ANCHOR QEA
Jason Stuckey
6720 SW Macadam Ave Suite 125
Portland OR 97219

Line	Field Sample ID	Collection Date	Collection Time	Matrix	No. of Containers	Parameters: Dissolved metals (Al, As, Fe, Li, Mn)	Parameters: Dissolved metals (Al, As, Fe, Li, Mo, Mn)												Comments/Preservation
1	GS-AP-OBT2-MW-6D-Mn-LDH-BUF-F3	5/18/2023	16:00	Water	1	X													0.067 M hydroxylamine hydrochloride
2	GS-AP-OBT2-MW-6D-Mn-Fe-LDH-BUF-F3	5/18/2023	16:05	Water	1	X													0.067 M hydroxylamine hydrochloride
3	GS-AP-OBT2-MW-6D-Mn-LDH-F3	5/18/2023	16:10	Water	1	X													0.067 M hydroxylamine hydrochloride
4	GS-AP-OBT2-MW-6D-Mn-Fe-LDH-F3	5/18/2023	16:15	Water	1	X													0.067 M hydroxylamine hydrochloride
5	GS-AP-OBT2-MW-7-Mn-LDH-BUF-F3	5/18/2023	16:20	Water	1		X												0.067 M hydroxylamine hydrochloride
6	GS-AP-OBT2-MW-7-Mn-LDH-BUF-DUP-F3	5/18/2023	16:25	Water	1		X												0.067 M hydroxylamine hydrochloride
7	GS-AP-OBT2-MW-7-Mn-Fe-LDH-BUF-F3	5/18/2023	16:30	Water	1		X												0.067 M hydroxylamine hydrochloride
8	GS-AP-OBT2-MW-7-Mn-LDH-F3	5/18/2023	16:35	Water	1		X												0.067 M hydroxylamine hydrochloride
9	GS-AP-OBT2-MW-7-Mn-Fe-LDH-F3	5/18/2023	16:40	Water	1		X												0.067 M hydroxylamine hydrochloride
10																			
11																			
12																			
13																			
14																			
15																			
16																			
17																			
18																			
19																			
20																			

Notes: All samples are HNO3-preserved and 0.45-um filtered. The comment section lists the chemical composition of the sample. Please Contact Masa (mkanematsu@anchorqea.com) if running > 10X dilution. Please analyze by ICP-MS method 200.8 to achieve the MDL < 1 ppb. **Please analyze on a standard TAT.**

Relinquished by: Masa Kanematsu	Company: Anchor QEA	Received by: ALS 5/25/23 1015	
Signature/Print Name:	Date/Time: 5/23/2023 9:30	Signature/Print Name: Vevelyn Mitolo	
Relinquished by:	Company:	Received by:	
Signature/Print Name:	Date/Time:	Signature/Print Name:	

Distribution: A copy will be made for the laboratory and client. The Project file will retain the original.

Page 1 of 1

PM Mack

Cooler Receipt and Preservation Form

Client Anchor Service Request **K23** 05927

Received: 5/25/23 Opened: 5/25/23 By: VM Unloaded: 5/25/23 By: VM

1. Samples were received via? *USPS* [✓ *Fed Ex*] *UPS* *DHL* *PDX* *Courier* *Hand Delivered*
2. Samples were received in: (circle) [✓ *Cooler*] *Box* *Envelope* *Other*________ *NA*
3. Were custody seals on coolers? NA Y [✓ N] If yes, how many and where? ________

   If present, were custody seals intact? Y N If present, were they signed and dated? Y N

Temp Blank	Sample Temp	IR Gun	Cooler #/COC ID / NA	Out of temp indicate with "X"	PM Notified If out of temp	Tracking Number NA	Filed
3.3		IR01	Cooler 1			772246558027	
	4.9	IR01	Cooler 2			772246558141	

4. Was a Temperature Blank present in cooler? NA [✓ Y] [✓ N] If yes, notate the temperature in the appropriate column above:

   If no, take the temperature of a representative sample bottle contained within the cooler; notate in the column "Sample Temp":
5. Were samples received within the method specified temperature ranges? NA [✓ Y] N

   If no, were they received on ice and same day as collected? If not, notate the cooler # above and notify the PM. [✓ NA] Y N

If applicable, tissue samples were received: *Frozen* *Partially Thawed* *Thawed*

6. Packing material: *Inserts* [✓ *Baggies*] *Bubble Wrap* *Gel Packs* [✓ *Wet Ice*] *Dry Ice* *Sleeves* ________
7. Were custody papers properly filled out (ink, signed, etc.)? NA [✓ Y] N
8. Were samples received in good condition (unbroken) NA [✓ Y] N
9. Were all sample labels complete (ie, analysis, preservation, etc.)? NA [✓ Y] N
10. Did all sample labels and tags agree with custody papers? NA [✓ Y] N
11. Were appropriate bottles/containers and volumes received for the tests indicated? NA [✓ Y] N
12. Were the pH-preserved bottles (*see SMO GEN SOP*) received at the appropriate pH? *Indicate in the table below* [✓ NA] Y N
13. Were VOA vials received without headspace? *Indicate in the table below.* [✓ NA] Y N
14. Was C12/Res negative? [✓ NA] Y N
15. Were samples received within the method specified time limit? If not, notate the error below and notify the PM [✓ NA] Y N
16. Were 100ml sterile microbiology bottles filled exactly to the 100ml mark? [✓ NA] Y N Underfilled Overfilled

Sample ID on Bottle	Sample ID on COC	Identified by:

Sample ID	Bottle Count Bottle Type	Head-space	Broke	pH	Reagent	Volume added	Reagent Lot Number	Initials	Time

Notes, Discrepancies, Resolutions: Didn't ph due to limited volume

Miscellaneous Forms

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Inorganic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated value.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.
H	The holding time for this test is immediately following sample collection. The samples were analyzed as soon as possible after receipt by the laboratory.

Metals Data Qualifiers

#	The control limit criteria is not applicable.
J	The result is an estimated value.
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
M	The duplicate injection precision was not met.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
S	The reported value was determined by the Method of Standard Additions (MSA).
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
+	The correlation coefficient for the MSA is less than 0.995.
Q	See case narrative. One or more quality control criteria was outside the limits.

Organic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
A	A tentatively identified compound, a suspected aldol-condensation product.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
C	The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
D	The reported result is from a dilution.
E	The result is an estimated value.
J	The result is an estimated value.
N	The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
P	The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a chromatographic interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.

Additional Petroleum Hydrocarbon Specific Qualifiers

F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
Y	The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
Z	The chromatographic fingerprint does not resemble a petroleum product.

ALS Group USA Corp. dba ALS Environmental (ALS) - Kelso
State Certifications, Accreditations, and Licenses

Agency	Web Site	Number
Alaska DEH	http://dec.alaska.gov/eh/lab/cs/csapproval.htm	UST-040
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0339
Arkansas - DEQ	http://www.adeq.state.ar.us/techsvs/labcert.htm	88-0637
California DHS (ELAP)	http://www.cdph.ca.gov/certlic/labs/Pages/ELAP.aspx	2795
DOD ELAP	http://www.denix.osd.mil/edqw/Accreditation/AccreditedLabs.cfm	L16-58-R4
Florida DOH	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E87412
Hawaii DOH	http://health.hawaii.gov/	-
ISO 17025	http://www.pjlabs.com/	L16-57
Louisiana DEQ	http://www.deq.louisiana.gov/page/la-lab-accreditation	03016
Maine DHS	http://www.maine.gov/dhhs/	WA01276
Minnesota DOH	http://www.health.state.mn.us/accreditation	053-999-457
Nevada DEP	http://ndep.nv.gov/bsdw/labservice.htm	WA01276
New Jersey DEP	http://www.nj.gov/dep/enforcement/oqa.html	WA005
New York - DOH	https://www.wadsworth.org/regulatory/elap	12060
North Carolina DEQ	https://deq.nc.gov/about/divisions/water-resources/water-resources-data/water-sciences-home-page/laboratory-certification-branch/non-field-lab-certification	605
Oklahoma DEQ	http://www.deq.state.ok.us/CSDnew/labcert.htm	9801
Oregon – DEQ (NELAP)	http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	WA100010
South Carolina DHEC	http://www.scdhec.gov/environment/EnvironmentalLabCertification/	61002
Texas CEQ	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	T104704427
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C544
Wyoming (EPA Region 8)	https://www.epa.gov/region8-waterops/epa-region-8-certified-drinking-water	-
Kelso Laboratory Website	www.alsglobal.com	NA

Analyses were performed according to our laboratory’s NELAP-approved quality assurance program. A complete listing of specific NELAP-certified analytes, can be found in the certification section at www.ALSGlobal.com or at the accreditation bodies web site.

Please refer to the certification and/or accreditation body's web site if samples are submitted for compliance purposes. The states highlighted above, require the analysis be listed on the state certification if used for compliance purposes and if the method/anlayte is offered by that state.

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LOD	Limit of Detection
LOQ	Limit of Quantitation
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Analyst Summary report

Client: Anchor QEA, LLC

Service Request: K2305977

Project: Gorgas/221114-10.01 Task 05

Sample Name: GS-AP-OBT2-MW-6D-Mn-LDH-BUF-F3
Lab Code: K2305977-001
Sample Matrix: Water
Date Collected: 05/18/23
Date Received: 05/25/23

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ACOUCH	JCHAN

Sample Name: GS-AP-OBT2-MW-6D-Mn-LDH-BUF-F3
Lab Code: K2305977-001.R01
Sample Matrix: Water
Date Collected: 05/18/23
Date Received: 05/25/23

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ACOUCH	JCHAN

Sample Name: GS-AP-OBT2-MW-6D-Mn-Fe-LDH-BUF
Lab Code: K2305977-002
Sample Matrix: Water
Date Collected: 05/18/23
Date Received: 05/25/23

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ACOUCH	JCHAN

Sample Name: GS-AP-OBT2-MW-6D-Mn-Fe-LDH-BUF
Lab Code: K2305977-002.R01
Sample Matrix: Water
Date Collected: 05/18/23
Date Received: 05/25/23

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ACOUCH	JCHAN

Sample Name: GS-AP-OBT2-MW-6D-Mn-LDH-F3
Lab Code: K2305977-003
Sample Matrix: Water
Date Collected: 05/18/23
Date Received: 05/25/23

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ACOUCH	JCHAN

Client: Anchor QEA, LLC
Service Request: K2305977
Project: Gorgas/221114-10.01 Task 05

Sample Name: GS-AP-OBT2-MW-6D-Mn-LDH-F3
Date Collected: 05/18/23
Lab Code: K2305977-003.R01
Date Received: 05/25/23
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ACOUCH	JCHAN

Sample Name: GS-AP-OBT2-MW-6D-Mn-Fe-LDH-F3
Date Collected: 05/18/23
Lab Code: K2305977-004
Date Received: 05/25/23
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ACOUCH	JCHAN

Sample Name: GS-AP-OBT2-MW-6D-Mn-Fe-LDH-F3
Date Collected: 05/18/23
Lab Code: K2305977-004.R01
Date Received: 05/25/23
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ACOUCH	JCHAN

Sample Name: GS-AP-OBT2-MW-7-Mn-LDH-BUF-F3
Date Collected: 05/18/23
Lab Code: K2305977-005
Date Received: 05/25/23
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ACOUCH	JCHAN

Sample Name: GS-AP-OBT2-MW-7-Mn-LDH-BUF-F3
Date Collected: 05/18/23
Lab Code: K2305977-005.R01
Date Received: 05/25/23
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ACOUCH	JCHAN

Client:	Anchor QEA, LLC	**Service Request:**	K2305977
Project:	Gorgas/221114-10.01 Task 05		

Sample Name:	GS-AP-OBT2-MW-7-Mn-LDH-BUF-	**Date Collected:**	05/18/23
Lab Code:	K2305977-006	**Date Received:**	05/25/23
Sample Matrix:	Water		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ACOUCH	JCHAN

Sample Name:	GS-AP-OBT2-MW-7-Mn-LDH-BUF-	**Date Collected:**	05/18/23
Lab Code:	K2305977-006.R01	**Date Received:**	05/25/23
Sample Matrix:	Water		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ACOUCH	JCHAN

Sample Name:	GS-AP-OBT2-MW-7-Mn-Fe-LDH-BUF-	**Date Collected:**	05/18/23
Lab Code:	K2305977-007	**Date Received:**	05/25/23
Sample Matrix:	Water		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ACOUCH	JCHAN

Sample Name:	GS-AP-OBT2-MW-7-Mn-Fe-LDH-BUF-	**Date Collected:**	05/18/23
Lab Code:	K2305977-007.R01	**Date Received:**	05/25/23
Sample Matrix:	Water		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ACOUCH	JCHAN

Sample Name:	GS-AP-OBT2-MW-7-Mn-LDH-F3	**Date Collected:**	05/18/23
Lab Code:	K2305977-008	**Date Received:**	05/25/23
Sample Matrix:	Water		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ACOUCH	JCHAN

Client:	Anchor QEA, LLC	**Service Request:**	K2305977
Project:	Gorgas/221114-10.01 Task 05		

Sample Name:	GS-AP-OBT2-MW-7-Mn-LDH-F3	**Date Collected:**	05/18/23
Lab Code:	K2305977-008.R01	**Date Received:**	05/25/23
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
200.8	ACOUCH	JCHAN

Sample Name:	GS-AP-OBT2-MW-7-Mn-Fe-LDH-F3	**Date Collected:**	05/18/23
Lab Code:	K2305977-009	**Date Received:**	05/25/23
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
200.8	ACOUCH	JCHAN

Sample Name:	GS-AP-OBT2-MW-7-Mn-Fe-LDH-F3	**Date Collected:**	05/18/23
Lab Code:	K2305977-009.R01	**Date Received:**	05/25/23
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
200.8	ACOUCH	JCHAN

Sample Results

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Metals

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www.alsglobal.com

Client:	Anchor QEA, LLC	**Service Request:**	K2305977
Project:	Gorgas/221114-10.01 Task 05	**Date Collected:**	05/18/23 16:00
Sample Matrix:	Water	**Date Received:**	05/25/23 10:15
Sample Name:	GS-AP-OBT2-MW-6D-Mn-LDH-BUF-F3	**Basis:**	NA
Lab Code:	K2305977-001		

Dissolved Metals

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	200.8	**220**		ug/L	4.0	0.5	1	06/12/23 14:16	06/01/23	
Arsenic	200.8	**148**		ug/L	0.50	0.09	1	06/12/23 14:16	06/01/23	
Iron	200.8	**0.9**	**J**	ug/L	2.0	0.3	1	06/12/23 14:16	06/01/23	
Lithium	200.8	**293**		ug/L	0.20	0.10	1	06/12/23 14:16	06/01/23	
Manganese	200.8	**677000**		ug/L	6000	400	10000	06/13/23 08:31	06/01/23	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2305977
Project:	Gorgas/221114-10.01 Task 05	**Date Collected:**	05/18/23 16:05
Sample Matrix:	Water	**Date Received:**	05/25/23 10:15
Sample Name:	GS-AP-OBT2-MW-6D-Mn-Fe-LDH-BUF-F3	**Basis:**	NA
Lab Code:	K2305977-002		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	200.8	**61.0**	ug/L	4.0	0.5	1	06/12/23 14:18	06/01/23	
Arsenic	200.8	**111**	ug/L	0.50	0.09	1	06/12/23 14:18	06/01/23	
Iron	200.8	**29.5**	ug/L	2.0	0.3	1	06/12/23 14:18	06/01/23	
Lithium	200.8	**280**	ug/L	0.20	0.10	1	06/12/23 14:18	06/01/23	
Manganese	200.8	**525000**	ug/L	6000	400	10000	06/13/23 08:32	06/01/23	

Client:	Anchor QEA, LLC	**Service Request:**	K2305977
Project:	Gorgas/221114-10.01 Task 05	**Date Collected:**	05/18/23 16:10
Sample Matrix:	Water	**Date Received:**	05/25/23 10:15
Sample Name:	GS-AP-OBT2-MW-6D-Mn-LDH-F3	**Basis:**	NA
Lab Code:	K2305977-003		

Dissolved Metals

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	200.8	**79.8**		ug/L	4.0	0.5	1	06/12/23 14:22	06/01/23	
Arsenic	200.8	**126**		ug/L	0.50	0.09	1	06/12/23 14:22	06/01/23	
Iron	200.8	**1.0**	**J**	ug/L	2.0	0.3	1	06/12/23 14:22	06/01/23	
Lithium	200.8	**309**		ug/L	0.20	0.10	1	06/12/23 14:22	06/01/23	
Manganese	200.8	**547000**		ug/L	6000	400	10000	06/13/23 08:37	06/01/23	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2305977
Project:	Gorgas/221114-10.01 Task 05	**Date Collected:**	05/18/23 16:15
Sample Matrix:	Water	**Date Received:**	05/25/23 10:15
Sample Name:	GS-AP-OBT2-MW-6D-Mn-Fe-LDH-F3	**Basis:**	NA
Lab Code:	K2305977-004		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	200.8	**72.0**	ug/L	4.0	0.5	1	06/12/23 14:24	06/01/23	
Arsenic	200.8	**66.2**	ug/L	0.50	0.09	1	06/12/23 14:24	06/01/23	
Iron	200.8	**17.1**	ug/L	2.0	0.3	1	06/12/23 14:24	06/01/23	
Lithium	200.8	**237**	ug/L	0.20	0.10	1	06/12/23 14:24	06/01/23	
Manganese	200.8	**446000**	ug/L	6000	400	10000	06/13/23 08:39	06/01/23	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2305977
Project:	Gorgas/221114-10.01 Task 05	**Date Collected:**	05/18/23 16:20
Sample Matrix:	Water	**Date Received:**	05/25/23 10:15
Sample Name:	GS-AP-OBT2-MW-7-Mn-LDH-BUF-F3	**Basis:**	NA
Lab Code:	K2305977-005		

Dissolved Metals

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	200.8	**126**		ug/L	4.0	0.5	1	06/12/23 14:26	06/01/23	
Arsenic	200.8	**144**		ug/L	0.50	0.09	1	06/12/23 14:26	06/01/23	
Iron	200.8	**1.0**	**J**	ug/L	2.0	0.3	1	06/12/23 14:26	06/01/23	
Lithium	200.8	**208**		ug/L	0.20	0.10	1	06/12/23 14:26	06/01/23	
Manganese	200.8	**865000**		ug/L	6000	400	10000	06/13/23 08:41	06/01/23	
Molybdenum	200.8	**98.1**		ug/L	0.10	0.03	1	06/12/23 14:26	06/01/23	

Client:	Anchor QEA, LLC	**Service Request:**	K2305977
Project:	Gorgas/221114-10.01 Task 05	**Date Collected:**	05/18/23 16:25
Sample Matrix:	Water	**Date Received:**	05/25/23 10:15
Sample Name:	GS-AP-OBT2-MW-7-Mn-LDH-BUF-DUP-F3	**Basis:**	NA
Lab Code:	K2305977-006		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	200.8	**252**	ug/L	4.0	0.5	1	06/12/23 14:27	06/01/23	
Arsenic	200.8	**151**	ug/L	0.50	0.09	1	06/12/23 14:27	06/01/23	
Iron	200.8	**0.6 J**	ug/L	2.0	0.3	1	06/12/23 14:27	06/01/23	
Lithium	200.8	**228**	ug/L	0.20	0.10	1	06/12/23 14:27	06/01/23	
Manganese	200.8	**761000**	ug/L	6000	400	10000	06/13/23 08:42	06/01/23	
Molybdenum	200.8	**117**	ug/L	0.10	0.03	1	06/12/23 14:27	06/01/23	

Client:	Anchor QEA, LLC	**Service Request:**	K2305977
Project:	Gorgas/221114-10.01 Task 05	**Date Collected:**	05/18/23 16:30
Sample Matrix:	Water	**Date Received:**	05/25/23 10:15
Sample Name:	GS-AP-OBT2-MW-7-Mn-Fe-LDH-BUF-F3	**Basis:**	NA
Lab Code:	K2305977-007		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	200.8	**63.0**	ug/L	4.0	0.5	1	06/12/23 14:50	06/01/23	
Arsenic	200.8	**120**	ug/L	0.50	0.09	1	06/12/23 14:50	06/01/23	
Iron	200.8	**29.7**	ug/L	2.0	0.3	1	06/12/23 14:50	06/01/23	
Lithium	200.8	**203**	ug/L	0.20	0.10	1	06/12/23 14:50	06/01/23	
Manganese	200.8	**501000**	ug/L	6000	400	10000	06/13/23 08:47	06/01/23	
Molybdenum	200.8	**77.0**	ug/L	0.10	0.03	1	06/12/23 14:50	06/01/23	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2305977
Project:	Gorgas/221114-10.01 Task 05	**Date Collected:**	05/18/23 16:35
Sample Matrix:	Water	**Date Received:**	05/25/23 10:15
Sample Name:	GS-AP-OBT2-MW-7-Mn-LDH-F3	**Basis:**	NA
Lab Code:	K2305977-008		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	200.8	**63.2**	ug/L	4.0	0.5	1	06/12/23 14:51	06/01/23	
Arsenic	200.8	**107**	ug/L	0.50	0.09	1	06/12/23 14:51	06/01/23	
Iron	200.8	**0.8 J**	ug/L	2.0	0.3	1	06/12/23 14:51	06/01/23	
Lithium	200.8	**187**	ug/L	0.20	0.10	1	06/12/23 14:51	06/01/23	
Manganese	200.8	**568000**	ug/L	6000	400	10000	06/13/23 08:49	06/01/23	
Molybdenum	200.8	**101**	ug/L	0.10	0.03	1	06/12/23 14:51	06/01/23	

Client:	Anchor QEA, LLC	**Service Request:**	K2305977
Project:	Gorgas/221114-10.01 Task 05	**Date Collected:**	05/18/23 16:40
Sample Matrix:	Water	**Date Received:**	05/25/23 10:15
Sample Name:	GS-AP-OBT2-MW-7-Mn-Fe-LDH-F3	**Basis:**	NA
Lab Code:	K2305977-009		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	200.8	**69.1**	ug/L	4.0	0.5	1	06/12/23 14:53	06/01/23	
Arsenic	200.8	**82.3**	ug/L	0.50	0.09	1	06/12/23 14:53	06/01/23	
Iron	200.8	**15.0**	ug/L	2.0	0.3	1	06/12/23 14:53	06/01/23	
Lithium	200.8	**194**	ug/L	0.20	0.10	1	06/12/23 14:53	06/01/23	
Manganese	200.8	**318000**	ug/L	6000	400	10000	06/13/23 08:50	06/01/23	
Molybdenum	200.8	**65.5**	ug/L	0.10	0.03	1	06/12/23 14:53	06/01/23	

QC Summary Forms

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Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2305977
Project:	Gorgas/221114-10.01 Task 05	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	KQ2309617-01		

Dissolved Metals

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	200.8	**1.0**	**J**	ug/L	4.0	0.5	1	06/12/23 14:13	06/01/23	
Arsenic	200.8	ND	U	ug/L	0.50	0.09	1	06/12/23 14:13	06/01/23	
Iron	200.8	ND	U	ug/L	2.0	0.3	1	06/12/23 14:13	06/01/23	
Lithium	200.8	ND	U	ug/L	0.20	0.10	1	06/12/23 14:13	06/01/23	
Manganese	200.8	ND	U	ug/L	0.60	0.04	1	06/13/23 08:28	06/01/23	
Molybdenum	200.8	ND	U	ug/L	0.10	0.03	1	06/12/23 14:13	06/01/23	

Client:	Anchor QEA, LLC	**Service Request:**	K2305977
Project:	Gorgas/221114-10.01 Task 05	**Date Collected:**	05/18/23
Sample Matrix:	Water	**Date Received:**	05/25/23
		Date Analyzed:	06/12/23 - 06/13/23
		Date Extracted:	06/1/23

Matrix Spike Summary
Dissolved Metals

Sample Name:	GS-AP-OBT2-MW-6D-Mn-Fe-LDH-BUF-F3	**Units:**	ug/L
Lab Code:	K2305977-002	**Basis:**	NA
Analysis Method:	200.8		
Prep Method:	EPA CLP ILM04.0		

Matrix Spike
KQ2309617-07

Analyte Name	Sample Result	Result	Spike Amount	% Rec	% Rec Limits
Aluminum	61.0	160	100	99	70-130
Arsenic	111	162	50.0	103	70-130
Iron	29.5	79.7	50.0	100	70-130
Lithium	280	322	50.0	85 #	70-130
Manganese	525000	629000	30	412935 #	70-130
Molybdenum	17.1	46.5	25.0	117	70-130

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Matrix Spike and Matrix Spike Duplicate Data is presented for information purposes only. The matrix may or may not be relevant to samples reported in this report. The laboratory evaluates system performance based on the LCS and LCSD control limits.

QA/QC Report

Client:	Anchor QEA, LLC	**Service Request:**	K2305977
Project	Gorgas/221114-10.01 Task 05	**Date Collected:**	05/18/23
Sample Matrix:	Water	**Date Received:**	05/25/23
		Date Analyzed:	06/12/23 - 06/13/23

Replicate Sample Summary
Dissolved Metals

Sample Name:	GS-AP-OBT2-MW-6D-Mn-Fe-LDH-BUF-F3	**Units:**	ug/L
Lab Code:	K2305977-002	**Basis:**	NA

Analyte Name	Analysis Method	MRL	MDL	Sample Result	Duplicate Sample KQ2309617-08 Result	Average	RPD	RPD Limit
Aluminum	200.8	4.0	0.5	61.0	60.1	60.6	1	20
Arsenic	200.8	0.50	0.09	111	111	111	<1	20
Iron	200.8	2.0	0.3	29.5	29.6	29.6	<1	20
Lithium	200.8	0.20	0.10	280	272	276	3	20
Manganese	200.8	6000	400	525000	549000	537000	4	20
Molybdenum	200.8	0.10	0.03	17.1	16.9	17.0	1	20

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client:	Anchor QEA, LLC	**Service Request:**	K2305977
Project:	Gorgas/221114-10.01 Task 05	**Date Analyzed:**	06/12/23 - 06/13/23
Sample Matrix:	Water		

Lab Control Sample Summary
Dissolved Metals

Units:ug/L
Basis:NA

Lab Control Sample
KQ2309617-02

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Aluminum	200.8	98.3	100	98	85-115
Arsenic	200.8	49.0	50.0	98	85-115
Iron	200.8	49.3	50.0	99	85-115
Lithium	200.8	52.4	50.0	105	85-115
Manganese	200.8	24.1	25.0	96	85-115
Molybdenum	200.8	27.1	25.0	108	85-115

June 20, 2023 Service Request No:K2305983

Masa Kanematsu
Anchor QEA, LLC
6720 SW Macadam Avenue
Suite 125
Portland, OR 97219

Laboratory Results for: Gorgas

Dear Masa,

Enclosed are the results of the sample(s) submitted to our laboratory May 25, 2023
For your reference, these analyses have been assigned our service request number **K2305983.**

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. All results are intended to be considered in their entirety, and ALS Group USA Corp. dba ALS Environmental (ALS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please contact me if you have any questions. My extension is 3376. You may also contact me via email at Mark.Harris@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

Mark Harris
Project Manager

ADDRESS 1317 S. 13th Avenue, Kelso, WA 98626
PHONE +1 360 577 7222 | FAX +1 360 636 1068
ALS Group USA, Corp.
dba ALS Environmental

Narrative Documents

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Client: Anchor QEA, LLC
Service Request: K2305983
Project: Gorgas
Date Received: 05/25/2023
Sample Matrix: Water

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples for the Tier II level requested by the client.

Sample Receipt:

Nine water samples were received for analysis at ALS Environmental on 05/25/2023. Any discrepancies upon initial sample inspection are annotated on the sample receipt and preservation form included within this report. The samples were stored at minimum in accordance with the analytical method requirements.

Metals:

No significant anomalies were noted with this analysis.

Approved by ______________________ Date 06/20/2023

SAMPLE DETECTION SUMMARY

This form includes only detections above the reporting levels. For a full listing of sample results, continue to the Sample Results section of this Report.

CLIENT ID: GS-AP-OBT2-MW-6D-Mn-LDH-BUF-F4 **Lab ID: K2305983-001**

Analyte	Results	Flag	MDL	MRL	Units	Method
Aluminum, Dissolved	469000		10	80	ug/L	200.8
Arsenic, Dissolved	45		2	10	ug/L	200.8
Iron, Dissolved	153		6	40	ug/L	200.8
Lithium, Dissolved	154		2.0	2.0	ug/L	200.8
Manganese, Dissolved	1440000		80	1200	ug/L	200.8

CLIENT ID: GS-AP-OBT2-MW-6D-Mn-Fe-LDH-BUF-F4 **Lab ID: K2305983-002**

Analyte	Results	Flag	MDL	MRL	Units	Method
Aluminum, Dissolved	347000		10	80	ug/L	200.8
Arsenic, Dissolved	123		2	10	ug/L	200.8
Iron, Dissolved	620000		30	200	ug/L	200.8
Lithium, Dissolved	9.3		2.0	2.0	ug/L	200.8
Manganese, Dissolved	800000		80	1200	ug/L	200.8

CLIENT ID: GS-AP-OBT2-MW-6D-Mn-LDH-F4 **Lab ID: K2305983-003**

Analyte	Results	Flag	MDL	MRL	Units	Method
Aluminum, Dissolved	600000		10	80	ug/L	200.8
Arsenic, Dissolved	81		2	10	ug/L	200.8
Iron, Dissolved	115		6	40	ug/L	200.8
Lithium, Dissolved	32.6		2.0	2.0	ug/L	200.8
Manganese, Dissolved	1140000		80	1200	ug/L	200.8

CLIENT ID: GS-AP-OBT2-MW-6D-Mn-Fe-LDH-F4 **Lab ID: K2305983-004**

Analyte	Results	Flag	MDL	MRL	Units	Method
Aluminum, Dissolved	495000		10	80	ug/L	200.8
Arsenic, Dissolved	98		2	10	ug/L	200.8
Iron, Dissolved	403000		30	200	ug/L	200.8
Lithium, Dissolved	14.7		2.0	2.0	ug/L	200.8
Manganese, Dissolved	591000		80	1200	ug/L	200.8

CLIENT ID: GS-AP-OBT2-MW-7-Mn-LDH-BUF-F4 **Lab ID: K2305983-005**

Analyte	Results	Flag	MDL	MRL	Units	Method
Aluminum, Dissolved	339000		10	80	ug/L	200.8
Arsenic, Dissolved	59		2	10	ug/L	200.8
Iron, Dissolved	232		6	40	ug/L	200.8
Lithium, Dissolved	11.7		2.0	2.0	ug/L	200.8
Manganese, Dissolved	825000		80	1200	ug/L	200.8
Molybdenum, Dissolved	237		0.6	2.0	ug/L	200.8

CLIENT ID: GS-AP-OBT2-MW-7-Mn-LDH-BUF-DUP-F4 **Lab ID: K2305983-006**

Analyte	Results	Flag	MDL	MRL	Units	Method
Aluminum, Dissolved	420000		10	80	ug/L	200.8
Arsenic, Dissolved	127		2	10	ug/L	200.8

SAMPLE DETECTION SUMMARY

This form includes only detections above the reporting levels. For a full listing of sample results, continue to the Sample Results section of this Report.

CLIENT ID: GS-AP-OBT2-MW-7-Mn-LDH-BUF-DUP-F4 **Lab ID: K2305983-006**

Analyte	Results	Flag	MDL	MRL	Units	Method
Iron, Dissolved	283		6	40	ug/L	200.8
Lithium, Dissolved	72.2		2.0	2.0	ug/L	200.8
Manganese, Dissolved	1450000		80	1200	ug/L	200.8
Molybdenum, Dissolved	272		0.6	2.0	ug/L	200.8

CLIENT ID: GS-AP-OBT2-MW-7-Mn-Fe-LDH-BUF-F4 **Lab ID: K2305983-007**

Analyte	Results	Flag	MDL	MRL	Units	Method
Aluminum, Dissolved	375000		10	80	ug/L	200.8
Arsenic, Dissolved	120		2	10	ug/L	200.8
Iron, Dissolved	592000		30	200	ug/L	200.8
Lithium, Dissolved	7.7		2.0	2.0	ug/L	200.8
Manganese, Dissolved	1040000		80	1200	ug/L	200.8
Molybdenum, Dissolved	272		0.6	2.0	ug/L	200.8

CLIENT ID: GS-AP-OBT2-MW-7-Mn-LDH-F4 **Lab ID: K2305983-008**

Analyte	Results	Flag	MDL	MRL	Units	Method
Aluminum, Dissolved	546000		10	80	ug/L	200.8
Arsenic, Dissolved	58		2	10	ug/L	200.8
Iron, Dissolved	169		6	40	ug/L	200.8
Lithium, Dissolved	13.8		2.0	2.0	ug/L	200.8
Manganese, Dissolved	888000		80	1200	ug/L	200.8
Molybdenum, Dissolved	193		0.6	2.0	ug/L	200.8

CLIENT ID: GS-AP-OBT2-MW-7-Mn-Fe-LDH-F4 **Lab ID: K2305983-009**

Analyte	Results	Flag	MDL	MRL	Units	Method
Aluminum, Dissolved	606000		10	80	ug/L	200.8
Arsenic, Dissolved	127		2	10	ug/L	200.8
Iron, Dissolved	537000		30	200	ug/L	200.8
Lithium, Dissolved	23.9		2.0	2.0	ug/L	200.8
Manganese, Dissolved	906000		80	1200	ug/L	200.8
Molybdenum, Dissolved	242		0.6	2.0	ug/L	200.8

Sample Receipt Information

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
K2305983-001	GS-AP-OBT2-MW-6D-Mn-LDH-BUF-F4	5/19/2023	1500
K2305983-002	GS-AP-OBT2-MW-6D-Mn-Fe-LDH-BUF-F4	5/19/2023	1505
K2305983-003	GS-AP-OBT2-MW-6D-Mn-LDH-F4	5/19/2023	1510
K2305983-004	GS-AP-OBT2-MW-6D-Mn-Fe-LDH-F4	5/19/2023	1515
K2305983-005	GS-AP-OBT2-MW-7-Mn-LDH-BUF-F4	5/19/2023	1520
K2305983-006	GS-AP-OBT2-MW-7-Mn-LDH-BUF-DUP-F4	5/19/2023	1525
K2305983-007	GS-AP-OBT2-MW-7-Mn-Fe-LDH-BUF-F4	5/19/2023	1530
K2305983-008	GS-AP-OBT2-MW-7-Mn-LDH-F4	5/19/2023	1535
K2305983-009	GS-AP-OBT2-MW-7-Mn-Fe-LDH-F4	5/19/2023	1540

K2305983

Chain of Custody Record & Laboratory Analysis Request

Laboratory Number:	503-972-5019
Date:	5/23/2023
Project Name:	Gorgas
Project Number:	221114-10.01 Task 05
Project Manager:	Masa Kanematsu, mkanematsu@anchorqea.com
Phone Number:	503-972-5001
Shipment Method:	ALS Carrier

ANCHOR QEA
Jason Stuckey
6720 SW Macadam Ave Suite 125
Portland OR 97219

Line	Field Sample ID	Collection		Matrix	No. of Containers	Parameters													Comments/Preservation
		Date	Time			Dissolved metals (Al, As, Fe, Li, Mn)	Dissolved metals (Al, As, Fe, Li, Mo, Mn)												
1	GS-AP-OBT2-MW-6D-Mn-LDH-BUF-F4	5/19/2023	15.:00	Water	1	X													10.7 M nitric acid
2	GS-AP-OBT2-MW-6D-Mn-Fe-LDH-BUF-F4	5/19/2023	15:05	Water	1	X													10.7 M nitric acid
3	GS-AP-OBT2-MW-6D-Mn-LDH-F4	5/19/2023	15.:10	Water	1	X													10.7 M nitric acid
4	GS-AP-OBT2-MW-6D-Mn-Fe-LDH-F4	5/19/2023	15:15	Water	1	X													10.7 M nitric acid
5	GS-AP-OBT2-MW-7-Mn-LDH-BUF-F4	5/19/2023	15:20	Water	1		X												10.7 M nitric acid
6	GS-AP-OBT2-MW-7-Mn-LDH-BUF-DUP-F4	5/19/2023	15:25	Water	1		X												10.7 M nitric acid
7	GS-AP-OBT2-MW-7-Mn-Fe-LDH-BUF-F4	5/19/2023	15:30	Water	1		X												10.7 M nitric acid
8	GS-AP-OBT2-MW-7-Mn-LDH-F4	5/19/2023	15:35	Water	1		X												10.7 M nitric acid
9	GS-AP-OBT2-MW-7-Mn-Fe-LDH-F4	5/19/2023	15:40	Water	1		X												10.7 M nitric acid
10																			
11																			
12																			
13																			
14																			
15																			
16																			
17																			
18																			
19																			
20																			

Notes: All samples are HNO3-preserved and 0.45-um filtered. The comment section lists the chemical composition of the sample. Please Contact Masa (mkanematsu@anchorqea.com) if running > 10X dilution. Please analyze by ICP-MS method 200.8 to achieve the MDL < 1 ppb. **Please analyze on a standard TAT.**

Relinquished by: Masa Kanematsu	Company: Anchor QEA		Received by: ALS 5/25/23 1015
Signature/Print Name:	Date/Time: 5/23/2023 9:30		Signature/Print Name: Kaitlyn Mitolo
Relinquished by:	Company:		Received by:
Signature/Print Name:	Date/Time:		Signature/Print Name:

Distribution: A copy will be made for the laboratory and client. The Project file will retain the original.

Page 1 of 1

PM/Mark

Cooler Receipt and Preservation Form

Client: AnChor Service Request K23 05983

Received: 5/25/23 Opened: 5/25/23 By: VM Unloaded: 5/25/23 By: KM

1. Samples were received via? USPS [✓ Fed Ex] UPS DHL PDX Courier Hand Delivered
2. Samples were received in: (circle) [✓ Cooler] Box Envelope Other ______ NA
3. Were custody seals on coolers? NA Y [✓ N] If yes, how many and where? ______
   If present, were custody seals intact? Y N If present, were they signed and dated? Y N

Temp Blank	Sample Temp	IR Gun	Cooler #/COC ID / NA	Out of temp indicate with "X"	PM Notified If out of temp	Tracking Number NA	Filed
3.3		IR01	Cooler 1			772246558027	
	4.9	IR01	Cooler 2			772246558141	

4. Was a Temperature Blank present in cooler? NA [✓ Y] [✓ N] If yes, notate the temperature in the appropriate column above:
   If no, take the temperature of a representative sample bottle contained within the cooler; notate in the column "Sample Temp":
5. Were samples received within the method specified temperature ranges? NA [✓ Y] N
   If no, were they received on ice and same day as collected? If not, notate the cooler # above and notify the PM. [✓ NA] Y N
   If applicable, tissue samples were received: Frozen Partially Thawed Thawed
6. Packing material: Inserts [✓ Baggies] Bubble Wrap Gel Packs [✓ Wet Ice] Dry Ice Sleeves ______
7. Were custody papers properly filled out (ink, signed, etc.)? NA [✓ Y] N
8. Were samples received in good condition (unbroken) NA [✓ Y] N
9. Were all sample labels complete (ie, analysis, preservation, etc.)? NA [✓ Y] N
10. Did all sample labels and tags agree with custody papers? NA [✓ Y] N
11. Were appropriate bottles/containers and volumes received for the tests indicated? NA [✓ Y] N
12. Were the pH-preserved bottles (*see SMO GEN SOP*) received at the appropriate pH? *Indicate in the table below* [✓ NA] Y N
13. Were VOA vials received without headspace? *Indicate in the table below.* [✓ NA] Y N
14. Was C12/Res negative? [✓ NA] Y N
15. Were samples received within the method specified time limit? If not, notate the error below and notify the PM [✓ NA] Y N
16. Were 100ml sterile microbiology bottles filled exactly to the 100ml mark? [✓ NA] Y N Underfilled Overfilled

Sample ID on Bottle	Sample ID on COC	Identified by:

Sample ID	Bottle Count Bottle Type	Head-space	Broke	pH	Reagent	Volume added	Reagent Lot Number	Initials	Time

Notes, Discrepancies, Resolutions: Didn't ph due to limited volume

Miscellaneous Forms

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Inorganic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated value.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.
H	The holding time for this test is immediately following sample collection. The samples were analyzed as soon as possible after receipt by the laboratory.

Metals Data Qualifiers

#	The control limit criteria is not applicable.
J	The result is an estimated value.
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
M	The duplicate injection precision was not met.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
S	The reported value was determined by the Method of Standard Additions (MSA).
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
+	The correlation coefficient for the MSA is less than 0.995.
Q	See case narrative. One or more quality control criteria was outside the limits.

Organic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
A	A tentatively identified compound, a suspected aldol-condensation product.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
C	The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
D	The reported result is from a dilution.
E	The result is an estimated value.
J	The result is an estimated value.
N	The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
P	The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a chromatographic interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.

Additional Petroleum Hydrocarbon Specific Qualifiers

F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
Y	The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
Z	The chromatographic fingerprint does not resemble a petroleum product.

ALS Group USA Corp. dba ALS Environmental (ALS) - Kelso
State Certifications, Accreditations, and Licenses

Agency	Web Site	Number
Alaska DEH	http://dec.alaska.gov/eh/lab/cs/csapproval.htm	UST-040
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0339
Arkansas - DEQ	http://www.adeq.state.ar.us/techsvs/labcert.htm	88-0637
California DHS (ELAP)	http://www.cdph.ca.gov/certlic/labs/Pages/ELAP.aspx	2795
DOD ELAP	http://www.denix.osd.mil/edqw/Accreditation/AccreditedLabs.cfm	L16-58-R4
Florida DOH	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E87412
Hawaii DOH	http://health.hawaii.gov/	-
ISO 17025	http://www.pjlabs.com/	L16-57
Louisiana DEQ	http://www.deq.louisiana.gov/page/la-lab-accreditation	03016
Maine DHS	http://www.maine.gov/dhhs/	WA01276
Minnesota DOH	http://www.health.state.mn.us/accreditation	053-999-457
Nevada DEP	http://ndep.nv.gov/bsdw/labservice.htm	WA01276
New Jersey DEP	http://www.nj.gov/dep/enforcement/oqa.html	WA005
New York - DOH	https://www.wadsworth.org/regulatory/elap	12060
North Carolina DEQ	https://deq.nc.gov/about/divisions/water-resources/water-resources-data/water-sciences-home-page/laboratory-certification-branch/non-field-lab-certification	605
Oklahoma DEQ	http://www.deq.state.ok.us/CSDnew/labcert.htm	9801
Oregon – DEQ (NELAP)	http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	WA100010
South Carolina DHEC	http://www.scdhec.gov/environment/EnvironmentalLabCertification/	61002
Texas CEQ	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	T104704427
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C544
Wyoming (EPA Region 8)	https://www.epa.gov/region8-waterops/epa-region-8-certified-drinking-water	-
Kelso Laboratory Website	www.alsglobal.com	NA

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. A complete listing of specific NELAP-certified analytes, can be found in the certification section at www.ALSGlobal.com or at the accreditation bodies web site.
Please refer to the certification and/or accreditation body's web site if samples are submitted for compliance purposes. The states highlighted above, require the analysis be listed on the state certification if used for compliance purposes and if the method/anlayte is offered by that state.

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LOD	Limit of Detection
LOQ	Limit of Quantitation
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Client: Anchor QEA, LLC **Service Request:** K2305983
Project: Gorgas/221114-10.01 Task 05

Sample Name: GS-AP-OBT2-MW-6D-Mn-LDH-BUF-F4 **Date Collected:** 05/19/23
Lab Code: K2305983-001 **Date Received:** 05/25/23
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ACOUCH	JCHAN

Sample Name: GS-AP-OBT2-MW-6D-Mn-LDH-BUF-F4 **Date Collected:** 05/19/23
Lab Code: K2305983-001.R01 **Date Received:** 05/25/23
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ACOUCH	JCHAN

Sample Name: GS-AP-OBT2-MW-6D-Mn-Fe-LDH-BUF **Date Collected:** 05/19/23
Lab Code: K2305983-002 **Date Received:** 05/25/23
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ACOUCH	JCHAN

Sample Name: GS-AP-OBT2-MW-6D-Mn-Fe-LDH-BUF **Date Collected:** 05/19/23
Lab Code: K2305983-002.R01 **Date Received:** 05/25/23
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ACOUCH	JCHAN

Sample Name: GS-AP-OBT2-MW-6D-Mn-LDH-F4 **Date Collected:** 05/19/23
Lab Code: K2305983-003 **Date Received:** 05/25/23
Sample Matrix: Water

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ACOUCH	JCHAN

Client:	Anchor QEA, LLC	**Service Request:**	K2305983
Project:	Gorgas/221114-10.01 Task 05		

Sample Name:	GS-AP-OBT2-MW-6D-Mn-LDH-F4	**Date Collected:**	05/19/23
Lab Code:	K2305983-003.R01	**Date Received:**	05/25/23
Sample Matrix:	Water		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ACOUCH	JCHAN

Sample Name:	GS-AP-OBT2-MW-6D-Mn-Fe-LDH-F4	**Date Collected:**	05/19/23
Lab Code:	K2305983-004	**Date Received:**	05/25/23
Sample Matrix:	Water		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ACOUCH	JCHAN

Sample Name:	GS-AP-OBT2-MW-6D-Mn-Fe-LDH-F4	**Date Collected:**	05/19/23
Lab Code:	K2305983-004.R01	**Date Received:**	05/25/23
Sample Matrix:	Water		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ACOUCH	JCHAN

Sample Name:	GS-AP-OBT2-MW-7-Mn-LDH-BUF-F4	**Date Collected:**	05/19/23
Lab Code:	K2305983-005	**Date Received:**	05/25/23
Sample Matrix:	Water		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ACOUCH	JCHAN

Sample Name:	GS-AP-OBT2-MW-7-Mn-LDH-BUF-F4	**Date Collected:**	05/19/23
Lab Code:	K2305983-005.R01	**Date Received:**	05/25/23
Sample Matrix:	Water		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ACOUCH	JCHAN

Analyst Summary report

Client:	Anchor QEA, LLC	**Service Request:**	K2305983
Project:	Gorgas/221114-10.01 Task 05		

Sample Name:	GS-AP-OBT2-MW-7-Mn-LDH-BUF-	**Date Collected:**	05/19/23
Lab Code:	K2305983-006	**Date Received:**	05/25/23
Sample Matrix:	Water		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ACOUCH	JCHAN

Sample Name:	GS-AP-OBT2-MW-7-Mn-LDH-BUF-	**Date Collected:**	05/19/23
Lab Code:	K2305983-006.R01	**Date Received:**	05/25/23
Sample Matrix:	Water		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ACOUCH	JCHAN

Sample Name:	GS-AP-OBT2-MW-7-Mn-Fe-LDH-BUF-	**Date Collected:**	05/19/23
Lab Code:	K2305983-007	**Date Received:**	05/25/23
Sample Matrix:	Water		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ACOUCH	JCHAN

Sample Name:	GS-AP-OBT2-MW-7-Mn-Fe-LDH-BUF-	**Date Collected:**	05/19/23
Lab Code:	K2305983-007.R01	**Date Received:**	05/25/23
Sample Matrix:	Water		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ACOUCH	JCHAN

Sample Name:	GS-AP-OBT2-MW-7-Mn-LDH-F4	**Date Collected:**	05/19/23
Lab Code:	K2305983-008	**Date Received:**	05/25/23
Sample Matrix:	Water		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	ACOUCH	JCHAN

Client: Anchor QEA, LLC

Service Request: K2305983

Project: Gorgas/221114-10.01 Task 05

Sample Name: GS-AP-OBT2-MW-7-Mn-LDH-F4
Date Collected: 05/19/23
Lab Code: K2305983-008.R01
Date Received: 05/25/23
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
200.8	ACOUCH	JCHAN

Sample Name: GS-AP-OBT2-MW-7-Mn-Fe-LDH-F4
Date Collected: 05/19/23
Lab Code: K2305983-009
Date Received: 05/25/23
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
200.8	ACOUCH	JCHAN

Sample Name: GS-AP-OBT2-MW-7-Mn-Fe-LDH-F4
Date Collected: 05/19/23
Lab Code: K2305983-009.R01
Date Received: 05/25/23
Sample Matrix: Water

Analysis Method	Extracted/Digested By	Analyzed By
200.8	ACOUCH	JCHAN

Sample Results

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Metals

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RIGHT SOLUTIONS | RIGHT PARTNER

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2305983
Project:	Gorgas/221114-10.01 Task 05	**Date Collected:**	05/19/23 15:00
Sample Matrix:	Water	**Date Received:**	05/25/23 10:15
Sample Name:	GS-AP-OBT2-MW-6D-Mn-LDH-BUF-F4	**Basis:**	NA
Lab Code:	K2305983-001		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	200.8	**469000**	ug/L	80	10	1	06/13/23 10:15	06/01/23	
Arsenic	200.8	**45**	ug/L	10	2	1	06/13/23 10:15	06/01/23	
Iron	200.8	**153**	ug/L	40	6	20	06/19/23 10:19	06/13/23	
Lithium	200.8	**154**	ug/L	2.0	2.0	1	06/13/23 10:15	06/01/23	
Manganese	200.8	**1440000**	ug/L	1200	80	100	06/13/23 09:21	06/01/23	

Client:	Anchor QEA, LLC	**Service Request:**	K2305983
Project:	Gorgas/221114-10.01 Task 05	**Date Collected:**	05/19/23 15:05
Sample Matrix:	Water	**Date Received:**	05/25/23 10:15
Sample Name:	GS-AP-OBT2-MW-6D-Mn-Fe-LDH-BUF-F4	**Basis:**	NA
Lab Code:	K2305983-002		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	200.8	**347000**	ug/L	80	10	1	06/13/23 11:02	06/01/23	
Arsenic	200.8	**123**	ug/L	10	2	1	06/13/23 11:02	06/01/23	
Iron	200.8	**620000**	ug/L	200	30	100	06/19/23 09:55	06/13/23	
Lithium	200.8	**9.3**	ug/L	2.0	2.0	1	06/13/23 11:02	06/01/23	
Manganese	200.8	**800000**	ug/L	1200	80	100	06/13/23 09:26	06/01/23	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2305983
Project:	Gorgas/221114-10.01 Task 05	**Date Collected:**	05/19/23 15:10
Sample Matrix:	Water	**Date Received:**	05/25/23 10:15
Sample Name:	GS-AP-OBT2-MW-6D-Mn-LDH-F4	**Basis:**	NA
Lab Code:	K2305983-003		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	200.8	**600000**	ug/L	80	10	1	06/13/23 10:21	06/01/23	
Arsenic	200.8	**81**	ug/L	10	2	1	06/13/23 10:21	06/01/23	
Iron	200.8	**115**	ug/L	40	6	20	06/19/23 10:20	06/13/23	
Lithium	200.8	**32.6**	ug/L	2.0	2.0	1	06/13/23 10:21	06/01/23	
Manganese	200.8	**1140000**	ug/L	1200	80	100	06/13/23 09:28	06/01/23	

Client:	Anchor QEA, LLC	**Service Request:**	K2305983
Project:	Gorgas/221114-10.01 Task 05	**Date Collected:**	05/19/23 15:15
Sample Matrix:	Water	**Date Received:**	05/25/23 10:15
Sample Name:	GS-AP-OBT2-MW-6D-Mn-Fe-LDH-F4	**Basis:**	NA
Lab Code:	K2305983-004		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	200.8	**495000**	ug/L	80	10	1	06/13/23 10:23	06/01/23	
Arsenic	200.8	**98**	ug/L	10	2	1	06/13/23 10:23	06/01/23	
Iron	200.8	**403000**	ug/L	200	30	100	06/19/23 10:00	06/13/23	
Lithium	200.8	**14.7**	ug/L	2.0	2.0	1	06/13/23 10:23	06/01/23	
Manganese	200.8	**591000**	ug/L	1200	80	100	06/13/23 09:30	06/01/23	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2305983
Project:	Gorgas/221114-10.01 Task 05	**Date Collected:**	05/19/23 15:20
Sample Matrix:	Water	**Date Received:**	05/25/23 10:15
Sample Name:	GS-AP-OBT2-MW-7-Mn-LDH-BUF-F4	**Basis:**	NA
Lab Code:	K2305983-005		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	200.8	**339000**	ug/L	80	10	1	06/13/23 10:24	06/01/23	
Arsenic	200.8	**59**	ug/L	10	2	1	06/13/23 10:24	06/01/23	
Iron	200.8	**232**	ug/L	40	6	20	06/19/23 10:24	06/13/23	
Lithium	200.8	**11.7**	ug/L	2.0	2.0	1	06/13/23 10:24	06/01/23	
Manganese	200.8	**825000**	ug/L	1200	80	100	06/13/23 09:31	06/01/23	
Molybdenum	200.8	**237**	ug/L	2.0	0.6	1	06/13/23 10:24	06/01/23	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2305983
Project:	Gorgas/221114-10.01 Task 05	**Date Collected:**	05/19/23 15:25
Sample Matrix:	Water	**Date Received:**	05/25/23 10:15
Sample Name:	GS-AP-OBT2-MW-7-Mn-LDH-BUF-DUP-F4	**Basis:**	NA
Lab Code:	K2305983-006		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	200.8	**420000**	ug/L	80	10	1	06/13/23 10:26	06/01/23	
Arsenic	200.8	**127**	ug/L	10	2	1	06/13/23 10:26	06/01/23	
Iron	200.8	**283**	ug/L	40	6	20	06/19/23 10:25	06/13/23	
Lithium	200.8	**72.2**	ug/L	2.0	2.0	1	06/13/23 10:26	06/01/23	
Manganese	200.8	**1450000**	ug/L	1200	80	100	06/13/23 09:33	06/01/23	
Molybdenum	200.8	**272**	ug/L	2.0	0.6	1	06/13/23 10:26	06/01/23	

Client:	Anchor QEA, LLC	**Service Request:**	K2305983
Project:	Gorgas/221114-10.01 Task 05	**Date Collected:**	05/19/23 15:30
Sample Matrix:	Water	**Date Received:**	05/25/23 10:15
Sample Name:	GS-AP-OBT2-MW-7-Mn-Fe-LDH-BUF-F4	**Basis:**	NA
Lab Code:	K2305983-007		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	200.8	**375000**	ug/L	80	10	1	06/13/23 10:28	06/01/23	
Arsenic	200.8	**120**	ug/L	10	2	1	06/13/23 10:28	06/01/23	
Iron	200.8	**592000**	ug/L	200	30	100	06/19/23 10:06	06/13/23	
Lithium	200.8	**7.7**	ug/L	2.0	2.0	1	06/13/23 10:28	06/01/23	
Manganese	200.8	**1040000**	ug/L	1200	80	100	06/13/23 09:38	06/01/23	
Molybdenum	200.8	**272**	ug/L	2.0	0.6	1	06/13/23 10:28	06/01/23	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2305983
Project:	Gorgas/221114-10.01 Task 05	**Date Collected:**	05/19/23 15:35
Sample Matrix:	Water	**Date Received:**	05/25/23 10:15
Sample Name:	GS-AP-OBT2-MW-7-Mn-LDH-F4	**Basis:**	NA
Lab Code:	K2305983-008		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	200.8	**546000**	ug/L	80	10	1	06/13/23 10:29	06/01/23	
Arsenic	200.8	**58**	ug/L	10	2	1	06/13/23 10:29	06/01/23	
Iron	200.8	**169**	ug/L	40	6	20	06/19/23 10:26	06/13/23	
Lithium	200.8	**13.8**	ug/L	2.0	2.0	1	06/13/23 10:29	06/01/23	
Manganese	200.8	**888000**	ug/L	1200	80	100	06/13/23 09:39	06/01/23	
Molybdenum	200.8	**193**	ug/L	2.0	0.6	1	06/13/23 10:29	06/01/23	

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2305983
Project:	Gorgas/221114-10.01 Task 05	**Date Collected:**	05/19/23 15:40
Sample Matrix:	Water	**Date Received:**	05/25/23 10:15
Sample Name:	GS-AP-OBT2-MW-7-Mn-Fe-LDH-F4	**Basis:**	NA
Lab Code:	K2305983-009		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	200.8	**606000**	ug/L	80	10	1	06/13/23 10:38	06/01/23	
Arsenic	200.8	**127**	ug/L	10	2	1	06/13/23 10:38	06/01/23	
Iron	200.8	**537000**	ug/L	200	30	100	06/19/23 10:09	06/13/23	
Lithium	200.8	**23.9**	ug/L	2.0	2.0	1	06/13/23 10:38	06/01/23	
Manganese	200.8	**906000**	ug/L	1200	80	100	06/13/23 09:41	06/01/23	
Molybdenum	200.8	**242**	ug/L	2.0	0.6	1	06/13/23 10:38	06/01/23	

QC Summary Forms

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Client:	Anchor QEA, LLC	**Service Request:**	K2305983
Project:	Gorgas/221114-10.01 Task 05	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	KQ2309618-01		

Dissolved Metals

Analyte Name	Analysis Method	Result		Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	200.8	**1.2**	**J**	ug/L	4.0	0.5	1	06/13/23 09:18	06/01/23	
Arsenic	200.8	ND	U	ug/L	0.50	0.09	1	06/13/23 09:18	06/01/23	
Lithium	200.8	ND	U	ug/L	0.10	0.10	1	06/13/23 09:18	06/01/23	
Manganese	200.8	**0.44**	**J**	ug/L	0.60	0.04	1	06/13/23 09:18	06/01/23	
Molybdenum	200.8	ND	U	ug/L	0.10	0.03	1	06/13/23 09:18	06/01/23	

Client:	Anchor QEA, LLC	**Service Request:**	K2305983
Project:	Gorgas/221114-10.01 Task 05	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	KQ2310488-03		

Dissolved Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Iron	200.8	**0.3 J**	ug/L	2.0	0.3	1	06/19/23 09:51	06/13/23	

Client:	Anchor QEA, LLC	**Service Request:**	K2305983
Project:	Gorgas/221114-10.01 Task 05	**Date Collected:**	05/19/23
Sample Matrix:	Water	**Date Received:**	05/25/23
		Date Analyzed:	06/13/23
		Date Extracted:	06/1/23

Matrix Spike Summary
Dissolved Metals

Sample Name:	GS-AP-OBT2-MW-6D-Mn-LDH-BUF-F4	**Units:**	ug/L
Lab Code:	K2305983-001	**Basis:**	NA
Analysis Method:	200.8		
Prep Method:	EPA CLP ILM04.0		

Matrix Spike
KQ2309618-04

Analyte Name	Sample Result	Result	Spike Amount	% Rec	% Rec Limits
Aluminum	469000	448000	2000	-1060 #	70-130
Arsenic	45	1000	1000	96	70-130
Lithium	154	1130	1000	97	70-130
Manganese	1440000	1430000	500	-2442 #	70-130
Molybdenum	16.3	521	500	101	70-130

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Matrix Spike and Matrix Spike Duplicate Data is presented for information purposes only. The matrix may or may not be relevant to samples reported in this report. The laboratory evaluates system performance based on the LCS and LCSD control limits.

Client:	Anchor QEA, LLC	**Service Request:**	K2305983
Project:	Gorgas/221114-10.01 Task 05	**Date Collected:**	05/19/23
Sample Matrix:	Water	**Date Received:**	05/25/23
		Date Analyzed:	06/19/23
		Date Extracted:	06/13/23

Matrix Spike Summary
Dissolved Metals

Sample Name:	GS-AP-OBT2-MW-6D-Mn-LDH-F4	**Units:**	ug/L
Lab Code:	K2305983-003	**Basis:**	NA
Analysis Method:	200.8		
Prep Method:	EPA CLP ILM04.0		

Matrix Spike
KQ2310488-01

Analyte Name	Sample Result	Result	Spike Amount	% Rec	% Rec Limits
Iron	115	153	50	76	70-130

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Matrix Spike and Matrix Spike Duplicate Data is presented for information purposes only. The matrix may or may not be relevant to samples reported in this report. The laboratory evaluates system performance based on the LCS and LCSD control limits.

Client:	Anchor QEA, LLC	**Service Request:**	K2305983
Project	Gorgas/221114-10.01 Task 05	**Date Collected:**	05/19/23
Sample Matrix:	Water	**Date Received:**	05/25/23
		Date Analyzed:	06/13/23

Replicate Sample Summary
Dissolved Metals

Sample Name:	GS-AP-OBT2-MW-6D-Mn-LDH-BUF-F4	**Units:**	ug/L
Lab Code:	K2305983-001	**Basis:**	NA

Analyte Name	Analysis Method	MRL	MDL	Sample Result	Duplicate Sample KQ2309618-03 Result	Average	RPD	RPD Limit
Aluminum	200.8	80	10	469000	453000	461000	3	20
Arsenic	200.8	10	2	45	42	44	7	20
Lithium	200.8	2.0	2.0	154	146	150	5	20
Manganese	200.8	1200	80	1440000	1380000	1410000	4	20
Molybdenum	200.8	2.0	0.6	16.3	17.8	17.1	9	20

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client:	Anchor QEA, LLC	**Service Request:**	K2305983
Project	Gorgas/221114-10.01 Task 05	**Date Collected:**	05/19/23
Sample Matrix:	Water	**Date Received:**	05/25/23
		Date Analyzed:	06/19/23

Replicate Sample Summary
Dissolved Metals

Sample Name:	GS-AP-OBT2-MW-6D-Mn-LDH-F4	**Units:**	ug/L
Lab Code:	K2305983-003	**Basis:**	NA

Analyte Name	Analysis Method	MRL	MDL	Sample Result	Duplicate Sample KQ2310488-02 Result	Average	RPD	RPD Limit
Iron	200.8	40	6	115	111	113	4	20

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client:	Anchor QEA, LLC	**Service Request:**	K2305983
Project:	Gorgas/221114-10.01 Task 05	**Date Analyzed:**	06/13/23
Sample Matrix:	Water		

Lab Control Sample Summary
Dissolved Metals

Units:ug/L
Basis:NA

Lab Control Sample
KQ2309618-02

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Aluminum	200.8	101	100	101	85-115
Arsenic	200.8	50.1	50.0	100	85-115
Lithium	200.8	50.6	50.0	101	85-115
Manganese	200.8	27.6	25.0	110	85-115
Molybdenum	200.8	25.9	25.0	104	85-115

Client:	Anchor QEA, LLC	**Service Request:**	K2305983
Project:	Gorgas/221114-10.01 Task 05	**Date Analyzed:**	06/19/23
Sample Matrix:	Water		

Lab Control Sample Summary
Dissolved Metals

Units:ug/L
Basis:NA

Lab Control Sample
KQ2310488-04

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Iron	200.8	51.6	50.0	103	85-115

June 14, 2023 Service Request No:K2305988

Masa Kanematsu
Anchor QEA, LLC
6720 SW Macadam Avenue
Suite 125
Portland, OR 97219

Laboratory Results for: Gorgas

Dear Masa,

Enclosed are the results of the sample(s) submitted to our laboratory May 25, 2023
For your reference, these analyses have been assigned our service request number **K2305988.**

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. All results are intended to be considered in their entirety, and ALS Group USA Corp. dba ALS Environmental (ALS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please contact me if you have any questions. My extension is 3376. You may also contact me via email at Mark.Harris@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

Mark Harris
Project Manager

Narrative Documents

ALS Environmental—Kelso Laboratory
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Client: Anchor QEA, LLC
Project: Gorgas
Sample Matrix: Soil

Service Request: K2305988
Date Received: 05/25/2023

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples for the Tier II level requested by the client.

Sample Receipt:

One soil sample was received for analysis at ALS Environmental on 05/25/2023. Any discrepancies upon initial sample inspection are annotated on the sample receipt and preservation form included within this report. The sample was stored at minimum in accordance with the analytical method requirements.

Metals:

No significant anomalies were noted with this analysis.

Approved by ______________________ Date 06/14/2023

SAMPLE DETECTION SUMMARY

This form includes only detections above the reporting levels. For a full listing of sample results, continue to the Sample Results section of this Report.

CLIENT ID: GS-AP-OBT2-MW-6D-Mn-LDH-BUF-F5 **Lab ID: K2305988-001**

Analyte	Results	Flag	MDL	MRL	Units	Method
Aluminum	2170			8.0	mg/Kg	200.8
Arsenic	100			2.0	mg/Kg	200.8
Iron	54.7			4.0	mg/Kg	200.8
Manganese	273000			2000	mg/Kg	200.8

Sample Receipt Information

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360) 577-7222 Fax (360) 425-9096
www.alsglobal.com

Client: Anchor QEA, LLC

Project: Gorgas/221114-10.01-Task 05

Service Request:K2305988

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
K2305988-001	GS-AP-OBT2-MW-6D-Mn-LDH-BUF-F5	5/22/2023	1500

K2305988

Chain of Custody Record & Laboratory Analysis Request

ANCHOR QEA
Jason Stuckey
6720 SW Macadam Ave Suite 125
Portland OR 97219

Laboratory Number: 503-972-5019
Date: 5/23/2023
Project Name: Gorgas
Project Number: 221114-10.01 Task 05
Project Manager: Masa Kanematsu, mkanematsu@anchorqea.com
Phone Number: 503-972-5001
Shipment Method: ALS Carrier

Line	Field Sample ID	Collection		Matrix	No. of Containers	Parameters													Comments/Preservation
		Date	Time			Total metals (Al, As, Fe, Li, Mn)													
1	GS-AP-OBT2-MW-6D-Mn-LDH-BUF-F5	5/22/2023	15:00	Solid	1	X													Air-dried (~0.07 g)
2																			
3																			
4																			
5																			
6																			
7																			
8																			
9																			
10																			
11																			
12																			
13																			
14																			
15																			
16																			
17																			
18																			
19																			
20																			

Notes: The sample is air-dried. **Please analyze on a standard TAT.**

Relinquished by: Masa Kanematsu	Company: Anchor QEA
Signature/Print Name:	Date/Time: 5/23/2023 9:30
Relinquished by:	Company:
Signature/Print Name:	Date/Time:

Received by: ALS 5/25/23 1015
Signature/Print Name: Kaitelyn Mitolo

Received by:
Signature/Print Name:

Distribution: A copy will be made for the laboratory and client. The Project file will retain the original.

Page 1 of 1

PM Mark

Cooler Receipt and Preservation Form

Client Anchor Service Request K23 05988

Received: 5/25/23 Opened: 5/25/23 By: VM Unloaded: 5/25/23 By: VM

1. Samples were received via? USPS [✓ Fed Ex] UPS DHL PDX Courier Hand Delivered
2. Samples were received in: (circle) [✓ Cooler] Box Envelope Other ____________ NA
3. Were custody seals on coolers? NA Y [✓ N] If yes, how many and where? ____________

   If present, were custody seals intact? Y N If present, were they signed and dated? Y N

Temp Blank	Sample Temp	IR Gun	Cooler #/COC ID / NA	Out of temp indicate with "X"	PM Notified If out of temp	Tracking Number NA	File
3.3		IR01	Cooler 1			772246558027	
	4.9	IR01	Cooler 2			772246558141	

4. Was a Temperature Blank present in cooler? NA [✓ Y] [✓ N] If yes, notate the temperature in the appropriate column above:

   If no, take the temperature of a representative sample bottle contained within the cooler; notate in the column "Sample Temp":

5. Were samples received within the method specified temperature ranges? NA [✓ Y] N

   If no, were they received on ice and same day as collected? If not, notate the cooler # above and notify the PM. [✓ NA] Y N

If applicable, tissue samples were received: *Frozen* *Partially Thawed* *Thawed*

6. Packing material: *Inserts* [✓ *Baggies*] *Bubble Wrap* *Gel Packs* [✓ *Wet Ice*] *Dry Ice* *Sleeves* ____________
7. Were custody papers properly filled out (ink, signed, etc.)? NA [✓ Y] N
8. Were samples received in good condition (unbroken) NA [✓ Y] N
9. Were all sample labels complete (ie, analysis, preservation, etc.)? NA [✓ Y] N
10. Did all sample labels and tags agree with custody papers? NA [✓ Y] N
11. Were appropriate bottles/containers and volumes received for the tests indicated? NA [✓ Y] N
12. Were the pH-preserved bottles (*see SMO GEN SOP*) received at the appropriate pH? *Indicate in the table below* [✓ NA] Y N
13. Were VOA vials received without headspace? *Indicate in the table below.* [✓ NA] Y N
14. Was C12/Res negative? [✓ NA] Y N
15. Were samples received within the method specified time limit? If not, notate the error below and notify the PM [✓ NA] Y N
16. Were 100ml sterile microbiology bottles filled exactly to the 100ml mark? [✓ NA] Y N Underfilled Overfilled

Sample ID on Bottle	Sample ID on COC	Identified by:

Sample ID	Bottle Count Bottle Type	Head-space	Broke	pH	Reagent	Volume added	Reagent Lot Number	Initials	Time

Notes, Discrepancies, Resolutions: ____________

Miscellaneous Forms

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Inorganic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated value.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.
H	The holding time for this test is immediately following sample collection. The samples were analyzed as soon as possible after receipt by the laboratory.

Metals Data Qualifiers

#	The control limit criteria is not applicable.
J	The result is an estimated value.
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
M	The duplicate injection precision was not met.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
S	The reported value was determined by the Method of Standard Additions (MSA).
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
+	The correlation coefficient for the MSA is less than 0.995.
Q	See case narrative. One or more quality control criteria was outside the limits.

Organic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
A	A tentatively identified compound, a suspected aldol-condensation product.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
C	The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
D	The reported result is from a dilution.
E	The result is an estimated value.
J	The result is an estimated value.
N	The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
P	The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a chromatographic interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.

Additional Petroleum Hydrocarbon Specific Qualifiers

F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
Y	The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
Z	The chromatographic fingerprint does not resemble a petroleum product.

ALS Group USA Corp. dba ALS Environmental (ALS) - Kelso
State Certifications, Accreditations, and Licenses

Agency	Web Site	Number
Alaska DEH	http://dec.alaska.gov/eh/lab/cs/csapproval.htm	UST-040
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0339
Arkansas - DEQ	http://www.adeq.state.ar.us/techsvs/labcert.htm	88-0637
California DHS (ELAP)	http://www.cdph.ca.gov/certlic/labs/Pages/ELAP.aspx	2795
DOD ELAP	http://www.denix.osd.mil/edqw/Accreditation/AccreditedLabs.cfm	L16-58-R4
Florida DOH	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E87412
Hawaii DOH	http://health.hawaii.gov/	-
ISO 17025	http://www.pjlabs.com/	L16-57
Louisiana DEQ	http://www.deq.louisiana.gov/page/la-lab-accreditation	03016
Maine DHS	http://www.maine.gov/dhhs/	WA01276
Minnesota DOH	http://www.health.state.mn.us/accreditation	053-999-457
Nevada DEP	http://ndep.nv.gov/bsdw/labservice.htm	WA01276
New Jersey DEP	http://www.nj.gov/dep/enforcement/oqa.html	WA005
New York - DOH	https://www.wadsworth.org/regulatory/elap	12060
North Carolina DEQ	https://deq.nc.gov/about/divisions/water-resources/water-resources-data/water-sciences-home-page/laboratory-certification-branch/non-field-lab-certification	605
Oklahoma DEQ	http://www.deq.state.ok.us/CSDnew/labcert.htm	9801
Oregon – DEQ (NELAP)	http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	WA100010
South Carolina DHEC	http://www.scdhec.gov/environment/EnvironmentalLabCertification/	61002
Texas CEQ	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	T104704427
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C544
Wyoming (EPA Region 8)	https://www.epa.gov/region8-waterops/epa-region-8-certified-drinking-water	-
Kelso Laboratory Website	www.alsglobal.com	NA

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. A complete listing of specific NELAP-certified analytes, can be found in the certification section at www.ALSGlobal.com or at the accreditation bodies web site.
Please refer to the certification and/or accreditation body's web site if samples are submitted for compliance purposes. The states highlighted above, require the analysis be listed on the state certification if used for compliance purposes and if the method/anlayte is offered by that state.

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LOD	Limit of Detection
LOQ	Limit of Quantitation
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Analyst Summary report

Client:	Anchor QEA, LLC	**Service Request:**	K2305988
Project:	Gorgas/221114-10.01-Task 05		

Sample Name:	GS-AP-OBT2-MW-6D-Mn-LDH-BUF-F5	**Date Collected:**	05/22/23
Lab Code:	K2305988-001	**Date Received:**	05/25/23
Sample Matrix:	Soil		

Analysis Method	**Extracted/Digested By**	**Analyzed By**
200.8	MSOLADEY	JCHAN

Sample Results

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Metals

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Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2305988
Project:	Gorgas/221114-10.01-Task 05	**Date Collected:**	05/22/23 15:00
Sample Matrix:	Soil	**Date Received:**	05/25/23 10:15
Sample Name:	GS-AP-OBT2-MW-6D-Mn-LDH-BUF-F5	**Basis:**	As Received
Lab Code:	K2305988-001		

Total Metals

Analyte Name	Analysis Method	Result		Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	200.8	**2170**		mg/Kg	8.0	5	06/13/23 14:07	06/07/23	
Arsenic	200.8	**100**		mg/Kg	2.0	5	06/13/23 14:07	06/07/23	
Iron	200.8	**54.7**		mg/Kg	4.0	5	06/13/23 14:07	06/07/23	
Lithium	200.8	ND	U	mg/Kg	0.40	5	06/13/23 14:07	06/07/23	
Manganese	200.8	**273000**		mg/Kg	2000	10000	06/13/23 14:45	06/07/23	

QC Summary Forms

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Metals

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ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client:	Anchor QEA, LLC	**Service Request:**	K2305988
Project:	Gorgas/221114-10.01-Task 05	**Date Collected:**	NA
Sample Matrix:	Soil	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	As Received
Lab Code:	KQ2310103-01		

Total Metals

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Date Extracted	Q
Aluminum	200.8	ND U	mg/Kg	2.0	5	06/13/23 13:58	06/07/23	
Arsenic	200.8	ND U	mg/Kg	0.50	5	06/13/23 13:58	06/07/23	
Iron	200.8	**1.3**	mg/Kg	1.0	5	06/13/23 13:58	06/07/23	
Lithium	200.8	ND U	mg/Kg	0.10	5	06/13/23 13:58	06/07/23	
Manganese	200.8	ND U	mg/Kg	0.25	5	06/13/23 13:58	06/07/23	

Client:	Anchor QEA, LLC	**Service Request:**	K2305988
Project:	Gorgas/221114-10.01-Task 05	**Date Analyzed:**	06/13/23
Sample Matrix:	Soil		

Duplicate Lab Control Sample Summary
Total Metals

Units: mg/Kg
Basis: As Received

		Lab Control Sample KQ2310103-02			Duplicate Lab Control Sample KQ2310103-03					
Analyte Name	**Analytical Method**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Aluminum	200.8	378	400	95	367	400	92	85-115	3	30
Arsenic	200.8	96.5	100	97	91.8	100	92	85-115	5	30
Iron	200.8	187	200	94	181	200	91	85-115	3	30
Lithium	200.8	19.1	20.0	95	18.2	20.0	91	85-115	5	30
Manganese	200.8	93.4	100	93	92.5	100	92	85-115	<1	30